# Federal Funds for Research and Development:

Fiscal Years 2002, 2003, and 2004

Volume 52

**Detailed Statistical Tables** 

Ronald L. Meeks, Project Officer

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



### **National Science Foundation**

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Director

### Directorate for Social, Behavioral, and Economic Sciences

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Acting Assistant Director

### **Division of Science Resources Statistics**

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## Research and Development Statistics Program

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National Science Foundation Division of Science Resources Statistics 4201 Wilson Blvd., Suite 965 Arlington, VA 22230 Telephone: (703) 292-8774

Fax: (703) 292-9092 e-mail: srsweb@nsf.gov

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# SECTION A. GENERAL NOTES

The data presented in this report were derived from the Survey of Federal Funds for Research and Development and cover FY 2002-04. Data for 2002 represent completed transactions. Data for 2003 and 2004 are estimated. During the second quarter of FY 2003, surveys were sent to all Federal agencies identified as conducting research and development (R&D) programs. Thirty agencies reported R&D funding levels. The amounts reported for 2003 reflect congressional appropriation actions as of that period, as well as apportionment and reprogramming decisions as of that time. Data for 2004 represent administration budget proposals that had not been acted on at the time of the survey. Authorization, appropriation, deferral, and apportionment actions completed after these data were collected will be reflected in later surveys of this series.

R&D totals in the tables are given in both outlays and obligations. The R&D obligation data are further categorized according to character of work (basic research, applied research, and development), performer, field of science or engineering (for research but not for development), and Federal R&D funding by state. Obligations for research performance at universities and colleges by fields of science or engineering are also shown, as are R&D plant data.

The amounts reported for each year are expressed in obligations or outlays incurred or expected to be incurred in that year, regardless of when the funds may have been authorized, appropriated, or received by an agency, and regardless of whether the funds are identified in an agency's budget specifically for research, development, or R&D plant.

Accuracy of the data depends in part on the Federal respondents. Because many agency R&D programs are not identified as budget-line items, agency officials must identify R&D and R&D plant activities within broader programs. Over the years personnel of the participating agencies have developed increasing skill and consistency in meeting the survey requirements, and their interactions with the National Science Foundation staff have considerably increased the reliability of the data.

Inquiries relating to Federal Funds for Research and Development: FY 2002, 2003, and 2004, Volume 52 of the Federal Funds series of detailed statistical tables, should be directed to

Ronald L. Meeks Research and Development Statistics Program Division of Science Resources Statistics National Science Foundation 4201 Wilson Boulevard, Suite 965 Arlington, VA 22230 (703) 292-7787

Email: rmeeks@nsf.gov

NOTE: For trend comparison, use only the historical data for FY 1983–2004 contained in tables C-92 through C-111a in this volume of the Federal Funds series. These tables incorporate changes in prior-year data made by the agencies to reflect program reclassifications. Do not use data published earlier.

# SECTION B. TECHNICAL NOTES

# SCOPE AND METHOD

During the period February 2003 through February 2004, a total of 30 Federal agencies and their subdivisions—74 individual respondents—submitted data in response to the National Science Foundation's (NSF's) annual Survey of Federal Funds for Research and Development (Federal Funds survey), which was distributed in February 2003. The agencies reported their data as obligations and outlays incurred or expected to be incurred, regardless of when the funds were appropriated or whether they were identified in the respondents' budgets specifically for R&D activities.

Only those agencies that had obligations in the variables represented by a particular table appear in that table. Appendix A provides a complete list of the Federal agencies that have been included in the Federal Funds survey. Additional notes associated with these agencies are in appendix B.

# **DEFINITIONS**

Definitions are essentially unchanged from those used in past Federal Funds surveys.

- An agency is an organization of the Federal Government whose principal executive officer reports to the President. The Library of Congress is also included in the survey, even though its chief officer reports to Congress. Subdivision refers to any organizational unit of a reporting agency, such as a bureau, division, office, or service.
- Obligations and outlays reported are consistent with figures shown for FY 2002, 2003, and 2004 appearing in The Budget of the United States Government, FY 2004. The R&D data in both agency submissions were based on the same definitions and are reconcilable.

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 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. Obligations and outlays cover all transactions that occurred in FY 2002 and those estimated for FY 2003 and 2004.

The data include all Federal funds available to an agency that the agency received or expects to receive from direct appropriations, trust funds, special account receipts, corporate income, or other sources, including funds appropriated to the President.

The amounts shown for each year reflect obligations or outlays for that year regardless of when the funds were originally authorized or received and regardless of whether they were appropriated, received, or identified in the agency's budget specifically for research, development, or R&D plant.

In reporting its obligations or outlays, each agency includes the amounts transferred to other agencies for support of research and development. The receiving agencies do not report funds transferred to them. Similarly, a subdivision of an agency that transfers funds to another subdivision within that agency reports such obligations or outlays as its own.

Obligations and outlays for R&D performed for an agency in foreign countries include all funds available to the agency for this purpose, including funds separately appropriated for special foreign currency programs.

Funds reported for research and development reflect full-cost coverage, which is the costs of specific R&D and the applicable overhead costs. The amounts reported include the costs of planning and administering R&D programs, laboratory overhead, pay of military personnel, and departmental administration.

- 3. The fiscal year in the Federal Government accounting period begins October 1 of a given year and ends September 30 of the following year; thus, FY 2002 began on October 1, 2001 and ended September 30, 2002.
- 4. Research, development, and R&D plant include all direct, incidental, or related costs resulting from, or necessary to, performance of R&D and costs of R&D plant, defined as follows below, regardless of whether the R&D is performed by a Federal agency (intramurally) or by private individuals and organizations under grant or contract (extramurally). R&D excludes routine product testing, quality control, mapping and surveys, collection of general-purpose statistics, experimental production, and the training of scientific personnel.

a. 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 objectives of the sponsoring agency.

Basic research is defined as systematic study directed toward fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind.

Applied research is defined as systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met.

b. Development is defined as systematic application of knowledge or understanding, directed toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements.

To better differentiate between the part of the Federal R&D budget that supports "science and key enabling technologies" (including for military and nondefense applications) and the part that primarily concerns "testing and evaluation" (of mostly defense-related systems), NSF now collects from the Department of Defense (DoD) development dollars in two categories, advanced technology development and major systems development.

DoD uses service codes 6.1 through 6.7 to classify data into the survey categories. Within DoD's research categories, basic research is classified as 6.1, and applied research is classified as 6.2. Within DoD's development categories, advanced technology development is classified as 6.3A. Major systems development is classified as 6.3B through 6.7 and includes demonstration and validation, engineering and manufacturing development, management and support, and operational system development.

c. Demonstration activities that are part of R&D (i.e., that are intended to prove or to test whether a technology or method does in fact work) are included. Demonstrations intended primarily to make information available about new technologies or methods are excluded.

- d. R&D plant (R&D facilities and fixed equipment, such as reactors, wind tunnels, and particle accelerators) includes acquisition of, construction of, major repairs to, or alterations in structures, works, equipment, facilities, or land for use in R&D activities at Federal or non-Federal installations. Excluded from the R&D plant category are expendable or movable equipment (e.g., spectrometers, microscopes) and office furniture and equipment. Also excluded are the costs of predesign studies (e.g., those undertaken before commitment to a specific facility). These excluded costs are reported under "total conduct of research and development." Obligations for foreign R&D plant are limited to Federal funds for facilities that are located abroad and used in support of foreign research and development.
- 5. Fields of science and engineering in this survey consist of eight broad field categories, each consisting of a number of detailed fields. The broad fields are life sciences; psychology; physical sciences; environmental sciences; mathematics and computer sciences; engineering; social sciences; and other sciences, not elsewhere classified. The term "not elsewhere classified" (nec) is used for multidisciplinary projects within a broad field and for single-discipline projects for which a separate field has not been assigned. The following list presents the detailed fields grouped under each of the broad fields, together with illustrative disciplines of detailed fields.

The illustrative disciplines are intended to be guidelines, not sharp definitions; they represent examples of disciplines generally classified under each detailed field. A discipline under one detailed field may be classified under another detailed field when the major emphasis is elsewhere. Research in biochemistry, for example, might be reported as biological, agricultural, or medical, depending on the focus of the project. Human biochemistry would be classified under biological, but animal biochemistry or plant biochemistry would fall under agricultural. In no case is the research reported under more than one field. No double counting is intended or allowed.

 a. Life sciences are concerned with the scientific study of living organisms and their systems. They consist of five detailed fields: biological sciences (excluding environmental biology), environmental biology, agricultural sciences, medical sciences, and life sciences, nec. Examples of the disciplines under each of these fields are as follows:

Biological sciences (excluding environmental biology): anatomy, biochemistry, biology, biometry and biostatistics, biophysics, botany, cell biology, entomology and parasitology, genetics, microbiology, neuroscience (biological), nutrition, physiology, zoology, other biological sciences, nec.

Environmental biology: ecosystem sciences, evolutionary biology, limnology, physiological ecology, population and biotic community ecology, population biology, systematics, other environmental biology, nec.

Agricultural sciences: agronomy, animal sciences, food science and technology, fish and wildlife, forestry, horticulture, phytopathology, phytoproduction, plant sciences, soils and soil science, general agriculture, other agriculture, nec.

Medical sciences: dentistry, internal medicine, neurology, obstetrics and gynecology, ophthalmology, otolaryngology, pathology, pediatrics, pharmacology, pharmacy, preventive medicine, psychiatry, radiology, surgery, veterinary medicine, other medical sciences, nec.

Life sciences, nec.

b. Psychology deals with behavior, mental processes, and individual and group characteristics and abilities. Psychology in this survey is divided into three categories: biological aspects, social aspects, and psychological sciences, nec. Examples of the disciplines under each of these fields are as follows:

Biological aspects: animal behavior, clinical psychology, comparative psychology, ethology, and experimental psychology

Social aspects: development and personality; educational, personnel, and vocational psychology and testing; industrial and engineering psychology; social psychology

Psychological sciences, nec.

c. Physical sciences are concerned with understanding of the material universe and its phenomena.
 They comprise the fields of astronomy, chemistry,

physics, and physical sciences, nec. Examples of disciplines under each of these fields are as follows:

Astronomy: laboratory astrophysics; optical astronomy; radio astronomy; theoretical astrophysics; x-ray, gamma-ray, and neutrino astronomy

Chemistry: inorganic, organic, organometallic, and physical chemistry

Physics: acoustics, atomic and molecular physics, condensed-matter physics, elementary particle physics, nuclear structure, optics, plasma physics

Physical sciences, nec.

d. Environmental sciences (terrestrial and extrater-restrial) are, with the exception of oceanography, concerned with the gross nonbiological properties of the areas of the solar system that directly or indirectly affect human survival and welfare. Obligations for studies pertaining to life in the sea or other bodies of water are reported as support of oceanography and not biology. Environmental sciences comprise the fields of atmospheric sciences, geological sciences, oceanography, and environmental sciences, nec. Examples of disciplines under each of these fields are as follows:

Atmospheric sciences: aeronomy, extraterrestrial atmospheres, meteorology, solar science, weather modification

Geological sciences: engineering geophysics, general geology, geodesy and gravity, geomagnetism, hydrology, inorganic geochemistry, isotopic geochemistry, laboratory geophysics, organic geochemistry, paleomagnetism, paleontology, physical geography and cartography, seismology

Oceanography: biological oceanography, chemical oceanography, marine geophysics, physical oceanography

Environmental sciences, nec.

e. Mathematics and computer sciences employlogical reasoning with the aid of symbols and are concerned with the development of methods of operation using such symbols and, in the case of computer sciences, with the application of such methods to automated information systems. Examples of disciplines under these fields are as follows:

Mathematics: algebra, analysis, applied mathematics, foundations and logic, geometry, numerical analysis, statistics, topology

Computer sciences: computer and information sciences (general); design, development, and application of computer capabilities to data storage and manipulation; information sciences and systems; programming languages; systems analysis

Mathematics and computer sciences, nec.

f. Engineering is concerned with studies directed toward developing engineering principles or toward making specific principles usable in engineering practice. Engineering in this survey is divided into eight fields: aeronautical, astronautical, chemical, civil, electrical, mechanical, metallurgy and materials engineering, and engineering, nec. Examples of disciplines under each of these fields are as follows:

Aeronautical engineering: aerodynamics

Astronautical engineering: aerospace, space technology

Chemical engineering: petroleum, petroleum refining process

Civil engineering: architectural, environmental, hydraulic, hydrologic, marine, sanitary, and structural engineering; transportation

Electrical engineering: communication, electronic engineering, power

Mechanical engineering: engineering mechanics

Metallurgy and materials engineering: ceramic engineering, mining, textile engineering, welding

Engineering, nec.: agricultural engineering, bioengineering, biomedical engineering, industrial and management engineering, nuclear engineering, ocean engineering, systems engineering

g. Social sciences are directed toward an understanding of the behavior of social institutions and groups and of individuals as members of a group. Social sciences include anthropology, economics, political science, sociology, and social sciences, nec. Examples of disciplines under the fields of social science are as follows:

Anthropology: applied anthropology, archaeology, cultural anthropology and personality, social anthropology and ethnology

Economics: econometrics and economic statistics; economic systems and development; economic theory; history of economic thought; industrial, labor, and agricultural economics; international economics; macroeconomics; microeconomics; public finance and fiscal policy

Political science: area or regional studies, comparative government, history of political ideas, international relations and law, national political and legal systems, political theory, public administration

Sociology: comparative and historical sociology, complex organizations, culture and social structure, demography, group interactions, social problems and social welfare, sociological theory

Social sciences, nec.: linguistics, research in education, research in history, research in law (e.g., attempts to assess impact on society of legal systems and practices), socioeconomic geography

- h. Other sciences, nec.: This category is used for multidisciplinary or interdisciplinary projects that cannot be classified within one of the broad fields of science already listed.
- 6. A performer is either an intramural group or organization carrying out an operational function or an extramural organization or person receiving support or providing services under a contract or grant.
  - a. Intramural performers are the agencies of the Federal Government. Their work is carried on directly by agency personnel. Obligations reported under this category are for activities performed or to be performed by the reporting agency itself or are for funds that the agency transfers to another Federal agency for performance of work, as long as the ultimate performer is that agency or any Federal agency. If the ultimate performer is not a Federal agency, the funds transferred are reported by the transferring agency under the appropriate extramural performer category (universities and colleges, other nonprofit institutions, or industrial firms).

NOTE: Intramural activities cover not only the actual intramural R&D performance but also the costs

associated with the planning and administration of both intramural and extramural programs by Federal personnel. Intramural activities also include the costs of supplies and off-the-shelf equipment, which has gone beyond the development or prototype stage, procured for use in intramural R&D. For example, the National Aeronautics and Space Administration's (NASA's) purchase from an extramural source of an operational launch vehicle used for intramural performance of R&D is reported as a part of the cost of intramural R&D.

- b. Extramural performers are organizations outside the Federal sector that perform R&D with Federal funds under contract, grant, or cooperative agreement. Only those costs associated with actual R&D performance are reported, but these costs would include costs of materials and supplies to carry out R&D activities. Note, however, that the costs of off-the-shelf supplies and equipment required to support intramural R&D and procured from extramural suppliers are considered part of the costs of intramural performance and not part of the costs of extramural performance. Extramural performers are identified as follows:
  - Industrial firms: Organizations that may legally distribute net earnings to individuals or to other organizations.
  - ii. Universities and colleges: Institutions of higher education in the United States that offer at least one year of college-level study leading toward a degree. Included are colleges of liberal arts; schools of arts and sciences; professional schools, such as schools of engineering and medicine, including affiliated hospitals and associated research institutes; and agricultural experiment stations.
  - iii. Other nonprofit institutions: Private organizations other than educational institutions whose net earnings in no part inure to the benefit of a private stockholder or individual and other private organizations organized for the exclusive purpose of turning over their entire net earnings to such nonprofit organizations.
  - iv. Federally funded research and development centers (FFRDCs): R&D-performing organizations that are exclusively or substantially financed by the Federal Government and are

supported by the Federal Government either to meet a particular R&D objective or, in some instances, to provide major facilities at universities for research and associated training purposes. Each center is administered either by an industrial firm, a university, or another non-profit institution.

In general, all of the following criteria are met by an organization that is included in the FFRDC category:

- Its primary activities include one or more of the following: basic research, applied research, development, or management of research and development (specifically excluded are organizations engaged primarily in routine quality control and testing, routine service activities, production, mapping and surveys, and information dissemination).
- 2. It is a separate operational unit within the parent organization or is organized as a separately incorporated organization.
- 3. It performs actual research and development or R&D management either upon direct request by the Federal Government or under a broad charter from the Federal Government but in either case under the direct monitorship of the Federal Government.
- 4. It receives its major financial support (70 percent or more) from the Federal Government, usually from one agency.
- 5. It has, or is expected to have, a long-term relationship with its sponsoring agency (about 5 years or more), as evidenced by specific obligations assumed by it and the agency.
- Most or all of its facilities are owned by or are funded under contract with the Federal Government.
- 7. It has an average annual budget (operating and capital equipment) of at least \$500,000.
  - v. State and local governments: State and local government agencies, excluding state or local universities and colleges, agricultural experiment stations, medical schools, and affiliated hospitals. (Federal R&D funds obligated directly to such state and local institutions excluded in this category are included under the

"universities and colleges" category in this report.) R&D activities under the state and local category are performed either by the state or local agencies themselves or by other organizations under grants or contracts from such agencies. Regardless of the ultimate performer, Federal R&D funds directed to state and local governments are reported only under this sector.

- vi. Foreign performers: Foreign citizens, foreign organizations, or foreign governments, as well as international organizations (such as the North Atlantic Treaty Organization; United Nations Educational, Scientific, and Cultural Organization (UNESCO); and World Health Organization), performing R&D work abroad financed by the Federal Government. Excluded from the survey are U.S. agencies, organizations, or citizens performing R&D abroad for the Federal Government; the survey does not seek information on "offshore" payments. An exception in the past was made in the case of U.S. citizens performing R&D abroad under special foreign currency funds; these activities were included under "foreign performers" but have not been collected since the mid-1990s. Foreign scientists performing in the United States, however, are excluded.
- vii. Private individuals: For cases wherein an R&D grant or contract is awarded directly to a private individual, obligations incurred are placed under "industrial firms."
- 7. Federal obligations for research performed at universities and colleges, by detailed field of science: Only six agencies are required to respond to the portion of the survey covering the funding of research at universities and colleges by detailed field of science. These six agencies represent approximately 97 percent of the Federal research obligations to universities and colleges. The six agencies are the Departments of Agriculture, Defense, Energy, and Health and Human Services; NASA; and NSF.
- 8. Geographic distribution of FY 2002 R&D obligations.
  - a. Only the 10 largest R&D funding agencies are required to respond to the portion of the survey covering the geographic distribution of obligations for research and development and R&D plant. These 10 agencies accounted for approximately 98 percent

of total Federal R&D and R&D plant obligations in FY 2002. The respondents are the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, the Interior, and Transportation; the Environmental Protection Agency; NASA; and NSF.

- b. Actual FY 2002 data were requested in terms of the principal location (state or outlying area) where the work was performed by the primary contractor, grantee, or intramural organization. When this information was not available in their records, the respondents were asked to assign the obligations to the state, outlying area, or U.S. offices abroad where the headquarters of the U.S. primary contractor, grantee, or intramural organization was located.
- c. Obligations for basic research, applied research, and development were reported as a combined R&D amount for non-Department of Defense (DoD) agencies. However, DoD agencies break out development obligations by advanced technology development and major systems development. Therefore, obligations for basic research, applied research, advanced technology development, and major-system development were reported as a combined R&D amount for DoD agencies.

Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the location of numerous subcontractors who perform most of the research and development.

d. Specifically omitted from the geographic portion of the survey were R&D obligations to foreign performers and support of foreign performers. Foreign performer data, by country, are reported in a separate section of the Federal Funds survey.

# CHANGES IN REPORTING

While completing the survey each year, agency respondents make revisions to their estimates for the latest two years of the previous report, in this case FY 2002 and 2003. Such revision is part of the budgetary cycle. From time to time, survey submissions also reflect reappraisals and revisions in classification of various aspects of agencies' R&D programs. When such revisions occur, NSF requests that the agencies provide revised prior-year data to maintain consistency and comparability with the most recent R&D concepts.

# CHANGES IN THE SCOPE OF THE SURVEY

The scope of the Federal Funds survey has changed over time, and the survey instrument has been revised accordingly. The most recent changes are described in the following paragraphs.

Since the volume 40 (FY 1990–92) survey cycle, DoD has reported research obligations and development obligations separately. Tables reporting obligations for research, by state and performer, and obligations for development, by state and performer, were specifically created for DoD. The additional detail provided by DoD highlights the following circumstances that are specific to DoD:

- DoD funds the preponderance of Federal development.
- DoD development funded at institutions of higher education is typically performed at universityaffiliated nonacademic laboratories. These are separate from the universities' academic departments, where university research is typically performed.

During the volume 44 (FY 1994–96) survey cycle, the Director for Defense Research and Engineering (DDR&E) at DoD requested that NSF further clarify the true character of DoD's R&D program, particularly as it compares with other Federal agencies, by adding more detail to development obligations reported by DoD respondents. Specifically, DoD requested that NSF allow DoD agencies to report development obligations in two separate categories, advanced technology development and major systems development.

The reasoning behind DDR&E's request for the additional development categories is best explained by the following excerpt from a letter written by Robert V. Tuohy, Chief, Program Analysis and Integration at DDR&E, to John E. Jankowski, Program Director, Research and Development Statistics Program, SRS:

The DoD's R&D program is divided into two major pieces, Science and Technology (S&T) and Major Systems Development. The other Federal agencies' entire R&D programs are equivalent in nature to DoD's S&T program, with the exception of the Department of Energy and possibly NASA. Comparing those other agency programs to DoD's program, including the development of weapons systems such as F-22 Fighter and the New Attack Submarine, is misleading.

At several annual issues workshops held during FY 1992–96, NSF learned from survey respondents that there were certain survey items for which reliable data were difficult to obtain and report. As a result, NSF began to consider removing certain items from the Federal Funds survey instrument. The volume 42 detailed statistical tables publication was distributed with a flier notifying data users that NSF was considering eliminating several items from future volumes of the document. Data users were asked to review the list of affected tables shown on the flier, and to comment on the proposed eliminations to NSF.

Before publication of volume 43 (FY 1993–95) of the detailed statistical tables, NSF decided to remove from the document 54 tables that depicted data on two of the items slated for elimination: data for the special foreign currency program, and detailed field-of-S&E data for estimated outyears. NSF continued to collect data from Federal agencies for these items through volume 45 but eliminated the special foreign currency program and outyear detailed field-of-S&E lines on the survey instrument beginning with the volume 46 (FY 1996–98) survey cycle. A special flier was included in the volume 46 mailout packet that listed the data items that were no longer required.

NSF also decided to remove two tables depicting data on foreign performers by region, country, and agency before publication of volume 43 of the detailed statistical tables. These tables have been reinstated since volume 46.

Before the volume 48 survey cycle, the National Science Foundation's Division of Science Resources Statistics updated the list of foreign performers in the Federal Funds survey to match the list of countries and territories in the 1996 UNESCO Statistical Yearbook.

On November 25, 2002, President Bush signed the Homeland Security Act of 2002, establishing the Department of Homeland Security. The new department's preliminary funding for R&D for FY 2003 and 2004 are included in this report.

# LIMITATIONS OF THE DATA

Funds for research and development were reported on a 3-year basis comparable with the 2002 budget, upon which the data were based. The amounts reported for each year, as already stated, are the obligations or outlays incurred in that year, regardless of when funds were authorized or received by an agency and regardless of whether the funds were identified in the agency's budget specifically for research, development, R&D plant, or some combination of the three.

The respondents reconciled the data reported to the Federal Funds survey with the amounts for R&D they reported under Max Schedule C to the Office of Management and Budget for the 2004 President's budget.

Some agencies are not able to report the full costs of research and development. For example, the headquarters costs of planning and administering R&D programs of the DoD (estimated at a fraction of 1 percent of the agency's R&D total) are excluded, because this agency has stated that identification of the amounts is impracticable.

R&D plant data are also underreported to some extent because of the difficulty encountered by some agencies, particularly DoD and NASA, in identifying and reporting these data. DoD's respondents report obligations for the R&D plant funded under the agency's construction appropriation, but they are able to identify only a small portion of the R&D plant support that is within R&D contracts funded from DoD's appropriation for research, development, testing, and evaluation. Similarly, NASA respondents cannot separately identify the portions of industrial R&D contracts that apply to R&D plant; R&D plant data are subsumed in the R&D data covering industrial performance. NASA R&D plant data for other performing sectors are reported separately.

Beginning in FY 2000, NASA reclassified space station as a physical asset and space station research as equipment, and it transferred funding for the program from R&D to R&D plant. Also, the National Institutes of Health (NIH) classified all of its development activities as research beginning in FY 2000. For more information on the classification changes at NASA and NIH, refer to the *InfoBrief* "Classification Revisions Reduced Reported Federal Development Obligations," NSF 02-309, February 2002, available on the Web at http://www.nsf.gov/statistics/.

# DATA COLLECTION

A Web-based data collection system (FedWeb) is used to collect the Federal Funds survey data. The FedWeb system is part of NSF's effort to enhance survey reporting and reduce data collection and processing costs by offering respondents direct online reporting and editing. Because the Federal Funds data are collected in electronic format, there is no paper instrument. Respondents provide data for their agency using similar data entry screens. The categories of funding are slightly different for Defense and non-Defense agencies. Mock survey instruments have been created to illustrate what information the respondent is asked to provide in FedWeb. See the Federal Fund's survey methodology report for further details on the FedWeb system.

# SECTION C. LIST OF DETAILED STATISTICAL TABLES

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TABLE C-1. Federal obligations for research and development, by character of work and R&D plant: FYs 1951-2004 (Dollars in thousands)

Fiscal years	Total	Total research and development	Basic research	Applied research	Development	R&D plant
1951 1952 1953 1954 1955	1,851,571 2,216,848 2,167,456 1,918,046 2,251,894	1,521,527 1,909,665 1,919,543 1,761,840 2,044,593	NA 120,945 115,997 116,033 130,068	NA NA NA NA	NA NA NA NA	330,044 307,183 247,913 156,206 207,301
1956	3,266,903	2,988,203	206,441	645,506	2,136,256	278,700
1957	4,389,237	3,932,001	262,348	662,199	3,007,454	457,236
1958	4,906,015	4,569,722	334,543	744,264	3,490,915	336,293
1959	7,122,610	6,693,510	465,981	874,272	5,353,257	429,100
1960	8,080,015	7,551,746	590,374	1,282,135	5,679,237	528,269
1961	9,607,023	9,058,623	814,513	1,663,431	6,580,679	548,400
1962	11,069,059	10,289,947	986,314	2,018,481	7,285,152	779,112
1963	13,662,879	12,494,611	1,151,753	2,356,150	8,986,708	1,168,268
1964	15,323,870	14,225,354	1,303,000	2,571,452	10,350,902	1,098,516
1965	15,745,852	14,614,249	1,435,469	2,811,761	10,367,019	1,131,603
1966	16,178,640	15,320,334	1,579,181	3,081,066	10,660,087	858,306
1967	17,149,186	16,529,099	1,845,847	2,785,543	11,897,709	620,087
1968	16,525,038	15,921,208	1,840,562	2,940,500	11,140,146	603,830
1969	16,309,900	15,640,888	1,944,773	2,700,117	10,995,998	669,012
1970	15,863,385	15,338,937	1,925,908	2,974,890	10,438,139	524,448
1971	16,153,756	15,542,512	1,980,141	3,143,030	10,419,341	611,244
1972	17,097,951	16,495,895	2,186,937	3,360,759	10,948,199	602,056
1973	17,574,486	16,800,153	2,232,006	3,349,423	11,218,724	774,333
1974	18,176,457	17,410,128	2,387,681	3,787,559	11,234,888	766,329
1975	19,859,548	19,038,818	2,588,427	4,141,281	12,309,110	820,730
1976	21,616,382	20,779,658	2,767,454	4,851,878	13,160,326	836,724
1977	24,817,577	23,450,377	3,258,640	5,255,475	14,936,262	1,367,200
1978	27,140,849	25,845,137	3,698,604	5,908,154	16,238,379	1,295,712
1979	29,620,597	28,145,142	4,192,665	6,342,340	17,610,137	1,475,455
1980	31,386,095	29,830,432	4,674,156	6,923,222	18,233,054	1,555,663
1981	34,589,634	33,103,924	5,041,295	7,171,485	20,891,144	1,485,710
1982	37,822,363	36,432,589	5,481,605	7,540,580	23,410,404	1,389,774
1983	40,009,032	38,711,537	6,260,131	7,993,394	24,458,012	1,297,495
1984	44,012,149	42,224,865	7,067,359	7,911,414	27,246,092	1,787,284
1985	50,180,369	48,359,565	7,818,682	8,314,739	32,226,144	1,820,804
1986	52,951,181	51,412,364	8,153,076	8,349,123	34,910,165	1,538,817
1987	57,099,656	55,253,693	8,942,425	8,998,096	37,313,172	1,845,963
1988	58,826,512	56,769,425	9,473,618	9,176,527	38,119,280	2,057,087
1989	63,571,605	61,406,484	10,602,011	10,163,520	40,640,953	2,165,121
1990	65,831,189	63,559,471	11,285,593	10,336,771	41,937,107	2,271,718
1991	64,147,951	61,295,152	12,170,794	11,797,583	37,326,775	2,852,799
1992	68,577,184	65,592,590	12,489,864	12,000,734	41,101,992	2,984,594
1993	70,414,697	67,314,025	13,399,121	13,491,376	40,423,528	3,100,672
1994	69,450,776	67,235,390	13,523,476	13,887,733	39,824,181	2,215,386
1995	70,442,935	68,186,798	13,877,031	14,557,365	39,752,402	2,256,137
1996	69,399,164	67,653,047	14,464,035	13,795,729	39,393,283	1,746,117
1997	71,753,430	69,826,779	14,941,892	14,423,397	40,461,490	1,926,651
1998	73,913,988	72,100,724	15,613,012	15,309,257	41,178,455	1,813,264
1999	77,386,368	75,340,622	17,443,653	16,083,861	41,813,108	2,045,746
2000	77,356,165	72,863,318	19,569,849	18,900,781	34,392,688	4,492,847
2001	84,003,042	79,933,214	21,958,136	22,755,600	35,219,478	4,069,828
2002	90,157,711	85,852,968	23,668,345	24,338,366	37,846,257	4,304,743
2003 (Preliminary)	101,008,104	95,755,849	25,599,941	26,968,563	43,187,345	5,252,255
2004 (Preliminary)	105,220,228	101,054,746	26,643,092	27,428,744	46,982,910	4,165,482

NA = Not available (indicates that data collected for this table were not recorded at that level in that particular fiscal year). R&D = Research and development.

NOTES: Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research. Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

TABLE C-2. Summary of Federal funds for research, development, and R&D plant: FYs 2002-04 (Dollars in millions)

		Preliminary			
Character of work, performers, and field	2002 —	2003	Percent change 2002-2003	2004	Percent change 2003-2004
Total outlays for research and development and for R&D plant	85,100.8	95,139.5	11.8	100,756.4	5.9
Research and development R&D plant	80,712.5	89,964.1	11.5	96,608.4	7.4
	4,388.3	5,175.3	17.9	4,148.0	-19.9
Total obligations for research and development and for R&D plant	90,157.7	101,008.1	12.0	105,220.2	4.2
Research and development, total	85,853.0	95,755.8	11.5	101,054.7	5.5
By performers: Intramural 1 Industry Industry FFRDCs Universities and colleges FFRDCs administered by universities and colleges	21,044.8	23,243.9	10.4	24,164.1	4.0
	29,538.2	34,052.1	15.3	37,671.0	10.6
	1,351.1	1,583.1	17.2	1,521.0	-3.9
	21,290.1	23,471.1	10.2	23,833.1	1.5
	4,641.2	4,852.3	4.5	5,067.9	4.4
Other nonprofit institutions	5,739.1	6,266.9	9.2	6,579.0	5.0
Nonprofit FFRDCs	1,404.8	1,406.4	.1	1,430.8	1.7
State and local governments	452.2	528.6	16.9	474.4	-10.2
Foreign	391.6	351.4	-10.3	313.5	-10.8
Research, total	48,006.7	52,568.5	9.5	54,071.8	2.9
By performers: Intramural <sup>1</sup> Industry Industry FFRDCs Universities and colleges FFRDCs administered by universities and colleges	11,857.4	12,618.0	6.4	13,427.3	6.4
	5,786.8	6,549.4	13.2	6,398.0	-2.3
	937.3	1,052.5	12.3	1,071.9	1.8
	20,285.4	22,379.8	10.3	22,933.6	2.5
	3,219.4	3,409.2	5.9	3,469.2	1.8
Other nonprofit institutions	4,723.0	5,230.7	10.8	5,468.5	4.5
Nonprofit FFRDCs	749.6	780.1	4.1	797.4	2.2
State and local governments	275.5	340.6	23.6	306.5	-10.0
Foreign	172.3	208.1	20.8	199.4	-4.2
By fields of science: Life sciences Psychology Physical sciences Environmental sciences Mathematics and computer sciences	25,476.8	28,441.9	11.6	29,340.5	3.2
	905.9	1,009.4	11.4	1,050.4	4.1
	4,983.2	5,105.3	2.4	5,417.0	6.1
	3,418.3	3,689.8	7.9	3,761.6	1.9
	2,630.7	2,738.2	4.1	2,828.8	3.3
Engineering	8,274.9	9,074.0	9.7	9,127.1	.6
Social sciences	1,038.5	1,176.3	13.3	1,202.9	2.3
Other sciences, nec	1,278.4	1,333.6	4.3	1,343.6	.8
Basic research, total	23,668.3	25,599.9	8.2	26,643.1	4.1
By performers: Intramural <sup>1</sup> Industry Industry FFRDCs Universities and colleges FFRDCs administered by universities and colleges	4,460.0	4,880.5	9.4	5,354.9	9.7
	1,231.9	1,434.6	16.5	1,648.0	14.9
	239.6	269.5	12.5	278.2	3.2
	12,668.2	13,568.1	7.1	13,723.5	1.1
	1,805.2	1,911.3	5.9	1,989.0	4.1
Other nonprofit institutions Nonprofit FFRDCs State and local governments Foreign	2,531.7	2,729.1	7.8	2,852.7	4.5
	563.4	594.7	5.5	594.1	1
	71.5	91.5	27.9	93.0	1.5
	96.8	120.5	24.6	109.9	-8.8
By fields of science: Life sciences Psychology Physical sciences Environmental sciences Mathematics and computer sciences	14,024.1	15,190.1	8.3	15,428.4	1.6
	464.6	511.3	10.0	526.3	2.9
	3,405.9	3,661.8	7.5	3,937.1	7.5
	1,833.3	1,964.5	7.2	2,093.1	6.5
	998.7	1,065.7	6.7	1,123.6	5.4
Engineering	1,864.9	2,053.0	10.1	2,334.1	13.7
Social sciences	361.7	402.2	11.2	399.3	7
Other sciences, nec	715.2	751.3	5.1	801.2	6.6

TABLE C-2. Summary of Federal funds for research, development, and R&D plant: FYs 2002-04 (Dollars in millions)

Page 2 of 2

	Preliminary				
Character of work, performers, and field	2002 —	2003	Percent change 2002-2003	2004	Percent change 2003-2004
Applied research, total	24,338.4	26,968.6	10.8	27,428.7	1.7
By performers: Intramural <sup>1</sup>	7 207 4	7 727 4	4.4	0.072.4	4.2
Industry	7,397.4 4,554.9	7,737.4 5,114.8	4.6 12.3	8,072.4 4,750.0	4.3 -7.1
Industry FFRDCs	697.7	783.0	12.3	793.7	1.4
Universities and colleges	7,617.2	8,811.6	15.7	9,210.2	4.5
FFRDCs administered by universities and colleges	1,414.1	1,497.9	5.9	1,480.2	-1.2
Other nonprofit institutions	2,191.3	2,501.6	14.2	2,615.8	4.6
Nonprofit FFRDCs	186.2	185.5	4	203.3	9.6
State and local governments	204.0	249.1	22.1	213.5	-14.3
Foreign	75.6	87.6	15.9	89.6	2.3
By fields of science:	11 452 7	12 251 0	15.7	12.012.0	Γ.0
Life sciences	11,452.7 441.3	13,251.9 498.1	15.7 12.9	13,912.0 524.1	5.0 5.2
Psychology Physical sciences	1,577.4	1,443.4	-8.5	1,479.9	2.5
Environmental sciences	1,585.0	1,725.3	8.9	1,668.5	-3.3
Mathematics and computer sciences	1,632.0	1,672.5	2.5	1,705.2	2.0
Engineering	6,410.0	7,021.0	9.5	6,793.0	-3.2
Social sciences	676.9	774.1	14.4	803.6	3.8
Other sciences, nec	563.3	582.3	3.4	542.4	-6.8
Development, total	37,846.3	43,187.3	14.1	46,982.9	8.8
By performers:					
Intramural <sup>1</sup>	9,187.4	10,625.9	15.7	10,736.8	1.0
Industry	23,751.4	27,502.7	15.8	31,273.0	13.7
Industry FFRDCs	413.7	530.5	28.2	449.1	-15.4
Universities and colleges	1,004.7	1,091.4	8.6	899.4	-17.6
FFRDCs administered by universities and colleges	1,421.8	1,443.1	1.5	1,598.7	10.8
Other nonprofit institutions	1,016.1	1,036.2	2.0	1,110.5	7.2
Nonprofit FFRDCs	655.2	626.3	-4.4	633.4	1.1
State and local governments	176.7	188.0	6.3	168.0	-10.6
Foreign	219.2	143.3	-34.6	114.1	-20.4
R&D plant, total	4,304.7	5,252.3	22.0	4,165.5	-20.7
By performers supported:					
Intramural	414.8	971.6	134.2	406.6	-58.1
Industry	2,524.9	2,381.5	-5.7	2,431.0	2.1
Industry FFRDCs	109.1	144.6	32.6	168.3	16.4
Universities and colleges	241.1	703.1	191.6	265.7	-62.2
FFRDCs administered by universities and colleges	583.3	573.9	-1.6	614.0	7.0
Other nonprofit institutions	29.1	139.6	380.5	26.8	-80.8
Nonprofit FFRDCs State and local governments	388.8 2.0	326.3 .0	-16.1 -100.0	241.4 .0	-26.0 .0
Foreign	2.0 11.7	.0 11.6	-100.0 1	.u 11.7	.0 .1
i orcigii	11.7	11.0	1	11.7	,1

<sup>&</sup>lt;sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers.

nec = Not elsewhere classified. R&D = Research and development.

NOTES: Because of rounding, detail may not add to totals. Percentages are computed using dollars in thousands.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

TABLE C-3. Federal funds for research, development, and R&D plant, by agency: FYs 2002-04 (Dollars in millions)

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		Obligations		Outlays		
Agency	2002	Prelimin	ary	2002	Prelimin	ary
		2003	2004		2003	2004
All agencies Departments	90,157.7	101,008.1	105,220.2	85,100.8	95,139.5	100,756.4
Department of Agriculture	2,090.6	2,231.3	2,047.8	2,026.1	2,182.7	2,094.5
Agricultural Marketing Service	5.2	5.4	5.4	5.2	5.4	5.4
Agricultural Research Service	1,163.6	1,221.0	1,185.9	1,131.4	1,364.6	1,206.7
Animal and Plant Health Inspection Service	23.7	na	na	23.7	na	na
Cooperative State Research, Ed., and						
Extension Service	546.7	648.1	492.8	487.6	512.5	497.2
Economic Research Service	67.0	68.7	76.7	69.9	72.0	77.0
Foreign Agricultural Service	1.4	1.6	1.6	1.4	1.6	1.6
Forest Service	268.0	271.0	270.0	292.0	211.0	291.0
Grain Inspection Packers and Stockyards Administration	6.0	6.8	7.1	6.0	6.8	7.1
Administration	0.0	0.0	7.1	0.0	0.0	7.1
National Agricultural Statistics Service	4.6	4.8	4.9	4.6	4.8	4.9
Rural Business-Cooperative Service	4.2	4.0	3.5	4.2	4.0	3.5
Department of Commerce	1,180.5	1,211.2	1,122.5	1,232.6	1,227.5	1,281.5
Bureau of the Census	28.7	1,211.2	13.5	22.7	18.9	1,201.3
Economic Development Administration	.5	.6	.6	.4	.5	.5
National Institute of Standards and						
Technology	480.5	541.4	414.8	532.2	514.4	552.1
National Oceanic and Atmospheric	/F1 2	/ 12 7	/0/ 0	/ [1 ]	/ 42 7	/0/ 0
Administration National Telecommunications and Information	651.3	643.7	686.9	651.3	643.7	686.9
Administration	19.6	9.2	6.7	26.0	50.0	28.0
Department of Defense	37,922.2	42,741.6	46,062.3	34,447.2	38,169.2	42,136.1
Defense Agencies	12,359.8	13,248.9	13,456.7	10,479.1	11,199.3	11,867.0
Ballistic Missile Defense Organization	6,544.7	6,718.6	7,737.9	6,107.8	6,354.2	7,403.4
Chemical and Biological Defense Defense Advanced Research Projects Agency	389.1 2,158.0	429.7 2,635.7	393.6 2,924.8	.0 1,916.1	.0 2,092.8	.0 2,421.5
Deletise Advanced Research Frojects Agency	2,130.0	2,033.7	2,724.0	1,710.1	2,072.0	2,421.3
Defense Information Systems Agency	205.7	252.9	322.1	169.6	211.8	261.8
Defense Logistics Agency	153.9	175.6	64.0	70.7	89.6	59.4
Defense Threat Reduction Agency	539.1	479.2	382.8	477.4	496.4	415.6
Joint Staff	59.4	99.3	119.1	59.4	99.3	119.1
Special Operations Command	400.7	436.0	448.1	264.6	396.6	458.7
TRICARE Management Activity 1	490.0	479.9	74.4	479.9	440.1	57.2
Washington Headquarters Services	1,419.1	1,542.2	990.0	933.5	1,018.5	670.4
Department of the Air Force	6,907.9	8,136.2	9,002.5	6,576.6	7,159.4	7,885.5
Air Force, Materials Command	4,651.3	5,643.9	6,255.3	4,402.3	5,020.6	5,483.0
Air Force, Space Command	2,256.5	2,492.3	2,747.1	2,174.3	2,138.8	2,402.4
Department of the Army	7,076.6	7,228.5	8,978.3	6,619.9	7,068.3	8,256.3
Department of the Army, Civil Functions	50.6	46.6	46.1	50.6	46.6	46.1
Department of the Army, Military Functions	7,026.0	7,182.0	8,932.3	6,569.2	7,021.7	8,210.2
Department of the Navy	11,344.5	13,900.3	14,343.9	10,576.2	12,512.3	13,870.7
Operational Test and Evaluation, Director	233.5	227.7	281.0	195.5	230.0	256.6
Department of Education	285.6	302.9	297.3	243.1	393.2	303.8
Department of Education	203.0	302.9	271.3	24J. I	373.2	JUJ.0

TABLE C-3. Federal funds for research, development, and R&D plant, by agency: FYs 2002-04 (Dollars in millions)

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		Obligations		Outlays		
gency	2002	Prelimin	ary	2002	Prelimin	ary
		2003	2004		2003	2004
Department of Energy	8,072.2	8,552.9	8,650.4	8,034.6	8,682.2	8,648.3
Energy Efficiency and Renewable Energy	744.7	791.7	772.1	739.8	786.4	767.1
Fossil Energy	373.5	647.5	486.4	480.5	677.4	484.4
National Nuclear Security Administration	3,728.3	3,830.8	4,068.9	3,711.7	3,831.1	4,055.8
Defense Programs	2,770.0	2,986.0	3,184.8	2,770.0	2,986.0	3,184.8
Fissile Materials Disposition	27.4	20.1	1.0	22.0	20.1	1.0
Naval Reactors	665.5	678.6	736.9	654.4	678.9	723.8
Nonproliferation and Verification	265.4	146.2	146.2	265.4	146.2	146.2
Office of Science	2,932.2	3,053.8	3,066.3	2,823.4	3,158.5	3,100.5
Other Department of Energy programs Bonneville Power Administration Civilian Radioactive Waste Management Environmental Management Nuclear Energy Office of Intelligence	293.6	229.0	256.8	279.2	228.8	240.4
	22.9	23.3	24.2	22.9	23.3	24.2
	62.5	62.5	59.1	62.5	62.5	59.1
	160.3	76.1	48.0	160.3	76.1	48.0
	42.5	63.0	121.5	28.2	63.0	105.3
	5.3	4.0	4.0	5.2	3.8	3.8
Department of Health and Human Services Administration for Children and Families Administration on Aging Agency for Healthcare Research and Quality Agency for Toxic Substances and Disease Registry	24,259.1	28,325.4	28,941.5	23,892.1	28,005.4	28,643.3
	23.3	23.8	24.3	21.7	21.4	21.9
	3.7	.0	.0	2.1	3.2	2.0
	298.7	303.7	279.0	.0	.0	.0
Centers for Disease Control and Prevention	521.0	564.0	531.0	521.0	564.0	531.0
Centers for Medicare and Medicaid Services	117.0	74.2	63.4	72.9	73.7	63.4
Food and Drug Administration	149.7	142.2	138.4	129.7	126.4	121.4
Health Resources and Services Administration	54.7	45.6	21.5	54.7	45.6	21.5
National Institutes of Health	22,343.5	26,429.7	26,945.8	22,343.5	26,429.7	26,945.8
Office of the Secretary Office of the Assistant Secretary, Planning and Evaluation Office of Public Health and Science Substance Abuse and Mental Health Services Administration <sup>2</sup>	17.4	18.3	21.3	16.5	17.5	19.5
	14.9	16.0	16.0	14.9	16.0	16.0
	2.5	2.3	5.3	1.6	1.5	3.5
	717.6	723.9	916.8	717.6	723.9	916.8
Department of Homeland Security Animal and Plant Health Inspection Service Transportation Security Administration United States Coast Guard United States Customs Service	na na na na na	167.9 29.0 110.0 23.7 5.2	221.8 25.4 172.0 24.3	na na na na	168.1 29.0 110.0 25.6 3.5	220.4 25.4 172.0 22.9
Department of Housing and Urban Development	45.3	47.0	47.7	57.7	51.6	50.7
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service National Park Service <sup>3</sup>	634.9	595.7	560.7	633.2	612.3	577.0
	10.4	11.8	10.4	10.4	11.8	10.4
	565.0	555.1	521.3	565.0	555.1	521.3
	33.3	28.8	29.0	31.7	29.7	29.3
	26.2	.0	.0	26.2	15.7	16.0
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	99.2	115.7	109.3	67.7	84.2	66.8
	8.7	9.0	9.2	8.7	9.0	9.2
	33.6	42.7	34.1	33.6	42.7	34.1
	56.9	64.0	66.0	25.4	32.5	23.5
Department of Labor Bureau of Labor Statistics Employment and Training Administration Occupational Safety and Health Administration Office of the Secretary	166.4	170.6	30.4	164.6	149.2	28.7
	20.7	22.4	22.3	20.7	22.4	22.3
	137.1	139.9	.0	137.1	120.0	.0
	3.8	3.9	4.0	3.8	3.9	4.0
	1.2	1.7	1.2	1.2	1.7	1.2
Pension and Welfare Benefits Administration	2.7	2.0	2.1	.9	.5	.5
Pension Benefit Guaranty Corporation	.7	.7	.8	.7	.7	.8

TABLE C-3. Federal funds for research, development, and R&D plant, by agency: FYs 2002-04 (Dollars in millions)

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	Obligations			Outlays		
Agency	2002	Prelimina	ary	2002	Prelimina	ary
	_	2003	2004		2003	2004
Department of State	2.3	1.9	1.9	1.6	1.2	1.2
Department of Transportation	867.2	752.4	682.2	732.9	643.5	806.4
Coast Guard	22.4	na	na	20.0	na	na
Federal Aviation Administration	359.6	231.0	193.3	309.0	295.0	255.0
Federal Highway Administration	258.3	381.6	361.8	209.0	226.0	435.0
Federal Motor Carrier Safety Administration	3.7	6.2	6.7	2.0	3.0	6.0
Federal Railroad Administration Federal Transit Administration National Highway Traffic Safety Administration Office of the Secretary Research and Special Programs Administration Transportation Security Administration	34.1	35.3	31.7	28.4	45.8	34.5
	5.8	4.3	2.6	2.3	3.3	4.2
	59.6	58.2	59.9	47.1	47.7	49.1
	18.4	14.1	10.8	11.1	11.7	11.6
	10.2	21.7	15.4	9.0	11.0	11.0
	95.0	na	na	95.0	na	na
Department of the Treasury Bureau of Engraving and Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service	74.4	70.6	70.7	70.7	70.7	70.7
	7.1	7.1	7.1	7.1	7.1	7.1
	55.5	62.1	62.1	55.5	62.1	62.1
	.1	.2	.2	.1	.2	.2
	10.6	na	na	7.1	na	na
United States Mint	.3	.3	.3	.8	.4	.4
United States Secret Service	.8	1.0	1.0		1.0	1.0
Department of Veterans Affairs	329.2	353.9	380.8	329.2	353.9	380.8
Other agencies Agency for International Development Appalachian Regional Commission Broadcasting Board of Governors Environmental Protection Agency Federal Communications Commission	269.8	262.0	273.8	202.0	206.0	200.0
	.7	.7	.3	.7	.7	.3
	.3	.2	.1	.3	.1	.2
	415.2	627.0	606.9	561.0	584.0	550.0
	4.4	6.3	2.8	4.4	6.3	2.8
Federal Trade Commission General Services Administration Library of Congress National Aeronautics and Space Administration National Archives and Records Administration	1.8 .0 3.0 9,726.5	1.6 .0 4.2 10,540.4 .1	1.7 * 4.8 10,796.7 .1	1.8 * 2.8 9,142.0 .1	1.6 * 4.2 9,772.0 .1	1.7 5.8 10,755.0 .1
National Science Foundation	3,500.8	3,651.0	4,035.3	3,074.0	3,533.0	3,697.0
Nuclear Regulatory Commission	74.3	75.0	75.1	47.0	44.0	45.0
Smithsonian Institution	109.0	113.0	119.0	103.5	107.0	112.0
Social Security Administration	22.8	85.7	76.4	27.9	85.7	76.4

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only: data for the NPS cultural resources program were not available for this survey cycle.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
R&D = Research and development.

TABLE C-4. Federal funds for research and development, by agency: FYs 2002-04 (Dollars in millions)  $\,$ 

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	ı	Outlays				
Agency	2002	Prelimin	nary	2002	Prelimina	ary
		2003	2004		2003	2004
All agencies	85,853.0	95,755.8	101,054.7	80,712.5	89,964.1	96,608.4
Departments  Department of Agriculture	1 071 0	2.0/1./	1 010 /	1 010 1	2.024.0	1 024 4
Department of Agriculture Agricultural Marketing Service	1,971.8 5.2	2,061.6 5.4	1,918.6 5.4	1,919.1 5.2	2,034.9 5.4	1,934.6 5.4
Agricultural Research Service	1,059.8	1,069.2	1,074.6	1,039.4	1,234.9	1,064.9
Animal and Plant Health Inspection Service	23.7	na	na	23.7	na	na
Cooperative State Research, Ed., and						
Extension Service	546.7	648.1	492.8	487.6	512.5	497.2
Economic Research Service	67.0	68.7	76.7	69.9	72.0	77.0
Foreign Agricultural Service	1.4	1.6	1.6	1.4	1.6	1.6
Forest Service	253.0	253.0	252.0	277.0	193.0	273.0
Grain Inspection Packers and Stockyards			= -			
Administration	6.0	6.8	7.1	6.0	6.8	7.1
National Agricultural Statistics Service	4.6	4.8	4.9	4.6	4.8	4.9
Rural Business-Cooperative Service	4.2	4.0	3.5	4.2	4.0	3.5
Department of Commerce	1,151.4	1,157.4	1,052.9	1,113.7	1,184.7	1,236.3
Bureau of the Census	28.7	16.2	13.5	22.7	18.9	14.1
Economic Development Administration	.5	.6	.6	.4	.5	.5
National Institute of Standards and						
Technology	451.4	487.7	345.2	413.3	471.6	506.8
National Oceanic and Atmospheric	/54.0	/ 40 7	101.0	(54.0		
Administration	651.3	643.7	686.9	651.3	643.7	686.9
National Telecommunications and Information Administration	19.6	9.2	6.7	26.0	50.0	28.0
Department of Defense	37,557.1	42,500.3	45,781.6	34,077.8	37,953.6	41,903.4
Defense Agencies	12,075.7	13,109.0	13,299.2	10,196.9	11,061.2	11,710.7
Ballistic Missile Defense Organization	6,262.5	6,580.4	7,581.6	5,825.5	6,216.0	7,247.1
Chemical and Biological Defense	389.1	429.7	393.6	.0	.0	.0
Defense Advanced Research Projects Agency	2,158.0	2,635.7	2,924.8	1,916.1	2,092.8	2,421.5
Defense Information Systems Agency	205.7	252.9	322.1	169.6	211.8	261.8
Defense Logistics Agency	153.9	175.6	64.0	70.7	89.6	59.4
Defense Threat Reduction Agency	539.1	479.2	382.8	477.4	496.4	415.6
Joint Staff	59.4	99.3	119.1	59.4	99.3	119.1
Special Operations Command	400.7	436.0	448.1	264.6	396.6	458.7
TRICARE Management Activity 1	490.0	479.9	74.4	479.9	440.1	57.2
Washington Headquarters Services	1,417.3	1,540.4	988.8	933.5	1,018.5	670.4
Department of the Air Force	6,884.4	8,113.1	8,946.3	6,571.2	7,156.4	7,882.5
Air Force, Materials Command	4,645.9	5,640.9	6,252.4	4,396.9	5,017.6	5,480.0
Air Force, Space Command	2,238.4	2,472.2	2,693.9	2,174.3	2,138.8	2,402.4
Department of the Army	7,076.6	7,228.5	8,978.3	6,619.8	7,068.3	8,256.3
Department of the Army, Civil Functions	50.6	46.6	46.1	50.6	46.6	46.1
Department of the Army, Military Functions	7,026.0	7,182.0	8,932.3	6,569.2	7,021.7	8,210.2
Department of the Navy	11,287.0	13,822.0	14,276.8	10,494.5	12,437.8	13,797.3
Operational Test and Evaluation, Director	233.5	227.7	281.0	195.5	230.0	256.6
Department of Education	285.6	302.9	297.3	243.1	393.2	303.8

TABLE C-4. Federal funds for research and development, by agency: FYs 2002-04 (Dollars in millions)

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		Obligations		Outlays		
Agency	2002	Prelimin	ary —	2002	Prelimin	ary
	_	2003	2004	_	2003	2004
Department of Energy Energy Efficiency and Renewable Energy Fossil Energy National Nuclear Security Administration Defense Programs	7,044.2	7,554.1	7,691.4	7,010.3	7,575.1	7,649.2
	739.8	786.4	767.1	734.9	781.1	762.2
	363.3	643.3	482.2	471.3	671.9	480.2
	3,302.4	3,384.3	3,651.6	3,299.4	3,381.8	3,632.7
	2,372.7	2,569.1	2,796.0	2,372.7	2,569.1	2,796.0
Fissile Materials Disposition	27.4	20.1	1.0	22.0	20.1	1.0
Naval Reactors	637.0	648.9	708.4	639.3	646.4	689.4
Nonproliferation and Verification	265.4	146.2	146.2	265.4	146.2	146.2
Office of Science	2,345.1	2,511.0	2,533.7	2,225.5	2,511.5	2,533.7
Other Department of Energy programs Bonneville Power Administration Civilian Radioactive Waste Management Environmental Management Nuclear Energy Office of Intelligence	293.6	229.0	256.8	279.2	228.8	240.4
	22.9	23.3	24.2	22.9	23.3	24.2
	62.5	62.5	59.1	62.5	62.5	59.1
	160.3	76.1	48.0	160.3	76.1	48.0
	42.5	63.0	121.5	28.2	63.0	105.3
	5.3	4.0	4.0	5.2	3.8	3.8
Department of Health and Human Services Administration for Children and Families Administration on Aging Agency for Healthcare Research and Quality Agency for Toxic Substances and Disease Registry	24,011.6	27,096.2	28,857.3	23,647.8	26,774.7	28,559.6
	23.3	23.8	24.3	21.7	21.4	21.9
	3.7	.0	.0	2.1	3.2	2.0
	298.7	303.7	279.0	.0	.0	.0
Centers for Disease Control and Prevention	521.0	564.0	531.0	521.0	564.0	531.0
Centers for Medicare and Medicaid Services	117.0	74.2	63.4	72.9	73.7	63.4
Food and Drug Administration	136.3	139.8	134.9	119.4	122.5	118.3
Health Resources and Services Administration	54.1	45.0	20.9	54.1	45.0	20.9
National Institutes of Health	22,110.1	25,203.6	26,865.8	22,110.1	25,203.6	26,865.8
Office of the Secretary Office of the Assistant Secretary, Planning and Evaluation Office of Public Health and Science Substance Abuse and Mental Health Services Administration <sup>2</sup>	17.4	18.3	21.3	16.5	17.5	19.5
	14.9	16.0	16.0	14.9	16.0	16.0
	2.5	2.3	5.3	1.6	1.5	3.5
	717.6	723.9	916.8	717.6	723.9	916.8
Department of Homeland Security Animal and Plant Health Inspection Service Transportation Security Administration United States Coast Guard United States Customs Service	na na na na na	142.6 29.0 85.0 23.3 5.2	203.3 25.4 154.5 23.3 .0	na na na na	142.7 29.0 85.0 25.2 3.5	217.4 25.4 170.0 21.9
Department of Housing and Urban Development	45.3	47.0	47.7	57.7	51.6	50.7
Department of the Interior	632.8	592.2	555.8	631.1	608.7	572.2
Bureau of Reclamation	10.4	10.3	8.0	10.4	10.3	8.0
Geological Survey	565.0	555.1	521.3	565.0	555.1	521.3
Minerals Management Service	31.2	26.8	26.5	29.6	27.6	26.9
National Park Service <sup>3</sup>	26.2	.0	.0	26.2	15.7	16.0
Department of Justice	99.2	115.7	109.3	67.7	84.2	66.8
Bureau of Prisons	8.7	9.0	9.2	8.7	9.0	9.2
Federal Bureau of Investigation	33.6	42.7	34.1	33.6	42.7	34.1
Office of Justice Programs	56.9	64.0	66.0	25.4	32.5	23.5
Department of Labor Bureau of Labor Statistics Employment and Training Administration Occupational Safety and Health Administration Office of the Secretary	166.4	170.6	30.4	164.6	149.2	28.7
	20.7	22.4	22.3	20.7	22.4	22.3
	137.1	139.9	.0	137.1	120.0	.0
	3.8	3.9	4.0	3.8	3.9	4.0
	1.2	1.7	1.2	1.2	1.7	1.2
Pension and Welfare Benefits Administration	2.7	2.0	2.1	.9	.5	.5
Pension Benefit Guaranty Corporation	.7	.7	.8	.7	.7	.8

TABLE C-4. Federal funds for research and development, by agency: FYs 2002-04 (Dollars in millions)

Page 3 of 3

Obligations			Outlays		
2002	Prelimina	nry	2002	Prelimina	ry
	2003	2004		2003	2004
2.3	1.9	1.9	1.6	1.2	1.2
815.5	733.3	662.6	681.5	627.4	789.1
22.0	na	na	19.7	na	na
345.1	213.3	175.1	295.0	280.0	239.0
258.3	381.6	361.8	209.0	226.0	435.0
3.7	6.2	6.7	2.0	3.0	6.0
33.2	33.9	30.2	27.3	44.7	33.3
5.8	4.3	2.6	2.3	3.3	4.2
59.6	58.2	59.9	47.1	47.7	49.1
18.4	14.1	10.8	11.1	11.7	11.6
10.2	21.7	15.4	9.0	11.0	11.0
59.0	na	na	59.0	na	na
74.4	70.6	70.7	70.7	70.7	70.7
7.1	7.1	7.1	7.1	7.1	7.1
55.5	62.1	62.1	55.5	62.1	62.1
.1	.2	.2	.1	.2	.2
10.6	na	na	7.1	na	na
.3	.3	.3	.8	.4	.4
.8	1.0	1.0		1.0	1.0
328.8	353.6	380.5	328.8	353.6	380.5
269.8	262.0	273.8	202.0	206.0	200.0
.7	.7	.3	.7	.7	.3
.3	.2	.1	.3	.1	.2
415.2	627.0	606.9	561.0	584.0	550.0
4.4	6.3	2.8	4.4	6.3	2.8
1.8	1.6	1.7	1.8	1.6	1.7
3.0	4.2	4.8	2.8	4.2	5.8
7,508.2	8,280.8	8,546.8	6,945.0	7,701.0	8,455.0
.1	.1	.1	.1	.1	.1
3,260.0	3,403.6	3,689.9	2,803.0	3,221.0	3,398.0
74.3	75.0	75.1	47.0	44.0	45.0
106.0	109.0	115.0	101.0	104.0	109.0
22.8	85.7	76.4	27.9	85.7	76.4
	2.3 815.5 22.0 345.1 258.3 3.7 33.2 5.8 59.6 18.4 10.2 59.0 74.4 7.1 55.5 1 10.6 .3 .8 328.8 269.8 .7 .3 415.2 4.4 1.8 3.0 7,508.2 .1 3,260.0 74.3 106.0	Prelimina 2002  2003  2.3	Preliminary  2002  2003  2004  2.3  1.9  1.9  815.5  733.3  662.6  22.0  na  na  345.1  213.3  175.1  258.3  381.6  361.8  3.7  6.2  6.7  33.2  33.9  30.2  5.8  4.3  2.6  59.6  58.2  59.9  18.4  14.1  10.8  10.2  21.7  15.4  59.0  na  na  74.4  70.6  70.7  7.1  7.1  7.1  7.1  7.1  7.1  7.	Preliminary   2002     2003   2004     2002       2003   2004     2002       2003   2004       2002	Preliminary   2002   Preliminary   2003

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

on SAMHSA's obligations by program activity budget and previously reported funding for development.

3 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the

NPS cultural resources program were not available for this survey cycle.

 $<sup>^{\</sup>star}$  = Amount greater than 0 but less than 50,000 dollars. na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-5. Federal obligations for research and development, by agency and character of work: FY 2002 (Dollars in thousands)

Page 1 of 3

		Basic	Applied		Development	
Agency	Total R&D	research	research	Total	Advanced technology	Major systems
All agencies Departments	85,852,968	23,668,345	24,338,366	37,846,257	NA	NA
Department of Agriculture Agricultural Marketing Service Agricultural Research Service Animal and Plant Health Inspection Service	1,971,755 5,187 1,059,803 23,743	930,062 0 582,892 0	880,345 4,413 381,529 0	161,348 774 95,382 23,743	NA NA NA NA	NA NA NA NA
Cooperative State Research, Ed., and Extension Service Economic Research Service Foreign Agricultural Service Forest Service Grain Inspection Packers and Stockyards	546,692 67,045 1,431 253,000	234,415 6,705 808 103,730	312,277 60,340 623 113,850	0 0 0 35,420	NA NA NA NA	NA NA NA NA
Administration	6,029	0	0	6,029	NA	NA
National Agricultural Statistics Service Rural Business-Cooperative Service	4,597 4,228	1,512 0	3,085 4,228	0 0	NA NA	NA NA
Department of Commerce Bureau of the Census Economic Development Administration National Institute of Standards and	1,151,371 28,706 470	72,546 2,795 64	921,922 3,192 406	156,903 22,719 0	NA NA NA	NA NA NA
Technology National Oceanic and Atmospheric	451,368	56,089	298,551	96,728	NA	NA
Administration  National Telecommunications and Information	651,259	13,598	615,691	21,970	NA	NA
Administration	19,568	0	4,082	15,486	NA	NA
Department of Defense Defense Agencies Ballistic Missile Defense Organization Chemical and Biological Defense Defense Advanced Research Projects Agency	37,557,113 12,075,695 6,262,459 389,116 2,157,995	1,812,518 899,241 0 44,287 135,483	4,452,840 1,754,241 762 191,427 1,048,405	31,291,755 9,422,213 6,261,697 153,402 974,107	5,214,451 2,370,869 191,787 65,549 888,192	26,077,304 7,051,344 6,069,910 87,853 85,915
Defense Information Systems Agency Defense Logistics Agency Defense Threat Reduction Agency Joint Staff Special Operations Command	205,705 153,923 539,087 59,444 400,696	0 0 0 0	8,714 368,015 0 27,325	205,705 145,209 171,072 59,444 373,371	0 135,633 171,072 59,444 156,816	205,705 9,576 0 0 216,555
TRICARE Management Activity <sup>1</sup> Washington Headquarters Services Department of the Air Force Air Force, Materials Command Air Force, Space Command	489,994 1,417,276 6,884,364 4,645,927 2,238,437	384,604 334,867 298,993 275,992 23,001	1,460 108,133 1,058,435 1,056,320 2,115	103,930 974,276 5,526,936 3,313,615 2,213,321	699 701,677 1,090,114 533,224 556,890	103,231 272,599 4,436,822 2,780,391 1,656,431
Department of the Army Department of the Army, Civil Functions <sup>2</sup> Department of the Army, Military Functions Department of the Navy Operational Test and Evaluation, Director	7,076,563 50,610 7,025,953 11,286,997 233,494	224,630 3,049 221,581 389,654 0	886,883 26,836 860,047 753,281 0	5,965,050 20,725 5,944,325 10,144,062 233,494	NA NA 915,850 809,859 7,034	NA NA 5,028,475 9,334,203 226,460
Department of Education	285,632	5,280	178,285	102,067	NA	NA

TABLE C-5. Federal obligations for research and development, by agency and character of work: FY 2002 (Dollars in thousands)

Page 2 of 3

		Basic	Applied	Development		
Agency	Total R&D	research	research	Total	Advanced technology	Major systems
Department of Energy Energy Efficiency and Renewable Energy Fossil Energy National Nuclear Security Administration Defense Programs	7,044,164 739,812 363,267 3,302,414 2,372,661	2,477,841 60,058 8,114 26,529	2,584,648 233,553 136,897 2,046,064 1,893,925	1,981,675 446,201 218,256 1,229,821 478,736	NA NA NA NA	NA NA NA NA
Fissile Materials Disposition Naval Reactors Nonproliferation and Verification Office of Science	27,373 636,956 265,424 2,345,103	0 0 26,529 2,342,057	0 0 152,139 3,046	27,373 636,956 86,756 0	NA NA NA NA	NA NA NA
Other Department of Energy programs Bonneville Power Administration Civilian Radioactive Waste Management Environmental Management Nuclear Energy Office of Intelligence	293,568 22,932 62,522 160,342 42,500 5,272	41,083 3,183 0 37,900 0	165,088 11,089 62,522 48,977 42,500	87,397 8,660 0 73,465 0 5,272	NA NA NA NA NA	NA NA NA NA NA
Department of Health and Human Services Administration for Children and Families Administration on Aging Agency for Healthcare Research and Quality Agency for Toxic Substances and Disease	24,011,614 23,293 3,728 298,719	12,860,758 0 0 0	10,370,131 23,293 3,728 274,821	780,725 0 0 23,898	NA NA NA NA	NA NA NA
Registry	12,436	0	12,436	0	NA	NA
Centers for Disease Control and Prevention Centers for Medicare and Medicaid Services Food and Drug Administration Health Resources and Services Administration National Institutes of Health	521,000 117,015 136,316 54,097 22,110,101	0 0 0 2,121 12,843,779	521,000 117,015 136,316 15,200 9,266,322	0 0 0 36,776 0	NA NA NA NA	NA NA NA NA
Office of the Secretary	17,356	14,858	0	2,498	NA	NA
Office of the Assistant Secretary, Planning and Evaluation Office of Public Health and Science Substance Abuse and Mental Health Services	14,858 2,498	14,858	0	0 2,498	NA NA	NA NA
Administration <sup>3</sup> Department of Housing and Urban Development	717,553 45,346	0	0 16,216	717,553 29,130	NA NA	NA NA
Department of Housing and orban bevelopment  Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service National Park Service <sup>4</sup>	632,768 10,390 564,999 31,198 26,181	45,829 0 40,809 0 5,020	511,556 3,636 464,118 31,198 12,604	75,383 6,754 60,072 0 8,557	NA NA NA NA NA	NA NA NA NA NA
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	99,155 8,717 33,562 56,876	25,396 0 0 25,396	23,756 3,642 0 20,114	50,003 5,075 33,562 11,366	NA NA NA NA	NA NA NA
Department of Labor Bureau of Labor Statistics Employment and Training Administration Occupational Safety and Health Administration Office of the Secretary	166,391 20,700 137,135 3,839 1,249	30,238 12,400 17,838 0 0	15,279 8,300 0 3,839 342	120,874 0 119,297 0 907	NA NA NA NA	NA NA NA NA
Pension and Welfare Benefits Administration Pension Benefit Guaranty Corporation	2,733 735	0	2,733 65	0 670	NA NA	NA NA
Department of State	2,304	0	2,304	0	NA	NA

TABLE C-5. Federal obligations for research and development, by agency and character of work: FY 2002 (Dollars in thousands)

Page 3 of 3

		Basic research	Applied research	Development		
Agency	Total R&D			Total	Advanced technology	Major systems
Department of Transportation	815,501	36,306	494,581	284,614	NA	NA
Coast Guard	22,031	0	6,408	15,623	NA	NA
Federal Aviation Administration	345,108	0	244.839	100,269	NA	NA
Federal Highway Administration	258,333	17,426	121,149	119,758	NA	NA
Federal Motor Carrier Safety Administration	3,736	0	165	3,571	NA	NA
Federal Railroad Administration	33,223	0	29,744	3,479	NA	NA
Federal Transit Administration	5,833	0	592	5,241	NA	NA
National Highway Traffic Safety Administration	59,624	0	59,624	0	NA	NA
Office of the Secretary	18,425	0	0	18,425	NA	NA
Research and Special Programs Administration	10,188	0	3,740	6,448	NA	NA
Transportation Security Administration	59,000	18,880	28,320	11,800	NA	NA
Department of the Treasury	74,436	703	61,128	12,605	NA	NA
Bureau of Engraving and Printing	7,074	703	4,615	1,756	NA	NA
Internal Revenue Service	55,539	0	55,539	0	NA	NA
Office of Thrift Supervision	147	0	147	0	NA	NA
United States Customs Service	10,609	0	40	10,569	NA	NA
United States Mint	280	0	0	280	NA	NA
United States Secret Service	787	0	787	0	NA	NA
Department of Veterans Affairs	328,806	141,705	172,601	14,500	NA	NA
Other agencies						
Agency for International Development	269,798	106	247,469	22,223	NA	NA
Appalachian Regional Commission	670	0	670	0	NA	NA
Broadcasting Board of Governors	250	0	250	0	NA	NA
Environmental Protection Agency	415,200	63,800	259,900	91,500	NA	NA
Federal Communications Commission	4,417	0	4,417	0	NA	NA
Federal Trade Commission	1,803	0	1,803	0	NA	NA
Library of Congress	3,003	0	1,743	1,260	NA	NA
National Aeronautics and Space Administration	7,508,230	1,984,711	2,853,827	2,669,692	NA	NA
National Archives and Records Administration	120	0	120	0	NA	NA
National Science Foundation	3,260,008	3,074,546	185,462	0	NA	NA
Nuclear Regulatory Commission	74,314	0	74,314	0	NA	NA
Smithsonian Institution	106,000	106,000	0	0	NA	NA
Social Security Administration	22,799	0	22,799	0	NA	NA

NOTES: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy and Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown. For accounting purposes, funds are shown in advanced technology column for Department of Defense.

Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NA = Not available (data are not collected in this category for this agency).

TABLE C-6. Preliminary Federal obligations for research and development, by agency and character of work: FY 2003 (Dollars in thousands)

Page 1 of 3

		Basic	Basic Applied		Development	
Agency	Total R&D	research	research	Total	Advanced technology	Major systems
All agencies Departments	95,755,849	25,599,941	26,968,563	43,187,345	NA	NA
Department of Agriculture Agricultural Marketing Service Agricultural Research Service Cooperative State Research, Ed., and	2,061,550 5,397 1,069,249	979,305 0 588,087	942,973 4,591 384,930	139,272 806 96,232	NA NA NA	NA NA NA
Extension Service	648,051	278,143	369,908	0	NA	NA
Economic Research Service Foreign Agricultural Service Forest Service Grain Inspection Packers and Stockyards	68,674 1,600 253,000	6,867 912 103,730	61,807 688 113,850	0 0 35,420	NA NA NA	NA NA NA
Administration National Agricultural Statistics Service Rural Business-Cooperative Service	6,814 4,761 4,004	0 1,566 0	0 3,195 4,004	6,814 0 0	NA NA NA	NA NA NA
Department of Commerce Bureau of the Census Economic Development Administration National Institute of Standards and	1,157,417 16,242 550	78,537 2,142 275	943,472 2,426 275	135,408 11,674 0	NA NA NA	NA NA NA
Technology National Oceanic and Atmospheric	487,704	63,292	325,470	98,942	NA	NA
Administration National Telecommunications and Information	643,702	12,828	609,861	21,013	NA	NA
Administration	9,219	0	5,440	3,779	NA	NA
Department of Defense Defense Agencies Ballistic Missile Defense Organization Chemical and Biological Defense Defense Advanced Research Projects Agency	42,500,268 13,108,980 6,580,423 429,694 2,635,684	1,890,731 916,209 0 53,396 179,081	4,623,094 1,823,829 0 205,336 1,157,948	35,986,443 10,368,942 6,580,423 170,962 1,298,655	6,389,566 2,921,494 204,257 92,516 1,185,754	29,596,877 7,447,448 6,376,166 78,446 112,901
Defense Information Systems Agency Defense Logistics Agency Defense Threat Reduction Agency Joint Staff Special Operations Command	252,867 175,567 479,161 99,305 436,037	0 0 0 0	0 22,888 297,254 0 27,232	252,867 152,679 181,907 99,305 408,805	0 147,662 181,907 99,305 171,698	252,867 5,017 0 0 237,107
TRICARE Management Activity <sup>1</sup> Washington Headquarters Services Department of the Air Force Air Force, Materials Command Air Force, Space Command	479,855 1,540,387 8,113,068 5,640,910 2,472,158	358,138 325,594 360,762 315,362 45,400	0 113,171 1,143,969 1,132,842 11,127	121,717 1,101,622 6,608,337 4,192,706 2,415,631	0 838,395 1,492,566 554,703 937,863	121,717 263,227 5,115,771 3,638,003 1,477,768
Department of the Army, Civil Functions <sup>2</sup> Department of the Army, Military Functions Department of the Navy Operational Test and Evaluation, Director	7,228,521 46,550 7,181,971 13,822,043 227,656	220,581 2,793 217,788 393,179 0	848,287 24,206 824,081 807,009 0	6,159,653 19,551 6,140,102 12,621,855 227,656	NA NA 1,052,658 894,742 8,555	NA NA 5,087,444 11,727,113 219,101
Department of Education	302,896	5,494	195,018	102,384	NA	NA

TABLE C-6. Preliminary Federal obligations for research and development, by agency and character of work: FY 2003 (Dollars in thousands)

Page 2 of 3

		Basic	Applied		Development	elopment	
Agency	Total R&D	research	research	Total	Advanced technology	Major systems	
Department of Energy Energy Efficiency and Renewable Energy Fossil Energy National Nuclear Security Administration Defense Programs	7,554,063 786,416 643,334 3,384,254 2,569,081	2,590,457 59,536 10,473 9,107	2,730,477 250,365 245,888 2,072,683 2,003,149	2,233,129 476,515 386,973 1,302,464 565,932	NA NA NA NA	NA NA NA NA	
Fissile Materials Disposition Naval Reactors Nonproliferation and Verification Office of Science	20,071 648,910 146,192 2,511,026	0 0 9,107 2,508,063	0 0 69,534 2,963	20,071 648,910 67,551 0	NA NA NA NA	NA NA NA NA	
Other Department of Energy programs Bonneville Power Administration Civilian Radioactive Waste Management Environmental Management Nuclear Energy Office of Intelligence	229,033 23,345 62,479 76,144 63,034 4,031	3,278 3,278 0 0 0	158,578 11,407 62,479 30,458 54,234 0	67,177 8,660 0 45,686 8,800 4,031	NA NA NA NA NA	NA NA NA NA NA	
Department of Health and Human Services Administration for Children and Families Agency for Healthcare Research and Quality Centers for Disease Control and Prevention Centers for Medicare and Medicaid Services	27,096,188 23,782 303,695 564,000 74,194	14,152,873 0 0 0 0	12,165,119 23,782 279,399 564,000 74,194	778,196 0 24,296 0	NA NA NA NA	NA NA NA NA	
Food and Drug Administration Health Resources and Services Administration National Institutes of Health Office of the Secretary Office of the Assistant Secretary, Planning	139,784 44,961 25,203,553 18,343	0 2,068 14,134,805 16,000	139,784 15,212 11,068,748 0	0 27,681 0 2,343	NA NA NA NA	NA NA NA	
and Evaluation	16,000	16,000	0	0	NA	NA	
Office of Public Health and Science Substance Abuse and Mental Health Services	2,343	0	0	2,343	NA	NA	
Administration <sup>3</sup>	723,876	0	0	723,876	NA	NA	
Department of Homeland Security Animal and Plant Health Inspection Service Transportation Security Administration United States Coast Guard United States Customs Service	142,565 29,022 85,000 23,343 5,200	27,200 0 27,200 0	47,536 0 40,800 6,736 0	67,829 29,022 17,000 16,607 5,200	NA NA NA NA	NA NA NA NA	
Department of Housing and Urban Development	46,954	0	17,491	29,463	NA	NA	
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	592,201 10,308 555,103 26,790	40,934 0 40,934 0	484,468 3,608 454,070 26,790	66,799 6,700 60,099 0	NA NA NA NA	NA NA NA	
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	115,700 9,000 42,700 64,000	35,000 0 0 35,000	16,700 3,700 0 13,000	64,000 5,300 42,700 16,000	NA NA NA NA	NA NA NA NA	
Department of Labor Bureau of Labor Statistics Employment and Training Administration Occupational Safety and Health Administration Office of the Secretary	170,615 22,400 139,897 3,926 1,692	33,497 13,600 19,897 0	15,536 8,800 0 3,926 792	121,582 0 120,000 0 900	NA NA NA NA	NA NA NA NA	
Pension and Welfare Benefits Administration Pension Benefit Guaranty Corporation	1,951 749	0	1,951 67	0 682	NA NA	NA NA	
Department of State	1,852	0	1,852	0	NA	NA	

TABLE C-6. Preliminary Federal obligations for research and development, by agency and character of work: FY 2003 (Dollars in thousands)

Page 3 of 3

Agency	Total R&D	Basic research	Applied research	Development		
				Total	Advanced technology	Major systems
Department of Transportation Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety Administration Federal Railroad Administration	733,283 213,265 381,565 6,196 33,912	20,324 0 20,324 0	409,161 129,472 181,729 2,964 29,296	303,798 83,793 179,512 3,232 4,616	NA NA NA NA	NA NA NA NA
Federal Transit Administration National Highway Traffic Safety Administration Office of the Secretary Research and Special Programs Administration	4,320 58,181 14,133 21,711	0 0 0 0	0 58,181 0 7,519	4,320 0 14,133 14,192	NA NA NA NA	NA NA NA NA
Department of the Treasury Bureau of Engraving and Printing Internal Revenue Service Office of Thrift Supervision United States Mint United States Secret Service	70,556 7,070 62,050 162 297 977	224 224 0 0 0	69,475 6,286 62,050 162 0 977	857 560 0 0 297 0	NA NA NA NA NA	NA NA NA NA NA
Department of Veterans Affairs	353,564	152,375	185,597	15,592	NA	NA
Other agencies Agency for International Development Appalachian Regional Commission Broadcasting Board of Governors Environmental Protection Agency Federal Communications Commission	262,045 686 243 626,964 6,265	100 0 0 101,100 0	240,770 686 243 354,864 6,265	21,175 0 0 171,000 0	NA NA NA NA	NA NA NA NA
Federal Trade Commission Library of Congress National Aeronautics and Space Administration National Archives and Records Administration National Science Foundation	1,554 4,233 8,280,800 120 3,403,614	0 0 2,177,850 0 3,204,940	1,554 1,780 3,154,985 120 198,674	2,453 2,947,965 0	NA NA NA NA	NA NA NA NA
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration	74,996 109,000 85,657	109,000 0	74,996 0 85,657	0 0 0	NA NA NA	NA NA NA

NOTES: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

<sup>1</sup> TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
2 The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy and Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown. For accounting purposes, funds are shown in advanced technology column for Department of Defense.
3 Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are settimates based on SAMHSA) are

estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

NA = Not available (data are not collected in this category for this agency).

TABLE C-7. Preliminary Federal obligations for research and development, by agency and character of work: FY 2004 (Dollars in thousands)

Page 1 of 3

		Basic	Applied	I	Development	
Agency	Total R&D	research	research _	Total	Advanced technology	Major systems
All agencies Departments	101,054,746	26,643,092	27,428,744	46,982,910	NA	NA
Department of Agriculture Agricultural Marketing Service Agricultural Research Service Cooperative State Research, Ed., and	1,918,585 5,446 1,074,628	916,805 0 591,045	861,856 4,633 386,866	139,924 813 96,717	NA NA NA	NA NA NA
Extension Service	492,775	212,263	280,512	0	NA	NA
Economic Research Service Foreign Agricultural Service Forest Service Grain Inspection Packers and Stockyards	76,657 1,600 252,000	7,666 912 103,320	68,991 688 113,400	0 0 35,280	NA NA NA	NA NA NA
Administration National Agricultural Statistics Service Rural Business-Cooperative Service	7,114 4,861 3,504	0 1,599 0	0 3,262 3,504	7,114 0 0	NA NA NA	NA NA NA
Department of Commerce Bureau of the Census Economic Development Administration National Institute of Standards and	1,052,866 13,475 550	99,415 1,949 275	905,005 2,204 275	48,446 9,322 0	NA NA NA	NA NA NA
Technology National Oceanic and Atmospheric	345,249	83,269	242,657	19,323	NA	NA
Administration National Telecommunications and Information	686,914	13,922	653,191	19,801	NA	NA
Administration	6,678	0	6,678	0	NA	NA
Department of Defense Defense Agencies Ballistic Missile Defense Organization Chemical and Biological Defense Defense Advanced Research Projects Agency	45,781,586 13,299,199 7,581,598 393,636 2,924,756	1,622,516 243,302 0 45,079 151,055	4,267,648 1,799,790 0 168,228 1,235,890	39,891,422 11,256,107 7,581,598 180,329 1,537,811	6,034,297 2,743,016 232,812 87,715 1,424,890	33,857,125 8,513,091 7,348,786 92,614 112,921
Defense Information Systems Agency Defense Logistics Agency Defense Threat Reduction Agency Joint Staff Special Operations Command	322,053 63,996 382,825 119,115 448,053	0 0 0 0	0 22,615 297,212 0 24,253	322,053 41,381 85,613 119,115 423,800	0 36,172 85,613 119,115 177,996	322,053 5,209 0 0 245,804
TRICARE Management Activity <sup>1</sup> Washington Headquarters Services Department of the Air Force Air Force, Materials Command Air Force, Space Command	74,367 988,800 8,946,292 6,252,350 2,693,942	0 47,168 591,761 317,657 274,104	0 51,592 1,220,921 1,220,920	74,367 890,040 7,133,610 4,713,773 2,419,837	0 578,703 1,698,471 526,061 1,172,410	74,367 311,337 5,435,139 4,187,712 1,247,427
Department of the Army Department of the Army, Civil Functions <sup>2</sup> Department of the Army, Military Functions Department of the Navy Operational Test and Evaluation, Director	8,978,318 46,050 8,932,268 14,276,780 280,997	333,965 2,763 331,202 453,488 0	692,110 24,867 667,243 554,827	7,952,243 18,420 7,933,823 13,268,465 280,997	NA NA 833,860 728,175 12,355	NA NA 7,099,963 12,540,290 268,642
Department of Education	297,325	6,408	213,172	77,745	NA	NA

TABLE C-7. Preliminary Federal obligations for research and development, by agency and character of work: FY 2004 (Dollars in thousands)

Page 2 of 3

		Basic	Applied		Development	
Agency	Total R&D	research	research	Total	Advanced technology	Major systems
Department of Energy Energy Efficiency and Renewable Energy Fossil Energy National Nuclear Security Administration Defense Programs	7,691,413 767,104 482,162 3,651,595 2,796,039	2,610,245 57,346 9,652 9,107	2,908,813 276,290 172,950 2,322,476 2,252,942	2,172,355 433,468 299,560 1,320,012 543,097	NA NA NA NA	NA NA NA NA
Fissile Materials Disposition Naval Reactors Nonproliferation and Verification Office of Science	1,000 708,364 146,192 2,533,747	0 0 9,107 2,530,747	0 0 69,534 3,000	1,000 708,364 67,551 0	NA NA NA NA	NA NA NA
Other Department of Energy programs Bonneville Power Administration Civilian Radioactive Waste Management Environmental Management Nuclear Energy Office of Intelligence	256,805 24,162 59,092 47,994 121,526 4,031	3,393 3,393 0 0 0	134,097 11,806 59,092 19,198 44,001	119,315 8,963 0 28,796 77,525 4,031	NA NA NA NA NA	NA NA NA NA NA
Department of Health and Human Services Administration for Children and Families Agency for Healthcare Research and Quality Centers for Disease Control and Prevention Centers for Medicare and Medicaid Services	28,857,346 24,282 279,000 531,000 63,400	14,818,874 0 0 0 0	13,088,507 24,282 256,680 531,000 63,400	949,965 0 22,320 0	NA NA NA NA	NA NA NA NA
Food and Drug Administration Health Resources and Services Administration National Institutes of Health Office of the Secretary Office of the Assistant Secretary, Planning	134,909 20,908 26,865,797 21,291	2,088 14,800,786 16,000	134,909 13,225 12,065,011 0	0 5,595 0 5,291	NA NA NA NA	NA NA NA NA
and Evaluation  Office of Public Health and Science Substance Abuse and Mental Health Services Administration <sup>3</sup>	16,000 5,291 916,759	16,000 0 0	0 0 0	0 5,291 916,759	NA NA NA	NA NA NA
Department of Homeland Security Animal and Plant Health Inspection Service Transportation Security Administration United States Coast Guard	203,264 25,447 154,500 23,317	54,400 0 54,400 0	88,053 0 81,600 6,453	60,811 25,447 18,500 16,864	NA NA NA NA	NA NA NA
Department of Housing and Urban Development	47,660	0	17,806	29,854	NA	NA
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	555,787 8,035 521,294 26,458	38,192 0 38,192 0	461,867 2,812 432,597 26,458	55,728 5,223 50,505 0	NA NA NA NA	NA NA NA NA
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	109,295 9,150 34,145 66,000	33,000 0 0 33,000	13,850 3,850 0 10,000	62,445 5,300 34,145 23,000	NA NA NA NA	NA NA NA NA
Department of Labor Bureau of Labor Statistics Occupational Safety and Health Administration Office of the Secretary Pension and Welfare Benefits Administration Pension Benefit Guaranty Corporation	30,381 22,300 3,992 1,200 2,129 760	14,000 14,000 0 0 0	14,790 8,300 3,992 300 2,129 69	1,591 0 0 900 0 691	NA NA NA NA NA	NA NA NA NA NA
Department of State	1,933	0	1,933	0	NA	NA

TABLE C-7. Preliminary Federal obligations for research and development, by agency and character of work: FY 2004 (Dollars in thousands)

Page 3 of 3

		Basic	Applied		Development	
Agency	Total R&D	research	research	Total	Advanced technology	Major systems
Department of Transportation	662,559	36,151	384,422	241,986	NA	NA
Federal Aviation Administration	175,135	0	100,000	75,135	NA	NA
Federal Highway Administration	361,804	36,151	185,834	139,819	NA	NA
Federal Motor Carrier Safety Administration	6,682	0	5,344	1,338	NA	NA
Federal Railroad Administration	30,243	0	27,043	3,200	NA	NA
Federal Transit Administration	2,640	0	0	2,640	NA	NA
National Highway Traffic Safety Administration	59,867	0	59,867	0	NA	NA
Office of the Secretary	10,836	0	0	10,836	NA	NA
Research and Special Programs Administration	15,352	0	6,334	9,018	NA	NA
Department of the Treasury	70,656	224	69,537	895	NA	NA
Bureau of Engraving and Printing	7,070	224	6,286	560	NA	NA
Internal Revenue Service	62,050	0	62,050	0	NA	NA
Office of Thrift Supervision	177	0	177	0	NA	NA
United States Mint	335	0	0	335	NA	NA
United States Secret Service	1,024	0	1,024	0	NA	NA
Department of Veterans Affairs	380,471	163,971	199,722	16,778	NA	NA
Other agencies						
Agency for International Development	273,772	100	252,775	20,897	NA	NA
Appalachian Regional Commission	343	0	343	0	NA	NA
Broadcasting Board of Governors	51	0	51	0	NA	NA
Environmental Protection Agency	606,907	89,507	369,100	148,300	NA	NA
Federal Communications Commission	2,759	0	2,759	0	NA	NA
Federal Trade Commission	1,679	0	1,679	0	NA	NA
Library of Congress	4,802	0	788	4,014	NA	NA
National Aeronautics and Space Administration	8,546,800	2,538,400	2,948,646	3,059,754	NA	NA
National Archives and Records Administration	120	0	120	0	NA	NA
National Science Foundation	3,689,876	3,485,884	203,992	0	NA	NA
Nuclear Regulatory Commission	75,110	0	75,110	0	NA	NA
Smithsonian Institution	115,000	115,000	0	0	NA	NA
Social Security Administration	76,400	0	76,400	0	NA	NA

NOTES: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

<sup>1</sup> TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
2 The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy and Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown. For accounting purposes, funds are shown in advanced technology column for Department of Defense.
3 Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are settimates based on SAMHSA) are

estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

NA = Not available (data are not collected in this category for this agency).

TABLE C-8. Federal obligations for total research and development, by agency and performer: FY 2002 (Dollars in millions)

						Extram	ural			
		- Intra-			United State	es and U.S.	territories			
Agency	Total R&D	mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	Foreign
All agencies	85,853.0	21,044.8	29,538.2	1,351.1	21,290.1	4,641.2	5,739.1	1,404.8	452.2	391.6
Departments Department of Agriculture	1,971.8	1,330.0	17.6	.0	591.9	.0	23.2	.0	4.9	4.2
Agricultural Marketing Service	5.2	4.6	.0	.0	.2	.0	.2	.0	.1	.0
Agricultural Research Service Animal and Plant Health	1,059.8	971.5	.0	.0	76.3	.0	7.9	.0	.6	3.6
Inspection Service	23.7	19.7	.0	.0	4.1	.0	.0	.0	.0	.0
Cooperative State Research,										
Ed., and Extension Service	546.7	33.9	12.9	.0	488.7	.0	10.3	.0	1.0	.0
Economic Research Service	67.0	57.7	3.9	.0	4.1	.0	1.4	.0	.0	.1
Foreign Agricultural Service Forest Service	1.4 253.0	.8 229.8	.0 .9	.0 .0	.6 17.6	.0 .0	.0 1.0	.0 .0	.0 3.2	.0 .5
Grain Inspection Packers and	255.0	227.0	.,	.0	17.0	.0	1.0	.0	3.2	.5
Stockyards Administration	6.0	6.0	.0	.0	.0	.0	.0	.0	.0	.0
National Agricultural Statistics										
Service	4.6	4.5	.0	.0	.1	.0	.0	.0	.0	.0
Rural Business-Cooperative Service	4.2	1.5	.0	.0	.2	.0	2.5	.0	.0	.0
Department of Commerce	1,151.4	804.6	163.3	*	142.0	.6	23.3	.0	17.0	4
Department of Commerce Bureau of the Census	1,151.4 28.7	28.7	.0	.0	.0	.0	23.3	.0	.0	.4 .0
Economic Development	20.7	20.7	.0	.0	.0	.0	.0	.0	.0	.0
Administration .	.5	.1	.0	.0	.1	.0	.4	.0	.0	.0
National Institute of Standards and Technology	451.4	272.8	157.4	*	15.2	.0	5.6	.0	.0	.4
National Oceanic and Atmospheric										
Administration National Telecommunications and	651.3	496.0	6.0	.0	124.3	.6	10.9	.0	13.6	*
Information Administration	19.6	7.2	.0	.0	2.4	.0	6.6	.0	3.5	.0
Department of Defense	37,557.1	9,933.9	23,832.5	121.9	2,218.8	378.5	323.5	508.4	4.1	235.5
Defense Agencies, research and development (R&D)	12,075.7	2,318.0	7,682.7	111.1	1,291.3	285.6	121.0	141.8	.0	124.1
Ballistic Missile Defense	12,075.7	2,310.0	1,002.1	111.1	1,291.3	200.0	121.0	141.0	.0	124.1
Organization, R&D Chemical and Biological	6,262.5	1,022.5	4,873.8	50.5	64.0	116.0	3.3	49.7	.0	82.7
Defense, R&D	389.1	114.2	195.8	.0	63.5	.0	15.6	.0	.0	.0
Defense Advanced Research	2.150.0	240.0	1 21/ 2	22.0	407.0	// 1	70.0	24.7	0	11 /
Projects Agency, R&D	2,158.0	248.9	1,216.3	22.9	487.2	66.4	70.0	34.7	.0	11.6
Defense Information Systems	205.7	4/0	1177	0	17	2	0.0	11 1	^	^
Agency, R&D Defense Logistics Agency, R&D	205.7 153.9	66.0 58.1	117.7 62.7	.0 .0	1.7 29.5	.2 .1	8.9 .5	11.2 3.0	.0 .0	0. 0.
Defense Threat Reduction										
Agency, R&D Joint Staff, R&D	539.1 59.4	263.6 59.4	216.8 .0	10.8 .0	6.2 .0	37.0 .0	1.1 .0	2.7 .0	.0 .0	.7 .0
Special Operations	37.4	37.4	.0	.0	.0	.0	.0	.0	.0	.0
Command, R&D	400.7	137.1	258.6	.0	4.9	.0	.0	.0	.0	.0
TRICARE Management										
Activity, R&D <sup>2</sup>	490.0	44.9	175.1	.0	250.8	.0	12.8	.0	.0	6.4
Washington Headquarters Services, R&D	1,417.3	303.2	566.0	26.9	383.5	65.8	8.9	40.4	.0	22.7
Department of the Air Force	6,884.4	1,437.2	5,065.2	1.5	122.6	23.9	24.0	203.0	3.8	3.2
Air Force, Materials							24.0		*	
Command, R&D Air Force, Space Command, R&D	4,645.9 2,238.4	1,335.7 101.5	3,085.4 1,979.8	.3 1.2	121.8 .8	5.6 18.3	24.0 .0	69.9 133.1	3.8	3.2
Department of the Army, R&D	7,076.6	2,138.8	4,494.7	1.5	231.7	37.5	37.9	52.9	.1	81.6
Department of the Navy, R&D	11,287.0	3,966.3	6,464.9	7.9	565.1	31.5	140.6	83.8	.2	26.7
Operational Test and Evaluation, Director, R&D	233.5	73.5	124.8	.0	8.1	.1	.0	27.0	.0	^
υπειίοι, καυ	233.5	13.5	124.8	.0	ŏ. I	.1	.U	21.0	.U	.0

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-8. Federal obligations for total research and development, by agency and performer: FY 2002 (Dollars in millions) \\ \end{tabular}$ 

United States and U.S. te	erritories			
Intra-				
Agency Total R&D mural 1  Univer- Indu- Industry stry and sity FFRDCs Colleges FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	Foreign
Department of Defense, research 7,622.8 3,057.9 2,458.7 16.8 1,707.1 91.5	196.1	67.2	0.1	27.5
Department of Defense, Development 36,818.7 8,313.2 26,439.0 106.6 634.4 310.9 Department of Defense, advanced	151.4	644.2	7.8	211.2
technology development       6,304.6       1,439.0       4,177.7       46.2       316.6       123.0         Department of Defense, major systems development       30,514.1       6,874.2       22,261.3       60.4       317.9       187.9	78.5 72.9	97.2 547.0	7.6	18.8 192.3
Department of Education 285.6 13.4 17.3 .0 185.4 .0	69.5	.0	.0	.0
Department of Energy 7,044.2 730.1 992.3 893.4 761.9 2,710.2 Energy Efficiency and Renewable	94.0	856.4	3.5	2.4
Energy 739.8 289.1 .0 50.8 76.0 68.4 Fossil Energy 363.3 111.0 124.3 14.0 43.4 25.4	21.0 21.9	234.6 20.9	.0 1.4	.0 1.1
National Nuclear Security         3,302.4         279.3         796.1         694.4         42.3         1,439.0           Defense Programs         2,372.7         277.6         208.6         582.6         34.7         1,255.7	8.7 7.6	42.6 5.9	.0 .0	.0 .0
Fissile Materials Disposition 27.4 * .0 .2 .0 21.1 Naval Reactors 637.0 * 583.0 52.4 .0 .3	.0 1.1	6.1 .1	.0 .0	.0 .0
Nonproliferation and Verification         265.4         1.7         4.4         59.3         7.6         161.9           Office of Science         2,345.1         18.5         61.4         40.8         556.3         1,118.0	.0 38.2	30.5 510.5	.0 .0	.0 1.4
Other Department of Energy programs       293.6       32.2       10.4       93.5       43.9       59.5         Bonneville Power Administration       22.9       20.7       .1       .0       .0       .0	4.1	47.9 .0	2.1 2.1	.0 .0
Civilian Radioactive Waste         Management       62.5       11.4       .0       11.7       .0       38.3         Environmental Management       160.3       *       .0       70.2       38.5       12.6         Nuclear Energy       42.5       *       7.4       10.4       5.4       8.3         Office of Intelligence       5.3       .1       3.0       1.2       .0       .3	.0 .0 4.1 .0	1.1 39.0 7.0 .7	.0 .0 .0	.0 .0 .0
Department of Health and Human Services 24,011.6 4,591.8 1,177.8 308.2 13,329.4 57.1	4,183.4	14.7	226.9	122.2
Administration for Children and Families 23.3 1.4 .4 .0 16.6 .0	1.9	.0	3.0	.0
Administration on Aging 3.7 .1 .0 .0 .0 .0 .0 Agency for Healthcare Research and Quality 298.7 60.0 74.8 .0 104.5 .0	3.6 53.3	.0	.0 5.3	.0 8.
Agency for Toxic Substances and Disease Registry 12.4 2.3 .1 .0 2.5 .0	4.7	.0	2.9	
Centers for Disease Control and Prevention 521.0 448.2 32.5 .0 36.5 .0 Centers for Medicare and Medicaid	1.9	.0	1.9	.0
Services 117.0 .5 30.2 .0 10.8 .0 Food and Drug Administration 136.3 103.3 4.2 .0 21.4 .0 Health Resources and Services	20.9 6.3	.0 .0	53.0 .2	1.7 .9
Administration 54.1 2.6 .0 .0 28.1 .0	22.0 3,514.7	.0 14.7	1.3 93.7	.0 118.8
Office of the Secretary 17.4 4.1 6.4 .0 4.4 .0 Office of the Assistant Secretary, Planning and	.0	.0	2.4	.0
Evaluatión 14.9 3.7 6.4 .0 2.2 .0 Office of Public Health and	.0	.0	2.4	.0
Science         2.5         .3         .0         .0         2.2         .0           Substance Abuse and Mental Health         Services Administration <sup>3</sup> 717.6         *         57.6         .0         42.6         .0	.0 554.1	.0	.0 63.2	.0

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-8. Federal obligations for total research and development, by agency and performer: FY 2002 (Dollars in millions) \\ \end{tabular}$ 

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						Extramı	ıral			
		Intra-			United State	es and U.S. t	erritories			
ency	Total R&D	mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	Foreign
Department of Housing and Urban Development	45.3	27.6	12.2	.0	0.8	.0	4.8	.0	.0	.0
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service National Park Service <sup>4</sup>	632.8 10.4 565.0 31.2 26.2	537.1 7.0 515.3 6.7 8.0	20.9 1.2 8.1 9.9 1.8	.0 .0 .0 .0	63.3 1.2 36.2 11.1 14.8	.0 .0 .0 .0	3.3 .4 .0 1.9 1.0	.0 .0 .0 .0	6.6 .5 5.4 .1	1.6 .1 .0 1.5
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	99.2 8.7 33.6 56.9	40.6 2.9 33.6 4.1	12.9 .0 .0 12.9	.0 .0 .0	24.1 .0 .0 24.1	.0 .0 .0	6.2 .0 .0 6.2	1.4 .0 .0 1.4	14.0 5.9 .0 8.1	.0 .0 .0
Department of Labor Bureau of Labor Statistics	166.4 20.7	150.5 9.9	4.5 .4	.0 .0	5.4 5.3	.0 .0	5.9 5.1	.0 .0	.0 .0	.0 .0
Employment and Training Administration Occupational Safety and Health	137.1	137.1	.0	.0	.0	.0	.0	.0	.0	.0
Administration Office of the Secretary	3.8 1.2	2.1 .2	1.7 1.0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Pension and Welfare Benefits Administration Pension Benefit Guaranty	2.7	.8	1.0	.0	.1	.0	.8	.0	.0	.0
Corporation	.7	.4	.4	.0	.0	.0	.0	.0	.0	.0
Department of State	2.3	.7	1.6	.0	.0	.0	.0	.0	.0	.0
Department of Transportation Coast Guard Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	815.5 22.0 345.1 258.3	279.4 15.0 86.0 39.6	326.5 4.6 231.3 52.5	6.4 .0 6.4 .0	41.2 1.2 13.2 17.7	7.7 .0 7.7 *	17.8 1.2 .0 14.0	.5 .0 .5 *	134.7 .0 .0 .0 134.5	1.2 .0 .0
Administration	3.7	1.3	2.0	.0	.0	.0	.4	.0	.0	.0
Federal Railroad Administration Federal Transit Administration National Highway Traffic Safety	33.2 5.8	13.8 3.8	16.8 .0	.0 .0	1.9 .0	.0 .0	.0 2.0	.0 .0	.0 .0	.7 .0
Administration Office of the Secretary Research and Special Programs	59.6 18.4	36.6 18.4	15.2 .0	.0 .0	7.3 .0	.0 .0	.1 .0	.0 .0	.0 .0	.4 .0
Administration Transportation Security Administration	10.2 59.0	5.7 59.0	4.2	.0	.0	.0	.1 .0	.0	.2	.0
Department of the Treasury Bureau of Engraving and Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service	74.4 7.1 55.5 .1 10.6	59.7 7.1 50.5 .1 1.1	14.8 .0 5.0 .0 9.5	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0
United States Mint United States Secret Service	.3	.2	.1 .2	.0	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	328.8	328.8	.0	.0	.0	.0	.0	.0	.0	.0

TABLE C-8. Federal obligations for total research and development, by agency and performer: FY 2002 (Dollars in millions)

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						Extramı	ıral			
		Intra-			United State	es and U.S. t	erritories			
Agency	Total R&D	mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State For and local govts	Foreign
Other agencies										
Agency for International										
Development	269.8	33.2	17.2	.0	29.4	.0	190.0	.0	.0	.0
Appalachian Regional Commission	.7	*	.2	.0	.2	.0	.3	.0	.0	.0
Broadcasting Board of Governors	.3	.3	0.	.0	.0	.0	.0	.0	.0	.0
Environmental Protection Agency	415.2	197.0	39.9	.0	115.5	.0	52.5	.0	9.1	1.3
Federal Communications Commission	4.4	4.4	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.8	1.8	.0	.0	.0	.0	.0	.0	.0	.0
Library of Congress	3.0	2.8	.3	.0	.0	.0	.0	.0	.0	.0
National Aeronautics and Space	7.500.0								400	40.7
Administration	7,508.2	1,841.4	2,754.9	.0	1,074.7	1,302.4	500.1	4.1	18.0	12.7
National Archives and Records	1	1	0	0	0	0	0	0	0	0
Administration National Science Foundation	.1	.1	.0	.0 .0	.0	.0	.0	.0 5.2	.0 5.7	.0 7.8
National Science Foundation	3,260.0	13.6	121.2	.0	2,695.8	173.3	237.5	5.2	5.7	7.8
Nuclear Regulatory Commission	74.3	13.7	6.6	21.1	4.1	11.3	1.3	14.0	.0	2.1
Smithsonian Institution	106.0	106.0	.0	.0	.0	.0	.0	.0	.0	.0
Social Security Administration	22.8	2.5	3.9	.0	6.3	.0	2.4	.0	7.8	.0

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

data for the NPS cultural resources program were not available for this survey cycle.

 <sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
 FFRDCs = Federally funded research and development centers.
 R&D = Research and development.

TABLE C-9. Preliminary Federal obligations for research and development, by agency and performer: FY 2003 (Dollars in millions)

Page 1 of 4

United States and U.S. territories  Intra- Agency Total R&D mural 1		
		Egraic
Agency Total R&D mural 1  Univer- Indu- sities Univer- non- Nonprofit Industry stry and sity profit FFRDCs FFRDCs colleges FFRDCs insti- tutions	and local govts	Foreig
All agencies 95,755.8 23,243.9 34,052.1 1,583.1 23,471.1 4,852.3 6,266.9 1,406.4	528.6	351.4
Departments  Department of Agriculture 2,061.6 1,350.7 16.9 .0 665.1 .0 20.8 .0	4.6	3.!
Agricultural Marketing Service 5.4 5.4 .0 .0 .0 .0 .0 .0 .0	.0	.(
Agricultural Research Service 1,069.2 999.8 .0 .0 60.0 .0 6.0 .0 Cooperative State Research,	.4	3.0
Ed., and Extension Service 648.1 40.3 14.5 .0 582.0 .0 10.3 .0	1.0	.(
Economic Research Service 68.7 61.4 1.5 .0 4.8 .0 1.0 .0	.0	.(
Foreign Agricultural Service         1.6         .9         .0         .0         .7         .0         .0         .0           Forest Service         253.0         229.8         .9         .0         17.6         .0         1.0         .0	.0 3.2	). !.
Grain Inspection Packers and		
Stockyards Administration 6.8 6.8 .0 .0 .0 .0 .0 .0 .0 .0 .0 National Agricultural Statistics	.0	).
Service 4.8 4.7 .0 .0 * .0 * .0 Rural Business-Cooperative	.0	.(
Service 4.0 1.5 .0 .0 .0 .0 2.5 .0	.0	.(
Department of Commerce         1,157.4         818.8         172.7         *         139.9         .3         13.9         .0           Bureau of the Census         16.2         16.2         .0         .0         .0         .0         .0         .0         .0	11.3 .0	 ).
Economic Development Administration .6 .1 .0 .0 .3 .0 .3 .0	.0	.(
National Institute of Standards		
and Technology 487.7 300.3 167.4 * 13.0 .0 6.6 .0 National Oceanic and Atmospheric	.0	.4
Administration 643.7 493.0 5.2 .0 126.7 .3 7.1 .0 National Telecommunications and	11.3	.(
Information Administration 9.2 9.2 .0 .0 .0 .0 .0 .0 .0	.0	.(
Department of Defense 42,500.3 11,151.2 27,365.4 235.6 2,329.4 401.0 359.9 476.1	2.8	178.8
Defense Agencies, research and development (R&D) 13,109.0 2,605.5 8,418.0 118.7 1,370.7 285.0 127.2 118.1 Ballistic Missile Defense	.0	65.8
Organization, R&D 6,580.4 1,118.1 5,191.1 62.5 58.0 106.1 3.1 22.6 Chemical and Biological	.0	18.9
Defense, R&D 429.7 231.4 86.5 .0 96.4 .0 15.5 .0	.0	.(
Defense Advanced Research Projects Agency, R&D 2,635.7 355.2 1,452.0 28.8 578.6 83.1 81.9 42.3	.0	13.
Defense Information Systems		
Agency, R&D 252.9 62.6 175.1 .0 1.9 .0 .0 13.2 Defense Logistics Agency, R&D 175.6 81.6 58.2 1.1 24.2 .1 7.3 3.1	.0 .0	). ).
Defense Threat Reduction       Agency, R&D       479.2       112.3       342.1       4.0       1.0       18.7       .1       .4         Joint Staff, R&D       99.3       99.3       .0	.0 .0	!. ).
Special Operations Command, R&D 436.0 149.5 281.6 .0 5.0 .0 .0 .0 .0	.0	.· ).
	.0	.,
TRICARE Management	.0	7.0
Washington Headquarters Services, R&D 1,540.4 318.6 671.0 22.3 381.4 77.0 7.9 36.4	.0	25.0
Department of the Air Force 8,113.1 1,584.4 6,013.8 103.4 124.4 46.6 26.9 190.7 Air Force, Materials	2.7	20.
Command, R&D 5,640.9 1,472.2 3,909.9 .2 123.8 9.4 26.9 78.4	*	20.
Air Force, Space Command, R&D 2,472.2 112.1 2,103.9 103.3 .6 37.2 .0 112.3	2.7	.(
Department of the Army, R&D 7,228.5 2,357.3 4,425.7 6.4 239.1 36.8 53.0 47.6 Department of the Navy, R&D 13,822.0 4,532.6 8,386.3 7.1 586.9 32.5 152.8 93.4 Operational Test and Evaluation,	.1 .0	62.0 30.4
Director, R&D 227.7 71.5 121.6 .0 8.2 .1 .0 26.3	.0	.(

TABLE C-9. Preliminary Federal obligations for research and development, by agency and performer: FY 2003 (Dollars in millions)

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						Extram	ural			
		Intra-			United State	es and U.S.	territories			
gency	Total R&D	mural <sup>1 -</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	63.1 135.9 27.7 108.2 .C 1.C .C .C .C
Department of Defense, research	8,018.6	2,998.4	2,819.8	14.2	1,754.8	87.0	214.4	66.9	*	63.1
Department of Defense, Development	42,594.8	9,737.2	30,559.5	324.8	699.0	360.5	172.4	599.9	5.5	135.9
Department of Defense, advanced technology development	7,882.1	1,785.8	5,181.2	46.1	423.8	172.8	115.5	123.9	5.5	27.
Department of Defense, major systems development	34,712.6	7,951.5	25,378.3	278.7	275.2	187.8	57.0	476.0	.1	108.
Department of Education	302.9	12.5	14.5	.0	200.8	.0	75.1	.0	.0	
Department of Energy Energy Efficiency and Renewable	7,554.1	646.0	1,430.7	972.1	753.1	2,800.4	78.7	863.7	7.0	2.
Energy Fossil Energy National Nuclear Security	786.4 643.3	307.3 115.3	.0 396.1	53.5 14.1	80.8 45.0	72.7 26.7	22.3 22.0	249.9 22.2	.0 1.0	
Administration Defense Programs	3,384.3 2,569.1	141.5 130.5	849.4 246.1	789.3 696.8	51.5 48.0	1,512.0 1,431.8	10.0 8.6	30.6 7.4	.0 .0	
Fissile Materials Disposition Naval Reactors	20.1 648.9	*	.0 593.3	.0 53.7	.0 .0	16.0 .4	.0 1.4	4.1 .1	.0 .0	
Nonproliferation and Verification Office of Science	146.2 2,511.0	11.1 47.0	10.1 128.8	38.9 57.5	3.5 561.3	63.7 1,146.6	.0 24.2	19.0 538.8	.0 5.7	
Other Department of Energy programs Bonneville Power Administration Civilian Radioactive Waste Management	229.0 23.3 62.5	34.9 20.6 14.1	56.4 1.2	57.7 .3	14.7 .1	42.5 .0 35.9	.1 .0	22.4 .8	.4 .4	
Environmental Management Nuclear Energy Office of Intelligence	76.1 63.0 4.0	.2	.0 53.0 2.2	40.7 5.7 .3	14.5	4.7 1.2 .7	.0 .1 .0	16.2 3.0 .7	.0 .0 .0	
Department of Health and Human Services Administration for Children and	27,096.2	5,188.7	1,328.4	350.2	15,163.5	48.1	4,612.6	42.5	224.6	137.
Families Agency for Healthcare Research	23.8	1.4	.4	.0	16.9	.0	1.9	.0	3.1	
and Quality  Centers for Disease Control and	303.7	61.0	76.0	.0	106.2	.0	54.2	.0	5.4	
Prevention Centers for Medicare and Medicaid	564.0	487.6	34.1	.0	38.3	.0	1.9	.0	2.0	
Services	74.2	.1	13.1	.0	4.5	.0	12.1	.0	43.0	1.
Food and Drug Administration Health Resources and Services	139.8	106.0	4.3	.0	22.0	.0	6.5	.0	.2	
Administration National Institutes of Health Office of the Secretary Office of the Assistant	45.0 25,203.6 18.3	2.6 4,524.7 5.3	.0 1,107.5 6.0	.0 350.2 .0	23.7 14,889.3 4.5	.0 48.1 .0	17.7 3,982.7 .0	.0 42.5 .0	1.0 124.0 2.5	134.
Secretary, Planning and Evaluation	16.0	5.0	6.0	.0	2.5	.0	.0	.0	2.5	
Office of Public Health and Science Substance Abuse and Mental Health	2.3	.3	.0	.0	2.0	.0	.0	.0	.0	
Services Administration <sup>3</sup>	723.9	*	86.9	.0	57.9	.0	535.5	.0	43.5	).

TABLE C-9. Preliminary Federal obligations for research and development, by agency and performer: FY 2003 (Dollars in millions)

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						Extramı	ıral			
		Intra-			United State	es and U.S. t	erritories			
gency	Total R&D	mural <sup>1 —</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	Foreign
Department of Homeland Security	142.6	126.2	9.0	.0	6.2	.0	1.2	.0	.0	.0
Animal and Plant Health Inspection Service Transportation Security	29.0	24.1	.0	.0	5.0	.0	.0	.0	.0	.0
Administration United States Coast Guard United States Customs Service	85.0 23.3 5.2	85.0 16.0 1.2	.0 5.0 4.0	.0 .0 .0	.0 1.2 .0	.0 .0 .0	.0 1.2 .0	.0 .0 .0	.0 .0 .0	0. 0. 0.
Department of Housing and Urban Development	47.0	28.5	12.7	.0	.9	.0	4.9	.0	.0	.0
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	592.2 10.3 555.1 26.8	519.8 6.9 505.8 7.0	14.7 1.2 8.1 5.5	.0 .0 .0	49.3 1.2 36.5 11.6	.0 .0 .0	2.1 .4 .0 1.7	.0 .0 .0	5.4 .5 4.8 .1	0.9 .1 .0 .9
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	115.7 9.0 42.7 64.0	51.0 3.0 42.7 5.3	13.3 .0 .0 13.3	.0 .0 .0	30.1 .0 .0 30.1	.0 .0 .0	6.4 .0 .0 6.4	0.9 .0 .0	14.0 6.0 .0 8.0	.0 .0 .0
Department of Labor Bureau of Labor Statistics Employment and Training	170.6 22.4	153.7 10.1	5.4 1.3	.0 .0	4.1 4.0	.0 .0	7.4 7.0	.0 .0	.0 .0	.0 .0
Administration Occupational Safety and Health	139.9	139.9	.0	.0	.0	.0	.0	.0	.0	.0
Administration Office of the Secretary	3.9 1.7	2.2 .2	1.7 1.5	.0 .0	.0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Pension and Welfare Benefits Administration Pension Benefit Guaranty	2.0	1.0	.5	.0	.1	.0	.4	.0	.0	.0
Corporation	.7	.4	.4	.0	.0	.0	.0	.0	.0	.0
Department of State  Department of Transportation Federal Aviation Administration Federal Highway Administration	1.9 733.3 213.3 381.6	.7 206.0 82.9 46.9	253.4 103.9 100.5	.0 6.0 6.0 .0	.0 43.6 13.0 22.2	.0 7.1 7.0 .1	.0 9.8 .0 6.3	.0 .5 .5 *	.0 205.5 .0 205.5	.0 1.3 .0
Federal Motor Carrier Safety Administration Federal Railroad Administration	6.2 33.9	1.0 14.7	3.1 17.7	.0 .0	.0 1.4	.0 .0	1.3 .0	.0 .0	.0 .0	.7 .1
Federal Transit Administration National Highway Traffic Safety	4.3	2.3	.0	.0	.0	.0	2.0	.0	.0	.0
Administration Office of the Secretary Research and Special Programs	58.2 14.1	36.6 14.1	14.0 .0		7.0 .0	.0 .0	.2 .0	.0 .0	.0 .0	.4 .0
Administration	21.7	7.4	14.3	.0	.0	.0	.1	.0	.0	.0
Department of the Treasury Bureau of Engraving and Printing Internal Revenue Service Office of Thrift Supervision United States Mint	70.6 7.1 62.1 .2 .3	65.8 7.1 57.6 .2 .2	4.8 .0 4.5 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0
United States Secret Service  Department of Veterans Affairs	1.0 353.6	.8 353.6	.2	.0	.0	.0	.0	.0	.0	.0
1			.0		. 3					

TABLE C-9. Preliminary Federal obligations for research and development, by agency and performer: FY 2003 (Dollars in millions)

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						Extramu	ıral			
		Intra-			United State	es and U.S. t	erritories			
Agency	Total R&D	mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	.2 .0 .0 1.9
Other agencies										
Agency for International	0.400						404 7			
Development	262.0	28.0	20.6	.0	31.5	.0	181.7	.0	.0	
Appalachian Regional Commission	.7		.2	.0	.4	.0	.1	.0	.0	
Broadcasting Board of Governors	.2	.2	0.	.0	.0	.0	.0	.0	.0	
Environmental Protection Agency	627.0	297.2	60.3	.0	174.5	.0	79.3	.0	13.8	
Federal Communications Commission	6.3	6.3	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.6	1.6	.0	.0	.0	.0	.0	.0	.0	.0
Library of Congress	4.2	4.2	.0	.0	.0	.0	.0	.0	.0	.0
National Aeronautics and Space										
Administration	8,280.8	2,077.9	3,146.1	.0	1,053.8	1,405.8	562.3	4.1	18.0	12.7
National Archives and Records										
Administration	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0
National Science Foundation	3,403.6	14.2	128.1	.0	2,813.5	180.6	247.8	5.4	5.9	8.2
Nuclear Regulatory Commission	75.0	17.2	8.4	19.2	3.2	9.0	1.3	13.2	.0	3.6
Smithsonian Institution	109.0	109.0	.0	.0	.0	.0	.0	.0	.0	.0
Social Security Administration	85.7	14.8	45.4	.0	8.3	.0	1.5	.0	15.6	.0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.
 TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed

\* = Amount greater than 0 but less than 50,000 dollars. FFRDCs = Federally funded research and development centers.

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

services, their family members, and their survivors.

3 Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

R&D = Research and development.

TABLE C-10. Preliminary Federal obligations for research and development, by agency and performer: FY 2004 (Dollars in millions)

						Extram	ural			
		Intra-			United State	es and U.S.	territories			
Agency	Total R&D	mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	Foreign
All agencies	101,054.7	24,164.1	37,671.0	1,521.0	23,833.1	5,067.9	6,579.0	1,430.8	474.4	313.5
Departments Department of Agriculture	1,918.6	1,356.8	3.9	12.2	519.9	.0	17.7	.0	4.6	3.5
Agricultural Marketing Service	5.4	5.4	.0	.0	.0	.0	.0	.0	.0	.0
Agricultural Research Service Cooperative State Research,	1,074.6	1,005.2	.0	.0	60.0	.0	6.0	.0	.4	3.0
Ed., and Extension Service	492.8	37.4	.0	12.2	435.1	.0	7.2	.0	1.0	.0
Economic Research Service	76.7	65.7	3.0	.0	6.5	.0	1.5	.0	.0	.0
Foreign Agricultural Service	1.6	.9	.0	.0	.7	.0	.0	.0	.0	.0
Forest Service Grain Inspection Packers and	252.0	228.8	.9	.0	17.6	.0	1.0	.0	3.2	.5
Stockyards Administration	7.1	7.1	.0	.0	.0	.0	.0	.0	.0	.0
National Agricultural Statistics Service	4.9	4.8	.0	.0	*	.0	*	.0	.0	.0
Rural Business-Cooperative							0.0			
Service	3.5	1.5	.0	.0	.0	.0	2.0	.0	.0	.0
Department of Commerce	1,052.9	856.4	26.5	*	145.9	.3	11.2	.0	12.2	.3
Bureau of the Census Economic Development	13.5	13.5	.0	.0	.0	.0	.0	.0	.0	.0
Administration	.6	.1	.0	.0	.3	.0	.3	.0	.0	.0
National Institute of Standards and Technology	345.2	307.1	21.2	*	14.9	.0	1.7	.0	.0	.3
National Oceanic and Atmospheric										
Administration National Telecommunications and	686.9	529.1	5.3	.0	130.7	.3	9.2	.0	12.2	.0
Information Administration	6.7	6.7	.0	.0	.0	.0	.0	.0	.0	.0
Department of Defense	45,781.6	11,516.5	31,132.1	161.5	1,610.4	428.3	269.1	526.3	3.7	133.6
Defense Agencies, research and development (R&D)	13,299.2	2,758.6	9,066.0	127.6	747.9	303.2	100.3	143.3	.0	52.3
Ballistic Missile Defense			•							
Organization, R&D Chemical and Biological	7,581.6	1,369.0	5,907.7	73.3	57.8	127.8	4.2	26.4	.0	15.4
Defense, R&D	393.6	253.9	89.4	.0	33.0	.0	.0	17.5	.0	.0
Defense Advanced Research Projects Agency, R&D	2,924.8	397.7	1,642.8	33.0	606.5	94.4	88.3	46.7	.0	15.3
, , ,	2,72 110	07711	1,012.0	33.0	000.0	,	00.0	1017		10.0
Defense Information Systems Agency, R&D	322.1	61.7	246.4	.0	2.0	.0	.0	12.0	.0	.0
Defense Logistics Agency, R&D	64.0	35.3	16.4	.0	1.9	1.5	7.0	2.0	.0	.0
Defense Threat Reduction Agency, R&D	382.8	79.3	288.3	2.1	.8	11.3	.1	.4	.0	.5
Joint Staff, R&D	119.1	119.1	.0	.0	.0	.0	.0	.0	.0	.0
Special Operations Command, R&D	448.1	153.6	289.3	.0	5.2	.0	.0	.0	.0	.0
TRICARE Management Activity, R&D <sup>2</sup>	74.4	17.2	57.2	.0	.0	.0	.0	.0	.0	.0
Washington Headquarters										
Services, R&D	988.8	271.9	528.6	19.1	40.9	68.1	.8	38.4	.0	21.1
Department of the Air Force Air Force, Materials	8,946.3	1,871.0	6,635.9	15.1	114.4	58.3	23.6	220.2	3.7	4.1
Command, R&D	6,252.4	1,537.7	4,470.0	.2	114.1	14.3	23.6	88.3	*	4.1
Air Force, Space Command, R&D Department of the Army, R&D	2,693.9 8,978.3	333.3 2,407.9	2,165.9 6,197.5	14.9 11.4	.3 202.2	44.0 35.5	.0 21.1	131.9 57.0	3.7 .1	.0 45.8
Department of the Navy, R&D	14,276.8	4,390.9	9,082.7	7.5	535.5	31.2	124.1	73.5	.0	31.5
Operational Test and Evaluation, Director, R&D	281.0	88.2	149.9	.0	10.5	.1	.0	32.4	.0	.0
,	200		,	.5				J	.0	.0

TABLE C-10. Preliminary Federal obligations for research and development, by agency and performer: FY 2004 (Dollars in millions)

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						Extram	ural			
		- Intra-			United State	es and U.S.	territories			
gency	Total R&D	mural <sup>1 –</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	Foreigr
Department of Defense, research	7,702.8	3,385.0	2,719.2	13.9	1,216.7	80.9	165.5	91.2	*	30.4
Department of Defense, Development Department of Defense, advanced	47,025.0	10,002.4	35,048.8	162.8	508.0	405.7	127.3	655.3	7.4	107.3
technology development Department of Defense, major	7,732.8	1,576.6	5,351.5	51.1	288.7	197.7	79.3	161.3	7.3	19.:
systems development  Department of Education	39,292.3 297.3	8,425.8 13.3	29,697.3 14.2	111.7 .0	219.3 216.3	207.9	48.0 53.6	494.0	.1	88.
Department of Energy	7,691.4	900.5	1,313.1	948.4	743.9	2,868.3	77.9	833.6	3.9	1.
Energy Efficiency and Renewable Energy Fossil Energy	767.1 482.2	299.7 116.6	.0 233.6	54.0 14.0	78.8 44.6	70.9 26.4	21.8 22.5	241.9 22.5	.0 1.0	1.
National Nuclear Security Administration Defense Programs	3,651.6 2,796.0	413.0 401.9	877.8 215.7	778.4 685.1	43.6 40.1	1,500.8 1,436.7	12.4 10.9	25.7 5.6	.0 .0	
Fissile Materials Disposition Naval Reactors Nonproliferation and	1.0 708.4	*	.0 652.0	.0 54.4	.0 .0	.0 .4	.0 1.5	1.0 .1	.0 .0	
Verification Office of Science	146.2 2,533.7	11.1 34.3	10.1 148.1	38.9 57.1	3.5 561.0	63.7 1,178.6	.0 21.2	19.0 529.7	.0 2.9	
Other Department of Energy programs Bonneville Power Administration Civilian Radioactive Waste	256.8 24.2	36.9 23.4	53.7 .0	44.8 .0	15.9 .0	91.6 .0	.0 .0	13.9 .8	.0 .0	
Management Environmental Management Nuclear Energy Office of Intelligence	59.1 48.0 121.5 4.0	13.3	.0 .0 51.4 2.2	10.1 25.7 8.8 .3	.0 9.2 6.7 .0	34.0 3.0 54.0 .7	.0 .0 .0	1.7 10.2 .6 .7	.0 .0 .0	•
Department of Health and Human Services	28,857.3	5,442.1	1,416.0	373.3	16,140.7	51.3	4,999.2	45.3	243.1	146
Administration for Children and Families Agency for Healthcare Research	24.3	1.5	.5	.0	17.3	.0	2.0	.0	3.1	
and Quality Centers for Disease Control and	279.0	56.0	69.8	.0	97.6	.0	49.8	.0	5.0	
Prevention Centers for Medicare and Medicaid	531.0	450.7	35.8	.0	40.3	.0	2.0	.0	2.1	
Services Food and Drug Administration	63.4 134.9	.1 102.6	9.3 4.1	.0	3.2 21.0	.0	7.9 6.2	.0	41.5	1.
Health Resources and Services Administration National Institutes of Health Office of the Secretary Office of the Assistant	20.9 26,865.8 21.3	2.6 4,823.1 5.5	.0 1,180.5 6.0	.0 373.3 .0	9.3 15,871.3 7.3	.0 51.3 .0	7.4 4,245.4 .0	.0 45.3 .0	1.6 132.2 2.5	143.
Secretary, Planning and Evaluation	16.0	5.0	6.0	.0	2.5	.0	.0	.0	2.5	
Office of Public Health and Science Substance Abuse and Mental Health	5.3	.5	.0	.0	4.8	.0	.0	.0	.0	
Services Administration <sup>3</sup>	916.8	*	110.0	.0	73.3	.0	678.5	.0	55.0	).

TABLE C-10. Preliminary Federal obligations for research and development, by agency and performer: FY 2004 (Dollars in millions)

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						Extramı	ıral			
		Intra-			United State	es and U.S. t	erritories			
gency	Total R&D	mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	Foreign
Department of Homeland Security	203.3	191.5	4.9	.0	5.6	.0	1.2	.0	.0	.0
Animal and Plant Health Inspection Service	25.4	21.1	.0	.0	4.4	.0	.0	.0	.0	.0
Transportation Security Administration	154.5	154.5	.0	.0	.0	.0	.0	.0	.0	.0
United States Coast Guard	23.3	15.9	4.9	.0	1.2	.0	1.2	.0	.0	.0
Department of Housing and Urban Development	47.7	28.9	12.9	.0	.9	.0	5.0	.0	.0	.0
Department of the Interior	555.8	504.0	7.3	.0	37.8	.0	.7	.0	4.7	1.2
Bureau of Reclamation Geological Survey	8.0 521.3	5.4 491.8	.9 .0	.0 .0	.9 25.3	.0 .0	.3 .0	.0 .0	.4 4.3	.0
Minerals Management Service	26.5	6.8	6.4	.0	11.6	.0	.4	.0	.1	1.2
Department of Justice	109.3	44.7	11.9	.0	31.9	.0	5.7	0.7	14.5	.0
Bureau of Prisons Federal Bureau of Investigation	9.2 34.1	3.2 34.1	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	6.0 .0	.0 .0
Office of Justice Programs	66.0	7.4	11.9	.0	31.9	.0	5.7	.7	8.5	.0
Department of Labor Bureau of Labor Statistics Occupational Safety and Health	30.4 22.3	14.4 10.4	4.4 .8	.0 .0	10.7 10.6	.0 .0	.9 .5	.0 .0	.0 .0	.0 .0
Administration Office of the Secretary Pension and Welfare Benefits	4.0 1.2	2.3 .2	1.7 1.0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Administration	2.1	1.1	.5	.0	.1	.0	.4	.0	.0	.0
Pension Benefit Guaranty Corporation	.8	.4	.4	.0	.0	.0	.0	.0	.0	.0
Department of State	1.9	.7	1.2	.0	.0	.0	.0	.0	.0	.0
Department of Transportation Federal Aviation Administration Federal Highway Administration	662.6 175.1 361.8	230.3 70.6 88.9	237.1 83.5 110.6	5.0 5.0 .0	28.2 10.0 11.7	6.1 5.5 .6	20.4 .0 15.6	.6 .5 .0	134.3 .0 134.3	.5 .0 .0
Federal Motor Carrier Safety										
Administration Federal Railroad Administration	6.7 30.2	.5 14.9	3.6 15.3	.0 .0	.0 .0	.0 .0	2.4 .0	.1 .0	.0 .0	.0 .1
Federal Transit Administration National Highway Traffic Safety	2.6	.6	.0	.0	.0	.0	2.0	.0	.0	.0
Administration Office of the Secretary	59.9 10.8	38.0 10.8	14.8	.0 .0	6.5 .0	.0 .0	.2 .0	.0 .0	.0 .0	.4 .0
Research and Special Programs Administration	15.4	5.9	9.3	.0	.0	.0	.2	.0	.0	.0
Department of the Treasury	70.7	65.8	4.8	.0	.0	.0	.0	.0	.0	.0
Bureau of Engraving and Printing	7.1	7.1	.0	.0	.0	.0	.0	.0	.0	.0
Internal Revenue Service Office of Thrift Supervision	62.1 .2	57.6 2	4.5 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
United States Mint	.3	.2 .2	.1	.0	.0	.0	.0	.0	.0	.0
United States Secret Service	1.0	.8	.2	.0	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	380.5	380.5	.0	.0	.0	.0	.0	.0	.0	.0

TABLE C-10. Preliminary Federal obligations for research and development, by agency and performer: FY 2004 (Dollars in millions)

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						Extramu	ıral			
		Intra-			United State	es and U.S. t	erritories			
Agency	Total R&D	mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Nonprofit FFRDCs	State and local govts	Foreign
Other agencies										
Agency for International				_		_		_	_	_
Development	273.8	32.4	18.1	.0	36.5	.0	186.7	.0	.0	.2
Appalachian Regional Commission	.3	*	.1	.0	.2	.0		.0	.0	.0
Broadcasting Board of Governors	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0
Environmental Protection Agency	606.9	287.7	58.3	.0	168.9	.0	76.8	.0	13.3	1.9
Federal Communications Commission	2.8	2.8	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.7	1.7	.0	.0	.0	.0	.0	.0	.0	.0
Library of Congress National Aeronautics and Space	4.8	4.8	.0	.0	.0	.0	.0	.0	.0	.0
Administration	8,546.8	2,136.7	3,212.5	.0	1,074.7	1,507.8	580.3	4.1	18.0	12.7
National Archives and Records										
Administration	.1	1	.0	.0	.0	.0	.0	0	.0	.0
National Science Foundation	3,689.9	15.4	135.5	.0	3,052.5	196.4	268.9	5.9	6.5	8.9
Nuclear Regulatory Commission	75.1	16.3	9.1	20.5	2.3	9.4	.8	14.2	.0	2.5
Smithsonian Institution	115.0	115.0	.0	.0	.0	.0	.0	.0	.0	.0
Social Security Administration	76.4	4.9	47.3	.0	5.9	.0	2.9	.0	15.4	.0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.
 TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed

\* = Amount greater than 0 but less than 50,000 dollars. FFRDCs = Federally funded research and development centers.

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

services, their family members, and their survivors.

3 Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

R&D = Research and development.

TABLE C-11. Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: FY 2002 (Dollars in thousands)

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	F	Research and	development		R&D plant				
Agency	Total R&D	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts	Total	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts	
All agencies	7,397,010	1,351,063	4,641,153	1,404,794	1,081,193	109,085	583,309	388,799	
Department of Commerce National Institute of	603	15	588	0	0	0	0	0	
Standards and Technology	15	15	0	0	0	0	0	C	
National Oceanic and Atmospheric Administration	588	0	588	0	0	0	0	0	
Department of Defense Defense Agencies Ballistic Missile Defense	1,008,816 538,458	121,903 111,088	378,521 285,592	508,392 141,778	2,215 215	107 107	0	2,108 108	
Organization Defense Advanced Research	216,182	50,507	116,017	49,658	0	0	0	0	
Projects Agency Defense Information Systems	124,018	22,887	66,448	34,683	0	0	0	0	
Agency	11,450	0	202	11,248	0	0	0	0	
Defense Logistics Agency Defense Threat Reduction	3,130	0	96	3,034	0	0	0	0	
Agency Washington Headquarters	50,621	10,838	37,042	2,741	0	0	0	0	
Services	133,057	26,856	65,787	40,414	215	107	0	108	
Department of the Air Force Air Force, Materials Command	228,334 75,851	1,489 327	23,873 5,616	202,972 69,908	2,000 0	0	0	2,000 0	
Air Force, Space Command	152,483	1,162	18,257	133,064	2,000	0	0	2,000	
Department of the Army Department of the Navy	91,798 123,129	1,474 7,852	37,469 31,507	52,855 83,770	0 0	0	0	0	
Operational Test and Evaluation,	123,127	7,032	31,307	03,770	U	O	U	0	
Director	27,097	0	80	27,017	0	0	0	0	
Department of Energy Energy Efficiency and	4,460,101	893,446	2,710,216	856,439	969,489	108,978	483,811	376,700	
Renewable Energy Fossil Energy National Nuclear Security	353,700 60,252	50,756 13,998	68,358 25,372	234,586 20,882	4,870 0	0	0	4,870 0	
Administration Defense Programs	2,176,050 1,844,162	694,409 582,554	1,439,028 1,255,689	42,613 5,919	386,747 383,356	105,623 102,232	281,124 281,124	0	
Fissile Materials Disposition Naval Reactors Nonproliferation and	27,372 52,777	150 52,384	21,078 313	6,144 80	0 3,391	0 3,391	0	0	
Verification Office of Science	251,739 1,669,272	59,321 40,787	161,948 1,118,002	30,470 510,483	0 577,872	0 3,355	0 202,687	0 371,830	
Other Department of Energy programs	200,827	93,496	59,456	47,875	0	0	0	0	
Civilian Radioactive Waste Management	51,084	11,669	38,309	1,106	0	0	0	0	
Environmental Management Nuclear Energy Office of Intelligence	121,824 25,701 2,218	70,200 10,394 1,233	12,616 8,276 255	39,008 7,031 730	0 0 0	0 0 0	0 0 0	0 0 0	
Department of Health and Human	222.44	000 000	F= 445	4.70:	-	-	ē	=	
Services National Institutes of Health	380,116 380,116	308,238 308,238	57,142 57,142	14,736 14,736	0	0	0	0	
Department of Justice Office of Justice Programs	1,415 1,415	0	0	1,415 1,415	0	0	0	0	

TABLE C-11. Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: FY 2002 (Dollars in thousands)

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	R	esearch and	development	R&D plant				
Agency	Total R&D	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts	Total	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts
Department of Transportation	14,643	6,405	7,714	524	0	0	0	0
Federal Aviation Administration	14,581	6,405	7,672	504	0	0	0	0
Federal Highway Administration	62	0	42	20	0	0	0	0
Other agencies National Aeronautics and Space Administration National Science Foundation Nuclear Regulatory Commission	1,306,472	0	1,302,379	4,093	38,104	0	28,113	9,991
	178,419	0	173,258	5,161	71,385	0	71,385	0
	46,425	21,056	11,335	14,034	0	0	0	0

R&D = Research and development.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-12. Preliminary Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: FY 2003 (Dollars in thousands)

Page 1 of 2

	F	Research and	development		R&D plant					
Agency	Total R&D	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts	Total	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts		
All agencies	7,841,825	1,583,087	4,852,290	1,406,448	1,044,832	144,623	573,940	326,269		
Department of Commerce	292	14	278	0	0	0	0	0		
National Institute of Standards and Technology	14	14	0	0	0	0	0	0		
National Oceanic and Atmospheric Administration	278	0	278	0	0	0	0	0		
Department of Defense Defense Agencies	1,112,697 521,802	235,619 118,714	400,980 285,031	476,098 118,057	1,042 132	53 53	50 50	939 29		
Ballistic Missile Defense Organization	191,229	62,536	106,083	22,610	0	0	0	0		
Defense Advanced Research Projects Agency Defense Information Systems	154,186	28,780	83,089	42,317	0	0	0	0		
Agency	13,203	0	0	13,203	0	0	0	0		
Defense Logistics Agency Defense Threat Reduction	4,260	1,050	96	3,114	0	0	0	0		
Agency Washington Headquarters	23,130	4,012	18,747	371	0	0	0	0		
Services Department of the Air Force Air Force, Materials Command	135,794 340,677 87,918	22,336 103,430 153	77,016 46,555 9,399	36,442 190,692 78,366	132 910 0	53 0 0	50 0 0	29 910 0		
Air Force, Space Command Department of the Army Department of the Navy Operational Test and Evaluation,	252,759 90,838 133,022	103,277 6,383 7,092	37,156 36,833 32,484	112,326 47,622 93,446	910 0 0	0 0 0	0 0 0	910 0 0		
Director	26,358	0	77	26,281	0	0	0	0		
Department of Energy Energy Efficiency and	4,636,220	972,055	2,800,425	863,740	944,862	144,570	484,953	315,339		
Renewable Energy Fossil Energy National Nuclear Security	375,984 62,936	53,460 14,110	72,666 26,655	249,858 22,171	5,297 0	0	0	5,297 0		
Administration Defense Programs	2,331,872 2,136,039	789,344 696,759	1,511,966 1,431,848	30,562 7,432	407,166 405,586	134,320 132,740	272,846 272,846	0		
Fissile Materials Disposition Naval Reactors Nonproliferation and	20,070 54,164	0 53,710	16,000 374	4,070 80	0 1,580	0 1,580	0	0		
Verification Office of Science	121,599 1,742,890	38,875 57,458	63,744 1,146,646	18,980 538,786	0 532,399	0 10,250	0 212,107	0 310,042		
Other Department of Energy programs Bonneville Power	122,538	57,683	42,492	22,363	0	0	0	0		
Administration Civilian Radioactive Waste	1,045	275	0	770	0	0	0	0		
Management Environmental Management Nuclear Energy Office of Intelligence	48,386 61,623 9,877 1,607	10,660 40,729 5,744 275	35,935 4,734 1,153 670	1,791 16,160 2,980 662	0 0 0 0	0 0 0	0 0 0	0 0 0 0		
Department of Health and Human Services National Institutes of Health	440,840 440,840	350,224 350,224	48,094 48,094	42,522 42,522	0	0	0	0		
Department of Justice	915	0	40,094	915	0	0	0	0		
Office of Justice Programs	915	0	0	915	0	0	0	(		

TABLE C-12. Preliminary Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: FY 2003 (Dollars in thousands)

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	R	Research and development					R&D plant				
Agency	Total R&D	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts	Total	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts			
Department of Transportation	13,590	6,000	7,070	520	0	0	0	0			
Federal Aviation Administration	13,500	6,000	7,000	500	0	0	0	0			
Federal Highway Administration	90	0	70	20	0	0	0	0			
Other agencies National Aeronautics and Space Administration National Science Foundation Nuclear Regulatory Commission	1,409,940	0	1,405,847	4,093	25,591	0	15,600	9,991			
	185,986	0	180,606	5,380	73,337	0	73,337	0			
	41,345	19,175	8,990	13,180	0	0	0	0			

R&D = Research and development.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-13. Preliminary Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: FY 2004 (Dollars in thousands)

Page 1 of 2

	F	Research and	development			R&D plant				
Agency	Total R&D	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts	Total	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts		
All agencies	8,019,684	1,520,986	5,067,932	1,430,766	1,023,738	168,333	614,020	241,385		
Departments Department of Agriculture Cooperative State Research,	12,189	12,189	0	0	0	0	0	0		
Ed., and Extension Service	12,189	12,189	0	0	0	0	0	0		
Department of Commerce	331	14	317	0	0	0	0	0		
National Institute of Standards and Technology National Oceanic and	14	14	0	0	0	0	0	0		
Atmospheric Administration	317	0	317	0	0	0	0	0		
Department of Defense Defense Agencies	1,116,135 574,054	161,542 127,599	428,252 303,153	526,341 143,302	3,000 139	41 41	23 23	2,936 75		
Ballistic Missile Defense Organization	227,524	73,313	127,848	26,363	0	0	0	0		
Chemical and Biological Defense	17,457	0	0	17,457	0	0	0	0		
Defense Advanced Research Projects Agency	174,187	33,040	94,438	46,709	0	0	0	0		
Defense Information Systems Agency Defense Logistics Agency Defense Threat Reduction	12,030 3,500	0	0 1,500	12,030 2,000	0	0	0	0		
Agency Washington Headquarters	13,769	2,123	11,290	356	0	0	0	0		
Services Department of the Air Force	125,587 293,628	19,123 15,125	68,077 58,322	38,387 220,181	139 2,861	41 0	23 0	75 2,861		
Air Force, Materials Command Air Force, Space Command Department of the Army Department of the Navy Operational Test and Evaluation,	102,837 190,791 103,825 112,160	216 14,909 11,360 7,458	14,291 44,031 35,455 31,227	88,330 131,851 57,010 73,475	0 2,861 0 0	0 0 0 0	0 0 0 0	0 2,861 0 0		
Director	32,468	0	95	32,373	0	0	0	0		
Department of Energy Energy Efficiency and	4,650,345	948,388	2,868,345	833,612	892,766	168,292	496,016	228,458		
Renewable Energy Fossil Energy National Nuclear Security	366,748 62,955	54,004 14,012	70,881 26,415	241,863 22,528	4,950 0	0	0 0	4,950 0		
Administration Defense Programs	2,304,868 2,127,407	778,393 685,118	1,500,811 1,436,686	25,664 5,603	376,978 376,278	134,302 133,602	242,676 242,676	0		
Fissile Materials Disposition Naval Reactors	999 54,863	0 54,400	0 381	999 82	0 700	0 700	0	0		
Nonproliferation and Verification Office of Science	121,599 1,765,433	38,875 57,138	63,744 1,178,644	18,980 529,651	0 510,838	0 33,990	0 253,340	0 223,508		
Other Department of Energy programs	150,341	44,841	91,594	13,906	0	0	0	0		
Bonneville Power Administration	797	0	0	797	0	0	0	0		
Civilian Radioactive Waste Management Environmental Management Nuclear Energy Office of Intelligence	45,744 38,842 63,351 1,607	10,127 25,672 8,767 275	33,956 2,984 53,984 670	1,661 10,186 600 662	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0		

TABLE C-13. Preliminary Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: FY 2004 (Dollars in thousands)

Page 2 of 2

	R	esearch and	development		R&D plant					
Agency	Total R&D	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts	Total	Admin by industry	Admin by univs and colleges	Admin by other nonprofit insts		
Department of Health and Human										
Services	469,914	373,322	51,265	45,327	0	0	0	0		
National Institutes of Health	469,914	373,322	51,265	45,327	0	0	0	0		
Department of Justice	704	0	0	704	0	0	0	0		
Office of Justice Programs	704	0	0	704	0	0	0	0		
Department of Transportation	11,784	5,000	6,140	644	0	0	0	0		
Federal Aviation Administration	11,000	5,000	5,500	500	0	0	0	0		
Federal Highway Administration Federal Motor Carrier Safety	640	0	640	0	0	0	0	0		
Administration	144	0	0	144	0	0	0	0		
Other agencies National Aeronautics and Space										
Administration	1,511,878	0	1,507,785	4,093	25,591	0	15,600	9,991		
National Science Foundation	202,288	0	196,438	5,850	102,381	0	102,381	0		
Nuclear Regulatory Commission	44,116	20,531	9,390	14,195	0	0	0	0		

R&D = Research and development.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-14. Federal obligations for research and development to federally funded research and development centers, by FFRDC and agency: FY 2002 (Dollars in thousands)

Page 1 of 2

Federally funded research and development centers	Total	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	National Aero- nautics and Space Admin	National Science Founda- tion	Other
All FFRDCs	7,397,010	603	1,008,816	4,460,101	380,116	1,306,472	178,419	62,483
FFRDCs administered by industrial firms Idaho National Engineering and	1,351,063	15	121,903	893,446	308,238	0	0	27,461
Environmental Laboratory National Cancer Institute at Frederick Sandia National Laboratories Savannah River Technology Center	128,132 307,238 884,861 30,832	0 0 15 0	2,370 0 119,067 466	122,017 0 741,063 30,366	0 307,238 1,000 0	0 0 0 0	0 0 0 0	3,745 0 23,716 0
FFRDCs administered by universities and colleges <sup>1</sup> Ames Laboratory Argonne National Laboratory Ernest Orlando Lawrence Berkeley	4,641,153 21,119 268,735	588 0 0	378,521 16 8,217	2,710,216 20,516 249,381	57,142 0 0	1,302,379 0 1,161	173,258 0 216	19,049 587 9,760
National Laboratory Fermi National Accelerator	310,495	588	2,911	273,095	33,267	598	36	0
Laboratory	250,521	0	0	250,521	0	0	0	0
Jet Propulsion Laboratory Lawrence Livermore National	1,307,727	0	9,992	0	0	1,297,729	6	0
Laboratory Lincoln Laboratory Los Alamos National Laboratory National Astronomy and Ionosphere Center	726,072 256,559 998,165 9,409	0 0 0 0	56,487 256,264 23,819 0	658,476 0 957,300 0	8,825 0 15,050 0	2,074 0 426 0	0 0 155 9,409	210 295 1,415 0
National Center for Atmospheric Research National Optical Astronomy	83,927	0	0	0	0	391	76,796	6,740
Observatories National Radio Astronomy Observatory Oak Ridge Institute for Science and	45,618 41,022	0	0	0	0	0	45,618 41,022	0
Education Princeton Plasma Physics Laboratory	11,311 64,336	0	1,662 639	9,607 63,697	0	0	0	42 0
Software Engineering Institute Stanford Linear Accelerator Center Thomas Jefferson National Accelerator	17,614 160,360	0	17,614 0	0 160,360	0	0	0	0
Facility	68,163	0	900	67,263	0	0	0	0
FFRDCs administered by nonprofit institutions <sup>2</sup> Aerospace Federally Funded Research	1,404,794	0	508,392	856,439	14,736	4,093	5,161	15,973
and Development Center Arroyo Center <sup>3</sup>	146,600 21,755	0	141,753 21,755	0	0	3,079 0	353 0	1,415 0
Brookhaven National Laboratory C3I Federally Funded Research and	239,555	0	596	223,901	9,938	491	0	4,629
Development Center <sup>4</sup>	197,272	0	196,199	0	550	0	300	223
Center for Naval Analyses Institute for Defense Analyses	50,160	0	49,833	0	0	0	327	0
Communications and Computing FFRDC Institute for Defense Analyses Studies	9,095	0	9,095	0	0	0	0	0
and Analyses FFRDC	54,689	0	54,689	0	0	0	0	0

TABLE C-14. Federal obligations for research and development to federally funded research and development centers, by FFRDC and agency: FY 2002 (Dollars in thousands) Page 2 of 2

Federally funded research and development centers	Total	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	National Aero- nautics and Space Admin	National Science Founda- tion	Other
National Defense Research Institute <sup>3</sup>	10,354	0	10,354	0	0	0	0	0
National Renewable Energy Laboratory	138,982	0	100	138,882	0	0	0	0
Oak Ridge National Laboratory	363,112	0	14,371	341,455	0	0	170	7,116
Pacific Northwest National Laboratory	168,958	0	9,262	152,201	4,248	523	134	2,590
Project Air Force Science and Technology Policy	385	0	385	0	0	0	0	0
Institute, The <sup>3</sup>	3,877	0	0	0	0	0	3,877	0

FFRDCs = Federally funded research and development centers.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table.

Includes university consortia.
 That is, other than universities and colleges.
 The following portions of the RAND Corporation are FFRDCs: National Defense Research Institute (formerly Defense/Office of the Joint Chiefs of Staff), the Arroyo Center, and The Science and Technology Policy Institute (formerly Critical Technologies Institute). All other agency support to RAND is reported under "other nonprofit institutions excluding FFRDCs."
 Only the C3I Federally Funded Research and Development Center (FFRDC), the Center for Advanced Aviation System Development, and the Internal Revenue Service (IRS) FFRDC parts of the MITRE Corporation are FFRDCs. All other agency support to MITRE is reported under "other nonprofit institutions excluding FFRDCs."

TABLE C-15. Federal obligations for R&D plant to federally funded research and development centers, by FFRDC and agency: FY 2002 (Dollars in thousands)

Federally funded research and development centers	Total	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	National Aero- nautics and Space Admin	National Science Founda- tion	Other
All FFRDCs	1,081,193	0	2,215	969,489	0	38,104	71,385	0
FFRDCs administered by industrial firms Idaho National Engineering and	109,085	0	107	108,978	0	0	0	0
Environmental Laboratory	3,512	0	0	3,512	0	0	0	0
Sandia National Laboratories	105,475	0	9	105,466	0	0	0	0
Savannah River Technology Center	98	0	98	0	0	0	0	0
FFRDCs administered by universities								
and colleges 1	583,309	0	0	483,811	0	28,113	71,385	0
Ames Laboratory	3,083	0	0	3,083	0	0	0	0
Argonne National Laboratory Ernest Orlando Lawrence Berkeley	24,720	0	0	24,720	0	0	0	0
National Laboratory Fermi National Accelerator	56,511	0	0	56,511	0	0	0	0
Laboratory	55,701	0	0	55,701	0	0	0	0
Jet Propulsion Laboratory Lawrence Livermore National	28,113	0	0	0	0	28,113	0	0
Laboratory	281.914	0	0	281.914	0	0	0	0
Los Alamos National Laboratory	5,614	ő	0	5,614	Ö	ő	0	0
National Center for Atmospheric Research National Optical Astronomy	54,163	0	0	0	0	0	54,163	Ô
Observatories	4,736	0	0	0	0	0	4,736	0
National Radio Astronomy Observatory Oak Ridge Institute for Science and	12,486	0	0	0	0	0	12,486	0
Education	1,019	0	0	1,019	0	0	0	0
Princeton Plasma Physics Laboratory	6,578	0	0	6,578	0	0	0	0
Stanford Linear Accelerator Center Thomas Jefferson National Accelerator	40,241	0	0	40,241	0	0	0	0
Facility	8,430	0	0	8,430	0	0	0	0
FFRDCs administered by nonprofit								
institutions <sup>2</sup> Aerospace Federally Funded Research	388,799	0	2,108	376,700	0	9,991	0	0
and Development Center	191	0	0	0	0	191	0	0
Brookhaven National Laboratory C3I Federally Funded Research and	53,779	0	0	43,979	0	9,800	0	0
Development Center <sup>3</sup>	2,000	0	2,000	0	0	0	0	0
National Renewable Energy Laboratory	5,280	Ö	0	5,280	Ő	0	Ő	Ő
Oak Ridge National Laboratory	316,380	0	90	316,290	0	0	0	0
Pacific Northwest National Laboratory	11,169	0	18	11,151	0	0	0	0

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table.

Includes university consortia.
 That is, other than universities and colleges.
 Only the C3I Federally Funded Research and Development Center (FFRDC), the Center for Advanced Aviation System Development, and the Internal Revenue Service (IRS) FFRDC parts of the MITRE Corporation are FFRDCs. All other agency support to MITRE is reported under "other nonprofit institutions" excluding FFRDCs."

TABLE C-16. Federal obligations for research, by agency and performer: FY 2002 (Dollars in thousands)

						Extramura	ıl			
Agency	Total	Intra-			United States	and U.S. teri	ritories			
		mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	48,006,711	11,857,397	5,786,794	937,321	20,285,393	3,219,371	4,722,965	749,636	275,495	172,339
Departments  Department of Agriculture  Agricultural Marketing	1,810,407	1,180,708	17,571	0	580,941	0	22,499	0	4,801	3,887
Service Agricultural Research Service Cooperative State Research,	4,413 964,421	3,867 884,020	0	0	188 69,431	0	228 7,161	0	130 506	0 3,303
Ed., and Extension Service Economic Research Service	546,692 67,045	33,921 57,650	12,860 3,861	0	488,704 4,103	0	10,250 1,371	0	957 0	0 60
Foreign Agricultural Service Forest Service	1,431 217,580	808 194,401	0 850	0	623 17,608	0	0 989	0	0 3,208	0 524
National Agricultural Statistics Service Rural Business-Cooperative	4,597	4,530	0	0	67	0	0	0	0	0
Service Service	4,228	1,511	0	0	217	0	2,500	0	0	0
Department of Commerce Bureau of the Census Economic Development	994,468 5,987	744,037 5,987	83,209 0	15 0	139,228 0	588 0	13,868 0	0	13,083 0	440 0
Administration National Institute of	470	50	0	0	59	0	361	0	0	0
Standards and Technology National Oceanic and	354,640	255,227	81,185	15	14,878	0	2,908	0	0	427
Atmospheric Administration National Telecommunications and Information	629,289	478,691	2,024	0	124,291	588	10,599	0	13,083	13
Administration	4,082	4,082	0	0	0	0	0	0	0	0
Department of Defense Defense Agencies Ballistic Missile Defense	6,265,358 2,653,482	2,292,725 465,019	2,017,252 930,509	16,459 15,588	1,590,836 1,038,323	88,002 80,318	174,103 87,812	61,155 28,099	91 0	24,735 7,814
Organization Chemical and Biological	762	224	170	0	368	0	0	0	0	0
Defense Defense Advanced Research	235,714	73,378	88,085	0	60,647	0	13,604	0	0	0
Projects Agency	1,183,888	115,195	551,409	8,514	397,692	28,015	55,505	20,480	0	7,078
Defense Logistics Agency Defense Threat Reduction	8,714	6,392	0	0	0	0	0	2,322	0	0
Agency Special Operations Command TRICARE Management	368,015 27,325	175,236 8,403	157,521 16,677	7,074 0	1,928 2,245	23,530 0	644 0	1,828 0	0	254 0
Activity <sup>2</sup> Washington Headquarters	386,064	42,249	80,214	0	250,842	0	12,759	0	0	0
Services Department of the Air Force	443,000 1,357,428	43,942 765,204	36,433 441,412	0 327	324,601 116,220	28,773 3,496	5,300 21,954	3,469 5,998	0 10	482 2,807
Air Force, Materials Command Air Force, Space Command Department of the Army	1,332,312 25,116 1,111,513	746,813 18,391 622,034	439,708 1,704 317,613	327 0 265	116,220 0 130,756	1,496 2,000 846	21,954 0 14,323	2,977 3,021 22,535	10 0 0	2,807 0 3,141
Department of the Navy	1,111,513	440,468	327,718	279	305,537	3,342	50,014	4,523	81	10,973
Department of Education	183,565	8,429	7,804	0	131,719	0	35,613	0	0	0

TABLE C-16. Federal obligations for research, by agency and performer: FY 2002 (Dollars in thousands)

Page 2 of 4

						Extramura	l			
Agency	Total	Intra-			United States	and U.S. terr	ritories			
		mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Energy Energy Efficiency and	5,062,489	448,443	230,866	585,148	702,000	2,376,972	62,982	652,611	2,100	1,367
Renewable Energy	293.611	114,727	0	34,002	30,170	27,129	8,342	79,241	0	0
Fossil Energy	145,011	30,232	50,295	4,752	43,363	6,310	4,726	5,333	0	0
National Nuclear Security	•	•						•		
Administration	2,072,593	261,514	111,713	452,642	42,268	1,170,897	7,558	26,001	0	0
Defense Programs	1,893,925	260,576	109,537	420,133	34,693	1,056,312	7,558	5,116	0	0
Nonproliferation and										
Verification	178,668	938	2,176	32,509	7,575	114,585	0	20.885	0	0
Office of Science	2,345,103	18,460	61,443	40,787	556,330	1,118,002	38,231	510,483	0	1,367
Other Department of Energy										
programs	206,171	23,510	7,415	52,965	29,869	54,634	4,125	31,553	2,100	0
Bonneville Power	200,171	23,310	7,413	32,703	27,007	34,034	4,123	31,333	2,100	U
Administration	14,272	12,069	63	0	0	0	40	0	2,100	0
Civilian Radioactive Waste	,_,_	.2,007	00	· ·	· ·	ŭ		·	2,.00	·
Management	62,522	11,438	0	11,669	0	38,309	0	1,106	0	0
Environmental Management	86,877	2	0	30,902	24,508	8,049	0	23,416	0	0
Nuclear Energy	42,500	1	7,352	10,394	5,361	8,276	4,085	7,031	0	0
Department of Health and Human										
Services	23,230,889	4,567,573	1,120,139	308,238	13,265,497	57,142	3,612,922	14,736	162,455	122,187
Administration for Children	20,200,007	1,007,070	1,120,107	000,200	10,200,177	07,112	0,012,722	11,700	102,100	122,107
and Families	23,293	1,403	437	0	16,552	0	1,909	0	2,992	0
Administration on Aging	3,728	91	0	0	0	0	3,637	0	0	0
Agency for Healthcare										
Research and Quality	274,821	36,094	74,770	0	104,503	0	53,311	0	5,301	842
Agency for Toxic Substances	40.407	0.070	404		0.407		4.750	•	0.040	07
and Disease Registry	12,436	2,278	124	0	2,487	0	4,650	0	2,860	37
Centers for Disease Control										
and Prevention	521,000	448,199	32,490	0	36,522	0	1,850	0	1,939	0
Centers for Medicare and										
Medicaid Services	117,015	452	30,156	0	10,810	0	20,887	0	53,025	1,685
Food and Drug Administration	136,316	103,338	4,182	0	21,449	0	6,316	0	177	854
Health Resources and	47.004	0.400	•		0.000		F ///		•	
Services Administration	17,321	2,633	071 527	0	9,022	0 57.143	5,666	14.72/	0 727	110.7/0
National Institutes of Health Office of the Secretary	22,110,101 14,858	3,969,345 3,740	971,537 6,443	308,238 0	13,061,911 2,241	57,142 0	3,514,696 0	14,736 0	93,727 2,434	118,769 0
Office of the Assistant	14,030	3,740	0,443	U	2,241	U	U	U	2,434	U
Secretary, Planning										
and Evaluation	14,858	3,740	6,443	0	2,241	0	0	0	2,434	0
December and of Herritan and Helena										
Department of Housing and Urban Development	16,216	9,319	4,840	0	792	0	1,265	0	0	0
Белеюфшенг	10,210	7,317	4,040	U	172	U	1,200	U	U	U
Department of the Interior	557,385	476,640	14,684	0	55,610	0	2,825	0	6,058	1,568
Bureau of Reclamation	3,636	2,447	411	0	429	0	138	0	191	20
Geological Survey	504,927	462,992	3,200	0	33,443	0	0	0	5,292	0
Minerals Management Service	31,198	6,721	9,901	0	11,111	0	1,885	0	52	1,528
National Park Service <sup>3</sup>	17,624	4,480	1,172	0	10,627	0	802	0	523	20

TABLE C-16. Federal obligations for research, by agency and performer: FY 2002 (Dollars in thousands)

						Extramura				
Agency	Total	- Intra-			United States	and U.S. terr	itories			
Agaily	Total	mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Justice Bureau of Prisons Office of Justice Programs	49,152 3,642 45,510	3,093 2,450 643	12,911 0 12,911	0 0 0	18,374 0 18,374	0 0 0	6,200 0 6,200	1,415 0 1,415	7,159 1,192 5,967	0 0 0
Department of Labor Bureau of Labor Statistics	45,517 20,700	30,823 9,900	3,328 400	0	5,419 5,300	0	5,947 5,100	0	0	0
Employment and Training Administration	17,838	17,838	0	0	0	0	0	0	0	0
Occupational Safety and Health Administration Office of the Secretary	3,839 342	2,118 100	1,721 242	0	0 0	0	0	0	0	0
Pension and Welfare Benefits Administration	2,733	802	965	0	119	0	847	0	0	0
Pension Benefit Guaranty Corporation	65	65	0	0	0	0	0	0	0	0
Department of State	2,304	675	1,629	0	0	0	0	0	0	0
Department of Transportation Coast Guard	530,887 6,408	209,508 3,949	206,432 1,459	6,405 0	37,985 1,000	7,714 0	8,619 0	524 0	52,513 0	1,187 0
Federal Aviation Administration	244,839	75,002	142,065	6,405	13,191	7,672	0	504	0	0
Federal Highway Administration	138,575	30,884	31,071	0	15,619	42	8,401	20	52,513	25
Federal Motor Carrier Safety Administration	165	2	163	0	0	0	0	0	0	0
Federal Railroad Administration	29,744	12,586	15,510	0	923	0	0	0	0	725
Federal Transit  Administration	592	592	0	0	0	0	0	0	0	0
National Highway Traffic SafetyAdministration	59,624	36,611	15,175	0	7,252	0	149	0	0	437
Research and Special Programs Administration	3,740	2,682	989	0	0	0	69	0	0	0
Transportation Security Administration	47,200	47,200	0	0	0	0	0	0	0	0
Department of the Treasury	61,831	56,630	5,201	0	0	0	0	0	0	0
Bureau of Engraving and Printing	5,318	5,318	0	0	0	0	0	0	0	0
Internal Revenue Service Office of Thrift Supervision	55,539 147	50,539 147	5,000 0	0	0	0	0	0	0	0
United States Customs Service United States Secret Service	40 787	15 611	25 176	0	0	0	0	0	0	0
Department of Veterans Affairs	314,306	314,306	0	0	0	0	0	0	0	0
Other agencies										
Agency for International Development	247,575	30,974	16,975	0	28,001	0	171,625	0	0	0
Appalachian Regional Commission Broadcasting Board of Governors	670 250	1 250	181 0	0	188 0	0 0	300	0	0	0
Environmental Protection Agency Federal Communications	323,700	153,550	31,088	0	90,025	0	40,935	0	7,117	985
Commission Federal Trade Commission	4,417 1,803	4,417 1,803	0 0	0	0	0	0	0	0	0
Library of Congress	1,743	1,743	0	0	0	0	0	0	0	0
National Aeronautics and Space Administration National Archives and Records	4,838,538	1,185,829	1,880,998	0	932,600	504,360	322,081	0	6,654	6,016
Administration	120	120	0	0	0	0	0	0	0	0

						Extramural				
Agency	Total	Intra-			United States	and U.S. terr	tories			
		mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Social Security Administration	3,260,008 74,314 106,000 22,799	13,591 13,730 106,000 2,480	121,237 6,597 0 3,852	21,056 0 0	2,695,785 4,080 0 6,313	173,258 11,335 0 0	237,451 1,337 0 2,393	5,161 14,034 0 0	5,703 0 0 7,761	7,822 2,145 0 0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as

FFRDCs = Federally funded research and development centers.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

actual intramural performance.

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-17. Preliminary Federal obligations for research, by agency and performer: FY 2003 (Dollars in thousands) \\ \end{tabular}$ 

Page 1 of 4

						Extramura	ıl			
Agency	Total	Intra-			United States	and U.S. teri	ritories			
		mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	52,568,504	12,617,969	6,549,419	1,052,541	22,379,750	3,409,201	5,230,718	780,148	340,646	208,112
Department of Agriculture Agricultural Marketing	1,922,278	1,217,648	16,896	0	659,704	0	20,229	0	4,547	3,254
Service Agricultural Research Service Cooperative State Research,	4,591 973,017	4,591 909,849	0	0	0 54,596	0	0 5,460	0	0 382	0 2,730
Ed., and Extension Service Economic Research Service	648,051 68,674	40,331 61,374	14,546 1,500	0	581,967 4,800	0	10,250 1,000	0	957 0	0
Foreign Agricultural Service Forest Service	1,600 217,580	912 194,401	0 850	0	688 17,608	0	0 989	0	0 3,208	0 524
National Agricultural Statistics Service Rural Business-Cooperative	4,761	4,686	0	0	45	0	30	0	0	0
Service	4,004	1,504	0	0	0	0	2,500	0	0	0
Department of Commerce Bureau of the Census Economic Development	1,022,009 4,568	773,359 4,568	88,279 0	14 0	137,874 0	278 0	10,880 0	0	10,893 0	432 0
Administration  National Institute of	550	50	0	0	250	0	250	0	0	0
Standards and Technology National Oceanic and	388,762	285,482	86,294	14	12,776	0	3,764	0	0	432
Atmospheric Administration National Telecommunications and Information	622,689	477,819	1,985	0	124,848	278	6,866	0	10,893	0
Administration	5,440	5,440	0	0	0	0	0	0	0	0
Department of Defense Defense Agencies Chemical and Biological	6,513,825 2,740,038	2,235,360 435,265	2,244,980 1,011,259	14,086 11,893	1,643,580 1,076,820	82,558 71,205	191,152 100,019	58,832 25,147	10 0	43,267 8,430
Defense  Defense Advanced Research	258,732	154,183	13,599	0	76,350	0	14,600	0	0	0
Projects Agency Defense Logistics Agency	1,337,029 22,888	129,322 8,808	613,343 4,976	9,592 1,050	459,169 500	31,780 0	62,567 6,474	23,356 1,080	0	7,900 0
Defense Threat Reduction Agency Special Operations Command TRICARE Management	297,254 27,232	50,032 9,334	240,377 16,090	451 0	694 1,808	4,675 0	124 0	371 0	0	530 0
Activity <sup>2</sup>	358,138	50,494	72,006	0	224,184	0	11,454	0	0	0
Washington Headquarters Services Department of the Air Force	438,765 1,504,731	33,092 763,036	50,868 574,801	800 153	314,115 111,192	34,750 4,463	4,800 23,257	340 8,035	0 10	0 19,784
Air Force, Materials Command	1,448,204	726,338	564,029	153	111,192	1,463	23,257	1,978	10	19,784
Air Force, Space Command Department of the Army Department of the Navy	56,527 1,068,868 1,200,188	36,698 595,535 441,524	10,772 300,918 358,002	0 677 1,363	0 127,550 328,018	3,000 1,335 5,555	0 18,086 49,790	6,057 22,339 3,311	0 0 0	0 2,428 12,625
Department of Education	200,512	8,077	6,598	0	146,994	0	38,843	0	0	0

TABLE C-17. Preliminary Federal obligations for research, by agency and performer: FY 2003 (Dollars in thousands)

						Extramura	I			
Agency	Total	Intra-			United States	and U.S. terr	itories			
3. 3		mural 1 -	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Energy	5,320,934	333,966	448,544	663,042	695,466	2,467,510	46,394	658,799	6,047	1,166
Energy Efficiency and Renewable Energy Fossil Energy	309,901 256,361	121,091 32,585	0 157,125	35,568 4,810	31,843 44,958	28,635 6,652	8,805 4,810	83,959 5,421	0	0
National Nuclear Security Administration Defense Programs	2,081,790 2,003,149	107,259 105,469	112,565 102,515	534,917 514,724	51,451 47,966	1,247,738 1,219,001	8,560 8,560	19,300 4,914	0	0
Nonproliferation and Verification Office of Science	78,641 2,511,026	1,790 46,979	10,050 128,822	20,193 57,458	3,485 561,257	28,737 1,146,646	0 24,215	14,386 538,786	0 5,697	0 1,166
Other Department of Energy programs Bonneville Power	161,856	26,052	50,032	30,289	5,957	37,839	4	11,333	350	0
Administration Civilian Radioactive Waste	14,685	11,957	1,190	275	143	0	0	770	350	0
Management Environmental Management Nuclear Energy	62,479 30,458 54,234	14,093 1 1	0 0 48,842	10,660 16,291 3,063	0 5,808 6	35,935 1,894 10	0 0 4	1,791 6,464 2,308	0 0 0	0 0 0
Department of Health and Human Services Administration for Children	26,317,992	5,164,057	1,241,436	350,224	15,088,790	48,094	4,065,033	42,522	180,159	137,677
and Families Agency for Healthcare	23,782	1,432	446	0	16,900	0	1,949	0	3,055	0
Research and Quality Centers for Disease Control	279,399	36,695	76,016	0	106,244	0	54,199	0	5,389	856
and Prevention Centers for Medicare and	564,000	487,558	34,115	0	38,348	0	1,943	0	2,036	0
Medicaid Services	74,194	50	13,112	0	4,549	0	12,098	0	43,000	1,385
Food and Drug Administration Health Resources and	139,784	106,029	4,281	0	21,954	0	6,465	0	181	874
Services Administration National Institutes of Health Office of the Secretary Office of the Assistant	17,280 25,203,553 16,000	2,592 4,524,701 5,000	0 1,107,466 6,000	350,224 0	8,990 14,889,305 2,500	48,094 0	5,698 3,982,681 0	0 42,522 0	0 123,998 2,500	0 134,562 0
Secretary, Planning and Evaluation	16,000	5,000	6,000	0	2,500	0	0	0	2,500	0
Department of Homeland Security Transportation Security	74,736	72,177	1,559	0	1,000	0	0	0	0	0
Administration United States Coast Guard	68,000 6,736	68,000 4,177	0 1,559	0 0	0 1,000	0	0	0	0	0
Department of Housing and Urban Development	17,491	10,052	5,220	0	855	0	1,364	0	0	0
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	525,402 3,608 495,004 26,790	462,949 2,430 453,485 7,034	9,113 408 3,200 5,505	0 0 0 0	45,660 425 33,633 11,602	0 0 0 0	1,847 137 0 1,710	0 0 0 0	4,940 189 4,686 65	893 19 0 874

TABLE C-17. Preliminary Federal obligations for research, by agency and performer: FY 2003 (Dollars in thousands)

						Extramura	I			
Agency	Total	Intra-			United States	and U.S. terr	itories			
		mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Justice Bureau of Prisons Office of Justice Programs	51,700 3,700 48,000	2,916 2,500 416	13,306 0 13,306	0 0 0	22,097 0 22,097	0 0 0	6,367 0 6,367	915 0 915	6,099 1,200 4,899	0 0 0
Department of Labor Bureau of Labor Statistics	49,033 22,400	33,320 10,100	4,213 1,300	0	4,062 4,000	0	7,438 7,000	0	0	0
Employment and Training Administration Occupational Safety	19,897	19,897	0	0	0	0	0	0	0	0
and Health Administration Office of the Secretary	3,926 792	2,205 100	1,721 692	0	0	0	0	0	0	0
Pension and Welfare Benefits Administration Pension Benefit Guaranty	1,951	951	500	0	62	0	438	0	0	0
Corporation	67	67	0	0	0	0	0	0	0	0
Department of State	1,852	702	1,150	0	0	0	0	0	0	0
Department of Transportation	429,485	152,760	127,116	6,000	39,649	7,070	5,988	520	89,568	814
Federal Aviation Administration	129,472	70,619	32,353	6,000	13,000	7,000	0	500	0	0
Federal Highway Administration	202,053	28,292	59,756	0	19,649	70	4,698	20	89,568	0
Federal Motor Carrier Safety Administration	2,964	1	1,614	0	0	0	1,055	0	0	294
Federal Railroad Administration	29,296	14,172	15,004	0	0	0	0	0	0	120
National Highway Traffic SafetyAdministration Research and Special Programs Administration	58,181 7,519	36,605 3,071	14,001 4,388	0	7,000 0	0	175 60	0	0	400 0
Department of the Treasury	69,699	64,999	4,700	0	0	0	0	0	0	0
Bureau of Engraving and Printing	6,510	6,510	0	0	0	0	0	0	0	0
Internal Revenue Service Office of Thrift Supervision United States Secret Service	62,050 162 977	57,550 162 777	4,500 0 200	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Veterans Affairs	337,972	337,972	0	0	0	0	0	0	0	0
Other agencies Agency for International Development Appalachian Regional Commission Broadcasting Board of Governors	240,870 686 243	25,515 1 243	20,461 165 0	0 0 0	30,000 445 0	0 0 0	164,694 75 0	0 0 0	0 0 0	200 0 0
Environmental Protection Agency Federal Communications	455,964	216,127	43,819	0	126,898	0	57,705	0	10,025	1,390
Commission Federal Trade Commission Library of Congress	6,265 1,554 1,780	6,265 1,554 1,780	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
National Aeronautics and Space Administration National Archives and Records	5,332,835	1,340,877	2,089,936	0	911,749	614,095	362,110	0	6,804	7,264
Administration	120	120	0	0	0	0	0	0	0	0

TABLE C-17. Preliminary Federal obligations for research, by agency and performer: FY 2003 (Dollars in thousands)

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						Extramural				
Agency	Total	Intra-			United States	and U.S. terri	tories			
		mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Social Security Administration	3,403,614 74,996 109,000 85,657	14,172 17,175 109,000 14,826	128,078 8,420 0 45,430	0 19,175 0 0	2,813,485 3,150 0 8,292	180,606 8,990 0 0	247,793 1,306 0 1,500	5,380 13,180 0 0	5,945 0 0 15,609	8,155 3,600 0

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance

FFRDCs = Federally funded research and development centers.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

actual inframural performance.

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

TABLE C-18. Preliminary Federal obligations for research, by agency and performer: FY 2004 (Dollars in thousands)

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						Extramura	nl			
Agency	Total	Intra-			United States	and U.S. ter	ritories			
		mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies	54,071,836	13,427,280	6,398,007	1,071,901	22,933,648	3,469,223	5,468,480	797,389	306,483	199,425
Departments Department of Agriculture Agricultural Marketing	1,778,661	1,223,168	3,850	12,189	514,482	0	17,171	0	4,547	3,254
Service Agricultural Research Service Cooperative State Research,	4,633 977,911	4,633 914,743	0	0	0 54,596	0	0 5,460	0	0 382	0 2,730
Ed., and Extension Service Economic Research Service	492,775 76,657	37,363 65,676	0 3,000	12,189 0	435,074 6,481	0	7,192 1,500	0	957 0	0
Foreign Agricultural Service Forest Service	1,600 216,720	912 193,541	0 850	0	688 17,608	0	0 989	0	0 3,208	0 524
National Agricultural Statistics Service Rural Business-Cooperative	4,861	4,796	0	0	35	0	30	0	0	0
Service	3,504	1,504	0	0	0	0	2,000	0	0	0
Department of Commerce Bureau of the Census	1,004,420 4,153	819,923 4,153	16,720 0	14 0	144,638 0	317 0	10,392 0	0	12,074 0	342 0
Economic Development Administration National Institute of	550	50	0	0	250	0	250	0	0	0
Standards and Technology  National Oceanic and	325,926	295,353	14,461	14	14,701	0	1,055	0	0	342
Atmospheric Administration National Telecommunications and Information	667,113	513,689	2,259	0	129,687	317	9,087	0	12,074	0
Administration	6,678	6,678	0	0	0	0	0	0	0	0
Department of Defense Defense Agencies Chemical and Biological	5,890,164 2,043,092	2,353,141 369,212	2,088,304 960,391	13,666 11,627	1,106,934 512,479	75,903 66,175	146,686 71,934	78,978 42,493	10 0	26,542 8,781
Defense  Defense Advanced Research	213,307	149,028	15,106	0	32,950	0	0	16,223	0	0
Projects Agency Defense Logistics Agency	1,386,945 22,615	135,254 9,858	648,747 4,000	9,982 0	462,951 500	32,781 1,500	65,059 6,757	23,924 0	0	8,247 0
Defense Threat Reduction Agency Special Operations Command Washington Headquarters	297,212 24,253	50,020 8,312	240,393 14,166	445 0	682 1,775	4,664 0	118 0	356 0	0	534 0
Services Department of the Air Force	98,760 1,812,682	16,740 1,031,897	37,979 630,926	1,200 216	13,621 109,794	27,230 4,987	0 18,808	1,990 12,204	0 10	0 3,840
Äir Force, Materials Command Air Force, Space Command	1,538,577 274,105	769,173 262,724	630,926 0	216 0	109,794 0	1,687 3,300	18,808 0	4,123 8,081	10 0	3,840 0
Department of the Army Department of the Navy	1,026,075 1,008,315	581,616 370,416	235,172 261,815	648 1,175	171,241 313,420	1,203 3,538	12,311 43,633	22,153 2,128	0	1,731 12,190
Department of Education	219,580	9,630	6,840	0	166,996	0	36,114	0	0	0

TABLE C-18. Preliminary Federal obligations for research, by agency and performer: FY 2004 (Dollars in thousands)

						Extramura	I			
Agency	Total	Intra-			United States	and U.S. terr	itories			
		mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Energy	5,519,058	596,697	381,152	647,179	687,918	2,504,491	46,127	651,835	2,932	727
Energy Efficiency and Renewable Energy Fossil Energy	333,636 182,602	130,367 33,078	0 83,490	37,729 4,695	34,282 44,610	30,828 6,653	9,479 4,500	90,951 5,576	0	0
National Nuclear Security Administration Defense Programs	2,331,583 2,252,942	370,554 368,764	114,536 104,486	524,754 504,561	43,617 40,132	1,247,556 1,218,819	10,899 10,899	19,667 5,281	0	0
Nonproliferation and Verification Office of Science	78,641 2,533,747	1,790 34,304	10,050 148,083	20,193 57,138	3,485 561,019	28,737 1,178,644	0 21,249	14,386 529,651	0 2,932	0 727
Other Department of Energy programs Bonneville Power	137,490	28,394	35,043	22,863	4,390	40,810	0	5,990	0	0
Administration Civilian Radioactive Waste	15,199	15,044	0	0	0	0	0	155	0	0
Management Environmental Management Nuclear Energy	59,092 19,198 44,001	13,348 1 1	0 0 35,043	10,127 10,269 2,467	0 3,660 730	33,956 1,194 5,660	0 0 0	1,661 4,074 100	0 0 0	0 0 0
Department of Health and Human Services Administration for Children	27,907,381	5,419,254	1,306,014	373,322	16,060,513	51,265	4,318,682	45,327	186,557	146,447
and Families Agency for Healthcare	24,282	1,463	456	0	17,254	0	1,990	0	3,119	0
Research and Quality Centers for Disease Control	256,680	33,711	69,834	0	97,606	0	49,792	0	4,951	786
and Prevention  Centers for Medicare and	531,000	450,736	35,821	0	40,265	0	2,040	0	2,138	0
Medicaid Services	63,400	50	9,293	0	3,224	0	7,948	0	41,500	1,385
Food and Drug Administration Health Resources and	134,909	102,551	4,103	0	21,046	0	6,197	0	174	838
Services Administration National Institutes of Health Office of the Secretary Office of the Assistant Secretary, Planning	15,313 26,865,797 16,000	2,625 4,823,118 5,000	0 1,180,507 6,000	373,322 0	7,323 15,871,295 2,500	0 51,265 0	5,365 4,245,350 0	0 45,327 0	0 132,175 2,500	0 143,438 0
and Evaluation	16,000	5,000	6,000	0	2,500	0	0	0	2,500	0
Department of Homeland Security Transportation Security	142,453	139,981	1,472	0	1,000	0	0	0	0	0
Administration United States Coast Guard	136,000 6,453	136,000 3,981	0 1,472	0	0 1,000	0	0	0	0	0
Department of Housing and Urban Development	17,806	10,232	5,315	0	870	0	1,389	0	0	0
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	500,059 2,812 470,789 26,458	451,378 1,892 442,694 6,792	6,685 318 0 6,367	0 0 0 0	35,854 332 23,913 11,609	0 0 0 0	532 107 0 425	0 0 0 0	4,395 148 4,182 65	1,215 15 0 1,200

TABLE C-18. Preliminary Federal obligations for research, by agency and performer: FY 2004 (Dollars in thousands)

						Extramural				
Agency	Total	Intra-			United States	and U.S. terri	itories			
		mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Justice Bureau of Prisons Office of Justice Programs	46,850 3,850 43,000	2,970 2,650 320	11,857 0 11,857	0 0 0	20,339 0 20,339	0 0 0	5,669 0 5,669	704 0 704	5,311 1,200 4,111	0 0 0
Department of Labor Bureau of Labor Statistics	28,790 22,300	13,969 10,400	3,221 800	0	10,662 10,600	0	938 500	0	0	0
Occupational Safety and Health Administration Office of the Secretary Pension and Welfare Benefits	3,992 300	2,271 100	1,721 200	0	0	0	0	0	0	0
Administration Pension Benefit Guaranty Corporation	2,129 69	1,129 69	500 0	0	62 0	0	438	0	0	0
Department of State	1,933	723	1,210	0	0	0	0	0	0	0
Department of Transportation	420,573	181,284	136,599	5,000	27,315	5,640	11,840	500	51,875	520
Federal Aviation Administration	100,000	57,568	21,432	5,000	10,000	5,500	0	500	0	0
Federal Highway Administration Federal Motor Carrier	221,985	68,229	81,495	0	10,815	140	9,431	0	51,875	0
Safety Administration Federal Railroad	5,344	469	2,826	0	0	0	2,049	0	0	0
Administration	27,043	14,369	12,554	0	0	0	0	0	0	120
National Highway Traffic SafetyAdministration Research and Special Programs	59,867	37,968	14,799	0	6,500	0	200	0	0	400
Administration	6,334	2,681	3,493	0	0	0	160	0	0	0
Department of the Treasury Bureau of Engraving and	69,761	65,041	4,720	0	0	0	0	0	0	0
Printing Internal Revenue Service	6,510 62,050	6,510 57,550	0 4,500	0	0	0	0	0	0	0
Office of Thrift Supervision United States Secret Service	177 1,024	177 804	0 220	0	0	0	0	0	0	0
Department of Veterans Affairs	363,693	363,693	0	0	0	0	0	0	0	0
Other agencies Agency for International										
Development Appalachian Regional Commission Broadcasting Board of Governors	252,875 343 51	30,020 1 51	18,000 83 0	0 0 0	35,001 223 0	0 0 0	169,704 36 0	0 0 0	0 0 0	150 0 0
Environmental Protection Agency Federal Communications	458,607	217,381	44,072	0	127,633	0	58,039	0	10,083	1,399
Commission Federal Trade Commission	2,759 1,679	2,759 1,679	0	0	0	0	0	0	0	0
Library of Congress National Aeronautics and Space	788	788	0	0	0	0	0	0	0	0
Administration National Archives and Records Administration	5,487,046 120	1,371,762	2,170,046	0	932,600	625,779	372,581 0	0	6,834	7,444
	120	120	3	Ü	3	J	U	3	3	3

TABLE C-18. Preliminary Federal obligations for research, by agency and performer: FY 2004 (Dollars in thousands)

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						Extramural				
Agency	Total	Intra-			United States	and U.S. terri	tories			
	Total	mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Social Security Administration	3,689,876 75,110 115,000 76,400	15,406 16,329 115,000 4,900	135,460 9,087 0 47,300	0 20,531 0 0	3,052,490 2,280 0 5,900	196,438 9,390 0 0	268,900 780 0 2,900	5,850 14,195 0 0	6,465 0 0 15,400	8,867 2,518 0 0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-19. Federal obligations for research, by detailed field of science and engineering: FYs 2002-04 (Dollars in thousands)

Field of science and engineering	2002	Preliminary				
3 3		2003	200			
All fields	48,006,711	52,568,504	54,071,83			
Life sciences	25,476,802	28,441,949	29,340,48			
Agricultural	1,047,642	NA NA	27,010,10			
Biological (excluding environmental)	14,498,524	NA	N.			
Environmental biology	778.884	NA	. ·			
Medical	6,427,390	NA				
Life sciences, nec	2,724,362	NA	Ŋ			
Psychology	905,874	1,009,388	1,050,3			
Biological aspects	10,619	NA	1,000,0			
Social aspects	52,502	NA				
Psychological sciences, nec	842,753	NA	N			
Physical sciences	4,983,230	5,105,284	5,416,9			
Astronomy	751,527	NA	1,,			
Chemistry	1,181,738	NA				
Physics	2,621,366	NA				
Physical sciences, nec	428,599	NA				
Environmental sciences	3.418.276	3.689.783	3.761.5			
Atmospheric	1,163,517	NA	1			
Geological	674,893	NA	1			
Oceanography	784,648	NA	1			
Environmental sciences, nec	795,218	NA	Ī			
Mathematics and computer sciences	2,630,661	2,738,202	2,828,8			
Computer sciences	2,043,190	NA	1			
Mathematics	401,997	NA	1			
Mathematics and computer sciences, nec	185,474	NA	1			
Engineering	8,274,904	9,074,012	9,127,0			
Aeronautical	2,157,141	NA	Ī			
Astronautical	760,786	NA	1			
Chemical	201,578	NA	1			
Civil	302,654	NA	1			
Electrical	808,667	NA	1			
Mechanical	265,916	NA	1			
Metallurgy and materials	1,000,525	NA	1			
Engineering, nec	2,777,637	NA	N			
Social sciences	1,038,517	1,176,317	1,202,9			
Anthropology	16,398	NA	N			
Economics	227,335	NA	N			
Political science	18,447	NA	Ŋ			
Sociology	96,108	NA	Ŋ			
Social sciences, nec	680,229	NA	N			
Other sciences, nec	1,278,447	1,333,569	1,343,6			
Other sciences, nec	1,278,447	1,333,569	1,343,			

 $\begin{tabular}{ll} NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year). \\ nec = Not elsewhere classified. \\ \end{tabular}$ 

TABLE C-20. Federal obligations for research, by agency and field of science and engineering: FY 2002 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	48,006,711	25,476,802	905,874	4,983,230	3,418,276	2,630,661	8,274,904	1,038,517	1,278,447
Department of Agriculture Agricultural Marketing Service	1,810,407 4,413	1,495,903 4,413	439 0	93,207 0	14,976 0	15,724 0	56,823 0	129,949 0	3,386 0
Agricultural Research Service Cooperative State Research,	964,421	886,014	0	64,231	4,243	1,254	8,679	0	0
Ed., and Extension Service	546,692	462,360	0	17,702	4,357	0	13,923	48,350	0
Economic Research Service Foreign Agricultural Service	67,045 1,431	0 1,431	0	0	0	0	0	67,045 0	0
Forest Service National Agricultural	217,580	139,181	439	11,274	6,376	9,873	34,221	12,830	3,386
Statistics Service Rural Business-Cooperative	4,597	0	0	0	0	4,597	0	0	0
Service Service	4,228	2,504	0	0	0	0	0	1,724	0
Department of Commerce Bureau of the Census	994,468 5,987	205,901 0	0	129,627 0	407,377 0	73,461 5,987	168,072 0	9,813 0	217 0
Economic Development Administration	470	0	0	0	0	0	0	470	0
National Institute of Standards and Technology	354,640	19,163	0	110,981	2,260	64,269	157,406	344	217
National Oceanic and Atmospheric Administration	629,289	186,738	0	18,646	405,117	3,205	6,584	8,999	0
National Telecommunications and Information Administration	4,082	0	0	0	0	0	4,082	0	0
Department of Defense Defense Agencies	6,265,358 2,653,482	1,125,512 817,663	55,383 17,837	515,034 164,387	313,024 28,079	883,580 577,103	3,017,179 927,526	16,399 0	339,247 120,887
Ballistic Missile Defense Organization Chemical and Biological	762	0	0	24	0	0	738	0	0
Defense Defense Advanced Research	235,714	183,800	0	51,541	0	373	0	0	0
Projects Agency	1,183,888	172,534	0	16,311	4,582	485,221	470,822	0	34,418
Defense Logistics Agency Defense Threat Reduction	8,714	0	8,714	0	0	0	0	0	0
Agency Special Operations Command TRICARE Management Activity <sup>1</sup>	368,015 27,325 386,064	733 1,094 386,064	0 0 0	44,984 0 0	0 0 0	38,907 0 0	197,135 26,018 0	0 0 0	86,256 213 0
Washington Headquarters Services	443,000	73,438	9,123	51,527	23,497	52,602	232,813	0	0
Department of the Air Force	1,357,428	45,771	32,282	165,534	6,864	84,065	971,707	0	51,205
Air Force, Materials Command Air Force, Space Command	1,332,312 25,116	45,771 0	32,282 0	165,534 0	6,864 0	83,654 411	947,002 24,705	0 0	51,205 0
Department of the Army Department of the Navy	1,111,513 1,142,935	161,135 100,943	5,264 0	121,054 64,059	35,329 242,752	160,647 61,765	444,530 673,416	16,399 0	167,155 0
Department of Education	183,565	17,203	4,255	0	0	0	16,721	145,386	0

TABLE C-20. Federal obligations for research, by agency and field of science and engineering: FY 2002 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Energy Energy Efficiency and	5,062,489	372,570	0	2,074,780	313,199	812,136	1,473,350	0	16,454
Renewable Energy Fossil Energy	293,611 145,011	14,126 0	0	45,932 33,315	0 18,970	0 0	233,553 92,726	0	0
National Nuclear Security Administration Defense Programs	2,072,593 1,893,925	35,698 0	0	521,706 428,807	5,790 0	668,754 660,056	838,675 805,062	0	1,970 0
Nonproliferation and Verification Office of Science	178,668 2,345,103	35,698 309,563	0	92,899 1,423,157	5,790 201,562	8,698 143,382	33,613 264,393	0	1,970 3,046
Other Department of Energy programs	206,171	13,183	0	50,670	86,877	0	44,003	0	11,438
Bonneville Power Administration Civilian Radioactive Waste	14,272	13,183	0	0	0	0	1,089	0	0
Management Environmental Management Nuclear Energy	62,522 86,877 42,500	0 0 0	0 0 0	50,670 0 0	0 86,877 0	0 0 0	414 0 42,500	0 0 0	11,438 0 0
Department of Health and Human Services	23,230,889	20,657,927	744,430	430,935	276,086	63,136	229,266	320,846	508,263
Administration for Children and Families Administration on Aging	23,293 3,728	0	0	0	0	0	0	23,293 3,728	0
Agency for Healthcare Research and Quality	274,821	129,893	32	305	0	22,196	0	61,150	61,245
Agency for Toxic Substances and Disease Registry	12,436	11,814	75	0	435	0	0	112	0
Centers for Disease Control and Prevention Centers for Medicare and	521,000	521,000	0	0	0	0	0	0	0
Medicaid Services Food and Drug Administration Health Resources and Services	117,015 136,316	117,015 136,316	0	0	0	0	0	0	0
Administration National Institutes of Health	17,321 22,110,101	17,321 19,724,568	0 744,323	0 430,630	0 275,651	0 40,940	0 229,266	0 217,705	0 447,018
Office of the Secretary Office of the Assistant	14,858	0	0	0	0	0	0	14,858	0
Secretary, Planning and Evaluation	14,858	0	0	0	0	0	0	14,858	0
Department of Housing and Urban Development	16,216	0	0	0	625	255	3,649	10,691	996
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service National Park Service <sup>2</sup>	557,385 3,636 504,927 31,198	169,466 311 155,500 4,434	0 0 0 0	1,858 0 400 0	359,986 0 334,618 19,489	9,795 0 9,100 94	11,357 2,996 3,409 4,952	4,594 0 1,900 2,229	329 329 0 0
Department of Justice Bureau of Prisons Office of Justice Programs	17,624 49,152 3,642 45,510	9,221 0 0 0	450 450 0	1,458 0 0 0	5,879 0 0 0	500 500 0	0 0 0	465 37,946 2,292 35,654	10,256 400 9,856
Department of Labor Bureau of Labor Statistics	45,517 20,700	92 0	0	0	0	184 0	1,319 0	43,922 20,700	0 0
Employment and Training Administration	17,838	92	0	0	0	184	1,319	16,243	0
Occupational Safety and Health Administration Office of the Secretary	3,839 342	0	0	0	0	0	0	3,839 342	0
Pension and Welfare Benefits Administration Pension Benefit Guaranty	2,733	0	0	0	0	0	0	2,733	0
Corporation	65	0	0	0	0	0	0	65	0

TABLE C-20. Federal obligations for research, by agency and field of science and engineering: FY 2002 (Dollars in thousands)

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Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of State	2,304	0	0	0	0	0	0	2,304	0
Department of Transportation Coast Guard Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	530,887 6,408 244,839 138,575	11,716 0 6,121 105	24,387 818 23,569 0	96,784 0 82,624 0	27,549 697 23,668 3,134	11,585 1,432 0 2,162	320,216 3,461 84,083 125,984	10,810 0 0 4,893	27,840 0 24,774 2,297
Administration Federal Railroad Administration Federal Transit Administration	165 29,744 592	165 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 29,744 0	0 0 0	0 0 592
National Highway Traffic Safety Administration Research and Special Programs	59,624	5,325	0	0	0	7,691	40,691	5,917	0
Administration  Transportation Security	3,740	0	0	0	50	300	3,213	0	177
Administration	47,200	0	0	14,160	0	0	33,040	0	0
Department of the Treasury Bureau of Engraving and	61,831	19	787	5,318	0	17	4	55,686	0
Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	5,318 55,539 147 40 787	0 0 0 19 0	0 0 0 0 787	5,318 0 0 0 0	0 0 0 0	0 0 0 17 0	0 0 0 4 0	0 55,539 147 0 0	0 0 0 0
Department of Veterans Affairs	314,306	248,103	47,367	0	0	0	18,836	0	0
Other agencies Agency for International Development Appalachian Regional Commission Broadcasting Board of Governors Environmental Protection Agency Federal Communications	247,575 670 250 323,700	165,145 0 0 131,849	0 0 0 0	0 0 0 11,438	4,407 0 0 110,464	0 0 0 10,896	0 0 250 42,670	77,102 670 0 4,105	921 0 0 12,278
Commission	4,417	0	0	260	0	43	1,335	2,779	0
Federal Trade Commission Library of Congress National Aeronautics and Space	1,803 1,743	0	0	0 243	0	0 1,500	0	1,803 0	0
Administration National Archives and Records	4,838,538	321,676	24,568	949,215	1,014,932	95,588	2,280,701	370	151,488
Administration National Science Foundation	120 3,260,008	0 512,654	0 3,808	120 628,706	0 571,379	0 652,261	0 558,842	0 126,454	0 205,904
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration	74,314 106,000 22,799	0 41,066 0	0 0 0	0 45,705 0	0 4,272 0	0 0 0	74,314 0 0	0 14,089 22,799	0 868 0

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-21. Preliminary Federal obligations for research, by agency and field of science and engineering: FY 2003 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies	52,568,504	28,441,949	1,009,388	5,105,284	3,689,783	2,738,202	9,074,012	1,176,317	1,333,569
Departments Department of Agriculture	1.922.278	1.596.369	439	97.430	15,501	15.900	58.719	134.534	3,386
Agricultural Marketing Service	4,591	4,591	0	97,430	15,501	15,900	0,719	134,334	3,300
Agricultural Research Service Cooperative State Research,	973,017	893,911	0	64,802	4,281	1,266	8,757	0	0
Ed., and Extension Service	648,051	554,582	0	21,354	4,844	0	15,741	51,530	0
Economic Research Service	68,674	0	0	0	0	0	0	68,674	0
Foreign Agricultural Service	1,600	1,600	0	0	0	0	0	0	0
Forest Service National Agricultural	217,580	139,181	439	11,274	6,376	9,873	34,221	12,830	3,386
Statistics Service	4.761	0	0	0	0	4.761	0	0	0
Rural Business-Cooperative	.,, .	Ü	· ·	· ·	ŭ	.,, .	· ·	Ü	· ·
Service	4,004	2,504	0	0	0	0	0	1,500	0
Department of Commerce	1,022,009	192,492	0	143,933	402,096	86,164	183,919	10,186	3,219
Bureau of the Census	4,568	0	0	0	0	4,568	0	0	0
Economic Development Administration	550	0	0	0	0	0	0	550	0
National Institute of	330	U	U	U	U	U	U	330	U
Standards and Technology National Oceanic and	388,762	21,034	0	124,890	2,455	65,664	171,127	373	3,219
Atmospheric Administration National Telecommunications and	622,689	171,458	0	19,043	399,641	15,932	7,352	9,263	0
Information Administration	5,440	0	0	0	0	0	5,440	0	0
Department of Defense	6,513,825	1,169,545	77,260	541,291	305,929	951,875	3,123,205	14,876	329,844
Defense Agencies Chemical and Biological	2,740,038	819,129	36,555	182,196	21,537	631,087	936,053	0	113,481
Defense  Defense Advanced Research	258,732	192,613	0	66,119	0	0	0	0	0
Projects Agency	1,337,029	216,050	0	16,221	0	529,602	537,453	0	37,703
Defense Logistics Agency	22,888	0	22,888	0	0	0	0	0	0
Defense Threat Reduction									
Agency	297,254	926	0	53,442	0	46,185	121,152	0	75,549
Special Operations Command	27,232 358,138	1,122 358,138	0	0	0	0	25,881 0	0	229 0
TRICARE Management Activity <sup>1</sup> Washington Headquarters	338,138	338,138	U	U	U	U	U	U	U
Services	438,765	50,280	13,667	46,414	21,537	55,300	251,567	0	0
Department of the Air Force	1,504,731	52,687	34,135	170,239	7,962	103,224	1,084,852	5,742	45,890
Air Force, Materials Command	1,448,204	52,687	34,135	170,239	7,962	102,869	1,028,680	5,742	45,890
Air Force, Space Command	56,527	0	0	0	0	355	56,172	0	0
Department of the Army Department of the Navy	1,068,868 1,200,188	192,747 104,982	6,570 0	123,747 65,109	24,512 251,918	153,357 64,207	388,328 713,972	9,134 0	170,473 0

TABLE C-21. Preliminary Federal obligations for research, by agency and field of science and engineering: FY 2003 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Education	200,512	17,865	4,870	0	0	0	15,458	162,319	0
Department of Energy Energy Efficiency and	5,320,934	277,731	0	2,056,643	359,104	802,069	1,813,052	0	12,335
Renewable Energy Fossil Energy National Nuclear Security	309,901 256,361	14,003 0	0	45,533 40,585	0 21,356	0	250,365 194,420	0	0
Administration  Defense Programs	2,081,790 2,003,149	0	0 0	501,733 444,826	2,686 0	640,906 634,240	936,465 924,083	0	0
Nonproliferation and Verification Office of Science	78,641 2,511,026	0 249,450	0	56,907 1,440,676	2,686 304,604	6,666 161,163	12,382 352,170	0	0 2,963
Other Department of Energy programs	161,856	14,278	0	28,116	30,458	0	79,632	0	9,372
Bonneville Power Administration Civilian Padigactive Waste	14,685	14,278	0	0	0	0	407	0	0
Civilian Radioactive Waste Management Environmental Management Nuclear Energy	62,479 30,458 54,234	0 0 0	0 0 0	28,116 0 0	0 30,458 0	0 0 0	24,991 0 54,234	0 0 0	9,372 0 0
Department of Health and Human Services Administration for Children	26,317,992	23,411,575	848,494	491,189	314,218	69,233	261,343	350,115	571,825
and Families Agency for Healthcare Research	23,782	0	0	0	0	0	0	23,782	0
and Quality Centers for Disease Control and	279,399	132,057	33	310	0	22,566	0	62,169	62,264
Prevention Centers for Medicare and	564,000	564,000	0	0	0	0	0	0	0
Medicaid Services	74,194	74,194	0	0	0	0	0	0	0
Food and Drug Administration Health Resources and Services	139,784	139,784	0	0	0	0	0	0	0
Administration National Institutes of Health Office of the Secretary Office of the Assistant	17,280 25,203,553 16,000	17,280 22,484,260 0	0 848,461 0	0 490,879 0	0 314,218 0	0 46,667 0	0 261,343 0	0 248,164 16,000	0 509,561 0
Secretary, Planning and Evaluation	16,000	0	0	0	0	0	0	16,000	0
Department of Homeland Security	74,736	0	1,036	20,400	716	1,469	51,115	0	0
Transportation Security Administration United States Coast Guard	68,000 6,736	0	0 1,036	20,400 0	0 716	0 1,469	47,600 3,515	0	0
Department of Housing and Urban Development	17,491	0	0	0	674	275	3,936	11,532	1,074
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	525,402 3,608 495,004 26,790	165,670 380 161,318 3,972	0 0 0 0	870 0 0 870	336,183 0 320,491 15,692	8,083 0 7,729 354	9,927 2,826 2,728 4,373	4,267 0 2,738 1,529	402 402 0 0
Department of Justice Bureau of Prisons Office of Justice Programs	51,700 3,700 48,000	0 0 0	500 500 0	0 0 0	0 0 0	500 500 0	0 0 0	44,330 2,700 41,630	6,370 0 6,370

TABLE C-21. Preliminary Federal obligations for research, by agency and field of science and engineering: FY 2003 (Dollars in thousands)

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Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Labor Bureau of Labor Statistics	49,033 22,400	102 0	0	0	0	194 0	1,420 0	47,317 22,400	0
Employment and Training Administration Occupational Safety and Health	19,897	102	0	0	0	194	1,420	18,181	0
Administration Office of the Secretary	3,926 792	0 0	0 0	0 0	0	0 0	0	3,926 792	0
Pension and Welfare Benefits Administration Pension Benefit Guaranty	1,951	0	0	0	0	0	0	1,951	0
Corporation	67	0	0	0	0	0	0	67	0
Department of State	1,852	0	0	0	0	0	0	1,852	0
Department of Transportation Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	429,485 129,472 202,053	13,542 6,306 116	20,000 20,000 0	0 0 0	31,915 28,380 3,510	8,088 0 1,973	320,805 56,747 187,575	11,014 0 4,966	24,121 18,039 3,913
Administration Federal Railroad Administration National Highway Traffic Safety	2,964 29,296	1,322 0	0	0	0	0	0 29,296	0	1,642 0
Administration	58,181	5,798	0	0	0	5,815	40,520	6,048	0
Research and Special Programs Administration	7,519	0	0	0	25	300	6,667	0	527
Department of the Treasury Bureau of Engraving and	69,699	0	977	6,510	0	0	0	62,212	0
Printing Internal Revenue Service Office of Thrift Supervision United States Secret Service	6,510 62,050 162 977	0 0 0 0	0 0 0 977	6,510 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 62,050 162 0	0 0 0
Department of Veterans Affairs	337,972	302,790	25,618	0	0	0	9,564	0	0
Other agencies Agency for International Development Appalachian Regional Commission Broadcasting Board of Governors Environmental Protection Agency	240,870 686 243 455,964	160,200 0 0 206,814	0 0 0 0	0 0 0 13,912	4,407 0 0 146,923	0 0 0 13,291	0 0 243 48,978	75,391 686 0 6,643	872 0 0 19,403
Federal Communications Commission	6,265	0	0	630	0	50	2,115	3,470	0
Federal Trade Commission Library of Congress	1,554 1,780	0	0	0 138	0	0 1,550	0	1,554 0	0 92
National Aeronautics and Space Administration National Archives and Records	5,332,835	349,264	26,217	1,032,058	1,171,962	99,132	2,509,244	394	144,564
Administration National Science Foundation	120 3,403,614	0 534,630	0 3,977	120 655,710	0 595,657	0 680,329	0 585,973	0 132,185	0 215,153
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration	74,996 109,000 85,657	0 43,360 0	0 0 0	0 44,450 0	0 4,498 0	0 0 0	74,996 0 0	0 15,783 85,657	0 909 0

<sup>1</sup> TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-22. Preliminary Federal obligations for research, by agency and field of science and engineering: FY 2004 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	54,071,836	29,340,480	1,050,388	5,416,951	3,761,564	2,828,846	9,127,071	1,202,930	1,343,606
Department of Agriculture Agricultural Marketing Service Agricultural Research Service	1,778,661 4,633 977,911	1,457,527 4,633 898,407	437 0 0	96,118 0 65,129	13,125 0 4,303	15,967 0 1,271	57,827 0 8,801	134,287 0 0	3,373 0 0
Cooperative State Research, Ed., and Extension Service	492,775	412,253	0	19,760	2,471	0	14,941	43,350	0
Economic Research Service Foreign Agricultural Service Forest Service National Agricultural	76,657 1,600 216,720	0 1,600 138,630	0 0 437	0 0 11,229	0 0 6,351	0 0 9,835	0 0 34,085	76,657 0 12,780	0 0 3,373
Statistics Service Rural Business-Cooperative	4,861	0	0	0	0	4,861	0	0	0
Service	3,504	2,004	0	0	0	0	0	1,500	0
Department of Commerce Bureau of the Census Economic Development	1,004,420 4,153	192,503 0	0 0	157,734 0	445,236 0	60,587 4,153	138,474 0	9,001 0	885 0
Administration National Institute of	550	0	0	0	0	0	0	550	0
Standards and Technology National Oceanic and	325,926	6,816	0	138,779	708	53,219	125,485	34	885
Atmospheric Administration National Telecommunications and	667,113	185,687	0	18,955	444,528	3,215	6,311	8,417	0
Information Administration	6,678	0	0	0	0	0	6,678	0	0
Department of Defense Defense Agencies Chemical and Biological	5,890,164 2,043,092	711,309 416,893	64,018 23,170	472,677 89,306	263,363 0	925,085 620,951	3,132,944 794,167	15,532 712	305,236 97,893
Defense  Defense Advanced Research	213,307	177,202	0	36,105	0	0	0	0	0
Projects Agency Defense Logistics Agency	1,386,945 22,615	211,957 0	0 22,615	17,055 0	0	572,639 0	547,120 0	0	38,174 0
Defense Threat Reduction Agency Special Operations Command Washington Headquarters	297,212 24,253	1,047 1,000	0	36,046 0	0	39,112 0	161,492 23,049	0	59,515 204
Services Department of the Air Force Air Force, Materials Command	98,760 1,812,682 1,538,577	25,687 50,688 50,688	555 32,305 32,305	100 164,314 164,314	0 5,814 5,814	9,200 93,328 93,328	62,506 1,413,744 1,139,639	712 5,888 5,888	0 46,601 46,601
Air Force, Space Command Department of the Army Department of the Navy	274,105 1,026,075 1,008,315	0 147,562 96,166	0 8,543 0	0 147,721 71,336	0 22,629 234,920	0 151,788 59,018	274,105 378,158 546,875	0 8,932 0	0 160,742 0

TABLE C-22. Preliminary Federal obligations for research, by agency and field of science and engineering: FY 2004 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Education	219,580	17,647	4,418	0	0	0	15,858	181,657	0
Department of Energy Energy Efficiency and	5,519,058	293,239	0	2,142,116	302,691	884,232	1,884,916	0	11,864
Renewable Energy Fossil Energy	333,636 182,602	13,488 0	0	43,858 38,207	0 20,011	0	276,290 124,384	0	0
National Nuclear Security Administration Defense Programs	2,331,583 2,252,942	0	0	560,973 504,066	2,686 0	719,992 713,326	1,047,932 1,035,550	0	0
Nonproliferation and Verification Office of Science	78,641 2,533,747	0 265,048	0	56,907 1,472,487	2,686 260,796	6,666 164,240	12,382 368,176	0	0 3,000
Other Department of Energy									
programs Bonneville Power	137,490	14,703	0	26,591	19,198	0	68,134	0	8,864
Administration Civilian Radioactive Waste	15,199	14,703	0	0	0	0	496	0	0
Management Environmental Management Nuclear Energy	59,092 19,198 44,001	0 0 0	0 0 0	26,591 0 0	0 19,198 0	0 0 0	23,637 0 44,001	0 0 0	8,864 0 0
Department of Health and Human Services Administration for Children	27,907,381	24,833,100	904,450	523,539	334,942	70,476	278,578	361,926	600,370
and Families Agency for Healthcare Research	24,282	0	0	0	0	0	0	24,282	0
and Quality Centers for Disease Control and	256,680	121,319	30	285	0	20,731	0	57,113	57,202
Prevention Centers for Medicare and	531,000	531,000	0	0	0	0	0	0	0
Medicaid Services	63,400	63,400	0	0	0	0	0	0	0
Food and Drug Administration Health Resources and Services	134,909	134,909	0	0	0	0	0	0	0
Administration National Institutes of Health Office of the Secretary Office of the Assistant	15,313 26,865,797 16,000	15,313 23,967,159 0	904,420 0	0 523,254 0	0 334,942 0	0 49,745 0	0 278,578 0	0 264,531 16,000	0 543,168 0
Secretary, Planning and Evaluation	16,000	0	0	0	0	0	0	16,000	0
Department of Homeland Security	142,453	0	990	40,800	687	1,407	98,569	0	0
Transportation Security Administration United States Coast Guard	136,000 6,453	0	0 990	40,800 0	0 687	0 1,407	95,200 3,369	0	0
Department of Housing and Urban Development	17,806	0	0	0	685	280	4,007	11,740	1,094
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	500,059 2,812 470,789 26,458	164,267 313 159,944 4,010	0 0 0 0	0 0 0 0	316,935 0 300,739 16,196	6,272 0 6,272 0	8,942 2,168 1,917 4,857	3,312 0 1,917 1,395	331 331 0 0
Department of Justice Bureau of Prisons Office of Justice Programs	46,850 3,850 43,000	0 0 0	500 500 0	0 0 0	0 0 0	500 500 0	0 0 0	40,950 2,850 38,100	4,900 0 4,900

TABLE C-22. Preliminary Federal obligations for research, by agency and field of science and engineering: FY 2004 (Dollars in thousands)

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Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Labor Bureau of Labor Statistics Occupational Safety and Health	28,790 22,300	0 0	0	0	0	0	0	28,790 22,300	0
Administration Office of the Secretary	3,992 300	0 0	0 0	0 0	0 0	0 0	0 0	3,992 300	0
Pension and Welfare Benefits Administration Pension Benefit Guaranty	2,129	0	0	0	0	0	0	2,129	0
Corporation	69	0	0	0	0	0	0	69	0
Department of State	1,933	0	0	0	0	0	0	1,933	0
Department of Transportation Federal Aviation Administration Federal Highway Administration	420,573 100,000 221,985	13,524 6,382 1,624	17,293 17,293 0	289 0 0	25,791 20,852 4,914	10,559 0 2,454	317,376 46,192 197,858	18,525 0 11,068	17,216 9,281 4,067
Federal Motor Carrier Safety Administration Federal Railroad Administration National Highway Traffic Safety	5,344 27,043	109 0	0	289 0	0	0	0 27,043	1,453 0	3,493 0
Administration Research and Special Programs	59,867	5,409	0	0	0	7,805	40,649	6,004	0
Administration	6,334	0	0	0	25	300	5,634	0	375
Department of the Treasury Bureau of Engraving and	69,761	0	1,024	6,510	0	0	0	62,227	0
Printing Internal Revenue Service Office of Thrift Supervision United States Secret Service	6,510 62,050 177 1,024	0 0 0 0	0 0 0 1,024	6,510 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 62,050 177 0	0 0 0 0
Department of Veterans Affairs	363,693	325,833	27,568	0	0	0	10,292	0	0
Other agencies Agency for International	050.075	440.500						0.01.	225
Development Appalachian Regional Commission Broadcasting Board of Governors Environmental Protection Agency	252,875 343 51 458,607	160,500 0 0 196,674	0 0 0	0 0 0 15,863	5,466 0 0 151,158	0 0 0 16,235	0 0 51 53,060	86,014 343 0 7,470	895 0 0 18,147
Federal Communications Commission	2,759	0	0	360	0	60	1,247	1,092	0
Federal Trade Commission Library of Congress	1,679 788	0 0	0	0 143	0	0 550	0 0	1,679 0	0 95
National Aeronautics and Space Administration	5,487,046	347,645	25,384	1,201,355	1,248,971	97,586	2,420,239	464	145,402
National Archives and Records Administration National Science Foundation	120 3,689,876	0 580,967	0 4,306	120 712,422	0 647,770	0 739,050	0 629,581	0 142,942	0 232,838
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration	75,110 115,000 76,400	0 45,745 0	0 0 0	0 46,905 0	4,744 0	0 0 0	75,110 0 0	0 16,646 76,400	960 0

nec = Not elsewhere classified.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-23. Federal obligations for research in psychology and life sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Psyc	hology				Life sci	ences		
Agency	Total	Bio- logi- cal as- pects	Social as- pects	Psycho- logical sciences, nec	Total	Biological (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sci- ences, nec
All agencies	905,874	10,619	52,502	842,753	25,476,802	14,498,524	778,884	1,047,642	6,427,390	2,724,362
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service	439 0 0	0 0 0	439 0 0	0 0 0	1,495,903 4,413 886,014	200,349 0 61,723	307,592 0 120,264	958,785 4,413 688,307	29,177 0 15,720	0 0 0
Cooperative State Research, Ed., and Extension Service	0	0	0	0	462,360	105,686	91,547	259,486	5,641	0
Foreign Agricultural Service Forest Service Rural Business-Cooperative	0 439	0 0	0 439	0	1,431 139,181	0 32,940	0 95,781	1,431 2,644	0 7,816	0
Service	0	0	0	0	2,504	0	0	2,504	0	0
Department of Commerce National Institute of	0	0	0	0	205,901	35,837	149,263	13,270	5,491	2,040
Standards and Technology National Oceanic and	0	0	0	0	19,163	14,465	0	2,220	1,560	918
Atmospheric Administration	0	0	0	0	186,738	21,372	149,263	11,050	3,931	1,122
Department of Defense Defense Agencies Chemical and Biological	55,383 17,837	10,231 7,935	4,411 1,188	40,741 8,714	1,125,512 817,663	350,169 267,363	20,996 11,060	1,885 1,188	655,907 536,957	96,555 1,095
Defense Defense Advanced Research	0	0	0	0	183,800	51,541	0	0	132,259	0
Projects Agency Defense Logistics Agency	0 8,714	0	0	0 8,714	172,534 0	171,954 0	0	0	580 0	0
Defense Threat Reduction Agency Special Operations Command TRICARE Management Activity <sup>1</sup> Washington Headquarters	0 0 0	0 0 0	0 0 0	0 0 0	733 1,094 386,064	0 0 0	0 0 1,460	0 0 0	733 0 384,604	0 1,094 0
Services  Department of the Air Force  Air Force, Materials Command	9,123 32,282 32,282	7,935 2,296 2,296	1,188 3,223 3,223	0 26,763 26,763	73,438 45,771 45,771	43,868 20,404 20,404	9,600 0 0	1,188 0 0	18,781 0 0	1 25,367 25,367
Department of the Army Department of the Navy	5,264 0	0	0	5,264 0	161,135 100,943	48,859 13,543	1,981 7,955	697 0	101,051 17,899	8,547 61,546
Department of Education	4,255	0	0	4,255	17,203	0	0	0	0	17,203
Department of Energy Energy Efficiency and	0	0	0	0	372,570	249,024	6,691	0	114,916	1,939
Renewable Energy National Nuclear Security	0	0	0	0	14,126	14,126	0	0	0	0
Administration Nonproliferation and	0	0	0	0	35,698	35,598	100	0	0	0
Verification Office of Science	0	0	0	0	35,698 309,563	35,598 192,708	100 0	0	0 114,916	0 1,939
Other Department of Energy programs Bonneville Power	0	0	0	0	13,183	6,592	6,591	0	0	0
Administration	0	0	0	0	13,183	6,592	6,591	0	0	0
Department of Health and Human Services	744,430	0	107	744,323	20,657,927	12,979,387	0	0	5,221,503	2,457,037
Agency for Healthcare Research and Quality	32	0	32	0	129,893	0	0	0	129,571	322
Agency for Toxic Substances and Disease Registry Centers for Disease Control and	75	0	75	0	11,814	9,700	0	0	0	2,114
Prevention Centers for Medicare and Medicaid Services	0	0	0	0	521,000 117,015	0	0	0	521,000	0 117,015

TABLE C-23. Federal obligations for research in psychology and life sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Psyc	hology				Life scie	ences		
Agency	Total	Bio- logi- cal as- pects	Social as- pects	Psycho- logical sciences, nec	Total	Biological (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sci- ences, nec
Food and Drug Administration Health Resources and Services	0	0	0	0	136,316	136,316	0	0	0	0
Administration National Institutes of Health	0 744,323	0	0	0 744,323	17,321 19,724,568	0 12,833,371	0	0	17,321 4,553,611	0 2,337,586
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service National Park Service <sup>2</sup>	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	169,466 311 155,500 4,434 9,221	89,651 0 82,415 0 7,236	79,348 311 73,085 4,434 1,518	45 0 0 0 45	0 0 0 0	422 0 0 0 422
Department of Justice Bureau of Prisons	450 450	0 0	200 200	250 250	0	0	0	0	0	0
Department of Labor Employment and Training Administration	0	0	0	0	92 92	0	0	92 92	0	0
Department of Transportation Coast Guard Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	24,387 818 23,569 0	0 0 0	24,387 818 23,569 0	0 0 0 0	11,716 0 6,121 105	0 0 0 0	105 0 0 105	0 0 0	6,121 0 6,121 0	5,490 0 0
Administration National Highway Traffic Safety	0	0	0	0	165	0	0	0	0	165
Administration	0	0	0	0	5,325	0	0	0	0	5,325
Department of the Treasury United States Customs Service United States Secret Service	787 0 787	0 0 0	0 0 0	787 0 787	19 19 0	0 0 0	0 0 0	0 0 0	0 0 0	19 19 0
Department of Veterans Affairs	47,367	0	0	47,367	248,103	0	0	0	248,103	0
Other agencies Agency for International Development Environmental Protection Agency National Aeronautics and Space Administration National Science Foundation Smithsonian Institution	0 0 24,568 3,808 0	0 0 388 0	0 0 19,150 3,808 0	0 0 5,030 0 0	165,145 131,849 321,676 512,654 41,066	0 48,461 134,978 390,634 20,034	0 60,169 11,668 122,020 21,032	71,389 208 1,968 0	0 0 146,172 0 0	93,756 23,011 26,890 0

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-24. Federal obligations for research in physical and environmental sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Phy	sical sciences	i		Environmental sciences						
Agency	Total	Astronomy	Chemistry	Physics	Physical sciences, nec	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, nec		
All agencies	4,983,230	751,527	1,181,738	2,621,366	428,599	3,418,276	1,163,517	674,893	784,648	795,218		
Departments Department of Agriculture Agricultural Research Service Cooperative State Research,	93,207 64,231	0	87,972 61,241	5,235 2,990	0	14,976 4,243	13,574 4,147	1,402 96	0	0		
Ed., and Extension Service Forest Service	17,702 11,274	0	17,702 9,029	0 2,245	0	4,357 6,376	4,357 5,070	0 1,306	0	0		
Department of Commerce National Institute of	129,627	350	44,843	82,882	1,552	407,377	155,500	37,583	157,577	56,717		
Standards and Technology National Oceanic and	110,981	350	39,017	70,062	1,552	2,260	0	826	1,434	0		
Atmospheric Administration	18,646	0	5,826	12,820	0	405,117	155,500	36,757	156,143	56,717		
Department of Defense Defense Agencies Ballistic Missile Defense	515,034 164,387	0	186,249 72,921	273,882 86,179	54,903 5,287	313,024 28,079	35,772 5,086	13,943 8,007	225,361 12,086	37,948 2,900		
Organization Chemical and Biological	24	0	0	0	24	0	0	0	0	0		
Defense  Defense Advanced Research	51,541	0	51,541	0	0	0	0	0	0	0		
Projects Agency	16,311	0	3,762	7,286	5,263	4,582	0	0	4,582	0		
Defense Threat Reduction Agency Washington Headquarters	44,984	0	0	44,984	0	0	0	0	0	0		
Services Department of the Air Force Air Force, Materials Command Department of the Army Department of the Navy	51,527 165,534 165,534 121,054 64,059	0 0 0 0	17,618 25,601 25,601 60,136 27,591	33,909 135,555 135,555 33,041 19,107	0 4,378 4,378 27,877 17,361	23,497 6,864 6,864 35,329 242,752	5,086 1,880 1,880 12,057 16,749	8,007 1,844 1,844 4,092 0	7,504 0 0 75 213,200	2,900 3,140 3,140 19,105 12,803		
Department of Energy	2,074,780	0	268,956	1,660,445	145,379	313,199	108,719	91,841	6,742	105,897		
Energy Efficiency and Renewable Energy Fossil Energy	45,932 33,315	0	45,932 33,315	0	0	0 18,970	0	0	0	0 18,970		
National Nuclear Security Administration Defense Programs	521,706 428,807	0	57,243 0	369,754 353,230	94,709 75,577	5,790 0	50 0	5,690 0	0	50 0		
Nonproliferation and Verification Office of Science	92,899 1,423,157	0	57,243 132,466	16,524 1,290,691	19,132 0	5,790 201,562	50 108,669	5,690 86,151	0 6,742	50 0		
Other Department of Energy programs Civilian Radioactive Waste	50,670	0	0	0	50,670	86,877	0	0	0	86,877		
Management Environmental Management	50,670 0	0	0	0	50,670 0	0 86,877	0	0	0	0 86,877		
Department of Health and Human Services Agency for Healthcare Research	430,935	0	376,070	0	54,865	276,086	0	435	0	275,651		
and Quality Agency for Toxic Substances	305	0	305	0	0	0	0	0	0	0		
and Disease Registry National Institutes of Health	0 430,630	0	0 375,765	0	0 54,865	435 275,651	0	435 0	0	0 275,651		
Department of Housing and Urban Development	0	0	0	0	0	625	0	0	0	625		

TABLE C-24. Federal obligations for research in physical and environmental sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Phy	sical sciences				Environ	mental scie	nces	
Agency	Total	Astronomy	Chemistry	Physics	Physi- cal sci- ences, nec	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, nec
Department of the Interior Geological Survey Minerals Management Service National Park Service <sup>1</sup>	1,858 400 0 1,458	0 0 0 0	110 0 0 110	0 0 0 0	1,748 400 0 1,348	359,986 334,618 19,489 5,879	587 0 396 191	195,669 193,740 736 1,193	17,515 0 17,465 50	146,215 140,878 892 4,445
Department of Transportation Coast Guard Federal Aviation Administration Federal Highway Administration Research and Special Programs	96,784 0 82,624 0	0 0 0 0	0 0 0 0	82,624 0 82,624 0	14,160 0 0 0	27,549 697 23,668 3,134	26,274 0 23,668 2,606	0 0 0 0	697 697 0 0	578 0 0 528
Administration Transportation Security Administration	0 14,160	0	0	0	0 14,160	50 0	0	0	0	50 0
Department of the Treasury Bureau of Engraving and Printing	5,318 5,318	0	377 377	0	4,941 4,941	0	0	0	0	0
Other agencies Agency for International Development Environmental Protection Agency	0 11,438	0	0 9,797	0	0 1,641	4,407 110,464	0 28,696	0 6,832	0 23,336	4,407 51,600
Federal Communications Commission Library of Congress National Aeronautics and Space	260 243	0	0 146	260 0	0 97	0	0	0	0	0
Administration	949,215	540,243	48,094	316,966	43,912	1,014,932	615,773	183,372	121,470	94,317
National Archives and Records Administration National Science Foundation Smithsonian Institution	120 628,706 45,705	0 167,921 43,013	70 158,377 677	50 197,007 2,015	0 105,401 0	0 571,379 4,272	0 178,537 85	0 139,908 3,908	0 231,671 279	0 21,263 0

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-25. Federal obligations for research in engineering, by agency and detailed field of engineering: FY 2002 (Dollars in thousands)

Agency	Total	Aero- nautical	Astro- nauti- cal	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, nec
All agencies	8,274,904	2,157,141	760,786	201,578	302,654	808,667	265,916	1,000,525	2,777,637
Departments Department of Agriculture Agricultural Research Service Cooperative State Research,	56,823 8,679	0	0	7,615 4,340	5,384 1,350	842 771	3,765 964	0	39,217 1,254
Ed., and Extension Service Forest Service	13,923 34,221	0	0	0 3,275	0 4,034	0 71	0 2,801	0	13,923 24,040
Department of Commerce National Institute of	168,072	0	0	4,659	23,798	52,052	5,034	45,795	36,734
Standards and Technology National Oceanic and	157,406	0	0	4,659	23,798	41,545	5,034	45,795	36,575
Atmospheric Administration  National Telecommunications and	6,584	0	0	0	0	6,425	0	0	159
Information Administration	4,082	0	0	0	0	4,082	0	0	0
Department of Defense Defense Agencies Ballistic Missile Defense	3,017,179 927,526	702,223 16,184	76,448 0	28,822 4,486	57,772 8,422	633,893 219,607	197,991 26,339	410,140 207,323	909,890 445,165
Organization  Defense Advanced Research	738	0	0	0	0	175	0	0	563
Projects Agency Defense Threat Reduction	470,822	12,833	0	0	0	118,686	0	170,519	168,784
Agency	197,135	0	0	0	0	22,384	0	0	174,751
Special Operations Command Washington Headquarters	26,018	0	0	0	0	0	0	0	26,018
Services  Department of the Air Force Air Force, Materials Command Air Force, Space Command	232,813 971,707 947,002 24,705	3,351 597,002 597,002 0	0 68,107 68,107 0	4,486 6,162 6,162 0	8,422 12,075 12,075 0	78,362 107,920 107,890 30	26,339 29,268 29,268 0	36,804 80,651 80,651 0	75,049 70,522 45,847 24,675
Department of the Army Department of the Navy	444,530 673,416	48,937 40,100	58 8,283	18,174 0	37,275 0	112,074 194,292	86,474 55,910	39,848 82,318	101,690 292,513
Department of Education	16,721	0	0	0	0	0	0	0	16,721
Department of Energy Energy Efficiency and	1,473,350	0	0	91,540	47,361	31,876	15,144	341,587	945,842
Renewable Energy Fossil Energy National Nuclear Security	233,553 92,726	0	0	0 90,375	46,361 700	30,782 0	271 0	304 1,651	155,835 0
Administration Defense Programs	838,675 805,062	0 0	0	1,165 0	100 0	285 0	0	90,032 90,032	747,093 715,030
Nonproliferation and Verification Office of Science	33,613 264,393	0	0	1,165 0	100 0	285 0	0 14,793	0 249,600	32,063 0
Other Department of Energy programs	44,003	0	0	0	200	809	80	0	42,914
Bonneville Power Administration	1,089	0	0	0	200	809	80	0	0
Civilian Radioactive Waste Management Nuclear Energy	414 42,500	0	0	0	0	0	0	0	414 42,500
Department of Health and Human Services National Institutes of Health	229,266 229,266	0	0	0	0	0	0	0	229,266 229,266
Department of Housing and Urban Development	3,649	0	0	0	0	0	0	0	3,649
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	11,357 2,996 3,409 4,952	0 0 0	0 0 0	1,869 824 0 1,045	6,739 1,394 2,859 2,486	753 203 550 0	412 412 0 0	481 163 0 318	1,103 0 0 1,103

TABLE C-25. Federal obligations for research in engineering, by agency and detailed field of engineering: FY 2002 (Dollars in thousands)

Agency	Total	Aero- nautical	Astro- nauti- cal	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, nec
Department of Labor	1,319	0	0	0	0	0	0	0	1,319
Employment and Training Administration	1,319	0	0	0	0	0	0	0	1,319
Department of Transportation	320,216	0	0	0	100,839	1,624	16,104	62,758	138,891
Coast Guard	3,461	0	0	0	360	1,624	721	756	0
Federal Aviation Administration	84,083	0	0	0	22,081	0	0	62,002	0
Federal Highway Administration	125,984	0	0	0	78,398	0	0	0	47,586
Federal Railroad Administration National Highway Traffic Safety	29,744	0	0	0	0	0	0	0	29,744
Administration Research and Special Programs	40,691	0	0	0	0	0	15,383	0	25,308
Administration Transportation Security	3,213	0	0	0	0	0	0	0	3,213
Administration	33,040	0	0	0	0	0	0	0	33,040
Department of the Treasury United States Customs Service	4 4	0	0	4	0	0	0	0	0
Department of Veterans Affairs	18,836	0	0	0	0	0	0	0	18,836
Other agencies									
Broadcasting Board of Governors	250	0	0	0	0	0	0	0	250
Environmental Protection Agency Federal Communications	42,670	0	0	5,802	13,926	210	465	354	21,913
Commission National Aeronautics and Space	1,335	0	0	0	0	1,335	0	0	0
Administration	2.280.701	1,454,918	684,338	2,760	193	22.874	19,639	18.337	77.642
National Science Foundation	558.842	0	004,550	58,507	46,642	63,208	7,362	121,073	262,050
Nuclear Regulatory Commission	74,314	Ő	Ő	00,007	0	00,200	0	0	74,314

nec = Not elsewhere classified.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-26. Federal obligations for research in mathematics and computer sciences and in social sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

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All agencies Departments Department of Agriculture Agricultural Research Service Cooperative State Research, Ed., and Extension Service National Agricultural Statistics Service National Agricultural Statistics Service National Agricultural Statistics Service Service National Agricultural Statistics Service Service National Agricultural Statistics Service National Oceanic National Institute of Standards and Technology National Oceanic and Almospheric Administration National Oceanic and Almospheric Administration National Oceanic and Almospheric Administration National Oceanic and National Oceanic and National Oceanic and Almospheric Administration National Oceanic and	Social sciences, nec
Departments   Department of Agriculture   15,724   15,724   0   0   129,949   319   116,083   0   13,547	0
Department of Agriculture	0
Agricultural Research Service         1,254         1,254         0         12,851         0         12,361         0         0         12,361         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         12,361         0	0
Economic Research Service   9,873   9,873   0   0   12,830   319   11,325   0   1,186	0
National Agricultural Statistics Service	0
Statistics Service Rural Business-Cooperative Service         4,597         4,597         0	0
Service         0         0         0         0         1,724         0         1,724         0         0           Department of Commerce         73,461         6,331         54,673         12,457         9,813         0         1,040         1,429         715           Bureau of the Census         5,987         0         0         5,987         0	0
Bureau of the Census 5,987 0 0 5,987 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
Administration 0 0 0 0 0 470 0 0 0 0 0 0 National Institute of Standards and Technology 64,269 5,263 52,536 6,470 344 0 0 0 0 0 0 National Oceanic and Atmospheric Administration 3,205 1,068 2,137 0 8,999 0 1,040 1,429 715  Department of Defense 883,580 60,008 732,619 90,953 16,399 297 0 0 75 Defense Agencies 577,103 13,943 530,796 32,364 0 0 0 0 0 0 0 0 Chemical and Biological Defense Advanced Research Projects Agency 485,221 4,504 471,624 9,093 0 0 0 0 0 0 0 0	6,629 0
Standards and Technology         64,269         5,263         52,536         6,470         344         0         0         0         0           National Oceanic and Atmospheric Administration         3,205         1,068         2,137         0         8,999         0         1,040         1,429         715           Department of Defense         883,580         60,008         732,619         90,953         16,399         297         0         0         75           Defense Agencies         577,103         13,943         530,796         32,364         0         <	470
Atmospheric Administration 3,205 1,068 2,137 0 8,999 0 1,040 1,429 715  Department of Defense 883,580 60,008 732,619 90,953 16,399 297 0 0 75  Defense Agencies 577,103 13,943 530,796 32,364 0 0 0 0 0 0 0  Chemical and Biological  Defense 373 373 0 0 0 0 0 0 0 0 0  Defense Advanced Research  Projects Agency 485,221 4,504 471,624 9,093 0 0 0 0 0 0	344
Defense Agencies         577,103         13,943         530,796         32,364         0	5,815
Defense       373       373       0 <td< td=""><td>16,027 0</td></td<>	16,027 0
Projects Agency 485,221 4,504 471,624 9,093 0 0 0 0 0	0
Defense Threat Reduction	0
Agency 38,907 0 21,796 17,111 0 0 0 0 0	0
Washington Headquarters       Services     52,602     9,066     37,376     6,160     0     0     0     0     0       Department of the Air Force     84,065     20,825     41,233     22,007     0     0     0     0     0       Air Force, Materials Command     83,654     20,825     41,233     21,596     0     0     0     0     0       Air Force, Space Command     411     0     0     0     0     0     0       Department of the Army     160,647     13,934     110,393     36,320     16,399     297     0     0     0       Department of the Navy     61,765     11,306     50,197     262     0     0     0     0     0	0 0 0 0 16,027
Department of Education 0 0 0 0 145,386 0 0 0 9,252	136,134
Department of Energy 812,136 119,337 684,101 8,698 0 0 0 0 0 0	0
National Nuclear Security Administration 668,754 0 660,056 8,698 0 0 0 0 0	0
Defense Programs 660,056 0 660,056 0 0 0 0 0 0 0 Nonproliferation and	0
Verification         8,698         0         0         8,698         0         0         0         0         0           Office of Science         143,382         119,337         24,045         0         0         0         0         0         0	0

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

TABLE C-26. Federal obligations for research in mathematics and computer sciences and in social sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

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	Mathe	matics and	computer scie	ences			Social so	ciences		
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, nec
Department of Health and Human Services	63,136	41,258	20,979	899	320,846	0	50,493	0	1,378	268,975
Administration for Children	·									
and Families Administration on Aging Agency for Healthcare Research	0	0	0	0	23,293 3,728	0	0	0	0	23,293 3,728
and Quality	22,196	318	20,979	899	61,150	0	50,493	0	1,266	9,391
Agency for Toxic Substances and Disease Registry	0	0	0	0	112	0	0	0	112	0
National Institutes of Health Office of the Secretary Office of the Assistant Secretary, Planning	40,940 0	40,940 0	0	0	217,705 14,858	0	0	0	0	217,705 14,858
and Evaluation	0	0	0	0	14,858	0	0	0	0	14,858
Department of Housing and Urban Development	255	0	0	255	10,691	0	9,229	8	618	836
Department of the Interior Geological Survey Minerals Management Service National Park Service <sup>1</sup>	9,795 9,100 94 601	1,911 1,700 0 211	7,494 7,400 94 0	390 0 0 390	4,594 1,900 2,229 465	0 0 0 0	361 0 361 0	0 0 0 0	3,168 1,300 1,868 0	1,065 600 0 465
Department of Justice Bureau of Prisons Office of Justice Programs	500 500 0	0 0 0	0 0 0	500 500 0	37,946 2,292 35,654	0 0 0	200 200 0	0 0 0	13,855 700 13,155	23,891 1,392 22,499
Department of Labor Bureau of Labor Statistics	184 0	0	184 0	0	43,922 20,700	0	6,979 0	0	0	36,943 20,700
Employment and Training Administration Occupational Safety and Health	184	0	184	0	16,243	0	0	0	0	16,243
Administration Office of the Secretary	0	0 0	0	0	3,839 342	0 0	3,839 342	0	0	0
Pension and Welfare Benefits Administration	0	0	0	0	2,733	0	2,733	0	0	0
Pension Benefit Guaranty Corporation	0	0	0	0	65	0	65	0	0	0
Department of State	0	0	0	0	2,304	0	369	392	161	1,382
Department of Transportation Coast Guard	11,585 1,432	0	2,095 1,432	9,490 0	10,810	0	2,532 0	1,171 0	0	7,107 0
Federal Highway Administration National Highway Traffic Safety Administration	2,162 7,691	0	663	1,499 7,691	4,893 5,917	0	2,532	1,171 0	0	1,190 5,917
Research and Special Programs Administration	300	0	0	300	0	0	0	0	0	0,717
Department of the Treasury	17	0	17	0	55,686	0	147	0	0	55,539
Internal Revenue Service Office of Thrift Supervision United States Customs Service	0 0 17	0 0 0	0 0 17	0 0 0	55,539 147 0	0 0 0	0 147 0	0 0 0	0 0 0	55,539 0 0

TABLE C-26. Federal obligations for research in mathematics and computer sciences and in social sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

Page 3 of 3

	Mathe	matics and	computer scie	nces	Social sciences						
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, nec	
Other agencies											
Agency for International Development	0	0	0	0	77,102	0	10,075	9,078	47,180	10,769	
Appalachian Regional Commission	0	0	0	Ő	670	Ő	78	0	0	592	
Environmental Protection Agency Federal Communications	10,896	4,643	3,352	2,901	4,105	0	2,060	0	0	2,045	
Commission	43	0	43	0	2,779	0	2,779	0	0	0	
Federal Trade Commission	0	0	0	0	1,803	0	1,803	0	0	0	
Library of Congress National Aeronautics and Space	1,500	0	1,500	0	0	0	0	0	0	0	
Administration	95,588	4,290	32,367	58,931	370	0	0	0	239	131	
National Science Foundation	652,261	148,495	503,766	0	126,454	13,186	23,107	6,369	5,557	78,235	
Smithsonian Institution	0	0	0	0	14,089	2,596	0	0	363	11,130	
Social Security Administration	0	0	0	0	22,799	0	0	0	0	22,799	

 $<sup>{}^{1} \</sup>quad \text{Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only;} \\ \text{data for the NPS cultural resources program were not available for this survey cycle.}$ 

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-27. Federal obligations for basic research, by agency and performer: FY 2002 (Dollars in thousands)

Page 1 of 2

						Extramu	ral			
Agency	Total	Intra-			United State	es and U.S. te	erritories			
		mural <sup>1 -</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	23,668,345	4,460,029	1,231,892	239,592	12,668,224	1,805,234	2,531,676	563,402	71,544	96,752
Department of Agriculture Agricultural Research Service Cooperative State Research,	930,062 582,892	657,660 534,298	199 0	0	260,748 41,964	0	8,414 4,328	0	891 306	2,150 1,996
Ed., and Extension Service Economic Research Service	234,415 6,705	15,000 6,705	90 0	0	215,030 0	0	3,862 0	0	433 0	0
Foreign Agricultural Service Forest Service National Agricultural	808 103,730	565 99,580	0 109	0	243 3,511	0	0 224	0 0	0 152	0 154
Statistics Service	1,512	1,512	0	0	0	0	0	0	0	0
Department of Commerce Bureau of the Census Economic Development	72,546 2,795	64,076 2,795	1,734 0	0	6,704 0	0	5 0	0	0	27 0
Administration National Institute of	64	5	0	0	59	0	0	0	0	0
Standards and Technology National Oceanic and	56,089	50,178	1,673	0	4,206	0	5	0	0	27
Atmospheric Administration	13,598	11,098	61	0	2,439	0	0	0	0	0
Department of Defense Defense Agencies Chemical and Biological	1,812,518 899,241	520,982 91,844	227,873 134,115	1,156 867	965,887 634,558	8,892 4,654	64,553 25,391	11,090 6,663	0	12,085 1,149
Defense Defense Advanced Research	44,287	25,054	6,321	0	11,392	0	1,520	0	0	0
Projects Agency TRICARE Management	135,483	9,323	19,878	867	91,693	3,849	5,812	3,394	0	667
Activity <sup>2</sup>	384,604	41,895	80,214	0	249,736	0	12,759	0	0	0
Washington Headquarters Services Department of the Air Force Air Force, Materials	334,867 298,993	15,572 139,936	27,702 42,718	0 10	281,737 100,177	805 2,673	5,300 7,594	3,269 4,051	0	482 1,834
Command Air Force, Space Command Department of the Army	275,992 23,001 224,630	121,956 17,980 149,048	42,718 0 25,154	10 0 0	100,177 0 48,601	673 2,000 108	7,594 0 1,154	1,030 3,021 13	0 0 0	1,834 0 552
Department of the Navy	389,654	140,154	25,886	279	182,551	1,457	30,414	363	0	8,550
Department of Education	5,280	313	0	0	4,967	0	0	0	0	0
Department of Energy Energy Efficiency and	2,477,841	42,972	61,632	59,380	585,725	1,146,082	39,977	538,606	2,100	1,367
Renewable Energy Fossil Energy National Nuclear Security	60,058 8,114	23,471 60	0	10,933 0	6,172 8,054	5,547 0	1,706 0	12,229 0	0	0
Administration Nonproliferation and	26,529	1	126	2,956	0	19,000	0	4,446	0	0
Verification Office of Science	26,529 2,342,057	1 18,459	126 61,443	2,956 40,787	0 556,330	19,000 1,116,531	0 38,231	4,446 508,909	0	0 1,367
Other Department of Energy programs Bonneville Power	41,083	981	63	4,704	15,169	5,004	40	13,022	2,100	0
Administration Environmental Management	3,183 37,900	980 1	63 0	0 4,704	0 15,169	0 5,004	40 0	0 13,022	2,100 0	0

TABLE C-27. Federal obligations for basic research, by agency and performer: FY 2002 (Dollars in thousands)

						Extramu	ral .			
Agency	Total	Intra-			United State	s and U.S. te	rritories			
		mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Health and Human Services Health Resources and	12,860,758	2,311,657	570,810	179,056	7,589,918	33,194	2,041,690	8,560	56,880	68,993
Services Administration National Institutes of Health Office of the Secretary Office of the Assistant Secretary, Planning	2,121 12,843,779 14,858	2,121 2,305,796 3,740	0 564,367 6,443	0 179,056 0	0 7,587,677 2,241	33,194 0	2,041,690 0	8,560 0	0 54,446 2,434	0 68,993 0
and Evaluation	14,858	3,740	6,443	0	2,241	0	0	0	2,434	0
Department of the Interior Geological Survey National Park Service <sup>3</sup>	45,829 40,809 5,020	40,741 39,353 1,388	1,094 700 394	0 0 0	3,630 653 2,977	0 0 0	182 0 182	0 0 0	177 103 74	5 0 5
Department of Justice Office of Justice Programs	25,396 25,396	1 1	6,779 6,779	0	13,966 13,966	0	3,225 3,225	0	1,425 1,425	0
Department of Labor Bureau of Labor Statistics Employment and Training	30,238 12,400	19,838 2,000	0	0	5,300 5,300	0	5,100 5,100	0	0	0
Administration	17,838	17,838	0	0	0	0	0	0	0	0
Department of Transportation Federal Highway	36,306	25,378	9,668	0	450	0	785	0	0	25
Administration Transportation Security	17,426	6,498	9,668	0	450	0	785	0	0	25
Administration	18,880	18,880	0	0	0	0	0	0	0	0
Department of the Treasury Bureau of Engraving and	703	703	0	0	0	0	0	0	0	0
Printing	703	703	0	0	0	0	0	0	0	0
Department of Veterans Affairs	141,705	141,705	0	0	0	0	0	0	0	0
Other agencies Agency for International Development Environmental Protection Agency National Aeronautics and Space	106 63,800	20 30,264	0 6,127	0	1 17,744	0	85 8,068	0	0 1,403	0 194
Administration National Science Foundation Smithsonian Institution	1,984,711 3,074,546 106,000	484,275 13,444 106,000	283,692 62,284 0	0 0 0	634,294 2,578,890 0	443,817 173,249 0	131,533 228,059 0	0 5,146 0	2,980 5,688 0	4,120 7,786 0

FFRDCs = Federally funded research and development centers.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.
 TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

TABLE C-28. Preliminary Federal obligations for basic research, by agency and performer: FY 2003 (Dollars in thousands)

Page 1 of 2

						Extramu	ral .			
Agency	Total	Intra-			United State	es and U.S. te	erritories			
		mural <sup>1 -</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	25,599,941	4,880,520	1,434,642	269,510	13,568,127	1,911,308	2,729,105	594,663	91,540	120,526
Department of Agriculture Agricultural Research Service Cooperative State Research,	979,305 588,087	676,252 549,908	199 0	0	292,848 32,998	0	7,386 3,300	0	816 231	1,804 1,650
Ed., and Extension Service Economic Research Service	278,143 6,867	17,693 6,867	90 0	0	256,065 0	0	3,862 0	0	433 0	0
Foreign Agricultural Service Forest Service	912 103,730	638 99,580	0 109	0	274 3,511	0	0 224	0	0 152	0 154
National Agricultural Statistics Service	1,566	1,566	0	0	0	0	0	0	0	0
Department of Commerce Bureau of the Census	78,537 2,142	69,971 2,142	1,758 0	0	6,776 0	0	5 0	0	0	27 0
Economic Development Administration	275	25	0	0	250	0	0	0	0	0
National Institute of Standards and Technology National Oceanic and	63,292	57,354	1,700	0	4,206	0	5	0	0	27
Atmospheric Administration	12,828	10,450	58	0	2,320	0	0	0	0	0
Department of Defense Defense Agencies Chemical and Biological	1,890,731 916,209	551,279 117,158	269,373 125,295	2,459 1,946	964,706 635,048	10,906 5,089	51,277 26,370	12,406 4,485	0	28,325 818
Defense Defense Advanced Research	53,396	36,958	696	0	13,308	0	2,434	0	0	0
Projects Agency TRICARE Management	179,081	12,388	26,275	1,146	121,198	5,089	7,682	4,485	0	818
Activity <sup>2</sup>	358,138	50,494	72,006	0	224,184	0	11,454	0	0	0
Washington Headquarters Services Department of the Air Force	325,594 360,762	17,318 144,539	26,318 89,972	800 0	276,358 91,848	0 3,893	4,800 3,635	0 7,222	0	0 19,653
Air Force, Materials Command	315,362	108,196	89,972 0	0	91,848	893	3,635	1,165	0	19,653 0
Air Force, Space Command Department of the Army Department of the Navy	45,400 220,581 393,179	36,343 149,459 140,123	21,533 32,573	0 513	0 48,032 189,778	3,000 144 1,780	0 1,093 20,179	6,057 0 699	0	320 7,534
Department of Education	5,494	254	0	0	5,240	0	0	0	0	0
Department of Energy Energy Efficiency and	2,590,457	70,861	129,935	70,636	578,327	1,155,247	25,906	553,046	5,333	1,166
Renewable Energy Fossil Energy	59,536 10,473	23,267 65	0	10,838 0	6,118 10,408	5,499 0	1,691 0	12,123 0	0	0
National Nuclear Security Administration Nonproliferation and	9,107	1	0	2,065	401	3,705	0	2,935	0	0
Verification Office of Science	9,107 2,508,063	1 46,978	0 128,745	2,065 57,458	401 561,257	3,705 1,146,043	0 24,215	2,935 537,218	0 4,983	0 1,166
Other Department of Energy programs	3,278	550	1,190	275	143	0	0	770	350	0
Bonneville Power Administration	3,278	550	1,190	275	143	0	0	770	350	0

TABLE C-28. Preliminary Federal obligations for basic research, by agency and performer: FY 2003 (Dollars in thousands)

						Extramur	al			
Agency	Total	Intra-			United State	s and U.S. te	rritories			
		mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Health and Human Services	14,152,873	2,544,637	627,096	196,415	8,352,808	26,973	2,233,591	23,847	72,041	75,465
Health Resources and Services Administration National Institutes of Health Office of the Secretary Office of the Assistant Secretary, Planning	2,068 14,134,805 16,000	2,068 2,537,569 5,000	0 621,096 6,000	0 196,415 0	0 8,350,308 2,500	0 26,973 0	0 2,233,591 0	0 23,847 0	0 69,541 2,500	0 75,465 0
and Evaluation	16,000	5,000	6,000	0	2,500	0	0	0	2,500	0
Department of Homeland Security	27,200	27,200	0	0	0	0	0	0	0	0
Transportation Security Administration	27,200	27,200	0	0	0	0	0	0	0	0
Department of the Interior Geological Survey	40,934 40,934	39,467 39,467	700 700	0	662 662	0	0	0	105 105	0
Department of Justice Office of Justice Programs	35,000 35,000	1 1	9,343 9,343	0	19,248 19,248	0	4,444 4,444	0	1,964 1,964	0 0
Department of Labor Bureau of Labor Statistics Employment and Training	33,497 13,600	22,497 2,600	0	0	4,000 4,000	0	7,000 7,000	0	0	0
Administration	19,897	19,897	0	0	0	0	0	0	0	0
Department of Transportation	20,324	6,089	13,230	0	0	0	1,005	0	0	0
Federal Highway Administration	20,324	6,089	13,230	0	0	0	1,005	0	0	0
Department of the Treasury	224	224	0	0	0	0	0	0	0	0
Bureau of Engraving and Printing	224	224	0	0	0	0	0	0	0	0
Department of Veterans Affairs	152,375	152,375	0	0	0	0	0	0	0	0
Other agencies Agency for International Development Environmental Protection Agency National Aeronautics and Space	100 101,100	15 47,921	0 9,716	0	1 28,137	0	84 12,795	0	0 2,223	0 308
Administration National Science Foundation Smithsonian Institution	2,177,850 3,204,940 109,000	548,463 14,014 109,000	308,367 64,925 0	0 0 0	627,111 2,688,263 0	537,585 180,597 0	147,880 237,732 0	0 5,364 0	3,129 5,929 0	5,315 8,116 0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as

FFRDCs = Federally funded research and development centers.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

actual intramural performance.

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

TABLE C-29. Preliminary Federal obligations for basic research, by agency and performer: FY 2004 (Dollars in thousands)

Page 1 of 2

						Extramur	al			
Agency	Total	Intra-			United State	es and U.S. te	rritories			
		mural <sup>1 -</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	26,643,092	5,354,904	1,647,960	278,159	13,723,461	1,989,025	2,852,665	594,099	92,956	109,863
Department of Agriculture Agricultural Research Service Cooperative State Research,	916,805 591,045	678,385 552,866	109 0	90 0	228,215 32,998	0	7,386 3,300	0	816 231	1,804 1,650
Ed., and Extension Service Economic Research Service	212,263 7,666	16,446 7,666	0	90 0	191,432 0	0	3,862 0	0	433 0	0
Foreign Agricultural Service Forest Service National Agricultural	912 103,320	638 99,170	0 109	0	274 3,511	0	0 224	0	0 152	0 154
Statistics Service	1,599	1,599	0	0	0	0	0	0	0	0
Department of Commerce Bureau of the Census Economic Development	99,415 1,949	90,390 1,949	1,933 0	0	7,060 0	0	5 0	0	0	27 0
Administration  National Institute of	275	25	0	0	250	0	0	0	0	0
Standards and Technology National Oceanic and	83,269	76,958	1,873	0	4,406	0	5	0	0	27
Atmospheric Administration	13,922	11,458	60	0	2,404	0	0	0	0	0
Department of Defense Defense Agencies Chemical and Biological	1,622,516 243,302	784,464 51,874	209,333 55,265	2,758 2,167	546,628 114,049	9,802 4,293	35,587 6,480	20,449 8,485	0	13,495 689
Defense  Defense Advanced Research	45,079	34,230	776	0	7,361	0	0	2,712	0	0
Projects Agency Washington Headquarters	151,055	10,449	22,163	967	102,231	4,293	6,480	3,783	0	689
Services	47,168	7,195	32,326	1,200	4,457	0	0	1,990	0	0
Department of the Air Force Air Force, Materials	591,761	384,755	90,046	0	94,186	4,215	3,727	11,158	0	3,674
Command Air Force, Space Command Department of the Army Department of the Navy	317,657 274,104 333,965 453,488	122,032 262,723 185,397 162,438	90,046 0 25,943 38,079	0 0 0 591	94,186 0 120,014 218,379	915 3,300 64 1,230	3,727 0 2,105 23,275	3,077 8,081 0 806	0 0 0 0	3,674 0 442 8,690
Department of Education	6,408	318	0	0	6,090	0	0	0	0	0
Department of Energy Energy Efficiency and	2,610,245	60,176	148,005	69,642	576,897	1,186,754	22,878	542,845	2,321	727
Renewable Energy Fossil Energy National Nuclear Security	57,346 9,652	22,411 68	0	10,439 0	5,893 9,584	5,297 0	1,629 0	11,677 0	0	0
Administration  Nonproliferation and	9,107	1	0	2,065	401	3,705	0	2,935	0	0
Verification Office of Science	9,107 2,530,747	1 34,303	0 148,005	2,065 57,138	401 561,019	3,705 1,177,752	0 21,249	2,935 528,233	0 2,321	0 727
Other Department of Energy programs	3,393	3,393	0	0	0	0	0	0	0	0
Bonneville Power Administration	3,393	3,393	0	0	0	0	0	0	0	0

TABLE C-29. Preliminary Federal obligations for basic research, by agency and performer: FY 2004 (Dollars in thousands)

						Extramu	ral			
Agency	Total	Intra-			United State	s and U.S. te	rritories			
		mural <sup>1</sup>	Industry	Indu- stry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Health and Human Services	14,818,874	2,664,219	656,360	205,669	8,746,244	28,243	2,338,829	24,971	75,317	79,022
Health Resources and Services Administration National Institutes of Health Office of the Secretary Office of the Assistant Secretary, Planning	2,088 14,800,786 16,000	2,088 2,657,131 5,000	0 650,360 6,000	0 205,669 0	0 8,743,744 2,500	0 28,243 0	0 2,338,829 0	0 24,971 0	0 72,817 2,500	79,022 0
and Evaluation	16,000	5,000	6,000	0	2,500	0	0	0	2,500	0
Department of Homeland Security Transportation Security	54,400	54,400	0	0	0	0	0	0	0	0
Administration	54,400	54,400	0	0	0	0	0	0	0	0
Department of the Interior Geological Survey	38,192 38,192	37,628 37,628	0	0	459 459	0	0	0	105 105	0
Department of Justice Office of Justice Programs	33,000 33,000	1 1	8,809 8,809	0	18,148 18,148	0	4,190 4,190	0	1,852 1,852	0
Department of Labor Bureau of Labor Statistics	14,000 14,000	2,900 2,900	0	0	10,600 10,600	0	500 500	0	0	0
Department of Transportation	36,151	10,538	24,662	0	0	0	951	0	0	0
Federal Highway Administration	36,151	10,538	24,662	0	0	0	951	0	0	0
Department of the Treasury	224	224	0	0	0	0	0	0	0	0
Bureau of Engraving and Printing	224	224	0	0	0	0	0	0	0	0
Department of Veterans Affairs	163,971	163,971	0	0	0	0	0	0	0	0
Other agencies Agency for International Development Environmental Protection Agency National Aeronautics and Space Administration	100 89,507 2,538,400	20 42,427 634,600	0 8,602 519,530	0 0	1 24,910 634,294	0 0 567,798	79 11,327 172,362	0 0	0 1,968 4,128	0 273 5,688
National Science Foundation Smithsonian Institution	3,485,884 115,000	15,243 115,000	70,617 0	0	2,923,915 0	196,428 0	258,571 0	5,834 0	6,449 0	8,827 0

<sup>&</sup>lt;sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

FFRDCs = Federally funded research and development centers.

TABLE C-30. Federal obligations for basic research, by detailed field of science and engineering: FYs 2002-04 (Dollars in thousands)

Field of science and engineering	2002	Preliminar	у
		2003	200
All fields	23,668,345	25,599,941	26,643,09
Life sciences	14,024,137	15,190,091	15,428,44
Agricultural	530.573	NA	13,420,44 N
Biological (excluding environmental)	8,379,723	NA	N
Environmental biology	334,509	NA	. N
Medical	3,361,011	NA	Ņ
Life sciences, nec	1,418,321	NA	N
Psychology	464,617	511,281	526,3
Biological aspects	7,800	NA	1_1,1
Social aspects	4.821	NA	
Psychological sciences, nec	451,996	NA	1
Physical sciences	3,405,868	3,661,841	3,937,0
Astronomy	603,302	NA	1
Chemistry	748,818	NA	Ŋ
Physics	1,861,727	NA	N
Physical sciences, nec	192,021	NA	N
Environmental sciences	1,833,303	1,964,486	2,093,0
Atmospheric	684,142	NA	, , , , ,
Geological	426,022	NA	1
Oceanography	427,040	NA	1
Environmental sciences, nec	296,099	NA	1
Mathematics and computer sciences	998,689	1,065,726	1,123,6
Computer sciences	636,938	NA	1
Mathematics	325,566	NA	1
Mathematics and computer sciences, nec	36,185	NA	1
Engineering	1,864,911	2,053,016	2,334,0
Aeronautical	330,127	NA	Ī
Astronautical	68,141	NA	Ī
Chemical	62,334	NA	1
Civil	46,514	NA	ľ
Electrical	213,032	NA	1
Mechanical	89,234	NA	1
Metallurgy and materials	507,772	NA	1
Engineering, nec	547,757	NA	١
Social sciences	361,652	402,195	399,3
Anthropology	15,154	NA	ľ
Economics	45,284	NA	ľ
Political science	5,721	NA	ľ
Sociology	19,473	NA	ľ
Social sciences, nec	276,020	NA	N
Other sciences, nec	715,168	751,305	801,1

NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year).

nec = Not elsewhere classified.

TABLE C-31. Federal obligations for basic research, by agency and field of science and engineering: FY 2002 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	23,668,345	14,024,137	464,617	3,405,868	1,833,303	998,689	1,864,911	361,652	715,168
Department of Agriculture Agricultural Research Service Cooperative State Research,	930,062 582,892	807,835 535,503	144 0	53,453 38,821	6,730 2,564	3,963 758	25,320 5,246	31,798 0	819 0
Ed., and Extension Service Economic Research Service	234,415 6,705	198,255 0	0	7,590 0	1,868 0	0	5,970 0	20,732 6,705	0
Foreign Agricultural Service Forest Service	808 103,730	808 73,269	0 144	0 7,042	0 2,298	0 1,693	0 14,104	0 4,361	0 819
National Agricultural Statistics Service	1,512	0	0	0	0	1,512	0	0	0
Department of Commerce Bureau of the Census	72,546 2,795	2,927 0	0	48,400 0	13,807 0	3,720 2,795	3,554 0	64 0	74 0
Economic Development Administration	64	0	0	0	0	0	0	64	0
National Institute of Standards and Technology	56,089	2,927	0	48,400	209	925	3,554	0	74
National Oceanic and Atmospheric Administration	13,598	0	0	0	13,598	0	0	0	0
Department of Defense Defense Agencies Chemical and Biological	1,812,518 899,241	598,750 508,715	13,141 6,747	180,150 53,466	159,319 21,121	158,986 67,598	578,515 238,214	126 0	123,531 3,380
Defense Defense Advanced Research	44,287	38,963	0	5,324	0	0	0	0	0
Projects Agency TRICARE Management Activity <sup>1</sup> Washington Headquarters	135,483 384,604	40,226 384,604	0	0	0	22,130 0	69,747 0	0	3,380 0
Services	334,867	44,922	6,747	48,142	21,121	45,468	168,467	0	0
Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Army	298,993 275,992 23,001 224,630	15,318 15,318 0 23,680	1,130 1,130 0 5,264	38,682 38,682 0 31,474	850 850 0 6,052	29,001 29,001 0 30,745	168,497 145,496 23,001 52,653	0 0 0 126	45,515 45,515 0 74,636
Department of the Navy	389,654	51,037	0	56,528	131,296	31,642	119,151	0	0
Department of Education	5,280	0	0	0	0	0	0	5,280	0
Department of Energy Energy Efficiency and Renewable Energy	2,477,841 60,058	337,455 14,126	0	1,492,184 45,932	239,462	144,047 0	264,693 0	0	0
Fossil Energy National Nuclear Security	8,114	0	0	8,114	0	0	0	0	0
Administration Nonproliferation and Verification	26,529 26,529	10,583 10,583	0	14,981 14,981	0	665 665	300 300	0	0
Office of Science	2,342,057	309,563	0	1,423,157	201,562	143,382	264,393	0	0
Other Department of Energy programs Bonneville Power	41,083	3,183	0	0	37,900	0	0	0	0
Administration Environmental Management	3,183 37,900	3,183 0	0	0	0 37,900	0	0 0	0	0
Department of Health and Human Services Health Resources and Services	12,860,758	11,460,142	432,378	250,153	160,126	23,782	133,181	141,323	259,673
Administration National Institutes of Health Office of the Secretary Office of the Assistant	2,121 12,843,779 14,858	2,121 11,458,021 0	0 432,378 0	250,153 0	0 160,126 0	23,782 0	0 133,181 0	0 126,465 14,858	259,673 0
Secretary, Planning and Evaluation	14,858	0	0	0	0	0	0	14,858	0

TABLE C-31. Federal obligations for basic research, by agency and field of science and engineering: FY 2002 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, nec
Department of the Interior Geological Survey National Park Service <sup>2</sup>	45,829 40,809 5,020	8,031 5,042 2,989	0 0 0	904 200 704	33,824 32,717 1,107	2,411 2,200 211	300 300 0	359 350 9	0 0 0
Department of Justice Office of Justice Programs	25,396 25,396	0	0 0	0 0	0	0	0	25,396 25,396	0
Department of Labor Bureau of Labor Statistics Employment and Training	30,238 12,400	92 0	0	0	0	184 0	1,319 0	28,643 12,400	0
Administration	17,838	92	0	0	0	184	1,319	16,243	0
Department of Transportation Federal Highway Administration Transportation Security	36,306 17,426	0	0 0	5,664 0	0 0	0	30,642 17,426	0 0	0
Administration	18,880	0	0	5,664	0	0	13,216	0	0
Department of the Treasury Bureau of Engraving and	703	0	0	703	0	0	0	0	0
Printing	703	0	0	703	0	0	0	0	0
Department of Veterans Affairs	141,705	126,954	10,741	0	0	0	4,010	0	0
Other agencies Agency for International									
Development Environmental Protection Agency National Aeronautics and Space	106 63,800	0 41,230	0 0	0 3,204	0 15,255	0 1,956	0 502	0 478	106 1,175
Administration National Science Foundation Smithsonian Institution	1,984,711 3,074,546 106,000	95,100 504,555 41,066	4,702 3,511 0	708,417 616,931 45,705	630,681 569,827 4,272	21,417 638,223 0	382,962 439,913 0	370 113,726 14,089	141,062 187,860 868

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-32. Preliminary Federal obligations for basic research, by agency and field of science and engineering: FY 2003 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	25,599,941	15,190,091	511,281	3,661,841	1,964,486	1,065,726	2,053,016	402,195	751,305
Department of Agriculture Agricultural Research Service	979,305 588,087	852,483 540,276	144 0	55,373 39,166	6,964 2,587	4,024 765	26,153 5,293	33,345 0	819 0
Cooperative State Research, Ed., and Extension Service Economic Research Service	278,143 6,867	238,026 0	0	9,165 0	2,079 0	0	6,756 0	22,117 6,867	0
Foreign Agricultural Service Forest Service	912 103,730	912 73,269	0 144	0 7,042	0 2,298	0 1,693	0 14,104	0 4,361	0 819
National Agricultural Statistics Service	1,566	0	0	0	0	1,566	0	0	0
Department of Commerce Bureau of the Census Economic Development	78,537 2,142	3,443 0	0	54,531 0	13,061 0	3,175 2,142	3,969 0	275 0	83 0
Administration  National Institute of	275	0	0	0	0	0	0	275	0
Standards and Technology National Oceanic and	63,292	3,443	0	54,531	233	1,033	3,969	0	83
Atmospheric Administration	12,828	0	0	0	12,828	0	0	0	0
Department of Defense Defense Agencies Chemical and Biological	1,890,731 916,209	582,887 492,267	16,208 11,070	179,437 52,926	157,252 18,940	179,689 82,038	639,919 250,228	5,862 0	129,477 8,740
Defense  Defense Advanced Research	53,396	44,087	0	9,309	0	0	0	0	0
Projects Agency TRICARE Management Activity <sup>1</sup> Washington Headguarters	179,081 358,138	54,026 358,138	0	0	0	36,534 0	79,781 0	0	8,740 0
Services	325,594	36,016	11,070	43,617	18,940	45,504	170,447	0	0
Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Army Department of the Navy	360,762 315,362 45,400 220,581 393,179	15,500 15,500 0 23,618 51,502	670 670 0 4,468 0	34,949 34,949 0 34,523 57,039	0 0 0 5,830 132,482	35,762 35,762 0 29,961 31,928	226,073 180,673 45,400 43,390 120,228	5,742 5,742 0 120 0	42,066 42,066 0 78,671
Department of Education	5,494	0	0	0	0	0	0	5,494	0
Department of Energy Energy Efficiency and	2,590,457	266,731	0	1,505,352	304,604	161,275	352,495	0	0
Renewable Energy Fossil Energy National Nuclear Security	59,536 10,473	14,003 0	0	45,533 10,473	0	0	0	0	0
Administration Nonproliferation and	9,107	0	0	8,670	0	112	325	0	0
Verification Office of Science	9,107 2,508,063	0 249,450	0	8,670 1,440,676	0 304,604	112 161,163	325 352,170	0	0
Other Department of Energy programs Bonneville Power	3,278	3,278	0	0	0	0	0	0	0
Administration	3,278	3,278	0	0	0	0	0	0	0
Department of Health and Human Services Health Resources and Services	14,152,873	12,611,822	475,839	275,298	176,222	26,172	146,568	155,177	285,775
Administration National Institutes of Health Office of the Secretary Office of the Assistant Secretary, Planning	2,068 14,134,805 16,000	2,068 12,609,754 0	0 475,839 0	0 275,298 0	0 176,222 0	26,172 0	0 146,568 0	0 139,177 16,000	0 285,775 0
and Evaluation	16,000	0	0	0	0	0	0	16,000	0

TABLE C-32. Preliminary Federal obligations for basic research, by agency and field of science and engineering: FY 2003 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Homeland Security Transportation Security	27,200	0	0	8,160	0	0	19,040	0	0
Administration	27,200	0	0	8,160	0	0	19,040	0	0
Department of the Interior Geological Survey	40,934 40,934	5,393 5,393	0 0	0	32,516 32,516	1,958 1,958	533 533	534 534	0
Department of Justice Office of Justice Programs	35,000 35,000	0 0	0 0	0 0	0 0	0 0	0	35,000 35,000	0
Department of Labor Bureau of Labor Statistics Employment and Training	33,497 13,600	102 0	0	0	0	194 0	1,420 0	31,781 13,600	0
Administration	19,897	102	0	0	0	194	1,420	18,181	0
Department of Transportation Federal Highway Administration	20,324 20,324	0	0 0	0	0	0	20,324 20,324	0	0
Department of the Treasury Bureau of Engraving and	224	0	0	224	0	0	0	0	0
Printing	224	0	0	224	0	0	0	0	0
Department of Veterans Affairs	152,375	136,513	11,550	0	0	0	4,312	0	0
Other agencies Agency for International									
Development Environmental Protection Agency National Aeronautics and Space	100 101,100	0 65,325	0 0	0 3,906	0 22,624	0 1,143	0 3,665	0	100 4,437
Administration National Science Foundation Smithsonian Institution	2,177,850 3,204,940 109,000	96,079 525,953 43,360	3,881 3,659 0	892,013 643,097 44,450	652,751 593,994 4,498	22,806 665,290 0	376,047 458,571 0	394 118,550 15,783	133,879 195,826 909

<sup>&</sup>lt;sup>1</sup> TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-33. Preliminary Federal obligations for basic research, by agency and field of science and engineering: FY 2004 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies	26,643,092	15,428,445	526,335	3,937,075	2,093,073	1,123,618	2,334,052	399,320	801,174
Departments Department of Agriculture Agricultural Research Service	916,805 591,045	794,462 542,993	142 0	54,890 39,364	5,954 2,601	4,054 768	25,804 5,319	30,683 0	816 0
Cooperative State Research, Ed., and Extension Service Economic Research Service	212,263 7,666	177,578 0	0	8,512 0	1,064 0	0	6,436 0	18,673 7,666	0
Foreign Agricultural Service Forest Service	912 103,320	912 72,979	0 142	0 7,014	0 2,289	0 1,687	0 14,049	0 4,344	0 816
National Agricultural Statistics Service	1,599	0	0	0	0	1,599	0	0	0
Department of Commerce Bureau of the Census Economic Development	99,415 1,949	4,395 0	0	71,324 0	14,216 0	3,752 1,949	5,348 0	275 0	105 0
Administration  National Institute of	275	0	0	0	0	0	0	275	0
Standards and Technology National Oceanic and	83,269	4,395	0	71,324	294	1,803	5,348	0	105
Atmospheric Administration	13,922	0	0	0	13,922	0	0	0	0
Department of Defense Defense Agencies Chemical and Biological	1,622,516 243,302	199,694 90,591	6,956 555	172,444 3,169	162,752 0	169,945 45,515	756,435 96,030	6,751 712	147,539 6,730
Defense Defense Advanced Research	45,079	41,910	0	3,169	0	0	0	0	0
Projects Agency Washington Headquarters	151,055	41,601	0	0	0	38,815	63,909	0	6,730
Services	47,168	7,080	555	0	0	6,700	32,121	712	0
Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Army	591,761 317,657 274,104 333,965	15,894 15,894 0 33,811	0 0 0 6,401	35,838 35,838 0 67,649	0 0 0 9,946	36,672 36,672 0 50,932	454,332 180,228 274,104 67,403	5,888 5,888 0 151	43,137 43,137 0 97,672
Department of the Navy	453,488	59,398	0	65,788	152,806	36,826	138,670	0	0
Department of Education	6,408	0	0	0	0	0	0	6,408	0
Department of Energy Energy Efficiency and Renewable Energy	2,610,245 57,346	281,929 13,488	0	1,534,667 43,858	260,796 0	164,352 0	368,501 0	0	0
Fossil Energy National Nuclear Security Administration	9,652 9,107	0	0	9,652 8,670	0	0 112	0 325	0	0
Nonproliferation and Verification Office of Science	9,107 2,530,747	0 265,048	0	8,670 1,472,487	0 260,796	112 164,240	325 368,176	0	0
Other Department of Energy programs	3,393	3,393	0	0	0	0	0	0	0
Bonneville Power Administration	3,393	3,393	0	0	0	0	0	0	0
Department of Health and Human Services	14,818,874	13,205,969	498,259	288,269	184,525	27,405	153,473	161,734	299,240
Health Resources and Services Administration	2,088	2,088	0	0	0	0	0	0	0
National Institutes of Health Office of the Secretary Office of the Assistant	14,800,786 16,000	13,203,881	498,259 0	288,269 0	184,525 0	27,405 0	153,473 0	145,734 16,000	299,240 0
Secretary, Planning and Evaluation	16,000	0	0	0	0	0	0	16,000	0

TABLE C-33. Preliminary Federal obligations for basic research, by agency and field of science and engineering: FY 2004 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Homeland Security	54,400	0	0	16,320	0	0	38,080	0	0
Transportation Security Administration	54,400	0	0	16,320	0	0	38,080	0	0
Department of the Interior Geological Survey	38,192 38,192	5,360 5,360	0	0 0	30,232 30,232	1,766 1,766	417 417	417 417	0
Department of Justice Office of Justice Programs	33,000 33,000	0	0	0	0 0	0	0	33,000 33,000	0
Department of Labor Bureau of Labor Statistics	14,000 14,000	0	0	0 0	0	0	0	14,000 14,000	0
Department of Transportation Federal Highway Administration	36,151 36,151	0	0	0	0	0	36,151 36,151	0	0
Department of the Treasury Bureau of Engraving and	224	0	0	224	0	0	0	0	0
Printing	224	0	0	224	0	0	0	0	0
Department of Veterans Affairs	163,971	146,902	12,429	0	0	0	4,640	0	0
Other agencies Agency for International									
Development Environmental Protection Agency National Aeronautics and Space	100 89,507	0 58,959	0	0 3,715	0 16,274	0 1,924	0 4,271	0	100 4,364
Administration National Science Foundation Smithsonian Institution	2,538,400 3,485,884 115,000	112,972 572,058 45,745	4,569 3,980 0	1,048,846 699,471 46,905	767,517 646,063 4,744	26,811 723,609 0	442,163 498,769 0	464 128,942 16,646	135,058 212,992 960

nec = Not elsewhere classified.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-34. Federal obligations for basic research in psychology and life sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Psyc	hology				Life scie	nces		
Agency	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, nec	Total	Biological (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sciences, nec
All agencies	464,617	7,800	4,821	451,996	14,024,137	8,379,723	334,509	530,573	3,361,011	1,418,321
Departments Department of Agriculture Agricultural Research Service	144 0	0	144 0	0	807,835 535,503	102,966 37,305	157,853 72,687	529,640 416,010	17,376 9,501	0
Cooperative State Research, Ed., and Extension Service Foreign Agricultural Service Forest Service	0 0 144	0 0 0	0 0 144	0 0 0	198,255 808 73,269	45,317 0 20,344	39,254 0 45,912	111,265 808 1,557	2,419 0 5,456	0 0 0
Department of Commerce	0	0	0	0	2,927	2,927	0	0	0	0
National Institute of Standards and Technology	0	0	0	0	2,927	2,927	0	0	0	0
Department of Defense Defense Agencies	13,141 6,747	7,412 6,747	0	5,729 0	598,750 508,715	102,174 80,070	17,681 9,600	252 0	441,901 419,044	36,742 1
Chemical and Biological Defense	0	0	0	0	38,963	5,324	0	0	33,639	0
Defense Advanced Research Projects Agency TRICARE Management Activity <sup>1</sup>	0	0	0	0	40,226 384,604	40,168 0	0	0	58 384,604	0
Washington Headquarters Services	6,747	6,747	0	0	44,922	34,578	9,600	0	743	1
Department of the Air Force Air Force, Materials Command Department of the Army Department of the Navy	1,130 1,130 5,264 0	665 665 0	0 0 0 0	465 465 5,264 0	15,318 15,318 23,680 51,037	6,992 6,992 7,141 7,971	0 0 126 7,955	0 0 252 0	0 0 13,994 8,863	8,326 8,326 2,167 26,248
Department of Energy	0	0	0	0	337,455	219,009	1,591	0	114,916	1,939
Energy Efficiency and Renewable Energy	0	0	0	0	14,126	14,126	0	0	0	0
National Nuclear Security Administration Nonproliferation and	0	0	0	0	10,583	10,583	0	0	0	0
Verification Office of Science	0	0	0	0	10,583 309,563	10,583 192,708	0	0	0 114,916	0 1,939
Other Department of Energy programs	0	0	0	0	3,183	1,592	1,591	0	0	0
Bonneville Power Administration	0	0	0	0	3,183	1,592	1,591	0	0	0
Department of Health and Human Services Health Resources and Services	432,378	0	0	432,378	11,460,142	7,454,918	0	0	2,647,318	1,357,906
Administration National Institutes of Health	0 432,378	0	0	0 432,378	2,121 11,458,021	0 7,454,918	0	0	2,121 2,645,197	0 1,357,906
Department of the Interior Geological Survey National Park Service <sup>2</sup>	0 0 0	0 0 0	0 0 0	0 0 0	8,031 5,042 2,989	4,891 2,672 2,219	3,043 2,370 673	0 0 0	0 0 0	97 0 97
Department of Labor	0	0	0	0	92	0	0	92	0	0
Émployment and Training Administration	0	0	0	0	92	0	0	92	0	0
Department of Veterans Affairs	10,741	0	0	10,741	126,954	0	0	0	126,954	0

TABLE C-34. Federal obligations for basic research in psychology and life sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Psyc	hology		Life sciences					
Agency	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, nec	Total	Biological (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sciences, nec
Other agencies Environmental Protection Agency	0	0	0	0	41,230	21,503	13,866	0	0	5,861
National Aeronautics and Space Administration National Science Foundation Smithsonian Institution	4,702 3,511 0	388 0 0	1,166 3,511 0	3,148 0 0	95,100 504,555 41,066	61,440 389,861 20,034	4,749 114,694 21,032	589 0 0	12,546 0 0	15,776 0 0

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

nec = Not elsewhere classified.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-35. Federal obligations for basic research in physical and environmental sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Phy	sical scienc	ces		Environmental sciences					
Agency	Total	Astronomy	Chem- istry	Physics	Physical sciences, nec	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, nec	
All agencies Departments	3,405,868	603,302	748,818	1,861,727	192,021	1,833,303	684,142	426,022	427,040	296,099	
Department of Agriculture Agricultural Research Service Cooperative State Research,	53,453 38,821	0	50,547 37,014	2,906 1,807	0	6,730 2,564	6,328 2,506	402 58	0	0	
Ed., and Extension Service Forest Service	7,590 7,042	0	7,590 5,943	0 1,099	0	1,868 2,298	1,868 1,954	0 344	0	0	
Department of Commerce National Institute of	48,400	350	17,804	30,030	216	13,807	0	209	13,598	0	
Standards and Technology National Oceanic and	48,400 0	350 0	17,804 0	30,030	216	209	0	209	12 500	0	
Atmospheric Administration  Department of Defense	180,150	0	71,151	92,488	16,511	13,598 159,319	15,820	9,627	13,598 129,146	4,726	
Defense Agencies Chemical and Biological Defense	53,466 5,324	0	21,675 5,324	31,791	0	21,121	3,898	8,007 0	6,316	2,900	
Washington Headquarters Services	48,142	0	16,351	31,791	0	21,121	3,898	8,007	6,316	2,900	
Department of the Air Force	38,682	0	10,267	26,138	2,277	850	0	0	0	850	
Air Force, Materials Command Department of the Army Department of the Navy	38,682 31,474 56,528	0 0 0	10,267 11,618 27,591	26,138 15,452 19,107	2,277 4,404 9,830	850 6,052 131,296	0 3,456 8,466	0 1,620 0	0 0 122,830	850 976 0	
Department of Energy Energy Efficiency and	1,492,184	0	191,859	1,295,335	4,990	239,462	108,669	86,151	6,742	37,900	
Renewable Energy Fossil Energy National Nuclear Security	45,932 8,114	0	45,932 8,114	0	0	0	0	0	0	0	
Administration Nonproliferation and	14,981	0	5,347	4,644	4,990	0	0	0	0	0	
Verification Office of Science	14,981 1,423,157	0	5,347 132,466	4,644 1,290,691	4,990 0	0 201,562	0 108,669	0 86,151	0 6,742	0	
Other Department of Energy programs Environmental Management	0	0	0	0	0	37,900 37,900	0	0	0	37,900 37,900	
Department of Health and Human Services National Institutes of Health	250,153 250,153	0	218,282 218,282	0	31,871 31,871	160,126 160,126	0	0	0	160,126 160,126	
Department of the Interior Geological Survey National Park Service <sup>1</sup>	904 200 704	0 0 0	3 0 3	0 0 0	901 200 701	33,824 32,717 1,107	54 0 54	32,564 32,417 147	0 0 0	1,206 300 906	
Department of Transportation Transportation Security	5,664	0	0	0	5,664	0	0	0	0	0	
Administration	5,664	0	0	0	5,664	0	0	0	0	0	
Department of the Treasury Bureau of Engraving and	703	0	151	0	552	0	0	0	0	0	
Printing	703	0	151	0	552	0	0	0	0	0	

TABLE C-35. Federal obligations for basic research in physical and environmental sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Phy	sical scienc	es		Environmental sciences					
Agency	Total	Astronomy	Chem- istry	Physics	Physical sciences, nec	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, nec	
Other agencies Environmental Protection Agency	3,204	0	3,204	0	0	15,255	0	1,411	10,048	3,796	
National Aeronautics and Space Administration National Science Foundation Smithsonian Institution	708,417 616,931 45,705	394,400 165,539 43,013	38,147 156,993 677	245,413 193,540 2,015	30,457 100,859 0	630,681 569,827 4,272	374,782 178,404 85	152,066 139,684 3,908	36,190 231,037 279	67,643 20,702 0	

 $<sup>{\</sup>small 1} \\ {\small Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only;} \\ {\small data for the NPS cultural resources program were not available for this survey cycle.} \\$ 

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

 $TABLE\ C-36.\ Federal\ obligations\ for\ basic\ research\ in\ engineering,\ by\ agency\ and\ detailed\ field:\ FY\ 2002\ (Dollars\ in\ thousands)$ 

Agency	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, nec
All agencies	1,864,911	330,127	68,141	62,334	46,514	213,032	89,234	507,772	547,757
Departments Department of Agriculture Agricultural Research Service	25,320 5,246	0	0	4,628 2,623	1,858 816	487 466	1,395 583	0	16,952 758
Cooperative State Research, Ed., and Extension Service Forest Service	5,970 14,104	0	0	0 2,005	0 1,042	0 21	0 812	0	5,970 10,224
Department of Commerce	3,554	0	0	477	90	0	0	2,204	783
National Institute of Standards and Technology	3,554	0	0	477	90	0	0	2,204	783
Department of Defense Defense Agencies Defense Advanced Research	578,515 238,214	77,686 3,351	7,735 0	6,063 2,710	4,037 646	154,976 79,275	57,784 24,542	121,735 70,343	148,499 57,347
Projects Agency Washington Headquarters	69,747	0	0	0	0	9,003	0	33,539	27,205
Services Department of the Air Force	168,467 168,497	3,351 61,013	0 7,735	2,710 1,791	646 0	70,272 16,914	24,542 1,317	36,804 14,781	30,142 64,946
Air Force, Materials Command Air Force, Space Command Department of the Army Department of the Navy	145,496 23,001 52,653 119,151	61,013 0 9,888 3,434	7,735 0 0 0	1,791 0 1,562 0	0 0 3,391 0	16,914 0 16,383 42,404	1,317 0 9,903 22,022	14,781 0 8,279 28,332	41,945 23,001 3,247 22,959
Department of Energy National Nuclear Security	264,693	0	0	300	0	0	14,793	249,600	0
Administration  Nonproliferation and	300	0	0	300	0	0	0	0	0
Verification Office of Science	300 264,393	0	0	300 0	0 0	0	0 14,793	0 249,600	0
Department of Health and Human Services National Institutes of Health	133,181 133,181	0	0	0	0	0	0	0	133,181 133,181
Department of the Interior Geological Survey	300 300	0	0	0	250 250	50 50	0	0	0
Department of Labor	1,319	0	0	0	0	0	0	0	1,319
Employment and Training Administration	1,319	0	0	0	0	0	0	0	1,319
Department of Transportation Federal Highway Administration Transportation Security	30,642 17,426	0 0	0	0 0	1,762 1,762	0	0 0	0	28,880 15,664
Administration	13,216	0	0	0	0	0	0	0	13,216
Department of Veterans Affairs	4,010	0	0	0	0	0	0	0	4,010
Other agencies Environmental Protection Agency National Aeronautics and Space	502	0	0	0	0	0	0	0	502
Administration National Science Foundation	382,962 439,913	252,441 0	60,406 0	2,241 48,625	160 38,357	6,249 51,270	8,525 6,737	14,106 120,127	38,834 174,797

nec = Not elsewhere classified.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-37. Federal obligations for basic research in mathematics and computer sciences and in social sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

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	Math	ematics and	computer scie	ences			Social so	ciences		
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Economics	Politi- cal science	Soci- ology	Socia sciences ne
All agencies	998,689	325,566	636,938	36,185	361,652	15,154	45,284	5,721	19,473	276,02
Departments Department of Agriculture Agricultural Research Service Cooperative State Research,	3,963 758	3,963 758	0	0	31,798 0	129 0	25,922 0	0	5,747 0	
Ed., and Extension Service Economic Research Service	0	0	0	0 0	20,732 6,705	0	15,432 6,705	0	5,300 0	
Forest Service National Agricultural	1,693	1,693	0	0	4,361	129	3,785	0	447	
Statistics Service	1,512	1,512	0	0	0	0	0	0	0	
Department of Commerce Bureau of the Census	3,720 2,795	0	925 0	2,795 2,795	64 0	0	0	0 0	0	6
Economic Development Administration National Institute of	0	0	0	0	64	0	0	0	0	(
Standards and Technology	925	0	925	0	0	0	0	0	0	
Department of Defense Defense Agencies	158,986 67,598	27,833 5,499	102,903 55,939	28,250 6,160	126 0	0	0	0 0	0	1.
Defense Advanced Research Projects Agency Washington Headquarters	22,130	0	22,130	0	0	0	0	0	0	
Services Department of the Air Force	45,468 29,001	5,499 3,436	33,809 8,132	6,160 17,433	0	0	0	0 0	0	
Air Force, Materials Command Department of the Army Department of the Navy	29,001 30,745 31,642	3,436 7,592 11,306	8,132 18,758 20,074	17,433 4,395 262	0 126 0	0 0 0	0 0 0	0 0 0	0 0 0	1
Department of Education	0	0	0	0	5,280	0	0	0	0	5,2
Department of Energy National Nuclear Security	144,047	119,337	24,045	665	0	0	0	0	0	
Administration Nonproliferation and Verification	665 665	0	0	665 665	0	0	0	0	0	
Office of Science	143,382	119,337	24,045	0	0	0	0	0	0	
Department of Health and Human Services National Institutes of Health Office of the Secretary Office of the Assistant	23,782 23,782 0	23,782 23,782 0	0 0 0	0 0 0	141,323 126,465 14,858	0 0 0	0 0 0	0 0 0	0 0 0	141,3 126,4 14,8
Secretary, Planning and Evaluation	0	0	0	0	14,858	0	0	0	0	14,8
Department of the Interior Geological Survey National Park Service <sup>1</sup>	2,411 2,200 211	511 300 211	1,900 1,900 0	0 0 0	359 350 9	0 0 0	0 0 0	0 0 0	300 300 0	
Department of Justice Office of Justice Programs	0	0	0	0	25,396 25,396	0	0	0 0	8,127 8,127	17,2 17,2
Department of Labor Bureau of Labor Statistics	184 0	0	184 0	0	28,643 12,400	0	0	0	0	28,6 12,4
Employment and Training Administration	184	0	184	0	16,243	0	0	0	0	16,2

TABLE C-37. Federal obligations for basic research in mathematics and computer sciences and in social sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

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	Mathematics and computer sciences Social sciences									
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Economics	Politi- cal science	Soci- ology	Social sciences, nec
Other agencies Environmental Protection Agency National Aeronautics and Space	1,956	708	1,146	102	478	0	0	0	0	478
Administration  National Science Foundation  Smithsonian Institution	21,417 638,223 0	1,134 148,298 0	15,910 489,925 0	4,373 0 0	370 113,726 14,089	0 12,429 2,596	0 19,362 0	0 5,721 0	239 4,697 363	131 71,517 11,130

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-38. Federal obligations for applied research, by agency and performer: FY 2002 (Dollars in thousands)

						Extramu	ral			
Agency	Total	Intra-			United State	es and U.S. te	rritories			
		mural <sup>1 -</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies	24,338,366	7,397,368	4,554,902	697,729	7,617,169	1,414,137	2,191,289	186,234	203,951	75,587
Departments Department of Agriculture	880,345	523,048	17,372	0	320,193	0	14,085	0	3,910	1,737
Agricultural Marketing Service Agricultural Research Service	4,413 381,529	3,867 349,722	0	0	188 27,467	0	228 2,833	0	130 200	0 1,307
Cooperative State Research, Ed., and Extension Service	312,277	18,921	12,770	0	273,674	0	6,388	0	524	0
Economic Research Service	60,340	50,945	3,861	0	4,103	0	1,371	0	0	60
Foreign Agricultural Service	623	243	0	0	380	0	0	0	0	0
Forest Service National Agricultural	113,850	94,821	741	0	14,097	0	765	0	3,056	370
Statistics Service Rural Business-Cooperative	3,085	3,018	0	0	67	0	0	0	0	0
Service	4,228	1,511	0	0	217	0	2,500	0	0	0
Department of Commerce Bureau of the Census	921,922 3,192	679,961 3,192	81,475 0	15 0	132,524 0	588 0	13,863 0	0	13,083 0	413 0
Economic Development Administration	406	45	0	0	0	0	361	0	0	0
National Institute of Standards and Technology	298,551	205,049	79,512	15	10,672	0	2,903	0	0	400
National Oceanic and Atmospheric Administration	615,691	467,593	1,963	0	121,852	588	10,599	0	13,083	13
National Telecommunications and Information Administration	4,082	4,082	0	0	0	0	0	0	0	0
Department of Defense Defense Agencies	4,452,840 1,754,241	1,771,743 373,175	1,789,379 796,394	15,303 14,721	624,949 403,765	79,110 75,664	109,550 62,421	50,065 21,436	91 0	12,650 6,665
Ballistic Missile Defense Organization	762	224	170	0	368	0	0	0	0	0
Chemical and Biological Defense	191,427	48,324	81,764	0	49,255	0	12,084	0	0	0
Defense Advanced Research Projects Agency	1,048,405	105,872	531,531	7,647	305,999	24,166	49,693	17,086	0	6,411
Defense Logistics Agency Defense Threat Reduction	8,714	6,392	0	0	0	0	0	2,322	0	0
Agency	368,015	175,236	157,521	7,074	1,928	23,530	644	1,828	0	254
Special Operations Command TRICARE Management Activity <sup>2</sup> Washington Headquarters	27,325 1,460	8,403 354	16,677 0	0	2,245 1,106	0	0	0	0	0
Services Department of the Air Force	108,133 1,058,435	28,370 625,268	8,731 398,694	0 317	42,864 16,043	27,968 823	0 14,360	200 1,947	0 10	0 973
Air Force, Materials Command Air Force, Space Command	1,056,320 2,115	624,857 411	396,990 1,704	317 0	16,043 0	823 0	14,360 0	1,947 0	10 0	973 0
Department of the Army Department of the Navy	886,883 753,281	472,986 300,314	292,459 301,832	265 0	82,155 122,986	738 1,885	13,169 19,600	22,522 4,160	0 81	2,589 2,423
Department of Education	178,285	8,116	7,804	0	126,752	0	35,613	0	0	0
Department of Energy	2,584,648	405,471	169,234	525,768	116,275	1,230,890	23,005	114,005	0	0
Energy Efficiency and Renewable Energy Fossil Energy	233,553 136,897	91,256 30,172	0 50,295	23,069 4,752	23,998 35,309	21,582 6,310	6,636 4,726	67,012 5,333	0	0
National Nuclear Security Administration Defense Programs	2,046,064 1,893,925	261,513 260,576	111,587 109,537	449,686 420,133	42,268 34,693	1,151,897 1,056,312	7,558 7,558	21,555 5,116	0	0
Nonproliferation and Verification	152,139	937	2,050	29,553	7,575	95,585	0	16,439	0	
Office of Science	3,046	1	2,050	29,553	0	1,471	0	1,574	0	0

TABLE C-38. Federal obligations for applied research, by agency and performer: FY 2002 (Dollars in thousands)  $\,$ 

						Extramur	al			
Agency	Total	Intra-			United State	s and U.S. te	rritories			
	mural <sup>1</sup>		Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Other Department of Energy programs	165,088	22,529	7,352	48,261	14,700	49,630	4,085	18,531	0	0
Bonneville Power	·				,					
Administration Civilian Radioactive Waste	11,089	11,089	0	0	0	0	0	0	0	0
Management	62,522	11,438	0	11,669	0	38,309	0	1,106	0	0
Environmental Management Nuclear Energy	48,977 42,500	1	0 7,352	26,198 10,394	9,339 5,361	3,045 8,276	0 4,085	10,394 7,031	0	0
Department of Health and Human Services	10,370,131	2,255,916	549,329	129,182	5,675,579	23,948	1,571,232	6,176	105,575	53,194
Administration for Children and Families	23,293	1,403	437	0	16,552	0	1,909	0	2,992	0
Administration on Aging	3,728	91	0	0	0	0	3,637	0	0	0
Agency for Healthcare Research and Quality	274,821	36,094	74,770	0	104,503	0	53,311	0	5,301	842
Agency for Toxic Substances and Disease Registry	12,436	2,278	124	0	2,487	0	4,650	0	2,860	37
Centers for Disease Control and Prevention Centers for Medicare and	521,000	448,199	32,490	0	36,522	0	1,850	0	1,939	0
Medicaid Services	117,015	452	30,156	0	10,810	0	20,887	0	53,025	1,685
Food and Drug Administration Health Resources and Services Administration	136,316 15,200	103,338 512	4,182 0	0	21,449 9,022	0	6,316 5,666	0	177 0	854 0
National Institutes of Health	9,266,322	1,663,549	407,170	129,182	5,474,234	23,948	1,473,006	6,176	39,281	49,776
Department of Housing and Urban Development	16,216	9,319	4,840	0	792	0	1,265	0	0	0
Department of the Interior	511,556	435,899	13,590	0	51,980	0	2,643	0	5,881	1,563
Bureau of Reclamation Geological Survey	3,636 464,118	2,447 423,639	411 2,500	0 0	429 32,790	0	138 0	0	191 5,189	20 0
Minerals Management Service	31,198	6,721	9,901	0	11,111	0	1,885	0	52	1,528
National Park Šervice <sup>3</sup>	12,604	3,092	778	0	7,650	0	620	0	449	15
Department of Justice	23,756	3,092	6,132	0	4,408	0	2,975	1,415	5,734	0
Bureau of Prisons Office of Justice Programs	3,642 20,114	2,450 642	0 6,132	0	0 4,408	0 0	0 2,975	0 1,415	1,192 4,542	0
Department of Labor	15,279	10,985	3,328	0	119	0	847	0	0	0
Bureau of Labor Statistics Occupational Safety and Health	8,300	7,900	400	0	0	0	0	0	0	0
Administration Office of the Secretary	3,839 342	2,118 100	1,721 242	0	0	0 0	0	0	0	0
Pension and Welfare Benefits Administration	2,733	802	965	0	119	0	847	0	0	0
Pension Benefit Guaranty Corporation	65	65	0	0	0	0	0	0	0	0
Department of State	2,304	675	1,629	0	0	0	0	0	0	0

TABLE C-38. Federal obligations for applied research, by agency and performer: FY 2002 (Dollars in thousands)

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						Extramur	al			
Agency	Total	Intra-			United State	s and U.S. te	rritories			
		mural <sup>1 -</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Transportation Coast Guard Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	494,581 6,408 244,839 121,149	184,130 3,949 75,002 24,386	196,764 1,459 142,065 21,403	6,405 0 6,405 0	37,535 1,000 13,191 15,169	7,714 0 7,672 42	7,834 0 0 7,616	524 0 504 20	52,513 0 0 52,513	1,162 0 0
Administration Federal Railroad Administration Federal Transit Administration	165 29,744 592	2 12,586 592	163 15,510 0	0 0 0	0 923 0	0 0 0	0 0 0	0 0 0	0 0 0	0 725 0
National Highway Traffic Safety Administration Research and Special Programs	59,624	36,611	15,175	0	7,252	0	149	0	0	437
Administration Transportation Security	3,740	2,682	989	0	0	0	69	0	0	0
Administration	28,320	28,320	0	0	0	0	0	0	0	0
Department of the Treasury Bureau of Engraving and	61,128	55,927	5,201	0	0	0	0	0	0	0
Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	4,615 55,539 147 40 787	4,615 50,539 147 15 611	0 5,000 0 25 176	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Department of Veterans Affairs	172,601	172,601	0	0	0	0	0	0	0	0
Other agencies Agency for International										
Development Appalachian Regional Commission Broadcasting Board of Governors Environmental Protection Agency Federal Communications	247,469 670 250 259,900	30,954 1 250 123,286	16,975 181 0 24,961	0 0 0 0	28,000 188 0 72,281	0 0 0 0	171,540 300 0 32,867	0 0 0 0	0 0 0 5,714	0 0 0 791
Commission	4,417	4,417	0	0	0	0	0	0	0	0
Federal Trade Commission Library of Congress	1,803 1,743	1,803 1,743	0	0	0	0	0	0	0	0
National Aeronautics and Space Administration National Archives and Records	2,853,827	701,554	1,597,306	0	298,306	60,543	190,548	0	3,674	1,896
Administration National Science Foundation	120 185,462	120 147	0 58,953	0	0 116,895	0 9	0 9,392	0 15	0 15	0 36
Nuclear Regulatory Commission Social Security Administration	74,314 22,799	13,730 2,480	6,597 3,852	21,056 0	4,080 6,313	11,335 0	1,337 2,393	14,034 0	0 7,761	2,145 0

Includes costs associated with the administration of intramural and extramural programs by Federal

FFRDCs = Federally funded research and development centers.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

ricidate costs associated with the administration of intrahilar and extrahilar programs by rederal personnel as well as actual intramural performance.

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

TABLE C-39. Preliminary Federal obligations for applied research, by agency and performer: FY 2003 (Dollars in thousands)

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						Extramu	ral .			
Agency	Total	Intra-			United State	es and U.S. te	rritories			
		mural 1 <sup>-</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies	26,968,563	7,737,449	5,114,777	783,031	8,811,623	1,497,893	2,501,613	185,485	249,106	87,586
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service	942,973 4,591 384,930	541,396 4,591 359,941	16,697 0 0	0 0 0	366,856 0 21,598	0 0 0	12,843 0 2,160	0 0 0	3,731 0 151	1,450 0 1,080
Cooperative State Research, Ed., and Extension Service	369,908	22,638	14,456	0	325,902	0	6,388	0	524	0
Economic Research Service Foreign Agricultural Service Forest Service National Agricultural	61,807 688 113,850	54,507 274 94,821	1,500 0 741	0 0 0	4,800 414 14,097	0 0 0	1,000 0 765	0 0 0	0 0 3,056	0 0 370
Statistics Service Rural Business-Cooperative Service	3,195 4,004	3,120 1,504	0	0	45 0	0	30 2,500	0	0	0
Department of Commerce Bureau of the Census Economic Development	943,472 2,426	703,388 2,426	86,521 0	14 0	131,098 0	278 0	10,875	0	10,893	405 0
Administration National Institute of	275	25	0	0	0	0	250	0	0	0
Standards and Technology National Oceanic and	325,470	228,128	84,594	14	8,570	0	3,759	0	0	405
Atmospheric Administration National Telecommunications and Information Administration	609,861 5,440	467,369 5,440	1,927	0	122,528 0	278 0	6,866	0	10,893	0
Department of Defense Defense Agencies Chemical and Biological	4,623,094 1,823,829	1,684,081 318,107	1,975,607 885,964	11,627 9,947	678,874 441,772	71,652 66,116	139,875 73,649	46,426 20,662	10 0	14,942 7,612
Defense Defense Advanced Research	205,336	117,225	12,903	0	63,042	0	12,166	0	0	0
Projects Agency Defense Logistics Agency	1,157,948 22,888	116,934 8,808	587,068 4,976	8,446 1,050	337,971 500	26,691 0	54,885 6,474	18,871 1,080	0	7,082 0
Defense Threat Reduction Agency Special Operations Command Washington Headquarters	297,254 27,232	50,032 9,334	240,377 16,090	451 0	694 1,808	4,675 0	124 0	371 0	0	530 0
Services Department of the Air Force Air Force, Materials Command	113,171 1,143,969 1,132,842	15,774 618,497 618,142	24,550 484,829 474,057	0 153 153	37,757 19,344 19,344	34,750 570 570	0 19,622 19,622	340 813 813	0 10 10	0 131 131
Air Force, Space Command Department of the Army Department of the Navy	11,127 848,287 807,009	355 446,076 301,401	10,772 279,385 325,429	0 677 850	0 79,518 138,240	0 1,191 3,775	0 16,993 29,611	0 22,339 2,612	0 0 0	0 2,108 5,091
Department of Education	195,018	7,823	6,598	0	141,754	0	38,843	0	0	0
Department of Energy Energy Efficiency and	2,730,477	263,105	318,609	592,406	117,139	1,312,263	20,488	105,753	714	0
Renewable Energy Fossil Energy National Nuclear Security	250,365 245,888	97,824 32,520	0 157,125	24,730 4,810	25,725 34,550	23,136 6,652	7,114 4,810	71,836 5,421	0	0
Administration Defense Programs	2,072,683 2,003,149	107,258 105,469	112,565 102,515	532,852 514,724	51,050 47,966	1,244,033 1,219,001	8,560 8,560	16,365 4,914	0	0
Nonproliferation and Verification Office of Science	69,534 2,963	1,789 1	10,050 77	18,128 0	3,084 0	25,032 603	0	11,451 1,568	0 714	0

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-39. Preliminary Federal obligations for applied research, by agency and performer: FY 2003 (Dollars in thousands) \\ \end{tabular}$ 

						Extramu	ral			
gency	Total	- Intra-			United State	s and U.S. te	rritories			
,,		mural <sup>1</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Other Department of Energy programs	158,578	25,502	48,842	30,014	5,814	37,839	4	10,563	0	0
Bonneville Power Administration	11,407	11,407	0	0	0	0	0	0	0	0
Civilian Radioactive Waste Management Environmental Management Nuclear Energy	62,479 30,458 54,234	14,093 1 1	0 0 48,842	10,660 16,291 3,063	0 5,808 6	35,935 1,894 10	0 0 4	1,791 6,464 2,308	0 0 0	0 0 0
Department of Health and Human Services Administration for Children	12,165,119	2,619,420	614,340	153,809	6,735,982	21,121	1,831,442	18,675	108,118	62,212
and Families	23,782	1,432	446	0	16,900	0	1,949	0	3,055	0
Agency for Healthcare Research and Quality	279,399	36,695	76,016	0	106,244	0	54,199	0	5,389	856
Centers for Disease Control and Prevention Centers for Medicare and	564,000	487,558	34,115	0	38,348	0	1,943	0	2,036	0
Medicaid Services	74,194	50	13,112	0	4,549	0	12,098	0	43,000	1,385
Food and Drug Administration Health Resources and Services	139,784	106,029	4,281	0	21,954	0	6,465	0	181	874
Administration National Institutes of Health	15,212 11,068,748	524 1,987,132	0 486,370	0 153,809	8,990 6,538,997	0 21,121	5,698 1,749,090	0 18,675	0 54,457	0 59,097
Department of Homeland Security Transportation Security	47,536	44,977	1,559	0	1,000	0	0	0	0	0
Administration United States Coast Guard	40,800 6,736	40,800 4,177	0 1,559	0	0 1,000	0	0	0 0	0	0
Department of Housing and Urban Development	17,491	10,052	5,220	0	855	0	1,364	0	0	0
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	484,468 3,608 454,070 26,790	423,482 2,430 414,018 7,034	8,413 408 2,500 5,505	0 0 0 0	44,998 425 32,971 11,602	0 0 0 0	1,847 137 0 1,710	0 0 0 0	4,835 189 4,581 65	893 19 0 874
Department of Justice Bureau of Prisons Office of Justice Programs	16,700 3,700 13,000	2,915 2,500 415	3,963 0 3,963	0 0 0	2,849 0 2,849	0 0 0	1,923 0 1,923	915 0 915	4,135 1,200 2,935	0 0 0
Department of Labor Bureau of Labor Statistics Occupational Safety and Health	15,536 8,800	10,823 7,500	4,213 1,300	0	62 0	0	438 0	0	0	0
Administration Office of the Secretary Pension and Welfare Benefits	3,926 792	2,205 100	1,721 692	0	0	0	0	0	0	0
Administration	1,951	951	500	0	62	0	438	0	0	0
Pension Benefit Guaranty Corporation	67	67	0	0	0	0	0	0	0	0
Department of State	1,852	702	1,150	0	0	0	0	0	0	0

TABLE C-39. Preliminary Federal obligations for applied research, by agency and performer: FY 2003 (Dollars in thousands)

Page 3 of 3

						Extramura	al			
Agency	Total	Intra-			United State	s and U.S. ter	ritories			
		mural <sup>1 -</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Transportation Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	409,161 129,472 181,729	146,671 70,619 22,203	113,886 32,353 46,526	6,000 6,000 0	39,649 13,000 19,649	7,070 7,000 70	4,983 0 3,693	520 500 20	89,568 0 89,568	814 0 0
Administration Federal Railroad Administration	2,964	1 14,172	1,614	0	0	0	1,055	0	0	294 120
National Highway Traffic Safety	29,296		15,004			-	0	-	-	
Administration Research and Special Programs	58,181	36,605	14,001	0	7,000	0	175	0	0	400
Administration	7,519	3,071	4,388	0	0	0	60	0	0	0
Department of the Treasury Bureau of Engraving and	69,475	64,775	4,700	0	0	0	0	0	0	0
Printing Internal Revenue Service Office of Thrift Supervision United States Secret Service	6,286 62,050 162 977	6,286 57,550 162 777	0 4,500 0 200	0 0 0	0 0 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0
Department of Veterans Affairs	185,597	185,597	0	0	0	0	0	0	0	0
Other agencies Agency for International Development Appalachian Regional Commission Broadcasting Board of Governors	240,770 686 243	25,500 1 243	20,461 165 0	0 0 0	29,999 445 0	0 0 0	164,610 75 0	0 0 0	0 0 0	200 0 0
Environmental Protection Agency Federal Communications	354,864	168,206	34,103	0	98,761	0	44,910	0	7,802	1,082
Commission	6,265	6,265	0	0	0	0	0	0	0	0
Federal Trade Commission Library of Congress National Aeronautics and Space	1,554 1,780	1,554 1,780	0	0	0	0	0	0	0	0
Administration National Archives and Records	3,154,985	792,414	1,781,569	0	284,638	76,510	214,230	0	3,675	1,949
Administration National Science Foundation	120 198,674	120 158	0 63,153	0 0	0 125,222	0 9	0 10,061	0 16	0 16	0 39
Nuclear Regulatory Commission Social Security Administration	74,996 85,657	17,175 14,826	8,420 45,430	19,175 0	3,150 8,292	8,990 0	1,306 1,500	13,180 0	0 15,609	3,600 0

 $<sup>^{\</sup>rm 1}$   $\,$  Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-40. Preliminary Federal obligations for applied research, by agency and performer: FY 2004 (Dollars in thousands) \\ \end{tabular}$ 

						Extramu	al			
Agency	Total	Intra-			United State	es and U.S. te	rritories			
		mural <sup>1 -</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies	27,428,744	8,072,376	4,750,047	793,742	9,210,187	1,480,198	2,615,815	203,290	213,527	89,562
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service Cooperative State Research,	861,856 4,633 386,866	544,783 4,633 361,877	3,741 0 0	12,099 0 0	286,267 0 21,598	0 0 0	9,785 0 2,160	0 0 0	3,731 0 151	1,450 0 1,080
Ed., and Extension Service	280,512	20,917	0	12,099	243,642	0	3,330	0	524	0
Economic Research Service Foreign Agricultural Service Forest Service National Agricultural	68,991 688 113,400	58,010 274 94,371	3,000 0 741	0 0 0	6,481 414 14,097	0 0 0	1,500 0 765	0 0 0	0 0 3,056	0 0 370
Statistics Service Rural Business-Cooperative	3,262	3,197	0	0	35	0	30	0	0	0
Service	3,504	1,504	0	0	0	0	2,000	0	0	0
Department of Commerce Bureau of the Census Economic Development	905,005 2,204	729,533 2,204	14,787 0	14 0	137,578 0	317 0	10,387 0	0	12,074 0	315 0
Administration National Institute of	275	25	0	0	0	0	250	0	0	0
Standards and Technology National Oceanic and	242,657	218,395	12,588	14	10,295	0	1,050	0	0	315
Atmospheric Administration National Telecommunications and	653,191	502,231	2,199	0	127,283	317	9,087	0	12,074	0
Information Administration	6,678	6,678	0	0	0	0	0	0	0	0
Department of Defense Defense Agencies Chemical and Biological	4,267,648 1,799,790	1,568,677 317,338	1,878,971 905,126	10,908 9,460	560,306 398,430	66,101 61,882	111,099 65,454	58,529 34,008	10 0	13,047 8,092
Defense Defense Advanced Research	168,228	114,798	14,330	0	25,589	0	0	13,511	0	0
Projects Agency Defense Logistics Agency	1,235,890 22,615	124,805 9,858	626,584 4,000	9,015 0	360,720 500	28,488 1,500	58,579 6,757	20,141 0	0	7,558 0
Defense Threat Reduction Agency Special Operations Command Washington Headquarters	297,212 24,253	50,020 8,312	240,393 14,166	445 0	682 1,775	4,664 0	118 0	356 0	0	534 0
Services Department of the Air Force Air Force, Materials Command	51,592 1,220,921 1,220,920	9,545 647,142 647,141	5,653 540,880 540,880	0 216 216	9,164 15,608 15,608	27,230 772 772	0 15,081 15,081	0 1,046 1,046	0 10 10	0 166 166
Air Force, Space Command Department of the Army Department of the Navy	1 692,110 554,827	1 396,219 207,978	0 209,229 223,736	0 648 584	0 51,227 95,041	0 1,139 2,308	0 10,206 20,358	0 22,153 1,322	0 0 0	0 1,289 3,500
Department of Education	213,172	9,312	6,840	0	160,906	0	36,114	0	0	0
Department of Energy Energy Efficiency and	2,908,813	536,521	233,147	577,537	111,021	1,317,737	23,249	108,990	611	0
Renewable Energy Fossil Energy National Nuclear Security	276,290 172,950	107,956 33,010	0 83,490	27,290 4,695	28,389 35,026	25,531 6,653	7,850 4,500	79,274 5,576	0	0 0
Administration Defense Programs	2,322,476 2,252,942	370,553 368,764	114,536 104,486	522,689 504,561	43,216 40,132	1,243,851 1,218,819	10,899 10,899	16,732 5,281	0	0
Nonproliferation and Verification Office of Science	69,534 3,000	1,789 1	10,050 78	18,128 0	3,084 0	25,032 892	0	11,451 1,418	0 611	0

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-40. Preliminary Federal obligations for applied research, by agency and performer: FY 2004 (Dollars in thousands) \\ \end{tabular}$ 

						Extramur	al			
gency	Total	- Intra-			United State	s and U.S. te	rritories			
		mural 1	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Other Department of Energy programs	134,097	25,001	35,043	22,863	4,390	40,810	0	5,990	0	0
Bonneville Power Administration	11,806	11,651	0	0	0	0	0	155	0	0
Civilian Radioactive Waste Management Environmental Management Nuclear Energy	59,092 19,198 44,001	13,348 1 1	0 0 35,043	10,127 10,269 2,467	0 3,660 730	33,956 1,194 5,660	0 0 0	1,661 4,074 100	0 0 0	0 0 0
Department of Health and Human Services Administration for Children	13,088,507	2,755,035	649,654	167,653	7,314,269	23,022	1,979,853	20,356	111,240	67,425
and Families	24,282	1,463	456	0	17,254	0	1,990	0	3,119	0
Agency for Healthcare Research and Quality	256,680	33,711	69,834	0	97,606	0	49,792	0	4,951	786
Centers for Disease Control and Prevention	531,000	450,736	35,821	0	40,265	0	2,040	0	2,138	0
Centers for Medicare and Medicaid Services	63,400	50	9,293	0	3,224	0	7,948	0	41,500	1,385
Food and Drug Administration Health Resources and Services	134,909	102,551	4,103	0	21,046	0	6,197	0	174	838
Administration National Institutes of Health	13,225 12,065,011	537 2,165,987	0 530,147	0 167,653	7,323 7,127,551	0 23,022	5,365 1,906,521	0 20,356	0 59,358	0 64,416
Department of Homeland Security Transportation Security	88,053	85,581	1,472	0	1,000	0	0	0	0	0
Administration United States Coast Guard	81,600 6,453	81,600 3,981	0 1,472	0	0 1,000	0	0	0	0	0
Department of Housing and Urban Development	17,806	10,232	5,315	0	870	0	1,389	0	0	0
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	461,867 2,812 432,597 26,458	413,750 1,892 405,066 6,792	6,685 318 0 6,367	0 0 0 0	35,395 332 23,454 11,609	0 0 0 0	532 107 0 425	0 0 0 0	4,290 148 4,077 65	1,215 15 0 1,200
Department of Justice Bureau of Prisons Office of Justice Programs	13,850 3,850 10,000	2,969 2,650 319	3,048 0 3,048	0 0 0	2,191 0 2,191	0 0 0	1,479 0 1,479	704 0 704	3,459 1,200 2,259	0 0 0
Department of Labor Bureau of Labor Statistics Occupational Safety and Health	14,790 8,300	11,069 7,500	3,221 800	0	62 0	0	438 0	0	0	0
Administration Office of the Secretary Pension and Welfare Benefits	3,992 300	2,271 100	1,721 200	0	0	0	0	0	0	0 0
Administration Pension Benefit Guaranty	2,129	1,129	500	0	62	0	438	0	0	0
Corporation	69	69	0	0	0	0	0	0	0	0
Department of State	1,933	723	1,210	0	0	0	0	0	0	0

TABLE C-40. Preliminary Federal obligations for applied research, by agency and performer: FY 2004 (Dollars in thousands)

Page 3 of 3

						Extramur	al			
Agency	Total	Intra-			United State	s and U.S. te	rritories			
		mural <sup>1 -</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Transportation Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	384,422 100,000 185,834	170,746 57,568 57,691	111,937 21,432 56,833	5,000 5,000 0	27,315 10,000 10,815	5,640 5,500 140	10,889 0 8,480	500 500 0	51,875 0 51,875	520 0 0
Administration	5,344	469	2,826	0	0	0	2,049	0	0	0
Federal Railroad Administration National Highway Traffic Safety	27,043	14,369	12,554	0	0	0	0	0	0	120
Administration	59,867	37,968	14,799	0	6,500	0	200	0	0	400
Research and Special Programs Administration	6,334	2,681	3,493	0	0	0	160	0	0	0
Department of the Treasury Bureau of Engraving and	69,537	64,817	4,720	0	0	0	0	0	0	0
Printing Internal Revenue Service Office of Thrift Supervision United States Secret Service	6,286 62,050 177 1,024	6,286 57,550 177 804	0 4,500 0 220	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0
Department of Veterans Affairs	199,722	199,722	0	0	0	0	0	0	0	0
Other agencies Agency for International Development	252,775	30,000	18,000	0	35,000	0	169,625	0	0	150
Appalachian Regional Commission	343	1	83	0	223	0	36	0	0	0
Broadcasting Board of Governors Environmental Protection Agency Federal Communications	51 369,100	51 174,954	0 35,470	0	0 102,723	0	0 46,712	0	0 8,115	0 1,126
Commission	2,759	2,759	0	0	0	0	0	0	0	0
Federal Trade Commission Library of Congress National Aeronautics and Space	1,679 788	1,679 788	0	0	0	0	0	0	0	0
Administration  National Archives and Records	2,948,646	737,162	1,650,516	0	298,306	57,981	200,219	0	2,706	1,756
Administration National Science Foundation	120 203,992	120 163	0 64,843	0	0 128,575	0 10	0 10,329	0 16	0 16	0 40
Nuclear Regulatory Commission Social Security Administration	75,110 76,400	16,329 4,900	9,087 47,300	20,531 0	2,280 5,900	9,390 0	780 2,900	14,195 0	0 15,400	2,518 0

 $<sup>^{\</sup>rm 1}$   $\,$  Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-41. Federal obligations for applied research, by detailed field of science and engineering: FYs 2002-04 (Dollars in thousands)

Field of science and engineering	2002	Prelimina	inary		
3 3		2003	2004		
Total, all fields	24,338,366	26,968,563	27,428,744		
Life sciences	11,452,665	13,251,858	13,912,035		
Agricultural	517,069	13,231,030 NA	13,712,03. N/		
Biological (excluding environmental)	6.118.801	NA	N/		
Environmental biology	444.375	NA	N/		
Medical	3,066,379	NA	N.		
Life sciences, nec	1,306,041	NA	N/		
Psychology	441.257	498.107	524.05		
Biological aspects	2,819	NA	N.		
Social aspects	47,681	NA	N.		
Psychological sciences, nec	390,757	NA	N.		
Physical sciences	1,577,362	1,443,443	1,479,87		
Astronomy	148,225	NA	N.		
Chemistry	432,920	NA	N.		
Physics	759,639	NA	N.		
Physical sciences, nec	236,578	NA	N/		
Environmental sciences	1,584,973	1,725,297	1,668,49		
Atmospheric	479,375	NA	N		
Geological	248,871	NA	N.		
Oceanography	357,608	NA	N		
Environmental sciences, nec	499,119	NA	N.		
Mathematics and computer sciences	1,631,972	1,672,476	1,705,22		
Computer sciences	1,406,252	NA	N		
Mathematics	76,431	NA	N		
Mathematics and computer sciences, nec	149,289	NA	N.		
Engineering	6,409,993	7,020,996	6,793,01		
Aeronautical	1,827,014	NA	N		
Astronautical	692,645	NA	N		
Chemical Civil	139,244 256,140	NA NA	N. N.		
Electrical	595,635	NA	N.		
Mechanical	595,635 176,682	NA NA	N N		
Metallurgy and materials	492,753	NA NA	N N		
Engineering, nec	2,229,880	NA NA	N.		
Social sciences	676,865	774,122	803,61		
Anthropology	1,244	NA	N.		
Economics	182,051	NA	N.		
Political science	12,726	NA	N.		
Sociology	76,635	NA	N.		
Social sciences, nec	404,209	NA	N		
Other sciences, nec	563,279	582,264	542,43		

 $\begin{tabular}{ll} NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year). \\ nec = Not elsewhere classified. \\ \end{tabular}$ 

TABLE C-42. Federal obligations for applied research, by agency and field of science and engineering: FY 2002 (Dollars in thousands)

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Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	24,338,366	11,452,665	441,257	1,577,362	1,584,973	1,631,972	6,409,993	676,865	563,279
Departments  Department of Agriculture  Agricultural Marketing Service	880,345 4,413	688,068 4,413	295 0	39,754 0	8,246 0	11,761 0	31,503 0	98,151 0	2,567 0
Agricultural Research Service Cooperative State Research,	381,529	350,511	0	25,410	1,679	496	3,433	0	0
Ed., and Extension Service	312,277	264,105	0	10,112	2,489	0	7,953	27,618	0
Economic Research Service Foreign Agricultural Service Forest Service Notice Agricultural	60,340 623 113,850	0 623 65,912	0 0 295	0 0 4,232	0 0 4,078	0 0 8,180	0 0 20,117	60,340 0 8,469	0 0 2,567
National Agricultural Statistics Service Rural Business-Cooperative	3,085	0	0	0	0	3,085	0	0	0
Service	4,228	2,504	0	0	0	0	0	1,724	0
Department of Commerce Bureau of the Census Economic Development	921,922 3,192	202,974 0	0	81,227 0	393,570 0	69,741 3,192	164,518 0	9,749 0	143 0
Administration National Institute of	406	0	0	0	0	0	0	406	0
Standards and Technology National Oceanic and	298,551	16,236	0	62,581	2,051	63,344	153,852	344	143
Atmospheric Administration National Telecommunications and	615,691	186,738	0	18,646	391,519	3,205	6,584	8,999	0
Information Administration	4,082	0	0	0	0	0	4,082	0	0
Department of Defense Defense Agencies Ballistic Missile Defense	4,452,840 1,754,241	526,762 308,948	42,242 11,090	334,884 110,921	153,705 6,958	724,594 509,505	2,438,664 689,312	16,273 0	215,716 117,507
Organization Chemical and Biological	762	0	0	24	0	0	738	0	0
Defense Defense Advanced Research	191,427	144,837	0	46,217	0	373	0	0	0
Projects Agency	1,048,405	132,308	0	16,311	4,582	463,091	401,075	0	31,038
Defense Logistics Agency Defense Threat Reduction	8,714	0	8,714	0	0	0	0	0	0
Agency Special Operations Command TRICARE Management Activity <sup>1</sup> Washington Headquarters	368,015 27,325 1,460	733 1,094 1,460	0 0 0	44,984 0 0	0 0 0	38,907 0 0	197,135 26,018 0	0 0 0	86,256 213 0
Services Department of the Air Force	108,133 1,058,435	28,516 30,453	2,376 31,152	3,385 126,852	2,376 6,014	7,134 55,064	64,346 803,210	0	0 5,690
Air Force, Materials Command Air Force, Space Command Department of the Army Department of the Navy	1,056,320 2,115 886,883 753,281	30,453 0 137,455 49,906	31,152 0 0 0	126,852 0 89,580 7,531	6,014 0 29,277 111,456	54,653 411 129,902 30,123	801,506 1,704 391,877 554,265	0 0 16,273 0	5,690 0 92,519 0
Department of Education	178,285	17,203	4,255	0	0	0	16,721	140,106	0
Department of Energy	2,584,648	35,115	0	582,596	73,737	668,089	1,208,657	0	16,454
Energy Efficiency and Renewable Energy Fossil Energy National Nuclear Security	233,553 136,897	0	0	0 25,201	0 18,970	0	233,553 92,726	0	0
Administration  Defense Programs	2,046,064 1,893,925	25,115 0	0	506,725 428,807	5,790 0	668,089 660,056	838,375 805,062	0	1,970 0
Nonproliferation and Verification Office of Science	152,139 3,046	25,115 0	0	77,918 0	5,790 0	8,033 0	33,313 0	0	1,970 3,046

TABLE C-42. Federal obligations for applied research, by agency and field of science and engineering: FY 2002 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Other Department of Energy	4/5.000	40.000	•	F0 (70	40.077	0	44.000	0	44.400
programs Bonneville Power	165,088	10,000	0	50,670	48,977	0	44,003	0	11,438
Administration Civilian Radioactive Waste	11,089	10,000	0	0	0	0	1,089	0	0
Management	62,522	0	0	50,670	0	0	414	0	11,438
Environmental Management Nuclear Energy	48,977 42,500	0	0	0	48,977 0	0	0 42,500	0	0
Department of Health and Human									
Services Administration for Children	10,370,131	9,197,785	312,052	180,782	115,960	39,354	96,085	179,523	248,590
and Families Administration on Aging	23,293 3,728	0	0	0	0	0	0	23,293 3,728	0
Agency for Healthcare Research	-,	_	-	_		_			-
and Quality Agency for Toxic Substances	274,821	129,893	32	305	0	22,196	0	61,150	61,245
and Disease Registry	12,436	11,814	75	0	435	0	0	112	0
Centers for Disease Control and	F21 000	F21 000	0	0	0	0	0	0	0
Prevention Centers for Medicare and	521,000	521,000	0	0	0	0	0	0	0
Medicaid Services Food and Drug Administration	117,015 136,316	117,015 136,316	0	0	0	0	0	0	0
Health Resources and Services									
Administration National Institutes of Health	15,200 9,266,322	15,200 8,266,547	0 311,945	0 180,477	0 115,525	0 17,158	0 96,085	0 91,240	0 187,345
Department of Housing and Urban									
Development	16,216	0	0	0	625	255	3,649	10,691	996
Department of the Interior	511,556	161,435	0	954	326,162	7,384	11,057	4,235	329
Bureau of Reclamation Geological Survey	3,636 464,118	311 150,458	0	0 200	0 301,901	0 6,900	2,996 3,109	0 1,550	329 0
Minerals Management Service	31,198	4,434	0	0	19,489	94	4,952	2,229	0
National Park Service <sup>2</sup>	12,604	6,232	0	754	4,772	390	0	456	0
Department of Justice	23,756	0	450	0	0	500	0	12,550	10,256
Bureau of Prisons Office of Justice Programs	3,642 20,114	0 0	450 0	0	0	500 0	0 0	2,292 10,258	400 9,856
Department of Labor	15,279	0	0	0	0	0	0	15,279	0
Bureau of Labor Statistics Occupational Safety and Health	8,300	0	0	0	0	0	0	8,300	0
Administration Office of the Secretary	3,839 342	0 0	0	0	0	0	0	3,839 342	0
Pension and Welfare Benefits				_					
Administration Pension Benefit Guaranty	2,733	0	0	0	0	0	0	2,733	0
Corporation	65	0	0	0	0	0	0	65	0
Department of State	2,304	0	0	0	0	0	0	2,304	0

TABLE C-42. Federal obligations for applied research, by agency and field of science and engineering: FY 2002 (Dollars in thousands)

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	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Transportation	494,581	11,716	24,387	91,120	27,549	11,585	289,574	10,810	27,840
Coast Guard	6,408	0	818	0	697	1,432	3,461	0	0
Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	244,839 121,149	6,121 105	23,569 0	82,624 0	23,668 3,134	0 2,162	84,083 108,558	0 4,893	24,774 2,297
Administration	165	165	0	0	0	0	0	0	0
Federal Railroad Administration	29,744	0	0	0	0	0	29,744	0	0
Federal Transit Administration	592	0	0	0	0	0	0	0	592
National Highway Traffic Safety Administration	59,624	5,325	0	0	0	7,691	40,691	5,917	0
Research and Special Programs Administration	3,740	0	0	0	50	300	3,213	0	177
Transportation Security Administration	28,320	0	0	8,496	0	0	19,824	0	0
								•	
Department of the Treasury Bureau of Engraving and	61,128	19	787	4,615	0	17	4	55,686	0
Printing	4,615	0	0	4,615	0	0	0	0	0
Internal Revenue Service	55,539	0	0	0	0	0	0	55,539	0
Office of Thrift Supervision United States Customs Service	147 40	0 19	0	0	0	0 17	0 4	147 0	0
United States Secret Service	787	0	787	0	0	0	0	0	0
Department of Veterans Affairs	172,601	121,149	36,626	0	0	0	14,826	0	0
Other agencies									
Agency for International									
Development	247,469	165,145	0	0	4,407	0	0	77,102	815
Appalachian Regional Commission	670	0	0	0	0	0	0	670	0
Broadcasting Board of Governors	250	0	0	0	0	0	250	0	0
Environmental Protection Agency Federal Communications	259,900	90,619	0	8,234	95,209	8,940	42,168	3,627	11,103
Commission	4,417	0	0	260	0	43	1,335	2,779	0
Federal Trade Commission	1,803	0	0	0	0	0	0	1,803	0
Library of Congress	1,743	0	0	243	0	1,500	0	0	0
National Aeronautics and Space Administration	2,853,827	226,576	19,866	240,798	384,251	74,171	1,897,739	0	10,426
National Archives and Records Administration	120	0	0	120	0	0	0	0	0
National Science Foundation	185,462	8,099	297	11,775	1,552	14,038	118,929	12,728	18,044
Nuclear Regulatory Commission	74,314	0	0	0	0	0	74,314	0	0
Social Security Administration	22,799	0	0	0	0	0	0	22,799	0

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-43. Preliminary Federal obligations for applied research, by agency and field of science and engineering: FY 2003 (Dollars in thousands)

Page 1 of 3

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies	26,968,563	13,251,858	498,107	1,443,443	1,725,297	1,672,476	7,020,996	774,122	582,264
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service	942,973 4,591 384,930	743,886 4,591 353,635	295 0 0	42,057 0 25,636	8,537 0 1,694	11,876 0 501	32,566 0 3,464	101,189 0 0	2,567 0 0
Cooperative State Research, Ed., and Extension Service	369,908	316,556	0	12,189	2,765	0	8,985	29,413	0
Economic Research Service	61,807	0	0	0	0	0	0	61,807	0
Foreign Agricultural Service Forest Service National Agricultural	688 113,850	688 65,912	0 295	0 4,232	0 4,078	0 8,180	0 20,117	0 8,469	0 2,567
Statistics Service Rural Business-Cooperative	3,195	0	0	0	0	3,195	0	0	0
Service	4,004	2,504	0	0	0	0	0	1,500	0
Department of Commerce Bureau of the Census Economic Development	943,472 2,426	189,049 0	0	89,402 0	389,035 0	82,989 2,426	179,950 0	9,911 0	3,136 0
Administration  National Institute of	275	0	0	0	0	0	0	275	0
Standards and Technology  National Oceanic and	325,470	17,591	0	70,359	2,222	64,631	167,158	373	3,136
Atmospheric Administration  National Telecommunications and	609,861	171,458	0	19,043	386,813	15,932	7,352	9,263	0
Information Administration	5,440	0	0	0	0	0	5,440	0	0
Department of Defense Defense Agencies Chamiest and Biological	4,623,094 1,823,829	586,658 326,862	61,052 25,485	361,854 129,270	148,677 2,597	772,186 549,049	2,483,286 685,825	9,014 0	200,367 104,741
Chemical and Biological Defense Defense Advanced Research	205,336	148,526	0	56,810	0	0	0	0	0
Projects Agency Defense Logistics Agency	1,157,948 22,888	162,024 0	0 22,888	16,221 0	0	493,068 0	457,672 0	0	28,963 0
Defense Threat Reduction Agency Special Operations Command	297,254 27,232	926 1,122	0	53,442 0	0	46,185 0	121,152 25,881	0	75,549 229
Washington Headquarters Services Department of the Air Force	113,171 1,143,969	14,264 37,187	2,597 33,465	2,797 135,290	2,597 7,962	9,796 67,462	81,120 858,779	0 0 0	0 3,824
Air Force, Materials Command	1,132,842	37,187	33,465	135,290	7,962	67,107	848,007	_	3,824
Air Force, Space Command Department of the Army Department of the Navy	11,127 848,287 807,009	0 169,129 53,480	0 2,102 0	0 89,224 8,070	0 18,682 119,436	355 123,396 32,279	10,772 344,938 593,744	9,014 0	91,802 0
Department of Education	195,018	17,865	4,870	0	0	0	15,458	156,825	0
Department of Energy	2,730,477	11,000	0	551,291	54,500	640,794	1,460,557	0	12,335
Energy Efficiency and Renewable Energy Fossil Energy	250,365 245,888	0	0 0	0 30,112	0 21,356	0 0	250,365 194,420	0	0
National Nuclear Security Administration Defense Programs	2,072,683 2,003,149	0	0	493,063 444,826	2,686 0	640,794 634,240	936,140 924,083	0	0
Nonproliferation and Verification Office of Science	69,534 2,963	0 0	0	48,237 0	2,686 0	6,554 0	12,057 0	0	0 2,963

TABLE C-43. Preliminary Federal obligations for applied research, by agency and field of science and engineering: FY 2003 (Dollars in thousands)

igency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Other Department of Energy programs	158,578	11,000	0	28,116	30,458	0	79,632	0	9,372
Bonneville Power Administration	11,407	11,000	0	0	0	0	407	0	0
Civilian Radioactive Waste Management Environmental Management Nuclear Energy	62,479 30,458 54,234	0 0 0	0 0 0	28,116 0 0	0 30,458 0	0 0 0	24,991 0 54,234	0 0 0	9,372 0 0
Department of Health and Human	2.,_2.								
Services Administration for Children	12,165,119	10,799,753	372,655	215,891	137,996	43,061	114,775	194,938	286,050
and Families	23,782	0	0	0	0	0	0	23,782	0
Agency for Healthcare Research and Quality Centers for Disease Control and	279,399	132,057	33	310	0	22,566	0	62,169	62,264
Prevention Centers for Medicare and	564,000	564,000	0	0	0	0	0	0	0
Medicaid Services	74,194	74,194	0	0	0	0	0	0	0
Food and Drug Administration Health Resources and Services	139,784	139,784	0	0	0	0	0	0	0
Administration National Institutes of Health	15,212 11,068,748	15,212 9,874,506	0 372,622	0 215,581	0 137,996	0 20,495	0 114,775	0 108,987	0 223,786
Department of Homeland Security Transportation Security	47,536	0	1,036	12,240	716	1,469	32,075	0	0
Administration United States Coast Guard	40,800 6,736	0	0 1,036	12,240 0	0 716	0 1,469	28,560 3,515	0	0
Department of Housing and Urban Development	17,491	0	0	0	674	275	3,936	11,532	1,074
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	484,468 3,608 454,070 26,790	160,277 380 155,925 3,972	0 0 0	870 0 0 870	303,667 0 287,975 15,692	6,125 0 5,771 354	9,394 2,826 2,195 4,373	3,733 0 2,204 1,529	402 402 0 0
Department of Justice Bureau of Prisons Office of Justice Programs	16,700 3,700 13,000	0 0 0	500 500 0	0 0 0	0 0 0	500 500 0	0 0 0	9,330 2,700 6,630	6,370 0 6,370
Department of Labor Bureau of Labor Statistics Occupational Safety and Health	15,536 8,800	0	0	0	0	0	0	15,536 8,800	0
Administration Office of the Secretary Pension and Welfare Benefits	3,926 792	0	0	0	0	0	0	3,926 792	0
Administration Pension Benefit Guaranty	1,951	0	0	0	0	0	0	1,951	0
Corporation	67	0	0	0	0	0	0	67	0
Department of State	1,852	0	0	0	0	0	0	1,852	0
Department of Transportation Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	409,161 129,472 181,729	13,542 6,306 116	20,000 20,000 0	0 0 0	31,915 28,380 3,510	8,088 0 1,973	300,481 56,747 167,251	11,014 0 4,966	24,121 18,039 3,913
Administration Federal Railroad Administration National Highway Traffic Safety	2,964 29,296	1,322 0	0	0	0	0	0 29,296	0	1,642 0
Administration  Research and Special Programs	58,181	5,798	0	0	0	5,815	40,520	6,048	0
Administration	7,519	0	0	0	25	300	6,667	0	527

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:solution}$ 

TABLE C-43. Preliminary Federal obligations for applied research, by agency and field of science and engineering: FY 2003 (Dollars in thousands)

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Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of the Treasury Bureau of Engraving and	69,475	0	977	6,286	0	0	0	62,212	0
Printing	6,286	0	0	6,286	0	0	0	0	0
Internal Revenue Service	62,050	0	0	0	0	0	0	62,050	0
Office of Thrift Supervision	162	0	0	0	0	0	0	162	0
United States Secret Service	977	0	977	0	0	0	0	0	0
Department of Veterans Affairs	185,597	166,277	14,068	0	0	0	5,252	0	0
Other agencies Agency for International									
Development	240,770	160,200	0	0	4,407	0	0	75,391	772
Appalachian Regional Commission	686	0	0	0	0	0	0	686	0
Broadcasting Board of Governors	243	0	0	0	0	0	243	0	0
Environmental Protection Agency Federal Communications	354,864	141,489	0	10,006	124,299	12,148	45,313	6,643	14,966
Commission	6,265	0	0	630	0	50	2,115	3,470	0
Federal Trade Commission	1,554	0	0	0	0	0	0	1,554	0
Library of Congress National Aeronautics and Space	1,780	0	0	138	0	1,550	0	0	92
Administration	3,154,985	253,185	22,336	140,045	519,211	76,326	2,133,197	0	10,685
National Archives and Records Administration	120	0	0	120	0	0	0	0	0
National Science Foundation	198,674	8,677	318	12,613	1,663	15,039	127,402	13,635	19,327
Nuclear Regulatory Commission	74.996	0	0	0	0	0	74,996	0	0
Social Security Administration	85,657	0	0	0	0	0	0	85,657	0

nec = Not elsewhere classified.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-44. Preliminary Federal obligations for applied research, by agency and field of science and engineering: FY 2004 (Dollars in thousands)

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Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	27,428,744	13,912,035	524,053	1,479,876	1,668,491	1,705,228	6,793,019	803,610	542,432
Department of Agriculture	861,856	663,065	295	41,228	7,171	11,913	32,023	103,604	2,557
Agricultural Marketing Service Agricultural Research Service	4,633 386,866	4,633 355,414	0 0	0 25,765	0 1,702	0 503	0 3,482	0	0 0
Cooperative State Research, Ed., and Extension Service	280,512	234,675	0	11,248	1,407	0	8,505	24,677	0
Economic Research Service	68,991	0	0	0	0	0	0	68,991	0
Foreign Agricultural Service Forest Service	688 113,400	688 65,651	0 295	0 4,215	0 4,062	0 8,148	0 20,036	0 8,436	0 2,557
National Agricultural Statistics Service	3,262	0	0	0	0	3,262	0	0	0
Rural Business-Cooperative Service	3,504	2,004	0	0	0	0	0	1,500	0
Department of Commerce Bureau of the Census	905,005 2,204	188,108 0	0 0	86,410 0	431,020 0	56,835 2,204	133,126 0	8,726 0	780 0
Economic Development Administration	275	0	0	0	0	0	0	275	0
National Institute of Standards and Technology	242,657	2,421	0	67,455	414	51,416	120,137	34	780
National Oceanic and Atmospheric Administration	653,191	185,687	0	18,955	430,606	3,215	6,311	8,417	0
National Telecommunications and Information Administration	6,678	0	0	0	0	0	6,678	0	0
Department of Defense Defense Agencies	4,267,648 1,799,790	511,615 326,302	57,062 22,615	300,233 86,137	100,611 0	755,140 575,436	2,376,509 698,137	8,781 0	157,697 91,163
Chemical and Biological Defense	168,228	135,292	0	32,936	0	0	0	0	0
Defense Advanced Research Projects Agency Defense Logistics Agency	1,235,890 22,615	170,356 0	0 22,615	17,055 0	0	533,824 0	483,211 0	0	31,444 0
Defense Threat Reduction Agency Special Operations Command Washington Headquarters	297,212 24,253	1,047 1,000	0	36,046 0	0	39,112 0	161,492 23,049	0	59,515 204
Services Department of the Air Force Air Force, Materials Command	51,592 1,220,921 1,220,920	18,607 34,794 34,794	0 32,305 32,305	100 128,476 128,476	0 5,814 5,814	2,500 56,656 56,656	30,385 959,412 959,411	0 0 0	0 3,464 3,464
Air Force, Space Command Department of the Army Department of the Navy	1 692,110 554,827	0 113,751 36,768	0 2,142 0	0 80,072 5,548	0 12,683 82,114	0 100,856 22,192	1 310,755 408,205	0 8,781 0	0 63,070 0
Department of Education	213,172	17,647	4,418	0	0	0	15,858	175,249	0
Department of Energy Energy Efficiency and	2,908,813	11,310	0	607,449	41,895	719,880	1,516,415	0	11,864
Renewable Energy Fossil Energy National Nuclear Security	276,290 172,950	0 0	0	0 28,555	0 20,011	0	276,290 124,384	0	0
Administration Defense Programs	2,322,476 2,252,942	0 0	0	552,303 504,066	2,686 0	719,880 713,326	1,047,607 1,035,550	0	0
Nonproliferation and Verification Office of Science	69,534 3,000	0	0	48,237 0	2,686 0	6,554 0	12,057 0	0	0 3,000
Other Department of Energy programs	134,097	11,310	0	26,591	19,198	0	68,134	0	8,864
Bonneville Power Administration	11,806	11,310	0	20,371	0	0	496	0	0,004
Civilian Radioactive Waste Management	59,092	0	0	26,591	0	0	23,637	0	8,864
Environmental Management Nuclear Energy	19,198 44,001	0	0	0 0	19,198 0	0	0 44,001	0	0 0

TABLE C-44. Preliminary Federal obligations for applied research, by agency and field of science and engineering: FY 2004 (Dollars in thousands)

ency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Health and Human Services	13,088,507	11,627,131	406,191	235,270	150,417	43,071	125,105	200,192	301,130
Administration for Children						·			
and Families Agency for Healthcare Research	24,282	0	0	0	0	0	0	24,282	0
and Quality Centers for Disease Control and	256,680	121,319	30	285	0	20,731	0	57,113	57,202
Prevention	531,000	531,000	0	0	0	0	0	0	0
Centers for Medicare and Medicaid Services	63,400	63,400	0	0	0	0	0	0	0
Food and Drug Administration Health Resources and Services	134,909	134,909	0	0	0	0	0	0	0
Administration National Institutes of Health	13,225 12,065,011	13,225 10,763,278	0 406,161	0 234,985	0 150,417	0 22,340	0 125,105	0 118,797	0 243,928
Department of Homeland Security Transportation Security	88,053	0	990	24,480	687	1,407	60,489	0	0
Administration United States Coast Guard	81,600 6,453	0	0 990	24,480 0	0 687	0 1,407	57,120 3,369	0 0	0
Department of Housing and Urban Development	17,806	0	0	0	685	280	4,007	11,740	1,094
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	461,867 2,812 432,597 26,458	158,907 313 154,584 4,010	0 0 0 0	0 0 0 0	286,703 0 270,507 16,196	4,506 0 4,506 0	8,525 2,168 1,500 4,857	2,895 0 1,500 1,395	331 331 0 0
Department of Justice Bureau of Prisons Office of Justice Programs	13,850 3,850 10,000	0 0 0	500 500 0	0 0 0	0 0 0	500 500 0	0 0 0	7,950 2,850 5,100	4,900 0 4,900
Department of Labor Bureau of Labor Statistics	14,790 8,300	0 0	0	0	0	0	0	14,790 8,300	0
Occupational Safety and Health Administration Office of the Secretary	3,992 300	0	0	0	0 0	0	0	3,992 300	0
Pension and Welfare Benefits Administration Pension Benefit Guaranty	2,129	0	0	0	0	0	0	2,129	0
Corporation	69	0	0	0	0	0	0	69	0
Department of State	1,933	0	0	0	0	0	0	1,933	0
Department of Transportation Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	384,422 100,000 185,834	13,524 6,382 1,624	17,293 17,293 0	289 0 0	25,791 20,852 4,914	10,559 0 2,454	281,225 46,192 161,707	18,525 0 11,068	17,216 9,281 4,067
Administration Federal Railroad Administration	5,344 27,043	109 0	0	289 0	0	0	0 27,043	1,453 0	3,493 0
National Highway Traffic Safety Administration Research and Special Programs	59,867	5,409	0	0	0	7,805	40,649	6,004	0
Administration	6,334	0	0	0	25	300	5,634	0	375
Department of the Treasury Bureau of Engraving and	69,537	0	1,024	6,286	0	0	0	62,227	0
Printing Internal Revenue Service Office of Thrift Supervision United States Secret Service	6,286 62,050 177 1,024	0 0 0 0	0 0 0 1,024	6,286 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 62,050 177 0	0 0 0 0
Department of Veterans Affairs	199,722	178,931	15,139	0	0	0	5,652	0	0

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:solution}$ 

TABLE C-44. Preliminary Federal obligations for applied research, by agency and field of science and engineering: FY 2004 (Dollars in thousands)

Page 3 of 3

Agency Tota	Life Il sciences	Psy- chology	Physical sciences	Environ- mental sciences	matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Other agencies								
Agency for International  Development 252,779	5 160,500	0	0	5,466	0	0	86,014	795
Appalachian Regional Commission 34		Ö	Ö	0,100	Ö	Ő	343	0
Broadcasting Board of Governors 5	1 0	0	0	0	0	51	0	0
Environmental Protection Agency 369,10	137,715	0	12,148	134,884	14,311	48,789	7,470	13,783
Federal Communications		0	240	0	40	1 247	1 000	0
Commission 2,75	9 0	0	360	0	60	1,247	1,092	0
Federal Trade Commission 1,67	9 0	0	0	0	0	0	1,679	0
Library of Congress 78	3 0	0	143	0	550	0	0	95
National Aeronautics and Space								
Administration 2,948,64	5 234,673	20,815	152,509	481,454	70,775	1,978,076	0	10,344
National Archives and Records Administration 12		0	120	0	0	0	0	0
Administration 12 National Science Foundation 203,99.		0 326	120 12,951	0 1,707	0 15,441	0 130,812	0 14,000	0 19,846
National Science Foundation 203,775.	2 0,909	320	12,731	1,707	13,441	130,012	14,000	17,040
Nuclear Regulatory Commission 75,119	0 0	0	0	0	0	75,110	0	0
Social Security Administration 76,40	0 0	0	0	0	0	0	76,400	0

nec = Not elsewhere classified.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-45. Federal obligations for applied research in psychology and life sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

Page 1 of 2

		Psyc	hology				Life sci	ences		
Agency	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, nec	Total	Bio- logical (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sciences, nec
All agencies	441,257	2,819	47,681	390,757	11,452,665	6,118,801	444,375	517,069	3,066,379	1,306,041
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service Cooperative State Research,	295 0 0	0 0 0	295 0 0	0 0 0	688,068 4,413 350,511	97,383 0 24,418	149,739 0 47,577	429,145 4,413 272,297	11,801 0 6,219	0 0 0
Ed., and Extension Service	0	0	0	0	264,105	60,369	52,293	148,221	3,222	0
Foreign Agricultural Service Forest Service	0 295	0	0 295	0	623 65,912	0 12,596	0 49,869	623 1,087	0 2,360	0
Rural Business-Cooperative Service	0	0	0	0	2,504	0	0	2,504	0	0
Department of Commerce National Institute of	0	0	0	0	202,974	32,910	149,263	13,270	5,491	2,040
Standards and Technology National Oceanic and	0	0	0	0	16,236	11,538	0	2,220	1,560	918
Atmospheric Administration	0	0	0	0	186,738	21,372	149,263	11,050	3,931	1,122
Department of Defense Defense Agencies Chemical and Biological	42,242 11,090	2,819 1,188	4,411 1,188	35,012 8,714	526,762 308,948	247,995 187,293	3,315 1,460	1,633 1,188	214,006 117,913	59,813 1,094
Defense Defense Advanced Research	0	0	0	0	144,837	46,217	0	0	98,620	0
Projects Agency Defense Logistics Agency	0 8,714	0	0	0 8,714	132,308 0	131,786 0	0	0	522 0	0
Defense Threat Reduction Agency Special Operations Command TRICARE Management Activity <sup>1</sup> Washington Headquarters	0 0 0	0 0 0	0 0 0	0 0 0	733 1,094 1,460	0 0 0	0 0 1,460	0 0 0	733 0 0	0 1,094 0
Services Department of the Air Force Air Force, Materials Command	2,376 31,152 31,152	1,188 1,631 1,631	1,188 3,223 3,223	0 26,298 26,298	28,516 30,453 30,453	9,290 13,412 13,412	0 0 0	1,188 0 0	18,038 0 0	0 17,041 17,041
Department of the Army Department of the Navy	0	0	0	0	137,455 49,906	41,718 5,572	1,855 0	445 0	87,057 9,036	6,380 35,298
Department of Education	4,255	0	0	4,255	17,203	0	0	0	0	17,203
Department of Energy National Nuclear Security	0	0	0	0	35,115	30,015	5,100	0	0	0
Administration Nonproliferation and	0	0	0	0	25,115	25,015	100	0	0	0
Verification	0	0	0	0	25,115	25,015	100	0	0	0
Other Department of Energy programs Bonneville Power	0	0	0	0	10,000	5,000	5,000	0	0	0
Administration	0	0	0	0	10,000	5,000	5,000	0	0	0
Department of Health and Human Services Agency for Healthcare Research	312,052	0	107	311,945	9,197,785	5,524,469	0	0	2,574,185	1,099,131
and Quality Agency for Toxic Substances	32	0	32	0	129,893	0	0	0	129,571	322
and Disease Registry Centers for Disease Control and	75	0	75	0	11,814	9,700	0	0	0	2,114
Prevention Centers for Medicare and	0	0	0	0	521,000	0	0	0	521,000	0
Medicaid Services	0	0	0	0	117,015	0	0	0	0	117,015
Food and Drug Administration Health Resources and Services	0	0	0	0	136,316	136,316	0	0	0	0
Administration National Institutes of Health	0 311,945	0	0	0 311,945	15,200 8,266,547	0 5,378,453	0	0	15,200 1,908,414	0 979,680

TABLE C-45. Federal obligations for applied research in psychology and life sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Psyc	hology				Life scie	ences		
Agency	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, nec	Total	Bio- logical (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sciences, nec
Department of the Interior	0	0	0	0	161,435	84,760	76,305	45	0	325
Bureau of Reclamation	0	0	0	0	311 150,458	70.742	311 70.715	0	0	0
Geological Survey Minerals Management Service	0	0	0	0	4,434	79,743 0	4,434	0	0	0
National Park Service <sup>2</sup>	0	0	0	0	6,232	5,017	845	45	0	325
Department of Justice	450	0	200	250	0	0	0	0	0	0
Bureau of Prisons	450	0	200	250	0	0	0	0	0	0
Department of Transportation	24,387	0	24,387	0	11,716	0	105	0	6,121	5,490
Coast Guard	818	0	818	0	0	0	0	0	0	0
Federal Aviation Administration Federal Highway Administration	23,569 0	0 0	23,569 0	0 0	6,121 105	0	0 105	0	6,121 0	0
Federal Motor Carrier Safety Administration	0	0	0	0	165	0	0	0	0	165
National Highway Traffic Safety Administration	0	0	0	0	5,325	0	0	0	0	5,325
Department of the Treasury	787	0	0	787	19	0	0	0	0	19
United States Customs Service	0	0	0	0	19	0	0	0	0	19
United States Secret Service	787	0	0	787	0	0	0	0	0	0
Department of Veterans Affairs	36,626	0	0	36,626	121,149	0	0	0	121,149	0
Other agencies										
Agency for International	0	0	0	0	165.145	0	0	71,389	0	93,756
Development Environmental Protection Agency	0	0	0 0	0 0	90,619	0 26,958	46,303	208	0	93,750 17,150
National Aeronautics and Space										
Administration	19,866	0	17,984	1,882	226,576	73,538	6,919	1,379	133,626	11,114
National Science Foundation	297	0	297	0	8,099	773	7,326	0	0	0

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-46. Federal obligations for applied research in physical and environmental sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

Page 1 of 2

		Phy	sical scienc	es			Enviro	nmental sci	iences	
Agency	Total	Astronomy	Chem- istry	Physics	Physical sciences, nec	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, nec
All agencies Departments	1,577,362	148,225	432,920	759,639	236,578	1,584,973	479,375	248,871	357,608	499,119
Department of Agriculture Agricultural Research Service Cooperative State Research,	39,754 25,410	0	37,425 24,227	2,329 1,183	0	8,246 1,679	7,246 1,641	1,000 38	0	0
Ed., and Extension Service Forest Service	10,112 4,232	0	10,112 3,086	0 1,146	0	2,489 4,078	2,489 3,116	0 962	0	0
Department of Commerce	81,227	0	27,039	52,852	1,336	393,570	155,500	37,374	143,979	56,717
National Institute of Standards and Technology National Oceanic and	62,581	0	21,213	40,032	1,336	2,051	0	617	1,434	0
Atmospheric Administration	18,646	0	5,826	12,820	0	391,519	155,500	36,757	142,545	56,717
Department of Defense Defense Agencies Ballistic Missile Defense	334,884 110,921	0	115,098 51,246	181,394 54,388	38,392 5,287	153,705 6,958	19,952 1,188	4,316 0	96,215 5,770	33,222 0
Organization Chemical and Biological	24	0	0	0	24	0	0	0	0	0
Defense  Defense Advanced Research	46,217	0	46,217	0	0	0	0	0	0	0
Projects Agency	16,311	0	3,762	7,286	5,263	4,582	0	0	4,582	0
Defense Threat Reduction Agency Washington Headquarters	44,984	0	0	44,984	0	0	0	0	0	0
Services  Department of the Air Force Air Force, Materials Command Department of the Army Department of the Navy	3,385 126,852 126,852 89,580 7,531	0 0 0 0	1,267 15,334 15,334 48,518 0	2,118 109,417 109,417 17,589 0	0 2,101 2,101 23,473 7,531	2,376 6,014 6,014 29,277 111,456	1,188 1,880 1,880 8,601 8,283	0 1,844 1,844 2,472 0	1,188 0 0 75 90,370	0 2,290 2,290 18,129 12,803
Department of Energy Fossil Energy	582,596 25,201	0	77,097 25,201	365,110 0	140,389 0	73,737 18,970	50 0	5,690 0	0	67,997 18,970
National Nuclear Security Administration Defense Programs	506,725 428,807	0	51,896 0	365,110 353,230	89,719 75,577	5,790 0	50 0	5,690 0	0	50 0
Nonproliferation and Verification	77,918	0	51,896	11,880	14,142	5,790	50	5,690	0	50
Other Department of Energy programs	50,670	0	0	0	50,670	48,977	0	0	0	48,977
Civilian Radioactive Waste Management Environmental Management	50,670 0	0	0	0	50,670 0	0 48,977	0	0	0	0 48,977
Department of Health and Human Services	180,782	0	157,788	0	22,994	115,960	0	435	0	115,525
Agency for Healthcare Research and Quality	305	0	305	0	0	0	0	0	0	0
Agency for Toxic Substances and Disease Registry National Institutes of Health	0 180,477	0	0 157,483	0 0	0 22,994	435 115,525	0	435 0	0	0 115,525
Department of Housing and Urban Development	0	0	0	0	0	625	0	0	0	625
Department of the Interior Geological Survey Minerals Management Service National Park Service <sup>1</sup>	954 200 0 754	0 0 0 0	107 0 0 107	0 0 0 0	847 200 0 647	326,162 301,901 19,489 4,772	533 0 396 137	163,105 161,323 736 1,046	17,515 0 17,465 50	145,009 140,578 892 3,539

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:solution}$ 

TABLE C-46. Federal obligations for applied research in physical and environmental sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

		Phys	sical science	es			Environ	mental sci	ences	
Agency	Total	Astronomy	Chem- istry	Physics	Physical sciences, nec	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, nec
Department of Transportation	91,120	0	0	82,624	8,496	27,549	26,274	0	697	578
Coast Guard	0	0	0	0	0	697	0	0	697	0
Federal Aviation Administration	82,624	0	0	82,624	0	23,668	23,668	0	0	0
Federal Highway Administration	0	0	0	0	0	3,134	2,606	0	0	528
Research and Special Programs Administration	0	0	0	0	0	50	0	0	0	50
Transportation Security Administration	8,496	0	0	0	8,496	0	0	0	0	0
Department of the Treasury	4,615	0	226	0	4,389	0	0	0	0	0
Bureau of Engraving and Printing	4,615	0	226	0	4,389	0	0	0	0	0
Other agencies Agency for International										
Development	0	0	0	0	0	4.407	0	0	0	4.407
Environmental Protection Agency Federal Communications	8,234	ő	6,593	0	1,641	95,209	28,696	5,421	13,288	47,804
Commission	260	0	0	260	0	0	0	0	0	0
Library of Congress	243	0	146	0	97	0	Ō	Ō	Ō	Ō
National Aeronautics and Space										
Administration	240,798	145,843	9,947	71,553	13,455	384,251	240,991	31,306	85,280	26,674
National Archives and Records	100	0	70	F0	0	0	0	0	0	0
Administration National Science Foundation	120 11,775	0 2,382	70 1 204	50 3,467	0 4,542	1 552	0 133	0 224	0 634	0 561
ivational Science Foundation	11,//5	۷,382	1,384	3,407	4,542	1,552	133	224	034	100

 $<sup>{\</sup>small 1} \\ {\small Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only;} \\ {\small data for the NPS cultural resources program were not available for this survey cycle.} \\$ 

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-47. Federal obligations for applied research in engineering, by agency and detailed field: FY 2002 (Dollars in thousands)

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Agency	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metallurgy and materials	Engi- neering, nec
All agencies	6,409,993	1,827,014	692,645	139,244	256,140	595,635	176,682	492,753	2,229,880
Departments Department of Agriculture Agricultural Research Service	31,503 3,433	0	0	2,987 1,717	3,526 534	355 305	2,370 381	0	22,265 496
Cooperative State Research, Ed., and Extension Service Forest Service	7,953 20,117	0	0	0 1,270	0 2,992	0 50	0 1,989	0 0	7,953 13,816
Department of Commerce	164,518	0	0	4,182	23,708	52,052	5,034	43,591	35,951
National Institute of Standards and Technology National Oceanic and	153,852	0	0	4,182	23,708	41,545	5,034	43,591	35,792
Atmospheric Administration	6,584	0	0	0	0	6,425	0	0	159
National Telecommunications and Information Administration	4,082	0	0	0	0	4,082	0	0	0
Department of Defense Defense Agencies Ballistic Missile Defense	2,438,664 689,312	624,537 12,833	68,713 0	22,759 1,776	53,735 7,776	478,917 140,332	140,207 1,797	288,405 136,980	761,391 387,818
Organization Defense Advanced Research	738	0	0	0	0	175	0	0	563
Projects Agency Defense Threat Reduction	401,075	12,833	0	0	0	109,683	0	136,980	141,579
Agency	197,135	0	0	0	0	22,384	0	0	174,751
Special Operations Command Washington Headquarters	26,018	0	0	0	0	0	0	0	26,018
Services Department of the Air Force Air Force, Materials Command Air Force, Space Command	64,346 803,210 801,506 1,704	0 535,989 535,989 0	0 60,372 60,372 0	1,776 4,371 4,371 0	7,776 12,075 12,075 0	8,090 91,006 90,976 30	1,797 27,951 27,951 0	0 65,870 65,870 0	44,907 5,576 3,902 1,674
Department of the Army Department of the Navy	391,877 554,265	39,049 36,666	58 8,283	16,612 0	33,884 0	95,691 151,888	76,571 33,888	31,569 53,986	98,443 269,554
Department of Education	16,721	0	0	0	0	0	0	0	16,721
Department of Energy Energy Efficiency and	1,208,657	0	0	91,240	47,361	31,876	351	91,987	945,842
Renewable Energy Fossil Energy	233,553 92,726	0	0	0 90,375	46,361 700	30,782 0	271 0	304 1,651	155,835 0
National Nuclear Security Administration Defense Programs	838,375 805,062	0	0	865 0	100 0	285 0	0	90,032 90,032	747,093 715,030
Nonproliferation and Verification	33,313	0	0	865	100	285	0	0	32,063
Other Department of Energy programs Bonneville Power	44,003	0	0	0	200	809	80	0	42,914
Administration	1,089	0	0	0	200	809	80	0	0
Civilian Radioactive Waste Management Nuclear Energy	414 42,500	0	0	0	0	0	0	0	414 42,500
Department of Health and Human									
Services National Institutes of Health	96,085 96,085	0	0	0	0	0	0	0	96,085 96,085
Department of Housing and Urban Development	3,649	0	0	0	0	0	0	0	3,649
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service	11,057 2,996 3,109 4,952	0 0 0 0	0 0 0 0	1,869 824 0 1,045	6,489 1,394 2,609 2,486	703 203 500 0	412 412 0 0	481 163 0 318	1,103 0 0 1,103

TABLE C-47. Federal obligations for applied research in engineering, by agency and detailed field: FY 2002 (Dollars in thousands)

Agency	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metallurgy and materials	Engi- neering, nec
Department of Transportation	289,574	0	0	0	99.077	1,624	16,104	62,758	110,011
Coast Guard	3,461	0	0	0	360	1.624	721	756	0
Federal Aviation Administration	84,083	Õ	0	Õ	22.081	.,621	0	62,002	0
Federal Highway Administration	108,558	0	0	Ō	76,636	0	Ō	0	31.922
Federal Railroad Administration National Highway Traffic Safety	29,744	0	0	0	0	0	0	0	29,744
Administration Research and Special Programs	40,691	0	0	0	0	0	15,383	0	25,308
Administration Transportation Security	3,213	0	0	0	0	0	0	0	3,213
Administration	19,824	0	0	0	0	0	0	0	19,824
Department of the Treasury	4	0	0	4	0	0	0	0	0
United States Customs Service	4	0	0	4	0	0	0	0	0
Department of Veterans Affairs	14,826	0	0	0	0	0	0	0	14,826
Other agencies									
Broadcasting Board of Governors	250	0	0	0	0	0	0	0	250
Environmental Protection Agency Federal Communications	42,168	0	0	5,802	13,926	210	465	354	21,411
Commission National Aeronautics and Space	1,335	0	0	0	0	1,335	0	0	0
Administration	1,897,739	1,202,477	623,932	519	33	16,625	11,114	4,231	38,808
National Science Foundation	118,929	0	0	9,882	8,285	11,938	625	946	87,253
Nuclear Regulatory Commission	74,314	0	0	0	0	0	0	0	74,314

nec = Not elsewhere classified.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-48. Federal obligations for applied research in mathematics and computer sciences and in social sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

Page 1 of 2

	Mathe	matics and o	computer scien	ices			Social sci	ences		
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Economics	Politi- cal science	Soci- ology	Socia sciences nec
All agencies	1,631,972	76,431	1,406,252	149,289	676,865	1,244	182,051	12,726	76,635	404,209
Departments Department of Agriculture Agricultural Research Service Cooperative State Research,	11,761 496	11,761 496	0	0	98,151 0	190 0	90,161 0	0 0	7,800 0	(
Ed., and Extension Service Economic Research Service	0	0	0	0	27,618 60,340	0	20,557 60,340	0	7,061 0	
Forest Service National Agricultural	8,180	8,180	0	0	8,469	190	7,540	0	739	
Statistics Service	3,085	3,085	0	0	0	0	0	0	0	
Rural Business-Cooperative Service	0	0	0	0	1,724	0	1,724	0	0	
Department of Commerce Bureau of the Census	69,741 3,192	6,331 0	53,748 0	9,662 3,192	9,749 0	0	1,040 0	1,429 0	715 0	6,56
Economic Development Administration National Institute of	0	0	0	0	406	0	0	0	0	40
Standards and Technology	63,344	5,263	51,611	6,470	344	0	0	0	0	34
National Oceanic and Atmospheric Administration	3,205	1,068	2,137	0	8,999	0	1,040	1,429	715	5,81
Department of Defense Defense Agencies Chemical and Biological	724,594 509,505	32,175 8,444	629,716 474,857	62,703 26,204	16,273 0	297 0	0	0	75 0	15,90
Defense	373	373	0	0	0	0	0	0	0	
Defense Advanced Research Projects Agency Defense Threat Reduction	463,091	4,504	449,494	9,093	0	0	0	0	0	
Agency	38,907	0	21,796	17,111	0	0	0	0	0	
Washington Headquarters Services Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Army Department of the Navy	7,134 55,064 54,653 411 129,902 30,123	3,567 17,389 17,389 0 6,342	3,567 33,101 33,101 0 91,635 30,123	0 4,574 4,163 411 31,925 0	0 0 0 0 16,273	0 0 0 0 297 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 75 0	15,90
Department of Education	0	0	0	0	140,106	0	0	0	9,252	130,85
Department of Energy National Nuclear Security	668,089	0	660,056	8,033	0	0	0	0	0	
Administration Defense Programs	668,089 660,056	0 0	660,056 660,056	8,033 0	0 0	0	0	0	0	
Nonproliferation and Verification	8,033	0	0	8,033	0	0	0	0	0	
Department of Health and Human Services	39,354	17,476	20,979	899	179,523	0	50,493	0	1,378	127,65
Administration for Children and Families Administration on Aging	0	0 0	0	0	23,293 3,728	0	0	0	0	23,29 3,72
Agency for Healthcare Research and Quality Agency for Toxic Substances	22,196	318	20,979	899	61,150	0	50,493	0	1,266	9,39
and Disease Registry National Institutes of Health	0 17,158	0 17,158	0 0	0	112 91,240	0	0	0	112 0	91,24

TABLE C-48. Federal obligations for applied research in mathematics and computer sciences and in social sciences, by agency and detailed field: FY 2002 (Dollars in thousands)

Page 2 of 2

	Mathe	matics and o	computer scier	ices			Social sci	ences		
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Economics	Politi- cal science	Soci- ology	Socia sciences ne
Department of Housing and Urban Development	255	0	0	255	10,691	0	9,229	8	618	83
Department of the Interior Geological Survey Minerals Management Service National Park Service <sup>1</sup>	7,384 6,900 94 390	1,400 1,400 0 0	5,594 5,500 94 0	390 0 0 390	4,235 1,550 2,229 456	0 0 0 0	361 0 361 0	0 0 0 0	2,868 1,000 1,868 0	1,00 55 45
Department of Justice Bureau of Prisons Office of Justice Programs	500 500 0	0 0 0	0 0 0	500 500 0	12,550 2,292 10,258	0 0 0	200 200 0	0 0 0	5,728 700 5,028	6,62 1,39 5,23
Department of Labor Bureau of Labor Statistics Occupational Safety and Health	0	0	0	0	15,279 8,300	0	6,979 0	0	0	8,30 8,30
Administration Office of the Secretary Pension and Welfare Benefits	0	0	0	0	3,839 342	0	3,839 342	0	0	
Administration Pension Benefit Guaranty Corporation	0	0	0	0	2,733 65	0	2,733 65	0	0	
Department of State	0	0	0	0	2,304	0	369	392	161	1,38
Department of Transportation Coast Guard Federal Highway Administration National Highway Traffic Safety	11,585 1,432 2,162	0 0 0	2,095 1,432 663	9,490 0 1,499	10,810 0 4,893	0 0 0	2,532 0 2,532	1,171 0 1,171	0 0 0	7,10 1,19
Administration Research and Special Programs	7,691	0	0	7,691	5,917	0	0	0	0	5,9
Administration  Department of the Treasury Internal Revenue Service Office of Thrift Supervision United States Customs Service	300 17 0 0 17	0 0 0 0	0 17 0 0 17	300 0 0 0 0	55,686 55,539 147 0	0 0 0 0	0 147 0 147 0	0 0 0 0	0 0 0 0	55,53 55,53
Other agencies Agency for International Development Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission	0 0 8,940 43	0 0 3,935 0 0	0 0 2,206 43 0	0 0 2,799 0 0	77,102 670 3,627 2,779 1,803	0 0 0	10,075 78 2,060 2,779 1,803	9,078 0 0	47,180 0 0	10,76 59 1,56
Library of Congress National Aeronautics and Space	1,500	0	1,500	0	0	0	0	0	0	
Administration National Science Foundation Social Security Administration	74,171 14,038 0	3,156 197 0	16,457 13,841 0	54,558 0 0	0 12,728 22,799	0 757 0	0 3,745 0	0 648 0	0 860 0	6,71 22,79

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-49. Federal obligations for development, by agency and performer: FY 2002 (Dollars in thousands)

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						Extramur	ral			
Agency	Total	Intra-			United State	es and U.S. te	rritories			
		mural <sup>1 -</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	37,846,257	9,187,365	23,751,423	413,742	1,004,714	1,421,782	1,016,108	655,158	176,744	219,221
Department of Agriculture Agricultural Marketing Service Agricultural Research Service Animal and Plant Health	161,348 774 95,382	149,330 774 87,430	0 0 0	0 0 0	10,933 0 6,867	0 0 0	708 0 708	0 0 0	50 0 50	327 0 327
Inspection Service Forest Service Grain Inspection Packers and	23,743 35,420	19,677 35,420	0	0 0	4,066 0	0	0	0	0	0
Stockyards Administration	6,029	6,029	0	0	0	0	0	0	0	0
Department of Commerce Bureau of the Census National Institute of Standards	156,903 22,719	60,592 22,719	80,124 0	0	2,750 0	0	9,477 0	0	3,960 0	0
and Technology National Oceanic and	96,728	17,530	76,196	0	357	0	2,645	0	0	0
Atmospheric Administration National Telecommunications and	21,970	17,271	3,928	0	0	0	278	0	493	0
Information Administration	15,486	3,072	0	0	2,393	0	6,554	0	3,467	0
Department of Defense Defense Agencies Ballistic Missile Defense	31,291,755 9,422,213	7,641,173 1,853,026	21,815,211 6,752,239	105,444 95,500	628,011 253,008	290,519 205,274	149,404 33,199	447,237 113,679	3,965 0	210,791 116,288
Organization Chemical and Biological	6,261,697	1,022,284	4,873,636	50,507	63,677	116,017	3,255	49,658	0	82,663
Defense  Defense Advanced Research	153,402	40,866	107,721	0	2,834	0	1,981	0	0	0
Projects Agency	974,107	133,726	664,843	14,373	89,494	38,433	14,474	14,203	0	4,561
Defense Information Systems Agency Defense Logistics Agency Defense Threat Reduction	205,705 145,209	65,999 51,696	117,659 62,685	0	1,694 29,491	202 96	8,903 529	11,248 712	0	0
Agency Joint Staff Special Operations Command	171,072 59,444 373,371	88,392 59,444 128,736	59,306 0 241,955	3,764 0 0	4,285 0 2,680	13,512 0 0	503 0 0	913 0 0	0 0 0	397 0 0
TRICARE Management Activity <sup>2</sup>	103,930	2,644	94,879	0	0	0	0	0	0	6,407
Washington Headquarters Services Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Army	974,276 5,526,936 3,313,615 2,213,321 5,965,050	259,239 672,018 588,914 83,104 1,516,782	529,555 4,623,804 2,645,712 1,978,092 4,177,116	26,856 1,162 0 1,162 1,209	58,853 6,397 5,558 839 100,913	37,014 20,377 4,120 16,257 36,623	3,554 2,000 2,000 0 23,586	36,945 196,974 66,931 130,043 30,320	0 3,824 0 3,824 64	22,260 380 380 0 78,437
Department of the Navy Operational Test and	10,144,062	3,525,870	6,137,222	7,573	259,603	28,165	90,619	79,247	77	15,686
Evaluation, Director	233,494	73,477	124,830	0	8,090	80	0	27,017	0	0

TABLE C-49. Federal obligations for development, by agency and performer: FY 2002 (Dollars in thousands)  $\,$ 

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						Extramur	al			
gency	Total	Intra-			United State	s and U.S. te	rritories			
5 ,		mural <sup>1 -</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Defense, advanced technology	5,214,451	1,293,949	3,282,473	46,167	311,395	109,792	78,459	69,927	3,824	18,465
Defense Agencies Ballistic Missile Defense	2,370,869	612,509	1,365,431	44,958	190,484	91,253	20,037	30,250	0	15,947
Organization Chemical and Biological	191,787	58,388	123,048	0	6,599	2,437	1,015	300	0	0
Defense	65,549	4,486	58,224	0	2,247	0	592	0	0	0
Defense Advanced Research Projects Agency	888,192	99,870	612,784	14,373	89,494	38,433	14,474	14,203	0	4,561
Defense Logistics Agency	135,633	51,438	54,597	0	29,491	0	107	0	0	0
Defense Threat Reduction Agency Joint Staff	171,072 59,444 156,816	88,392 59,444 54,069	59,306 0 101,621	3,764 0 0	4,285 0	13,512 0 0	503 0 0	913 0 0	0 0 0	397 0 0
Special Operations Command TRICARE Management Activity <sup>2</sup>	699	699	101,021	0	1,126 0	0	0	0	0	0
Washington Headquarters Services	701,677	195,723	355,851	26,821	57,242	36,871	3,346	14,834	0	10,989
Department of the Air Force	1,090,114	145,076	895,205	0	5,160	13,220	0,540	27,249	3,824	380
Air Force, Materials Command	533,224	128,074	398,950	0	5,160	0	0	660	0	380
Air Force, Space Command Department of the Army <sup>3</sup> Department of the Navy	556,890 936,575 809,859	17,002 285,657 248,941	496,255 586,093 432,564	0 1,209 0	37,468 76,763	13,220 3,072 2,247	0 17,124 41,298	26,589 3,986 7,874	3,824 0 0	1,966 172
Operational Test and Evaluation, Director	7,034	1,766	3,180	0	1,520	0	0	568	0	0
Department of Defense, major systems Defense Agencies	26,077,304 7,051,344	6,347,224 1,240,517	18,532,738 5,386,808	59,277 50,542	316,616 62,524	180,727 114,021	70,945 13,162	377,310 83,429	141 0	192,326 100,341
Ballistic Missile Defense Organization	6,069,910	963,896	4,750,588	50,507	57,078	113,580	2,240	49,358	0	82,663
Chemical and Biological Defense	87,853	36,380	49,497	0	587	0	1,389	0	0	0
Defense Advanced Research Projects Agency	85,915	33,856	52,059	0	0	0	0	0	0	0
Defense Information Systems Agency Defense Logistics Agency	205,705 9,576	65,999 258	117,659 8,088	0	1,694 0	202 96	8,903 422	11,248 712	0	0
Special Operations Command TRICARE Management	216,555	74,667	140,334	0	1,554	0	0	0	0	0
Activity <sup>2</sup> Washington Headquarters	103,231	1,945	94,879	0	0	0	0	0	0	6,407
Services Department of the Air Force	272,599 4,436,822	63,516 526,942	173,704 3,728,599	35 1,162	1,611 1,237	143 7,157	208 2,000	22,111 169,725	0 0	11,271 0
Air Force, Materials										
Command Air Force, Space Command Department of the Army Department of the Navy	2,780,391 1,656,431 5,028,475 9,334,203	460,840 66,102 1,231,125 3,276,929	2,246,762 1,481,837 3,591,023 5,704,658	0 1,162 0 7,573	398 839 63,445 182,840	4,120 3,037 33,551 25,918	2,000 0 6,462 49,321	66,271 103,454 26,334 71,373	0 0 64 77	0 0 76,471 15,514
Operational Test and Evaluation, Director	226,460	71,711	121,650	0	6,570	80	0	26,449	0	0
Department of Education	102,067	4,998	9,528	0	53,635	0	33,906	0	0	0
1-2-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-	.02,007	.,,,,	,,520	ŭ	- 5,000	J	20,700	ŭ	3	J

TABLE C-49. Federal obligations for development, by agency and performer: FY 2002 (Dollars in thousands)  $\,$ 

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						Extramura	al			
jency	Total	Intra-			United State	s and U.S. ter	ritories			
		mural <sup>1</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Energy Energy Efficiency and	1,981,675	281,610	761,399	308,298	59,857	333,244	30,998	203,828	1,373	1,068
Renewable Energy Fossil Energy	446,201 218,256	174,344 80,794	0 73,983	16,754 9,246	45,850 0	41,229 19,062	12,679 17,181	155,345 15,549	0 1,373	0 1,068
National Nuclear Security Administration Defense Programs	1,229,821 478,736	17,761 17,028	684,412 99,107		0	268,131 199,377	1,138 0	16,612 803	0	0
Fissile Materials Disposition Naval Reactors	27,373 636,956	1 1	0 583,040	150 52,384	0	21,078 313	0 1,138	6,144 80	0	0
Nonproliferation and Verification	86,756	731	2,265	26,812	0	47,363	0	9,585	0	0
Other Department of Energy programs Bonneville Power	87,397	8,711	3,004	40,531	14,007	4,822	0	16,322	0	0
Administration Environmental Management Office of Intelligence	8,660 73,465 5,272	8,660 1 50	0 0 3,004	0 39,298 1,233	0 14,007 0	0 4,567 255	0 0 0	0 15,592 730	0 0 0	0 0 0
Department of Health and Human Services	780,725	24,226	57,647	0	63,900	0	570,481	0	64,471	0
Agency for Healthcare Research and Quality Health Resources and Services	23,898	23,898	0	0	0	0	0	0	0	0
Administration Office of the Secretary	36,776 2,498	1 326	0	0	19,124 2,172	0	16,353 0	0	1,298 0	0
Office of Public Health and Science Substance Abuse and Mental	2,498	326	0	0	2,172	0	0	0	0	0
Health Services Administration <sup>4</sup>	717,553	1	57,647	0	42,604	0	554,128	0	63,173	0
Department of Housing and Urban Development	29,130	18,240	7,382	0	0	0	3,508	0	0	0
Department of the Interior Bureau of Reclamation Geological Survey National Park Service <sup>5</sup>	75,383 6,754 60,072 8,557	60,451 4,546 52,346 3,559	6,195 764 4,850 581	0 0 0	7,719 796 2,799 4,124	0 0 0	463 257 0 206	0 0 0	519 355 77 87	36 36 0
Department of Justice Bureau of Prisons Federal Bureau of Investigation	50,003 5,075 33,562	37,465 414 33,562	0 0	0 0 0	5,702 0 0	0 0 0	0 0	0 0 0	6,836 4,661 0	0 0
Office of Justice Programs	11,366	3,489	0	0	5,702	0	0	0	2,175	0
Department of Labor Employment and Training	120,874	119,688	1,186	0	0	0	0	0	0	0
Administration Office of the Secretary Pension Benefit Guaranty	119,297 907	119,297 100	0 807	0	0	0	0	0	0	0
Corporation	670	291	379	0	0	0	0	0	0	0

TABLE C-49. Federal obligations for development, by agency and performer: FY 2002 (Dollars in thousands)

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						Extramura	al			
Agency	Total	Intra-			United States	s and U.S. ter	ritories			
	284,614 69,908	mural 1	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Transportation Coast Guard Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	284,614 15,623 100,269 119,758	69,908 11,080 11,043 8,689	120,070 3,126 89,226 21,394	0 0 0 0	3,264 217 0 2,115	0 0 0 0	9,178 1,200 0 5,566	0 0 0 0	82,194 0 0 81,994	0 0 0 0
Administration Federal Railroad Administration Federal Transit Administration Office of the Secretary	3,571 3,479 5,241 18,425	1,333 1,250 3,241 18,425	1,826 1,297 0 0	0 0 0 0	0 932 0 0	0 0 0 0	412 0 2,000 0	0 0 0 0	0 0 0 0	0 0 0 0
Research and Special Programs Administration Transportation Security Administration	6,448 11,800	3,047 11,800	3,201 0	0	0	0	0	0	200	0
Department of the Treasury Bureau of Engraving and Printing United States Customs Service United States Mint	12,605 1,756 10,569 280	3,049 1,756 1,093 200	9,556 0 9,476 80	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0
Department of Veterans Affairs	14,500	14,500	0	0	0	0	0	0	0	0
Other agencies Agency for International Development Environmental Protection Agency Library of Congress National Aeronautics and Space Administration	22,223 91,500 1,260 2,669,692	2,200 43,404 1,010 655,521	213 8,788 250 873,874	0 0 0	1,440 25,447 0	0 0 0 798,019	18,370 11,571 0 178,044	0 0 0 4,093	2,012 0 11,364	0 278 0 6,721

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as

FFRDCs = Federally funded research and development centers.

NOTES: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.
 TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy and Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown. For accounting purposes the funds are shown in the advanced technology total for the Department of the Army.
 Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

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						Extramu	ral			
Agency	Total	Intra-			United State	es and U.S. te	erritories			
		mural <sup>1 -</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	43,187,345	10,625,910	27,502,697	530,546	1,091,387	1,443,089	1,036,161	626,300	187,966	143,289
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service Forest Service Grain Inspection Packers and	139,272 806 96,232 35,420	133,024 806 89,984 35,420	0 0 0 0	0 0 0 0	5,400 0 5,400 0	0 0 0 0	540 0 540 0	0 0 0 0	38 0 38 0	270 0 270 0
Stockyards Administration	6,814	6,814	0	0	0	0	0	0	0	0
Department of Commerce Bureau of the Census National Institute of Standards	135,408 11,674	45,450 11,674	84,399 0	0	2,063 0	0	3,058 0	0	438 0	0
and Technology National Oceanic and	98,942	14,800	81,154	0	196	0	2,792	0	0	0
Atmospheric Administration National Telecommunications and	21,013	15,197	3,245	0	1,867	0	266	0	438	0
Information Administration	3,779	3,779	0	0	0	0	0	0	0	0
Department of Defense Defense Agencies Ballistic Missile Defense	35,986,443 10,368,942	8,915,888 2,170,234	25,120,460 7,406,735	221,533 106,821	685,784 293,906	318,422 213,826	168,753 27,190	417,266 92,910	2,790 0	135,547 57,320
Organization Chemical and Biological	6,580,423	1,118,084	5,191,140	62,536	57,996	106,083	3,081	22,610	0	18,893
Defense Defense Advanced Research	170,962	77,171	72,923	0	20,002	0	866	0	0	0
Projects Agency	1,298,655	225,879	838,676	19,188	119,478	51,309	19,322	18,961	0	5,842
Defense Information Systems Agency Defense Logistics Agency Defense Threat Reduction	252,867 152,679	62,622 72,806	175,145 53,220	0	1,897 23,743	0 96	0 780	13,203 2,034	0	0
Agency Joint Staff Special Operations Command	181,907 99,305 408,805	62,226 99,305 140,117	101,770 0 265,469	3,561 0 0	278 0 3,219	14,072 0 0	0 0 0	0 0 0	0 0 0	0 0 0
TRICARE Management Activity <sup>2</sup>	121,717	26,469	88,230	0	0	0	0	0	0	7,018
Washingion Headquarters Services Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Army	1,101,622 6,608,337 4,192,706 2,415,631 6,159,653	285,555 821,331 745,881 75,450 1,761,722	620,162 5,439,015 3,345,910 2,093,105 4,124,806	21,536 103,277 0 103,277 5,706	67,293 13,247 12,603 644 111,531	42,266 42,092 7,936 34,156 35,498	3,141 3,666 3,666 0 34,868	36,102 182,657 76,388 106,269 25,283	0 2,730 0 2,730 60	25,567 322 322 0 60,179
Department of the Navy Operational Test and	12,621,855	4,091,073	8,028,339	5,729	258,895	26,929	103,029	90,135	0	17,726
Evaluation, Director	227,656	71,528	121,565	0	8,205	77	0	26,281	0	0

TABLE C-50. Preliminary Federal obligations for development, by agency and performer: FY 2003 (Dollars in thousands)

						Extramur	al			
Agency	Total	Intra-			United State	s and U.S. te	rritories			
	mural <sup>1</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign	
Department of Defense, advanced technology Defense Agencies	6,389,566 2,921,494	1,629,052 804,613	3,917,024 1,642,581	46,072 44,092	419,849 238,494	145,087 109,680	115,456 24,089	86,929 35,065	2,730 0	27,367 22,880
Ballistic Missile Defense Organization	204,257	63,886	126,537	0	8,722	2,220	800	1,900	0	192
Chemical and Biological Defense	92,516	36,499	35,770	0	20,001	0	246	0	0	0
Defense Advanced Research Projects Agency	1,185,754	181,389	770,265	19,188	119,478	51,309	19,322	18,961	0	5,842
Defense Logistics Agency Defense Threat Reduction	147,662	72,706	50,433	0	23,743	0	780	0	0	0
Agency Joint Staff	181,907 99,305	62,226 99,305	101,770 0	3,561 0	278 0	14,072 0	0	0	0	0
Special Operations Command Washington Headquarters	171,698	58,849	111,309	0	1,540	0	0	0	0	0
Services Department of the Air Force	838,395 1,492,566	229,753 156,698	446,497 1,264,192	21,343 0	64,732 3,962	42,079 27,670	2,941 0	14,204 36,992	0 2,730	16,846 322
Air Force, Materials Command Air Force, Space Command Department of the Army <sup>3</sup> Department of the Navy Operational Test and Evaluation, Director	554,703 937,863 1,072,209 894,742	149,074 7,624 406,461 259,132 2,148	400,322 863,870 547,128 459,256	0 0 1,980 0	3,962 0 70,027 105,517	257 27,413 4,545 3,192	0 0 33,091 58,276	766 36,226 5,327 8,854	0 2,730 0 0	322 0 3,650 515
Department of Defense,		7.00/.00/			0.45.005	470.005				100 100
major systems  Defense Agencies	29,596,877 7,447,448	7,286,836 1,365,621	21,203,436 5,764,154	175,461 62,729	265,935 55,412	173,335 104,146	53,297 3,101	330,337 57,845	60 0	108,180 34,440
Ballistic Missile Defense Organization Chemical and Biological	6,376,166	1,054,198	5,064,603	62,536	49,274	103,863	2,281	20,710	0	18,701
Defense  Defense Advanced Research	78,446	40,672	37,153	0	1	0	620	0	0	0
Projects Agency	112,901	44,490	68,411	0	0	0	0	0	0	0
Defense Information Systems Agency Defense Logistics Agency Special Operations Command	252,867 5,017 237,107	62,622 100 81,268	175,145 2,787 154,160	0 0 0	1,897 0 1,679	0 96 0	0 0 0	13,203 2,034 0	0 0 0	0 0 0
TRICARE Management Activity 2	121,717	26,469	88,230	0	0	0	0	0	0	7,018
Washinglon Headquarters Services Department of the Air Force	263,227 5,115,771	55,802 664,633	173,665 4,174,823	193 103,277	2,561 9,285	187 14,422	200 3,666	21,898 145,665	0	8,721 0
Air Force, Materials Command Air Force, Space Command Department of the Army Department of the Navy	3,638,003 1,477,768 5,087,444 11,727,113	596,807 67,826 1,355,261 3,831,941	2,945,588 1,229,235 3,577,678 7,569,083	0 103,277 3,726 5,729	8,641 644 41,504 153,378	7,679 6,743 30,953 23,737	3,666 0 1,777 44,753	75,622 70,043 19,956 81,281	0 0 60 0	0 0 56,529 17,211
Operational Test and Evaluation, Director	219,101	69,380	117,698	0	6,356	77	0	25,590	0	0
Department of Education	102,384	4,434	7,857	0	53,835	0	36,258	0	0	0

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-50. Preliminary Federal obligations for development, by agency and performer: FY 2003 (Dollars in thousands) \\ \end{tabular}$ 

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						Extramur	al			
gency	Total	Intra-			United State	s and U.S. te	rritories			
		mural 1	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Energy	2,233,129	312,080	982,203	309,013	57,676	332,915	32,301	204,941	1,000	1,000
Energy Efficiency and Renewable Energy Fossil Energy	476,515 386,973	186,188 82,750	0 238,949	17,892 9,300	48,965 0	44,031 20,003	13,540 17,221	165,899 16,750	0 1,000	0 1,000
National Nuclear Security Administration Defense Programs	1,302,464 565,932	34,266 24,996	736,841 143,536	254,427 182,035	0	264,228 212,847	1,440 0	11,262 2,518	0 0	0
Fissile Materials Disposition Naval Reactors	20,071 648,910	1 1	0 593,305	0 53,710	0	16,000 374	0 1,440	4,070 80	0	0
Nonproliferation and Verification	67,551	9,268	0	18,682	0	35,007	0	4,594	0	0
Other Department of Energy programs Bonneville Power	67,177	8,876	6,413	27,394	8,711	4,653	100	11,030	0	0
Administration Environmental Management Nuclear Energy Office of Intelligence	8,660 45,686 8,800 4,031	8,660 1 1 214	0 0 4,203 2,210	0 24,438 2,681 275	0 8,711 0 0	0 2,840 1,143 670	0 0 100 0	0 9,696 672 662	0 0 0 0	0 0 0 0
Department of Health and Human Services Agency for Healthcare Research	778,196	24,604	86,920	0	74,663	0	547,549	0	44,460	0
and Quality Health Resources and Services	24,296	24,296	0	0	0	0	0	0	0	0
Administration Office of the Secretary	27,681 2,343	1 306	0	0 0	14,680 2,037	0	12,000 0	0	1,000 0	0
Office of Public Health and Science Substance Abuse and Mental	2,343	306	0	0	2,037	0	0	0	0	0
Health Services Administration <sup>4</sup>	723,876	1	86,920	0	57,946	0	535,549	0	43,460	0
Department of Homeland Security Animal and Plant Health	67,829	54,030	7,391	0	5,201	0	1,207	0	0	0
Inspection Service Transportation Security	29,022	24,052	0	0	4,970	0	0	0	0	0
Administration United States Coast Guard United States Customs Service	17,000 16,607 5,200	17,000 11,778 1,200	0 3,391 4,000	0 0 0	0 231 0	0 0 0	0 1,207 0	0 0 0	0 0 0	0 0 0
Department of Housing and Urban Development	29,463	18,448	7,467	0	0	0	3,548	0	0	0
Department of the Interior Bureau of Reclamation Geological Survey	66,799 6,700 60,099	56,864 4,511 52,353	5,607 757 4,850	0 0 0	3,606 789 2,817	0 0 0	255 255 0	0 0 0	431 352 79	36 36 0
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	64,000 5,300 42,700 16,000	48,111 500 42,700 4,911	0 0 0 0	0 0 0 0	8,027 0 0 8,027	0 0 0 0	0 0 0 0	0 0 0 0	7,862 4,800 0 3,062	0 0 0 0
Department of Labor Employment and Training	121,582	120,403	1,179	0	0	0	0	0	0	0
Administration Office of the Secretary Pension Benefit Guaranty	120,000 900	120,000 100	0 800	0	0	0	0	0	0	0
Corporation	682	303	379	0	0	0	0	0	0	0

						Extramura	al			
Agency	Total	Intra-			United State	s and U.S. ter	ritories			
		mural <sup>1 —</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Transportation	303,798	53,215	126,330	0	3,986	0	3,853	0	115,973	441
Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	83,793 179,512	12,293 18,636	71,500 40,749	0	0 2,595	0	0 1,559	0	0 115,973	0
Administration	3,232	1,027	1,470	0	0	0	294	0	0	441
Federal Railroad Administration	4,616	505	2,720	0	1,391	0	0	0	0	0
Federal Transit Administration	4,320	2,320	0	0	0	0	2,000	0	0	0
Office of the Secretary Research and Special Programs	14,133	14,133	0	0	0	0	0	0	0	0
Administration	14,192	4,301	9,891	0	0	0	0	0	0	0
Department of the Treasury Bureau of Engraving and	857	769	88	0	0	0	0	0	0	0
Printing	560	560	0	0	0	0	0	0	0	0
United States Mint	297	209	88	0	0	0	0	0	0	0
Department of Veterans Affairs	15,592	15,592	0	0	0	0	0	0	0	0
Other agencies Agency for International										
Development	21,175	2,500	150	0	1,500	0	17,025	0	0	0
Environmental Protection Agency	171,000	81,054	16,433	0	47,590	0	21,641	0	3,760	522
Library of Congress National Aeronautics and Space	2,453	2,453	0	0	0	0	0	0	0	0
Administration	2,947,965	736,991	1,056,213	0	142,056	791,752	200,173	4,093	11,214	5,473

FFRDCs = Federally funded research and development centers.

NOTES: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.
 TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy and Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown. For accounting purposes the funds are shown in the advanced technology total for the Department of the Army.
 Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

TABLE C-51. Preliminary Federal obligations for development, by agency and performer: FY 2004 (Dollars in thousands)

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						Extramu	ral			
Agency	Total	Intra-			United State	es and U.S. te	rritories			
		mural <sup>1</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	46,982,910	10,736,774	31,272,963	449,085	899,417	1,598,709	1,110,527	633,377	167,963	114,095
Department of Agriculture Agricultural Marketing Service Agricultural Research Service Forest Service Grain Inspection Packers and	139,924 813 96,717 35,280	133,676 813 90,469 35,280	0 0 0 0	0 0 0 0	5,400 0 5,400 0	0 0 0 0	540 0 540 0	0 0 0 0	38 0 38 0	270 0 270 0
Stockyards Administration  Department of Commerce Bureau of the Census	7,114 48,446 9,322	7,114 36,485 9,322	9,776 0	0 0	1,256 0	0 0	761 0	0 0	168 0	0 0
National Institute of Standards and Technology National Oceanic and	19,323	11,705	6,752	0	206	0	660	0	0	0
Atmospheric Administration	19,801	15,458	3,024	0	1,050	0	101	0	168	0
Department of Defense Defense Agencies Ballistic Missile Defense	39,891,422 11,256,107	9,163,317 2,389,351	29,043,797 8,105,656	147,876 115,972	503,479 235,445	352,349 236,978	122,459 28,403	447,363 100,809	3,730 0	107,052 43,493
Organization Chemical and Biological	7,581,598	1,368,976	5,907,709	73,313	57,769	127,848	4,224	26,363	0	15,396
Defense  Defense Advanced Research	180,329	104,828	74,267	0	0	0	0	1,234	0	0
Projects Agency	1,537,811	262,468	994,031	23,058	143,574	61,657	23,219	22,785	0	7,019
Defense Information Systems Agency Defense Logistics Agency Defense Threat Reduction	322,053 41,381	61,693 25,397	246,363 12,414	0 0	1,967 1,369	0	0 201	12,030 2,000	0	0
Agency Joint Staff Special Operations Command	85,613 119,115 423,800	29,287 119,115 145,255	47,894 0 275,155	1,678 0 0	128 0 3,390	6,626 0 0	0 0 0	0 0 0	0 0 0	0 0 0
TRICARE Management Activity <sup>2</sup> Washington Headguarters	74,367	17,161	57,206	0	0	0	0	0	0	0
Services Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Army	890,040 7,133,610 4,713,773 2,419,837 7,952,243	255,171 839,097 768,493 70,604 1,826,260	490,617 6,004,989 3,839,088 2,165,901 5,962,332	17,923 14,909 0 14,909 10,712	27,248 4,562 4,305 257 30,948	40,847 53,335 12,604 40,731 34,252	759 4,818 4,818 0 8,783	36,397 207,977 84,207 123,770 34,857	0 3,665 0 3,665 65	21,078 258 258 0 44,034
Department of the Navy Operational Test and Evaluation, Director	13,268,465 280,997	4,020,438 88,171	8,820,926 149,894	6,283 0	222,060 10,464	27,689 95	80,455 0	71,347 32,373	0	19,267 0

TABLE C-51. Preliminary Federal obligations for development, by agency and performer: FY 2004 (Dollars in thousands)

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						Extramur	al			
Agency	Total	Intra-			United State	s and U.S. te	rritories			
J. 1		mural <sup>1 -</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Defense, advanced technology Defense Agencies	6,034,297 2,743,016	1,432,535 749,001	3,904,222 1,584,936	47,232 42,322	284,642 176,272	158,810 111,687	79,272 24,994	105,013 36,382	3,665 0	18,906 17,422
Ballistic Missile Defense Organization Chamical and Biological	232,812	66,643	156,639	0	5,065	2,810	1,015	640	0	0
Chemical and Biological Defense	87,715	40,332	47,261	0	0	0	0	122	0	0
Defense Advanced Research Projects Agency	1,424,890	217,970	925,608	23,058	143,574	61,657	23,219	22,785	0	7,019
Defense Logistics Agency Defense Threat Reduction	36,172	25,297	9,305	0	1,369	0	201	0	0	0
Agency Joint Staff Special Operations Command	85,613 119,115 177,996	29,287 119,115 61,007	47,894 0 115,377	1,678 0 0	128 0 1,612	6,626 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Washington Headquarters Services Department of the Air Force	578,703 1,698,471	189,350 144,099	282,852 1,447,290	17,586 3,835	24,524 4,075	40,594 38,931	559 0	12,835 56,318	0 3,665	10,403 258
Air Force, Materials Command Air Force, Space Command Department of the Army <sup>3</sup> Department of the Navy Operational Test and Evaluation, Director	526,061 1,172,410 852,280 728,175	136,456 7,643 325,352 210,980 3,103	384,692 1,062,598 492,484 373,927 5,585	0 3,835 1,075 0	4,075 0 15,696 85,929 2,670	0 38,931 5,594 2,598	0 0 6,820 47,458	580 55,738 4,453 6,863	0 3,665 0 0	258 0 806 420
Department of Defense,										
major systems  Defense Agencies  Pallistic Miscile Defense	33,857,125 8,513,091	7,730,782 1,640,350	25,139,575 6,520,720	100,644 73,650	218,837 59,173	193,539 125,291	43,187 3,409	342,350 64,427	65 0	88,146 26,071
Ballistic Missile Defense Organization Chemical and Biological	7,348,786	1,302,333	5,751,070	73,313	52,704	125,038	3,209	25,723	0	15,396
Defense  Defense Advanced Research	92,614	64,496	27,006	0	0	0	0	1,112	0	0
Projects Agency	112,921	44,498	68,423	0	0	0	0	0	0	0
Defense Information Systems Agency Defense Logistics Agency Special Operations Command TRICARE Management	322,053 5,209 245,804	61,693 100 84,248	246,363 3,109 159,778	0 0 0	1,967 0 1,778	0 0 0	0 0 0	12,030 2,000 0	0 0 0	0 0 0
Activity <sup>2</sup> Washington Headquarters	74,367	17,161	57,206	0	0	0	0	0	0	0
Services Department of the Air Force	311,337 5,435,139	65,821 694,998	207,765 4,557,699	337 11,074	2,724 487	253 14,404	200 4,818	23,562 151,659	0	10,675 0
Air Force, Materials Command Air Force, Space Command Department of the Army Department of the Navy	4,187,712 1,247,427 7,099,963 12,540,290	632,037 62,961 1,500,908 3,809,458	3,454,396 1,103,303 5,469,848 8,446,999	0 11,074 9,637 6,283	230 257 15,252 136,131	12,604 1,800 28,658 25,091	4,818 0 1,963 32,997	83,627 68,032 30,404 64,484	0 0 65 0	0 0 43,228 18,847
Operational Test and Evaluation, Director	268,642	85,068	144,309	0	7,794	95	0	31,376	0	0
Department of Education	77,745	3,639	7,319	0	49,308	0	17,479	0	0	0

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						Extramura	al			
Agency	Total	Intra-			United State	s and U.S. ter	rritories			
		mural 1	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Energy Energy Efficiency and	2,172,355	303,785	931,926	301,209	56,031	363,854	31,773	181,777	1,000	1,000
Renewable Energy Fossil Energy National Nuclear Security	433,468 299,560	169,370 83,476	0 150,097	16,275 9,317	44,541 0	40,053 19,762	12,317 17,956	150,912 16,952	0 1,000	0 1,000
Administration Defense Programs	1,320,012 543,097	42,402 33,132	763,219 111,219	253,639 180,557	0	253,255 217,867	1,500 0	5,997 322	0	0
Fissile Materials Disposition Naval Reactors Nonproliferation and	1,000 708,364	1 1	0 652,000	0 54,400	0	0 381	0 1,500	999 82	0	0
Verification	67,551	9,268	0	18,682	0	35,007	0	4,594	0	0
Other Department of Energy programs Bonneville Power	119,315	8,537	18,610	21,978	11,490	50,784	0	7,916	0	0
Administration Environmental Management Nuclear Energy Office of Intelligence	8,963 28,796 77,525 4,031	8,321 1 1 214	0 0 16,400 2,210	0 15,403 6,300 275	0 5,490 6,000 0	0 1,790 48,324 670	0 0 0	642 6,112 500 662	0 0 0 0	0 0 0
Department of Health and Human Services Agency for Healthcare Research	949,965	22,803	109,950	0	80,157	0	680,486	0	56,569	0
and Quality  Health Resources and Services	22,320	22,320	0	0	0	0	0	0	0	0
Administration Office of the Secretary Office of Public Health and	5,595 5,291	1 481	0	0 0	2,000 4,810	0	2,000 0	0	1,594 0	0
Science Substance Abuse and Mental Health Services	5,291	481	0	0	4,810	0	0	0	0	0
Administration <sup>4</sup>	916,759	1	109,950	0	73,347	0	678,486	0	54,975	0
Department of Homeland Security Animal and Plant Health	60,811	51,549	3,443	0	4,593	0	1,226	0	0	0
Inspection Service Transportation Security	25,447	21,089	0	0	4,358	0	0	0	0	0
Administration United States Coast Guard	18,500 16,864	18,500 11,960	0 3,443	0 0	0 235	0 0	0 1,226	0 0	0 0	0 0
Department of Housing and Urban Development	29,854	18,692	7,566	0	0	0	3,596	0	0	0
Department of the Interior Bureau of Reclamation Geological Survey	55,728 5,223 50,505	52,574 3,516 49,058	591 591 0	0 0 0	1,985 616 1,369	0 0 0	198 198 0	0 0 0	352 274 78	28 28 0
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	62,445 5,300 34,145 23,000	41,704 500 34,145 7,059	0 0 0 0	0 0 0 0	11,539 0 0 11,539	0 0 0	0 0 0 0	0 0 0 0	9,202 4,800 0 4,402	0 0 0
Department of Labor Office of the Secretary	1,591 900	412 100	1,179 800	0	0	0	0	0	0	0
Pension Benefit Guaranty Corporation	691	312	379	0	0	0	0	0	0	0

TABLE C-51. Preliminary Federal obligations for development, by agency and performer: FY 2004 (Dollars in thousands)

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						Extramura	al			
Agency	Total	Intra-			United State	s and U.S. ter	ritories			
		mural 1 <sup>—</sup>	Industry	Indus- try FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Department of Transportation	241,986	48,988	100,489	0	890	500	8,516	144	82,459	0
Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	75,135 139,819	13,022 20,690	62,113 29,137	0	0 890	0 500	0 6,143	0	0 82,459	0
Administration	1,338	73	748	0	0	0	373	144	0	0
Federal Railroad Administration	3,200	500	2,700	0	0	0	0	0	0	0
Federal Transit Administration	2,640	640	0	0	0	0	2,000	0	0	0
Office of the Secretary Research and Special Programs	10,836	10,836	0	0	0	0	0	0	0	0
Administration	9,018	3,227	5,791	0	0	0	0	0	0	0
Department of the Treasury Bureau of Engraving and	895	775	120	0	0	0	0	0	0	0
Printing	560	560	0	0	0	0	0	0	0	0
United States Mint	335	215	120	0	0	0	0	0	0	0
Department of Veterans Affairs	16,778	16,778	0	0	0	0	0	0	0	0
Other agencies Agency for International										
Development	20.897	2,350	135	0	1.450	0	16,962	0	0	0
Environmental Protection Agency	148,300	70,294	14,252	Ŏ	41,273	0	18,768	Õ	3,261	452
Library of Congress National Aeronautics and Space	4,014	4,014	0	0	0	0	0	0	0	0
Administration	3,059,754	764,939	1,042,420	0	142,056	882,006	207,763	4,093	11,184	5,293

FFRDCs = Federally funded research and development centers.

NOTES: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy and Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown. For accounting purposes the funds are shown in the advanced technology total for the Department of the Army.

Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

TABLE C-52. Federal funds for R&D plant, by agency: FYs 2002-04 (Dollars in thousands)

		Obligations			Outlays	
Agency	2002	Prelimir	nary	2002	Prelimir	nary
	_	2003	2004	_	2003	2004
All agencies	4,304,743	5,252,255	4,165,482	4,388,323	5,175,346	4,147,982
Departments Department of Agriculture Agricultural Research Service Forest Service	118,799	169,760	129,260	107,041	147,760	159,860
	103,799	151,760	111,260	92,041	129,760	141,860
	15,000	18,000	18,000	15,000	18,000	18,000
Department of Commerce National Institute of Standards and Technology	29,140 29,140	53,744 53,744	69,590 69,590	118,926 118,926	42,781 42,781	45,227 45,227
Department of Defense Defense Agencies Ballistic Missile Defense Organization Washington Headquarters Services Department of the Air Force	365,080	241,369	280,729	369,411	215,562	232,683
	284,114	139,958	157,459	282,275	138,130	156,265
	282,275	138,130	156,265	282,275	138,130	156,265
	1,839	1,828	1,194	0	0	0
	23,497	23,162	56,185	5,417	3,004	2,985
Air Force, Materials Command Air Force, Space Command Department of the Army Department of the Army, Military Functions Department of the Navy	5,417	3,004	2,985	5,417	3,004	2,985
	18,080	20,158	53,200	0	0	0
	0	0	0	85	0	0
	0	0	0	85	0	0
	57,469	78,249	67,085	81,634	74,428	73,433
Department of Energy Energy Efficiency and Renewable Energy Fossil Energy National Nuclear Security Administration Defense Programs	1,028,002	998,815	959,007	1,024,314	1,107,111	999,092
	4,870	5,297	4,950	4,870	5,297	4,950
	10,220	4,200	4,200	9,252	5,561	4,200
	425,839	446,579	417,286	412,383	449,291	423,181
	397,297	416,872	388,785	397,297	416,872	388,785
Fissile Materials Disposition	1	1	1	0	0	0
Naval Reactors	28,541	29,706	28,500	15,086	32,419	34,396
Office of Science	587,073	542,739	532,571	597,809	646,962	566,761
Department of Health and Human Services	247,480	1,229,180	84,151	244,298	1,230,685	83,731
Food and Drug Administration	13,418	2,448	3,519	10,236	3,953	3,099
Health Resources and Services Administration	623	632	632	623	632	632
National Institutes of Health	233,439	1,226,100	80,000	233,439	1,226,100	80,000
Department of Homeland Security Transportation Security Administration United States Coast Guard	na	25,329	18,490	na	25,329	2,990
	na	25,000	17,500	na	25,000	2,000
	na	329	990	na	329	990
Department of the Interior	2,086	3,523	4,900	2,104	3,571	4,762
Bureau of Reclamation	0	1,500	2,400	0	1,500	2,400
Minerals Management Service	2,086	2,023	2,500	2,104	2,071	2,362
Department of Transportation	51,692	19,136	19,625	51,374	16,166	17,234
Coast Guard	323	na	na	323	na	na
Federal Aviation Administration	14,450	17,700	18,200	14,000	15,000	16,000
Federal Railroad Administration	919	1,436	1,425	1,051	1,166	1,234
Transportation Security Administration	36,000	na	na	36,000	na	na
Department of Veterans Affairs	353	354	355	353	354	355
Other agencies General Services Administration National Aeronautics and Space Administration National Science Foundation Smithsonian Institution	0	0	45	2	27	48
	2,218,280	2,259,630	2,249,930	2,197,000	2,071,000	2,300,000
	240,831	247,415	345,400	271,000	312,000	299,000
	3,000	4,000	4,000	2,500	3,000	3,000

na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
 R&D = Research and development.

NOTE: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-53. Federal obligations for R&D plant, by agency and R&D performer: FY 2002 (Dollars in thousands)

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						Extramural				
		Intra-		Ur	ited States a	nd U.S. territ	ories			
Agency	Total	mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies	4,304,743	414,805	2,524,906	109,085	241,123	583,309	29,058	388,799	1,999	11,659
Departments Department of Agriculture Agricultural Research Service Forest Service	118,799 103,799 15,000	118,799 103,799 15,000	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Commerce National Institute of Standards and Technology	29,140 29,140	29,140 29,140	0	0	0	0	0	0	0	0
Department of Defense Defense Agencies Ballistic Missile Defense	365,080 284,114	42,048 1,729	320,254 281,607	107 107	528 528	0	35 35	2,108 108	0	0
Organization Washington Headquarters	282,275	954	281,321	0	0	0	0	0	0	0
Services	1,839	775	286	107	528	0	35	108	0	0
Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Navy	23,497 5,417 18,080 57,469	1,675 320 1,355 38,644	19,822 5,097 14,725 18,825	0 0 0	0 0 0 0	0 0 0	0 0 0 0	2,000 0 2,000 0	0 0 0	0 0 0 0
Department of Energy	1,028,002	1	50,058	108,978	8,454	483,811	0	376,700	0	0
Energy Efficiency and Renewable Energy Fossil Energy National Nuclear Security	4,870 10,220	0	0 10,220	0	0	0	0	4,870 0	0	0
Administration  Defense Programs	425,839 397,297	1 0	39,091 13,941	105,623 102,232	0	281,124 281,124	0	0	0	0
Fissile Materials Disposition Naval Reactors Office of Science	1 28,541 587,073	1 0 0	0 25,150 747	0 3,391 3,355	0 0 8,454	0 0 202,687	0 0 0	0 0 371,830	0 0 0	0 0 0
Department of Health and Human Services Food and Drug Administration Health Resources and Services	247,480 13,418	125,501 13,418	0	0 0	97,502 0	0 0	22,478 0	0	1,999 0	0
Administration National Institutes of Health	623 233,439	623 111,460	0	0	0 97,502	0	0 22,478	0	0 1,999	0
Department of the Interior Minerals Management Service	2,086 2,086	7 7	2,070 2,070	0	0	0	0	0	0	9 9
Department of Transportation Coast Guard Federal Aviation Administration Federal Railroad Administration Transportation Security	51,692 323 14,450 919	36,000 0 0 0	15,369 0 14,450 919	0 0 0 0	323 323 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Administration	36,000	36,000	0	0	0	0	0	0	0	0
Department of Veterans Affairs	353	353	0	0	0	0	0	0	0	0

Agency						Extramural				
		Intra		Un	ited States a	and U.S. territ	ories			
	Total	mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Other agencies National Aeronautics and Space Administration National Science Foundation Smithsonian Institution	2,218,280 240,831 3,000	49,684 10,272 3,000	2,118,842 18,313 0	0 0 0	0 134,316 0	28,113 71,385 0	0 6,545 0	9,991 0 0	0 0 0	11,650 0 0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTE: Data for only those agencies and subdivisions that had obligations in variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-54. Preliminary Federal obligations for R\&D plant, by agency and R\&D performer: FY 2003 (Dollars in thousands) \\ \end{tabular}$ 

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						Extramural				
		- Intra-		Un	nited States a	nd U.S. terri	tories			
Agency	Total	mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	5,252,255	971,558	2,381,481	144,623	703,118	573,940	139,616	326,269	0	11,650
Department of Agriculture Agricultural Research Service Forest Service	169,760 151,760 18,000	169,760 151,760 18,000	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Commerce National Institute of Standards and Technology	53,744 53,744	53,744 53,744	0	0	0	0	0	0	0	0
Department of Defense Defense Agencies	241,369 139,958	61,061 1,968	178,515 137,107	53 53	351 351	50 50	400 400	939 29	0	0
Ballistic Missile Defense Organization Washington Headquarters	138,130	1,472	136,658	0	0	0	0	0	0	0
Services	1,828	496	449	53	351	50	400	29	0	0
Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Navy	23,162 3,004 20,158 78,249	1,308 350 958 57,785	20,944 2,654 18,290 20,464	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	910 0 910 0	0 0 0 0	0 0 0 0
Department of Energy Energy Efficiency and Renewable	998,815	2,518	44,351	144,570	7,084	484,953	0	315,339	0	0
Energy Fossil Energy National Nuclear Security	5,297 4,200	0	0 4,200	0	0	0	0	5,297 0	0	0
Administration Defense Programs	446,579 416,872	1 0	39,412 11,286	134,320 132,740	0	272,846 272,846	0	0	0	0
Fissile Materials Disposition Naval Reactors Office of Science	1 29,706 542,739	1 0 2,517	0 28,126 739	0 1,580 10,250	0 0 7,084	0 0 212,107	0 0 0	0 0 310,042	0 0 0	0 0 0
Department of Health and Human Services Food and Drug Administration Health Resources and Services	1,229,180 2,448	588,505 2,448	0	0	517,366 0	0	123,309 0	0	0	0
Administration National Institutes of Health	632 1,226,100	632 585,425	0	0 0	0 517,366	0	0 123,309	0	0	0
Department of Homeland Security Transportation Security	25,329	25,000	0	0	329	0	0	0	0	0
Administration United States Coast Guard	25,000 329	25,000 0	0	0 0	0 329	0	0	0	0	0 0
Department of the Interior Bureau of Reclamation Minerals Management Service	3,523 1,500 2,023	1,700 1,500 200	1,823 0 1,823	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Transportation Federal Aviation Administration Federal Railroad Administration	19,136 17,700 1,436	0 0 0	19,136 17,700 1,436	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Veterans Affairs	354	354	0	0	0	0	0	0	0	0

TABLE C-54. Preliminary Federal obligations for R&D plant, by agency and R&D performer: FY 2003 (Dollars in thousands)

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Agency						Extramural				
		Intra-		Un	nited States a	and U.S. territ	ories			
		mural 1 <sup>-</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Other agencies National Aeronautics and Space Administration National Science Foundation Smithsonian Institution	2,259,630 247,415 4,000	54,363 10,553 4,000	2,118,842 18,814 0	0 0 0	40,000 137,988 0	15,600 73,337 0	9,184 6,723 0	9,991 0 0	0 0 0	11,650 0 0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTE: Data for only those agencies and subdivisions that had obligations in variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-55. Preliminary Federal obligations for R&D plant, by agency and R&D performer: FY 2004 (Dollars in thousands)

Page 1 of 2

						Extramural				
		Intra-		Ur	nited States a	and U.S. territ	ories			
Agency	Total	mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
All agencies Departments	4,165,482	406,612	2,431,017	168,333	265,689	614,020	26,766	241,385	0	11,660
Department of Agriculture Agricultural Research Service Forest Service	129,260 111,260 18,000	129,260 111,260 18,000	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Commerce National Institute of Standards and Technology	69,590 69,590	69,590 69,590	0	0	0	0	0	0	0	0
Department of Defense Defense Agencies	280,729 157,459	50,509 2,096	226,768 154,772	41 41	302 302	23 23	150 150	2,936 75	0	0 0
Ballistic Missile Defense Organization Washington Headquarters	156,265	1,693	154,572	0	0	0	0	0	0	0
Services	1,194	403	200	41	302	23	150	75	0	0
Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Navy	56,185 2,985 53,200 67,085	2,005 365 1,640 46,408	51,319 2,620 48,699 20,677	0 0 0	0 0 0	0 0 0	0 0 0 0	2,861 0 2,861 0	0 0 0 0	0 0 0 0
Department of Energy Energy Efficiency and Renewable	959,007	20,365	37,227	168,292	8,649	496,016	0	228,458	0	0
Energy Fossil Energy National Nuclear Security	4,950 4,200	0	0 4,200	0	0	0	0	4,950 0	0	0
Administration Defense Programs	417,286 388,785	8,821 8,820	31,487 3,687	134,302 133,602	0	242,676 242,676	0	0	0	0
Fissile Materials Disposition Naval Reactors Office of Science	1 28,500 532,571	1 0 11,544	0 27,800 1,540	0 700 33,990	0 0 8,649	0 0 253,340	0 0 0	0 0 223,508	0 0 0	0 0 0
Department of Health and Human Services Food and Drug Administration Health Resources and Services	84,151 3,519	42,348 3,519	0	0	33,757 0	0	8,046 0	0	0	0
Administration National Institutes of Health	632 80,000	632 38,197	0	0	0 33,757	0	0 8,046	0	0	0
Department of Homeland Security Transportation Security	18,490	18,490	0	0	0	0	0	0	0	0
Administration United States Coast Guard	17,500 990	17,500 990	0	0	0	0	0	0	0	0
Department of the Interior Bureau of Reclamation Minerals Management Service	4,900 2,400 2,500	2,600 2,400 200	2,290 0 2,290	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	10 0 10
Department of Transportation Federal Aviation Administration Federal Railroad Administration	19,625 18,200 1,425	0 0 0	19,625 18,200 1,425	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Veterans Affairs	355	355	0	0	0	0	0	0	0	0

						Extramural				
		Intra-		Ur	nited States a	and U.S. territ	ories			
Agency	Total	mural <sup>1 -</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other non- profit insti- tutions	Non- profit FFRDCs	State and local govts	Foreign
Other agencies General Services Administration National Aeronautics and Space	45	0	0	0	45	0	0	0	0	0
Administration National Science Foundation Smithsonian Institution	2,249,930 345,400 4,000	54,363 14,732 4,000	2,118,842 26,265 0	0 0 0	30,300 192,636 0	15,600 102,381 0	9,184 9,386 0	9,991 0 0	0 0 0	11,650 0 0

 $<sup>^{1}\,\,</sup>$  Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTE: Data for only those agencies and subdivisions that had obligations in variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-56. Federal obligations for research performed at universities and colleges for selected agencies, by detailed field of science and engineering: FYs 2002-04 (Dollars in thousands)

Field of science and engineering	2002	Prelimina	ry
		2003	200
All fields	19,767,659	21,812,774	22,354,93
Life sciences	13,443,050	15,153,136	15,590,21
Biological (excluding environmental)	8,279,116	NA	N.
Environmental biology	215,174	NA	N
Agricultural	280,616	NA	N
Medical	3,237,735	NA	N
Life sciences, nec	1,430,409	NA	N
Psychology	456,026	522,609	543.06
Biological aspects	8,224	NA	N
Social aspects	6,320	NA	N
Psychological sciences, nec	441,482	NA	N
Physical sciences	1,665,411	1,739,749	1,795,28
Astronomy	302,535	NA	.,, N
Chemistry	544,059	NA	N
Physics	603,563	NA	N
Physical sciences, nec	215,254	NA	N
Environmental sciences	932,663	947,835	1,005,7
Atmospheric	198,869	NA	1,000,1
Geological	163,804	NA	·
Oceanography	259,645	NA	
Environmental sciences, nec	310,345	NA	
Mathematics and computer sciences	980,618	1,031,971	1,073,10
Mathematics	200,758	NA	, , , , ,
Computer sciences	755,675	NA	Ŋ
Mathematics and computer sciences, nec	24,185	NA	N
Engineering	1,396,650	1,465,269	1,349,8
Aeronautical	73,674	NA	N
Astronautical	27,629	NA	N
Chemical	80,998	NA	N
Civil	54,335	NA	N
Electrical	231,675	NA	N
Mechanical	71,013	NA	N
Metallurgy and materials	270,691	NA	N
Engineering, nec	586,635	NA	N
Social sciences	312,690	339,425	352,69
Anthropology	11,131	NA	N
Economics	58,115	NA	N
Political science	6,284	NA	N
Sociology	16,928	NA	N
Social sciences, nec	220,232	NA	N
Other sciences, nec	580,551	612,780	644.90

 $\label{eq:NA} NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year). \\ nec = Not elsewhere classified.$ 

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in FYs 2002, 2003, and 2004. Data for only those agencies that had obligations in the variables represented by this table appear in the table.

TABLE C-57. Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: FY 2002 (Dollars in thousands)

Page 1 of 2

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	19,767,659	13,443,050	456,026	1,665,411	932,663	980,618	1,396,650	312,690	580,551
Department of Agriculture Agricultural Marketing Service Agricultural Research Service	580,941 188 69,431	489,105 188 63,787	0 0 0	21,451 0 4,624	4,611 0 305	425 0 90	13,820 0 625	51,034 0 0	495 0 0
Cooperative State Research, Ed., and Extension Service	488,704	411,387	0	16,145	4,030	0	12,843	44,299	0
Economic Research Service Foreign Agricultural Service Forest Service National Agricultural	4,103 623 17,608	0 623 13,120	0 0 0	0 0 682	0 0 276	0 0 268	0 0 352	4,103 0 2,415	0 0 495
Statistics Service Rural Business-Cooperative	67	0	0	0	0	67	0	0	0
Service	217	0	0	0	0	0	0	217	0
Department of Defense Defense Agencies Ballistic Missile Defense	1,590,836 1,038,323	493,390 418,266	9,098 9,024	142,473 68,253	96,944 17,183	292,757 232,897	543,585 282,463	74 0	12,515 10,237
Organization Chemical and Biological	368	0	0	0	0	0	368	0	0
Defense  Defense Advanced Research	60,647	47,210	0	13,064	0	373	0	0	0
Projects Agency	397,692	58,737	0	4,744	0	186,183	138,392	0	9,636
Defense Threat Reduction Agency Special Operations Command TRICARE Management Activity <sup>1</sup>	1,928 2,245 250,842	355 450 250,842	0 0 0	0 0 0	0 0 0	465 0 0	507 1,795 0	0 0 0	601 0 0
Washington Headquarters Services Department of the Air Force Air Force, Materials Command	324,601 116,220 116,220	60,672 10,660 10,660	9,024 0 0	50,445 26,818 26,818	17,183 0 0	45,876 20,999 20,999	141,401 56,155 56,155	0 0 0	0 1,588 1,588
Department of the Army Department of the Navy	130,756 305,537	36,380 28,084	74 0	20,777 26,625	6,506 73,255	22,290 16,571	43,965 161,002	74 0	690 0
Department of Energy	702,000	138,484	0	386,404	97,145	14,122	65,845	0	0

TABLE C-57. Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: FY 2002 (Dollars in thousands)

Page 2 of 2

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Health and Human									
Services	13,265,497	11,812,604	439,828	254,706	163,168	25,853	135,443	157,432	276,463
Administration for Children and Families	16,552	0	0	0	0	0	0	16,552	0
Agency for Healthcare Research and Quality	104,503	80,154	32	305	0	1,668	0	9,967	12,377
Agency for Toxic Substances and Disease Registry	2,487	2,029	75	0	323	0	0	60	0
Centers for Disease Control and Prevention	36,522	36,522	0	0	0	0	0	0	0
Centers for Medicare and									
Medicaid Services	10.810	10,810	0	0	0	0	0	0	0
Food and Drug Administration Health Resources and Services	21,449	21,449	0	0	0	0	0	0	0
Administration	9,022	9,022	0	0	0	0	0	0	0
National Institutes of Health	13,061,911	11,652,618	439,721	254,401	162,845	24,185	135,443	128,612	264,086
Office of the Secretary Office of the Assistant	2,241	0	0	0	0	0	0	2,241	0
Secretary, Planning and Evaluation	2,241	0	0	0	0	0	0	2,241	0
Other agencies National Aeronautics and Space									
Administration	932.600	59.579	3,318	345.658	176.116	31,526	164.884	31	151,488
National Science Foundation	2,695,785	449,888	3,782	514,719	394,679	615,935	473,073	104,119	139,590

<sup>&</sup>lt;sup>1</sup> TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-58. Preliminary Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: FY 2003 (Dollars in thousands)

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Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	21,812,774	15,153,136	522,609	1,739,749	947,835	1,031,971	1,465,269	339,425	612,780
Department of Agriculture Agricultural Research Service	659,704 54,596	559,953 50,157	0 0	24,083 3,637	4,971 240	384 71	15,498 491	54,320 0	495 0
Cooperative State Research, Ed., and Extension Service Economic Research Service	581,967 4,800	495,988 0	0	19,764 0	4,455 0	0	14,655 0	47,105 4,800	0
Foreign Agricultural Service Forest Service	688 17,608	688 13,120	0	0 682	0 276	0 268	0 352	0 2,415	0 495
National Agricultural Statistics Service	45	0	0	0	0	45	0	0	0
Department of Defense Defense Agencies Chemical and Biological	1,643,580 1,076,820	500,555 411,779	14,068 14,006	145,440 73,113	95,070 14,314	307,411 251,351	572,421 306,051	97 0	8,518 6,206
Defense Defense Advanced Research	76,350	56,369	0	19,981	0	0	0	0	0
Projects Agency Defense Logistics Agency	459,169 500	89,744 0	0 500	7,543 0	0	203,881 0	151,795 0	0	6,206 0
Defense Threat Reduction Agency Special Operations Command TRICARE Management Activity <sup>1</sup>	694 1,808 224,184	0 450 224,184	0 0 0	0 0 0	0 0 0	535 0 0	159 1,358 0	0 0 0	0 0 0
Washington Headquarters Services Department of the Air Force Air Force, Materials Command	314,115 111,192 111,192	41,032 15,216 15,216	13,506 0 0	45,589 21,133 21,133	14,314 0 0	46,935 21,353 21,353	152,739 51,687 51,687	0 0 0	0 1,803 1,803
Department of the Army Department of the Navy	127,550 328,018	43,602 29,958	62 0	23,016 28,178	5,034 75,722	16,745 17,962	38,485 176,198	97 0	509 0
Department of Energy	695,466	123,833	0	412,092	75,454	20,937	63,150	0	0

TABLE C-58. Preliminary Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: FY 2003 (Dollars in thousands)

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Mathe-Life Psy-Physical Environmatics Engi-Social Other Total chology Agency sciences sciences mental and comneering sciences sciences, sciences puter nec sciences Department of Health and Human 15,088,790 501,272 290,302 185,628 154,392 Services 13,438,180 29,265 176,138 313,613 Administration for Children and Families 16,900 0 0 0 0 0 0 16,900 0 Agency for Healthcare Research 0 and Quality 106.244 81,489 33 310 1.696 0 10.133 12.583 Centers for Disease Control and Prevention 38,348 38,348 0 0 0 0 0 0 0 Centers for Medicare and Medicaid Services 4,549 4,549 0 0 0 0 0 0 0 Food and Drug Administration 21,954 21,954 n 0 0 0 0 n 0 Health Resources and Services 8,990 Administration 8,990 0 0 0 0 0 0 0 National Institutes of Health 14,889,305 13,282,850 501,239 289,992 185,628 27,569 154,392 146,605 301,030 Office of the Secretary 0 0 0 0 2,500 2,500 0 0 Office of the Assistant Secretary, Planning 2,500 0 0 0 0 0 2,500 0 and Evaluation 0 Other agencies National Aeronautics and Space 61,440 911.749 330.990 31 Administration 3.318 175,255 31.526 164,884 144.305 National Science Foundation 108,839 2,813,485 469,175 3.951 536,842 411,457 642,448 494,924 145,849

## nec = Not elsewhere classified.

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in FY 2003. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

TABLE C-59. Preliminary Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: FY 2004 (Dollars in thousands)

Page 1 of 2

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	22,354,937	15,590,219	543,067	1,795,284	1,005,779	1,073,107	1,349,876	352,699	644,906
Department of Agriculture Agricultural Research Service Cooperative State Research.	514,482 54,596	425,061 50,157	0	22,344 3,637	2,742 240	374 71	14,612 491	48,854 0	495 0
Ed., and Extension Service Economic Research Service	435,074 6,481	361,096 0	0	18,025 0	2,226 0	0	13,769 0	39,958 6,481	0
Foreign Agricultural Service Forest Service National Agricultural	688 17,608	688 13,120	0	0 682	0 276	0 268	0 352	0 2,415	0 495
Statistics Service	35	0	0	0	0	35	0	0	0
Department of Defense Defense Agencies Chemical and Biological	1,106,934 512,479	203,883 121,929	1,144 1,055	116,266 13,442	87,445 0	291,440 217,298	397,279 151,761	783 712	8,694 6,282
Defense  Defense Advanced Research	32,950	27,317	0	5,633	0	0	0	0	0
Projects Agency Defense Logistics Agency	462,951 500	81,882 0	0 500	7,809 0	0	216,772 0	150,206 0	0	6,282 0
Defense Threat Reduction Agency Special Operations Command	682 1,775	0 376	0	0	0	526 0	156 1,399	0	0
Washington Headquarters Services Department of the Air Force Air Force, Materials Command	13,621 109,794 109,794	12,354 14,323 14,323	555 0 0	0 21,972 21,972	0 0 0	0 21,757 21,757	0 49,885 49,885	712 0 0	0 1,857 1,857
Department of the Army Department of the Navy	171,241 313,420	35,845 31,786	89 0	48,807 32,045	5,736 81,709	33,086 19,299	47,052 148,581	71 0	555 0
Department of Energy	687,918	83,100	0	417,581	95,031	20,941	71,265	0	0

TABLE C-59. Preliminary Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: FY 2004 (Dollars in thousands)

Page 2 of 2

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
Department of Health and Human									
Services Administration for Children	16,060,513	14,305,612	534,327	309,403	197,871	30,945	164,574	185,338	332,443
and Families  Agency for Healthcare Research	17,254	0	0	0	0	0	0	17,254	0
and Quality	97,606	74,864	30	285	0	1,558	0	9,309	11,560
Centers for Disease Control and Prevention	40,265	40,265	0	0	0	0	0	0	0
Centers for Medicare and Medicaid Services	3,224	3,224	0	0	0	0	0	0	0
Food and Drug Administration Health Resources and Services	21,046	21,046	0	0	0	0	0	0	0
Administration	7,323	7,323	0	0	0	0	0	0	0
National Institutes of Health Office of the Secretary Office of the Assistant	15,871,295 2,500	14,158,890 0	534,297 0	309,118 0	197,871 0	29,387 0	164,574 0	156,275 2,500	320,883 0
Secretary, Planning and Evaluation	2,500	0	0	0	0	0	0	2,500	0
Other agencies National Aeronautics and Space									
Administration	932.600	62,726	3,318	346,454	175,255	31,526	167.884	35	145,402
National Science Foundation	3,052,490	509,837	4,278	583,236	447,435	697,881	534,262	117,689	157,872

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent over 97 percent of total Federal research obligations to universities and colleges in FY 2004. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-60. Federal obligations for research performed at universities and colleges in psychology and life sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands) Page 1 of 2

		Psyc	hology				Life scie	ences		
Agency	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, nec	Total	Bio- logical (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sciences, nec
All agencies	456,026	8,224	6,320	441,482	13,443,050	8,279,116	215,174	280,616	3,237,735	1,430,409
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service Cooperative State Research,	0 0 0	0 0 0	0 0 0	0 0 0	489,105 188 63,787	106,614 0 4,444	98,514 0 8,658	277,606 188 49,553	6,371 0 1,132	0 0 0
Ed., and Extension Service	0	0	0	0	411,387	94,168	84,738	227,242	5,239	0
Foreign Agricultural Service Forest Service	0	0	0	0	623 13,120	0 8,002	0 5,118	623 0	0	0
Department of Defense Defense Agencies Chemical and Biological	9,098 9,024	7,836 7,836	1,188 1,188	74 0	493,390 418,266	123,082 105,109	12,863 9,089	1,213 1,188	331,324 302,430	24,908 450
Defense	0	0	0	0	47,210	13,064	0	0	34,146	0
Defense Advanced Research Projects Agency Defense Threat Reduction	0	0	0	0	58,737	58,487	0	0	250	0
Agency	0	0	0	0	355	0	0	0	355	0
Special Operations Command TRICARE Management Activity <sup>1</sup> Washington Headquarters	0	0	0	0	450 250,842	0	0 1,106	0	0 249,736	450 0
Services Department of the Air Force Air Force, Materials Command Department of the Army Department of the Navy	9,024 0 0 74 0	7,836 0 0 0 0	1,188 0 0 0 0	0 0 0 74 0	60,672 10,660 10,660 36,380 28,084	33,558 2,334 2,334 11,410 4,229	7,983 0 0 71 3,703	1,188 0 0 25 0	17,943 0 0 24,313 4,581	0 8,326 8,326 561 15,571
Department of Energy	0	0	0	0	138,484	64,304	0	0	74,180	0
Department of Health and Human Services	439,828	0	107	439,721	11,812,604	7,605,008	0	0	2,815,534	1,392,062
Agency for Healthcare Research and Quality	32	0	32	0	80,154	0	0	0	79,869	285
Agency for Toxic Substances and Disease Registry Centers for Disease Control and	75	0	75	0	2,029	2,029	0	0	0	0
Prevention	0	0	0	0	36,522	0	0	0	36,522	0
Centers for Medicare and Medicaid Services	0	0	0	0	10,810	0	0	0	0	10,810
Food and Drug Administration Health Resources and Services	0	0	0	0	21,449	21,449	0	0	0	0
Administration National Institutes of Health	0 439,721	0	0	0 439,721	9,022 11,652,618	0 7,581,530	0	0	9,022 2,690,121	0 1,380,967

TABLE C-60. Federal obligations for research performed at universities and colleges in psychology and life sciences, by selected agency and detailed field: FY 2002 Page 2 of 2

(Dollars in thousands)

		Psyc	hology		Life sciences						
Agency	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, nec	Total	Bio- logical (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sciences, nec	
Other agencies National Aeronautics and Space Administration National Science Foundation	3,318 3,782	388 0	1,243 3,782	1,687 0	59,579 449,888	32,617 347,491	1,400 102,397	1,797 0	10,326 0	13,439	

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

nec = Not elsewhere classified.

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-61. Federal obligations for research performed at universities and colleges in physical and environmental sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands)

		Ph	ysical scien	ces			Enviro	onmental sci	ences	
Agency	Total	Astrono- my	Chem- istry	Physics	Physical sciences, nec	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ menta sciences nec
All agencies Departments	1,665,411	302,535	544,059	603,563	215,254	932,663	198,869	163,804	259,645	310,345
Departments Department of Agriculture	21,451	0	21,236	215	0	4.611	4,604	7	0	(
Agricultural Research Service Cooperative State Research,	4,624	0	4,409	215	0	305	298	7	0	(
Ed., and Extension Service	16.145	0	16.145	0	0	4.030	4.030	0	0	(
Forest Service	682	0	682	0	0	276	276	0	0	Ċ
Department of Defense Defense Agencies	142,473 68,253	0	61,887 31,527	68,747 33,057	11,839 3,669	96,944 17,183	14,607 5,029	5,677 4,740	74,552 7,414	2,10
Chemical and Biological Defense Defense Advanced Research	13,064	0	13,064	0	0	0	0	0	0	
Projects Agency Washington Headquarters	4,744	0	1,075	0	3,669	0	0	0	0	
Services	50,445	0	17,388	33,057	0	17,183	5,029	4,740	7,414	
Department of the Air Force Air Force, Materials Command Department of the Army Department of the Navy	26,818 26,818 20,777 26,625	0 0 0 0	4,993 4,993 12,783 12,584	20,398 20,398 6,488 8,804	1,427 1,427 1,506 5,237	0 0 6,506 73,255	0 0 4,711 4,867	0 0 937 0	0 0 2 67,136	85 1,25
Department of Energy	386,404	0	69,760	281,086	35,558	97,145	25,970	29,884	4,514	36,77
Department of Health and Human Services	254,706	0	222,294	0	32,412	163,168	0	323	0	162,845
Agency for Healthcare Research and Quality	305	0	305	0	0	0	0	0	0	(
Agency for Toxic Substances and Disease Registry National Institutes of Health	0 254,401	0	0 221,989	0	0 32,412	323 162,845	0	323 0	0	162,84
Other agencies National Aeronautics and Space Administration National Science Foundation	345,658 514,719	239,481 63,054	12,039 156,843	59,577 193,938	34,561 100,884	176,116 394,679	59,557 94,131	13,952 113,961	11,437 169,142	91,17 17,44

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services: the National Aeronautics and Space Administration; and the National Science Foundation. Research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-62. Federal obligations for research performed at universities and colleges in engineering, by selected agency and detailed field: FY 2002 (Dollars in thousands)

Agency	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, nec
All agencies	1,396,650	73,674	27,629	80,998	54,335	231,675	71,013	270,691	586,635
Departments Department of Agriculture	13,820	0	0	313	97	56	69	0	13,285
Agricultural Research Service Cooperative State Research,	625	0	0	313	97	56	69	0	90
Ed., and Extension Service	12,843	0	0	0	0	0	0	0	12,843
Forest Service	352	0	0	0	0	0	0	0	352
Department of Defense Defense Agencies Ballistic Missile Defense	543,585 282,463	27,009 7,140	5,828 0	7,121 4,446	4,738 2,415	157,545 100,784	47,353 25,985	120,655 88,398	173,336 53,295
Organization Defense Advanced Research	368	0	0	0	0	0	0	0	368
Projects Agency Defense Threat Reduction	138,392	3,837	0	0	0	38,528	0	52,130	43,897
Agency	507	0	0	0	0	272	0	0	235
Special Operations Command Washington Headquarters	1,795	0	0	0	0	0	0	0	1,795
Services	141,401	3,303	0	4,446	2,415	61,984	25,985	36,268	7,000
Department of the Air Force	56,155	14,039	4,979	1,765	628	10,691	244	7,056	16,753
Air Force, Materials Command	56,155	14,039	4,979	1,765	628	10,691	244	7,056	16,753
Department of the Army	43,965	870	0	910	1,695	11,318	7,890	7,547	13,735
Department of the Navy	161,002	4,960	849	0	0	34,752	13,234	17,654	89,553
Department of Energy	65,845	0	0	13,704	4,764	3,163	7,792	15,049	21,373
Department of Health and Human	125 442	0	0	0	0	0	0	0	105 440
Services	135,443	0	0	0	0	0	0	0	135,443
National Institutes of Health	135,443	0	0	0	0	0	0	0	135,443
Other agencies National Aeronautics and Space									
Administration	164,884	46,665	21,801	2,151	160	8,092	8,693	14,191	63,131
National Science Foundation	473,073	0	0	57,709	44,576	62,819	7,106	120,796	180,067

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-63. Federal obligations for research performed at universities and colleges in mathematics and computer sciences and in social sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands)

Page 1 of 2

	Mathe	ematics and	computer scie	ences			Socials	sciences		
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, nec
All agencies Departments	980,618	200,758	755,675	24,185	312,690	11,131	58,115	6,284	16,928	220,232
Department of Agriculture Agricultural Research Service Cooperative State Research,	425 90	425 90	0	0 0	51,034 0	0	38,985 0	0 0	12,049 0	0
Ed., and Extension Service Economic Research Service	0	0	0	0	44,299 4,103	0	32,795 4,103	0	11,504 0	0
Forest Service National Agricultural	268	268	0	0	2,415	0	1,870	0	545	0
Statistics Service Rural Business-Cooperative	67	67	0	0	0	0	0	0	0	0
Service	0	0	0	0	217	0	217	0	0	0
Department of Defense Defense Agencies Chemical and Biological	292,757 232,897	23,054 10,796	251,377 218,856	18,326 3,245	74 0	11 0	0	0	2 0	61 0
Defense Defense Advanced Research	373	373	0	0	0	0	0	0	0	0
Projects Agency Defense Threat Reduction	186,183	1,435	181,968	2,780	0	0	0	0	0	0
Agency	465	0	0	465	0	0	0	0	0	0
Washington Headquarters Services Department of the Air Force Air Force, Materials Command Department of the Army Department of the Navy	45,876 20,999 20,999 22,290 16,571	8,988 2,695 2,695 4,495 5,068	36,888 7,048 7,048 14,148 11,325	0 11,256 11,256 3,647 178	0 0 0 74 0	0 0 0 11 0	0 0 0 0	0 0 0 0	0 0 0 2 0	0 0 0 61 0
Department of Energy	14,122	9,249	4,860	13	0	0	0	0	0	0
Department of Health and Human Services Administration for Children	25,853	24,454	500	899	157,432	0	2,853	0	545	154,034
and Families Agency for Healthcare Research	0	0	0	0	16,552	0	0	0	0	16,552
and Quality Agency for Toxic Substances	1,668	269	500	899	9,967	0	2,853	0	485	6,629
and Disease Registry National Institutes of Health	0 24,185	0 24,185	0 0	0	60 128,612	0	0	0	60 0	0 128,612
Office of the Secretary Office of the Assistant Secretary, Planning	0	0	0	0	2,241	0	0	0	0	2,241
and Evaluation	0	0	0	0	2,241	0	0	0	0	2,241

TABLE C-63. Federal obligations for research performed at universities and colleges in mathematics and computer sciences and in social sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands)

Page 2 of 2

	Mathe	matics and	computer scie	ences	Social sciences					
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, nec
Other agencies National Aeronautics and Space Administration National Science Foundation	31,526 615,935	1,278 142,298	25,301 473,637	4,947 0	31 104,119	0 11,120	0 16,277	0 6,284	0 4,332	31 66,106

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-64. Federal obligations for basic research performed at universities and colleges for selected agencies, by detailed field of science and engineering: FYs 2002-04 (Dollars in thousands)

Field of science and engineering	2002	Prelimina	ry
ŭ ŭ		2003	200
All fields	12,615,462	13,504,063	13,656,19
Life sciences	7,984,815	8,686,773	8,727,06
Biological (excluding environmental)	4,955,182	NA	0,727,00 N
Environmental biology	151,769	NA	N
Agricultural	130,606	NA	Ň
Medical	1,914,872	NA	N
Life sciences, nec	832,386	NA	N
Psychology	268,020	298,091	301,32
Biological aspects	7,036	NA	N
Social aspects	4,659	NA	Ņ
Psychological sciences, nec	256,325	NA	N
Physical sciences	1,304,820	1,348,013	1,404,83
Astronomy	155,271	NA	Λ
Chemistry	404,971	NA	N
Physics	591,618	NA	N
Physical sciences, nec	152,960	NA	N
Environmental sciences	779,809	788,004	849,0
Atmospheric	182,514	NA	N
Geological	157,065	NA	·
Oceanography	245,876	NA	
Environmental sciences, nec	194,354	NA	
Mathematics and computer sciences	738,218	777.505	811.6
Mathematics	184,223	NA	, ,
Computer sciences	538,098	NA	Ŋ
Mathematics and computer sciences, nec	15,897	NA	Ŋ
Engineering	924,158	961,643	887,8
Aeronautical	46,317	NA	N
Astronautical	9,282	NA	N
Chemical	54,602	NA	N
Civil	37,795	NA	N
Electrical	159,821	NA	N
Mechanical	61,258	NA	N
Metallurgy and materials	226,603	NA	N
Engineering, nec	328,480	NA	N
Social sciences	190,482	203,450	213,43
Anthropology	10,697	NA	N
Economics	28,144	NA	N
Political science	5,646	NA	Ŋ
Sociology	9,266	NA	N
Social sciences, nec	136,729	NA	V
Other sciences, nec	425,140	440.584	460.9

 $\begin{tabular}{ll} NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year). \\ nec = Not elsewhere classified. \\ \end{tabular}$ 

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Basic research obligations of the six agencies included in this table represent over 99 percent of total Federal basic research obligations to universities and colleges in FYs 2002, 2003, and 2004. Data for only those agencies that had obligations in the variables represented by this table appear in the table.

TABLE C-65. Federal obligations for basic research performed at universities and colleges, by selected agency and field of science and engineering: FY 2002 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies	12,615,462	7,984,815	268,020	1,304,820	779,809	738,218	924,158	190,482	425,140
Departments Department of Agriculture	260.748	222,117	0	10,214	2,043	144	6,154	19,985	91
Agricultural Research Service	260,748 41.964	38,553	0	2,795	2,043 184	144 54	378	19,985	91
Cooperative State Research,	41,704	30,333	U	2,175	104	34	370	U	U
Ed., and Extension Service	215,030	181,010	0	7,104	1,773	0	5,651	19,492	0
Foreign Agricultural Service	243	243	0	0	0	0	0	0	0
Forest Service	3,511	2,311	0	315	86	90	125	493	91
Department of Defense	965,887	369,480	6,722	108,854	79,391	96,693	302,121	5	2,621
Defense Agencies	634,558	330,917	6,648	48,827	14,807	49,250	183,108	0	1,001
Chemical and Biological Defense	11,392	10,025	0	1,367	0	0	0	0	0
Defense Advanced Research	11,572	10,023	U	1,507	U	0	O	U	O
Projects Agency	91,693	30,832	0	0	0	10,507	49,353	0	1,001
TRICÁRE Management Activity <sup>1</sup> Washington Headquarters	249,736	249,736	0	0	0	0	0	0	0
Services	281,737	40,324	6,648	47,460	14,807	38,743	133,755	0	0
Department of the Air Force	100,177	10,660	0	24,700	0	20,111	43,118	0	1,588
Air Force, Materials Command	100,177	10,660	0	24,700	0	20,111	43,118	0	1,588
Department of the Army	48,601	4,981	74	9,432	1,746	13,396	18,935	5	32
Department of the Navy	182,551	22,922	0	25,895	62,838	13,936	56,960	0	0
Department of Energy	585,725	137,327	0	341,510	69,997	14,109	22,782	0	0
Department of Health and Human									
Services	7,589,918	6,769,017	255,434	147,782	94,597	14,049	78,679	76,952	153,408
National Institutes of Health	7,587,677	6,769,017	255,434	147,782	94,597	14,049	78,679	74,711	153,408
Office of the Secretary	2,241	0	0	0	0	0	0	2,241	0
Office of the Assistant									
Secretary, Planning	0.044				0	•	•	0.044	
and Evaluation	2,241	0	0	0	0	0	0	2,241	0
Other agencies									
National Aeronautics and Space								_	
Administration	634,294	44,136	2,371	191,945	140,489	10,863	103,397	31	141,062
National Science Foundation	2,578,890	442,738	3,493	504,515	393,292	602,360	411,025	93,509	127,958

<sup>1</sup> TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Basic research obligations of the six agencies included in this table represent over 99 percent of total Federal basic research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-66. Preliminary Federal obligations for basic research performed at universities and colleges, by selected agency and field of science and engineering: FY 2003 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies	13,504,063	8,686,773	298,091	1,348,013	788,004	777,505	961,643	203,450	440,584
Departments Department of Agriculture	292,848	251,135	0	11,209	2,191	133	6,870	21,219	91
Agricultural Research Service Cooperative State Research,	32,998	30,315	0	2,198	145	43	297	0	0
Ed., and Extension Service	256,065	218,235	0	8,696	1,960	0	6,448	20,726	0
Foreign Agricultural Service	274	274	0	0	0	0	0	0	0
Forest Service	3,511	2,311	0	315	86	90	125	493	91
Department of Defense	964,706	354,927	10,971	105,215	77,355	102,204	309,628	6	4,400
Defense Agencies	635,048	312,074	10,909	45,321	11,717	54,643	197,787	0	2,597
Chemical and Biological Defense	13,308	10.979	0	2,329	0	0	0	0	0
Defense Advanced Research	10,000	10,777	· ·	2,027	· ·	Ü	Ü	Ū	· ·
Projects Agency	121,198	49,911	0	0	0	15,606	53,084	0	2,597
TRICARE Management Activity <sup>1</sup> Washington Headquarters	224,184	224,184	0	0	0	0	0	0	0
Services	276,358	27,000	10,909	42,992	11,717	39,037	144,703	0	0
Department of the Air Force	91.848	13.969	0	19.259	0	20.615	36.202	0	1.803
Air Force, Materials Command	91,848	13,969	0	19,259	0	20,615	36,202	0	1,803
Department of the Army	48,032	4,727	62	13,277	1,625	11,946	16,389	6	0
Department of the Navy	189,778	24,157	0	27,358	64,013	15,000	59,250	0	0
Department of Energy	578,327	123,833	0	352,098	54,754	20,937	26,705	0	0
Department of Health and Human									
Services	8,352,808	7,449,366	281,108	162,635	104,105	15,461	86,587	84,720	168,826
National Institutes of Health	8,350,308	7,449,366	281,108	162,635	104,105	15,461	86,587	82,220	168,826
Office of the Secretary	2,500	0	0	0	0	0	0	2,500	0
Office of the Assistant									
Secretary, Planning and Evaluation	2,500	0	0	0	0	0	0	2,500	0
Other agencies National Aeronautics and Space Administration	627,111	45,997	2,371	190,945	139,628	10,863	103,397	31	133,879
National Science Foundation	2,688,263	461,515	3,641	525,911	409,971	627,907	428,456	97,474	133,388

<sup>1</sup> TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent over 99 percent of total Federal basic research obligations to universities and colleges in FY 2003. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-67. Preliminary Federal obligations for basic research performed at universities and colleges, by selected agency and field of science and engineering: FY 2004 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies	13,656,193	8,727,062	301,328	1,404,831	849,007	811,679	887,870	213,439	460,977
Department of Agriculture	228,215	191.783	0	10.444	1,210	133	6.480	18.074	91
Department of Agriculture Agricultural Research Service Cooperative State Research,	32,998	30,315	0	2,198	1,210	43	297	0	0
Ed., and Extension Service	191,432	158,883	0	7.931	979	0	6.058	17.581	0
Foreign Agricultural Service	274	274	0	0	0	0	0	0	0
Forest Service	3,511	2,311	0	315	86	90	125	493	91
Department of Defense Defense Agencies	546,628 114,049	103,857 50,679	644 555	91,017 515	79,088 0	80,602 13,040	186,733 46,435	717 712	3,970 2,113
Chemical and Biological Defense Defense Advanced Research	7,361	6,846	0	515	0	0	0	0	0
Projects Agency Washington Headguarters	102,231	40,643	0	0	0	13,040	46,435	0	2,113
Services	4,457	3,190	555	0	0	0	0	712	0
Department of the Air Force Air Force, Materials Command Department of the Army Department of the Navy	94,186 94,186 120,014 218,379	14,323 14,323 11,057 27,798	0 0 89 0	19,747 19,747 39,274 31,481	0 0 5,428 73,660	21,138 21,138 29,162 17,262	37,121 37,121 34,999 68,178	0 0 5 0	1,857 1,857 0 0
Department of Energy	576,897	83,100	0	367,115	74,162	20,941	31,579	0	0
Department of Health and Human Services National Institutes of Health Office of the Secretary Office of the Assistant	8,746,244 8,743,744 2,500	7,800,353 7,800,353 0	294,353 294,353 0	170,298 170,298 0	109,010 109,010 0	16,190 16,190 0	90,666 90,666 0	88,594 86,094 2,500	176,780 176,780 0
Secretary, Planning and Evaluation	2,500	0	0	0	0	0	0	2,500	0
Other agencies National Aeronautics and Space Administration National Science Foundation	634,294 2,923,915	45,997 501.972	2,371 3,960	193,945 572,012	139,628 445,909	10,863 682,950	106,397 466.015	35 106.019	135,058 145,078

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent over 99 percent of total Federal basic research obligations to universities and colleges in FY 2004. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-68. Federal obligations for basic research performed at universities and colleges in psychology and life sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands)

		Psych	ology				Life sci	ences		
Agency	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, nec	Total	Bio- logical (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sciences, nec
All agencies	268,020	7,036	4,659	256,325	7,984,815	4,955,182	151,769	130,606	1,914,872	832,386
Departments					000 447	45 500		400 470		
Department of Agriculture Agricultural Research Service Cooperative State Research,	0	0	0	0	222,117 38,553	45,539 2,686	43,410 5,233	130,179 29,950	2,989 684	0
Ed., and Extension Service	0	0	0	0	181,010	41.434	37,285	99,986	2,305	0
Foreign Agricultural Service	0	0	0	0	243	41,434	0	243	2,303	0
Forest Service	Ő	Ö	Ö	0	2,311	1,419	892	0	Ő	Ő
Department of Defense	6,722	6,648	0	74	369,480	72,322	11,691	9	265,324	20,134
Defense Agencies Chemical and Biological	6,648	6,648	0	0	330,917	63,989	7,983	0	258,945	0
Defense Defense Advanced Research	0	0	0	0	10,025	1,367	0	0	8,658	0
Projects Agency	0	0	0	0	30.832	30,832	0	0	0	0
TRICARE Management Activity <sup>1</sup> Washington Headquarters	0	0	0	0	249,736	0	0	0	249,736	0
Services	6,648	6,648	0	0	40,324	31,790	7,983	0	551	0
Department of the Air Force	0	0	0	0	10,660	2,334	0	0	0	8,326
Air Force, Materials Command	0	0	0	0	10,660	2,334	0	0	0	8,326
Department of the Army Department of the Navy	74 0	0	0 0	74 0	4,981 22,922	2,308 3,691	5 3,703	9	2,659 3,720	0 11,808
Department of Energy	0	0	0	0	137,327	63,147	0	0	74,180	0
Department of Health and Human										
Services	255,434	0	0	255,434	6,769,017	4,404,118	0	0	1,562,694	802,205
National Institutes of Health	255,434	0	0	255,434	6,769,017	4,404,118	0	0	1,562,694	802,205
Other agencies										
National Aeronautics and Space Administration	2,371	388	1 144	817	44,136	23,224	762	418	9,685	10.047
National Science Foundation	2,371 3,493	388	1,166 3,493	817	44,136	23,224 346,832	95,906	418	9,685	10,047

 $<sup>^{1}</sup>$  TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Basic research obligations of the six agencies included in this table represent over 99 percent of total Federal basic research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-69. Federal obligations for basic research performed at universities and colleges in physical and environmental sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands)

		Ph	ysical scienc	ces		Environmental sciences					
Agency	Total	Astrono- my	Chem- istry	Physics	Physical sciences, nec	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, nec	
All agencies	1,304,820	155,271	404,971	591,618	152,960	779,809	182,514	157,065	245,876	194,354	
Departments Department of Agriculture Agricultural Research Service Cooperative State Research,	10,214 2,795	0	10,084 2,665	130 130	0	2,043 184	2,039 180	4 4	0	0	
Ed., and Extension Service Forest Service	7,104 315	0 0	7,104 315	0 0	0 0	1,773 86	1,773 86	0 0	0 0	0	
Department of Defense Defense Agencies Chamical and Biological	108,854 48,827	0	38,476 17,488	63,252 31,339	7,126 0	79,391 14,807	8,737 3,841	5,566 4,740	65,029 6,226	59 0	
Chemical and Biological Defense Washington Headquarters	1,367	0	1,367	0	0	0	0	0	0	0	
Services Department of the Air Force	47,460 24,700	0 0	16,121 4,776	31,339 18,497	0 1,427	14,807 0	3,841 0	4,740 0	6,226 0	0	
Air Force, Materials Command Department of the Army Department of the Navy	24,700 9,432 25,895	0 0 0	4,776 3,628 12,584	18,497 4,612 8,804	1,427 1,192 4,507	0 1,746 62,838	0 861 4,035	0 826 0	0 0 58,803	0 59 0	
Department of Energy	341,510	0	60,424	281,086	0	69,997	25,970	24,344	4,514	15,169	
Department of Health and Human Services National Institutes of Health	147,782 147,782	0	128,954 128,954	0	18,828 18,828	94,597 94,597	0	0	0	94,597 94,597	
Other agencies National Aeronautics and Space Administration National Science Foundation	191,945 504,515	93,638 61,633	11,538 155,495	56,312 190,838	30,457 96,549	140,489 393,292	51,766 94,002	13,404 113,747	7,676 168,657	67,643 16,886	

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-70. Federal obligations for basic research performed at universities and colleges in engineering, by selected agency and detailed field: FY 2002 (Dollars in thousands)

Agency	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, nec
All agencies Departments	924,158	46,317	9,282	54,602	37,795	159,821	61,258	226,603	328,480
Departments Department of Agriculture Agricultural Research Service Cooperative State Research,	6,154 378	0 0	0	189 189	59 59	34 34	42 42	0	5,830 54
Ed., and Extension Service Forest Service	5,651 125	0 0	0	0	0	0	0	0	5,651 125
Department of Defense Defense Agencies Defense Advanced Research	302,121 183,108	11,777 3,303	4,979 0	4,485 2,670	887 639	102,599 67,901	39,569 24,188	81,775 58,155	56,050 26,252
Projects Agency Washington Headguarters	49,353	0	0	0	0	7,714	0	21,887	19,752
Services Department of the Air Force	133,755 43,118	3,303 6,312	0 4,979	2,670 1,735	639 0	60,187 7,606	24,188 0	36,268 6,136	6,500 16,350
Air Force, Materials Command Department of the Army Department of the Navy	43,118 18,935 56,960	6,312 671 1,491	4,979 0 0	1,735 80 0	0 248 0	7,606 7,517 19,575	0 5,448 9,933	6,136 4,929 12,555	16,350 42 13,406
Department of Energy	22,782	0	0	0	0	0	7,764	15,018	0
Department of Health and Human Services National Institutes of Health	78,679 78,679	0	0	0	0	0	0	0	78,679 78,679
Other agencies National Aeronautics and Space Administration National Science Foundation	103,397 411,025	34,540 0	4,303 0	1,976 47,952	160 36,689	6,249 50,939	7,375 6,508	9,960 119,850	38,834 149,087

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-71. Federal obligations for basic research performed at universities and colleges in mathematics and computer sciences and in social sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands)

	Mathe	ematics and	computer scie	ences			Social s	sciences		
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Socia sciences nec
All agencies Departments	738,218	184,223	538,098	15,897	190,482	10,697	28,144	5,646	9,266	136,729
Department of Agriculture Agricultural Research Service Cooperative State Research,	144 54	144 54	0	0	19,985 0	0	14,476 0	0	5,509 0	
Ed., and Extension Service Forest Service	0 90	0 90	0 0	0 0	19,492 493	0	14,430 46	0	5,062 447	
Department of Defense Defense Agencies Defense Advanced Research	96,693 49,250	17,535 5,421	64,146 43,829	15,012 0	5 0	0	0	0	0	
Projects Agency Washington Headquarters	10,507	0	10,507	0	0	0	0	0	0	
Services Department of the Air Force	38,743 20,111	5,421 2,659	33,322 6,252	0 11,200	0 0	0	0	0 0	0	
Air Force, Materials Command Department of the Army Department of the Navy	20,111 13,396 13,936	2,659 4,387 5,068	6,252 5,375 8,690	11,200 3,634 178	0 5 0	0 0 0	0 0 0	0 0 0	0 0 0	
Department of Energy	14,109	9,249	4,860	0	0	0	0	0	0	
Department of Health and Human Services National Institutes of Health Office of the Secretary Office of the Assistant	14,049 14,049 0	14,049 14,049 0	0 0 0	0 0 0	76,952 74,711 2,241	0 0 0	0 0 0	0 0 0	0 0 0	76,95 74,71 2,24
Secretary, Planning and Evaluation	0	0	0	0	2,241	0	0	0	0	2,24
Other agencies National Aeronautics and Space Administration	10,863	1,134	8,844	885	31	0	0	0	0	3
National Science Foundation	602,360	142,112	460,248	0	93,509	10,697	13,668	5,646	3,757	59,7

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services: the National Aeronautics and Space Administration; and the National Science Foundation. Basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in FY 2002. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-72. Federal obligations for applied research performed at universities and colleges for selected agencies, by detailed field of science and engineering: FYs 2002-04 (Dollars in thousands)

Field of science and engineering	2002	Preliminar	у
		2003	2004
All fields	7,152,197	8,308,711	8,698,74
Life sciences	5,458,235	6,466,363	6,863,15
Biological (excluding environmental)	3,323,934	0,400,505 NA	0,003,13
Environmental biology	63,405	NA	N/
Agricultural	150,010	NA	N.
Medical	1,322,863	NA	N.
Life sciences, nec	598,023	NA	N.
Psychology	188,006	224,518	241.73
	1,188	224,516 NA	241,73 N
Biological aspects		NA NA	N N
Social aspects	1,661		
Psychological sciences, nec	185,157	NA	N
Physical sciences	360,591	391,736	390,45
Astronomy	147,264	NA	N
Chemistry	139,088	NA	N
Physics	11,945	NA	N
Physical sciences, nec	62,294	NA	N
Environmental sciences	152,854	159,831	156,77
Atmospheric	16,355	NA	
Geological	6.739	NA	Ň
Oceanography	13,769	NA	Ň
Environmental sciences, nec	115,991	NA	N
Mathematics and computer sciences	242.400	254.466	261.42
Mathematics	16,535	NA	, N
Computer sciences	217,577	NA	Ň
Mathematics and computer sciences, nec	8,288	NA	N
Engineering	472,492	503.626	462.00
Aeronautical	27.357	NA	.02,00 N
Astronautical	18,347	NA	Ň
Chemical	26,396	NA	. N
Civil	16,540	NA	N
Electrical	71.854	NA	N
Mechanical	9,755	NA	N
Metallurgy and materials	44,088	NA	N
Engineering, nec	258,155	NA	N
Social sciences	122,208	135,975	139,26
Anthropology	434	NA	107,20 N
Economics	29.971	NA	N.
Political science	638	NA	N
Sociology	7.662	NA	N.
Social sciences, nec	83,503	NA	N
Other sciences, nec	155,411	172,196	183,92

 $\begin{tabular}{ll} NA &=& Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year). \\ nec &=& Not elsewhere classified. \\ \end{tabular}$ 

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services: the National Aeronautics and Space Administration; and the National Science Foundation. Applied research obligations of the six agencies included in this table represent over 94 percent of total Federal applied research obligations to universities and colleges in FYs 2002, 2003, and 2004. Data for only those agencies that had obligations in the variables represented by this table appear in the table.

TABLE C-73. Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: FY 2002 (Dollars in thousands)

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Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies Departments	7,152,197	5,458,235	188,006	360,591	152,854	242,400	472,492	122,208	155,411
Department of Agriculture	320.193	266,988	0	11.237	2.568	281	7,666	31.049	404
Agricultural Marketing Service	188	188	Õ	0	0	0	0	0	0
Agricultural Research Service Cooperative State Research,	27,467	25,234	0	1,829	121	36	247	0	0
Ed., and Extension Service	273,674	230,377	0	9,041	2,257	0	7,192	24,807	0
Economic Research Service Foreign Agricultural Service Forest Service	4,103 380 14,097	0 380 10,809	0 0 0	0 0 367	0 0 190	0 0 178	0 0 227	4,103 0 1,922	0 0 404
National Agricultural Statistics Service	67	0	0	0	0	67	0	0	0
Rural Business-Cooperative Service	217	0	0	0	0	0	0	217	0
Department of Defense Defense Agencies Ballistic Missile Defense	624,949 403,765	123,910 87,349	2,376 2,376	33,619 19,426	17,553 2,376	196,064 183,647	241,464 99,355	69 0	9,894 9,236
Organization Chemical and Biological	368	0	0	0	0	0	368	0	0
Defense  Defense Advanced Research	49,255	37,185	0	11,697	0	373	0	0	0
Projects Agency	305,999	27,905	0	4,744	0	175,676	89,039	0	8,635
Defense Threat Reduction Agency Special Operations Command TRICARE Management Activity <sup>1</sup> Washington Headquarters	1,928 2,245 1,106	355 450 1,106	0 0 0	0 0 0	0 0 0	465 0 0	507 1,795 0	0 0 0	601 0 0
Services Department of the Air Force Air Force, Materials Command	42,864 16,043 16,043	20,348 0 0	2,376 0 0	2,985 2,118 2,118	2,376 0 0	7,133 888 888	7,646 13,037 13,037	0 0 0	0 0 0
Department of the Army Department of the Navy	82,155 122,986	31,399 5,162	0	11,345 730	4,760 10,417	8,894 2,635	25,030 104,042	69 0	658 0
Department of Energy	116,275	1,157	0	44,894	27,148	13	43,063	0	0

TABLE C-73. Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: FY 2002 (Dollars in thousands)

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Mathe-Psy-Life Physical Environmatics Engi-Social Other chology Agency Total sciences sciences mental and comneering sciences sciences, sciences puter nec sciences Department of Health and Human Services 5,675,579 184,394 106,924 68,571 11,804 80,480 123,055 5,043,587 56,764 Administration for Children and Families 16,552 0 0 0 0 0 0 16,552 0 Agency for Healthcare Research and Quality 0 104.503 80.154 32 305 0 1.668 9.967 12.377 Agency for Toxic Substances and Disease Registry 2,487 2,029 75 0 323 n 0 60 0 Centers for Disease Control and Prevention 36,522 36,522 0 0 0 0 0 0 0 Centers for Medicare and Medicaid Services 10,810 10,810 0 0 0 n 0 0 0 Food and Drug Administration 21,449 21,449 0 0 0 0 0 0 0 Health Resources and Services Administration 9,022 9,022 0 n National Institutes of Health 5,474,234 4,883,601 184,287 106,619 68,248 10,136 53,901 110,678 56,764 Other agencies National Aeronautics and Space Administration 298,306 15,443 947 153,713 35,627 20,663 61,487 0 10,426 National Science Foundation 116,895 7,150 289 10,204 1,387 13,575 62,048 10,610 11,632

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Applied research obligations of the six agencies included in this table represent approximately 94 percent of total Federal applied research obligations to universities and colleges in FY 2002.

Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>1</sup> TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

nec = Not elsewhere classified.

TABLE C-74. Preliminary Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: FY 2003 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies	8,308,711	6,466,363	224,518	391,736	159,831	254,466	503,626	135,975	172,196
Departments Department of Agriculture	366,856	308,818	0	12,874	2,780	251	8,628	33,101	404
Agricultural Research Service Cooperative State Research,	21,598	19,842	0	1,439	95	28	194	0	0
Ed., and Extension Service	325,902	277,753	0	11,068	2,495	0	8,207	26,379	0
Economic Research Service	4,800	0	0	0	0	0	0	4,800	0
Foreign Agricultural Service	414	414	0	0	0	0	0	0	0
Forest Service	14,097	10,809	0	367	190	178	227	1,922	404
National Agricultural	45	0	0	0	0	45	0	0	0
Statistics Service	45	0	0	0	0	45	0	0	0
Department of Defense	678,874	145,628	3,097	40,225	17,715	205,207	262,793	91	4,118
Defense Agencies	441,772	99,705	3,097	27,792	2,597	196,708	108,264	0	3,609
Chemical and Biological Defense	63,042	45,390	0	17,652	0	0	0	0	0
Defense Advanced Research	03,042	45,570	0	17,002	Ü	0	O	U	O
Projects Agency	337,971	39,833	0	7,543	0	188,275	98,711	0	3,609
Defense Logistics Agency	500	0	500	0	0	0	0	0	0
Defense Threat Reduction									
Agency	694	0	0	0	0	535	159	0	0
Special Operations Command Washington Headquarters	1,808	450	0	0	0	0	1,358	0	0
Services	37,757	14,032	2,597	2,597	2,597	7,898	8,036	0	0
Department of the Air Force	19,344	1,247	0	1,874	0	738	15,485	0	0
Àir Force, Materials Command	19,344	1,247	0	1,874	0	738	15,485	0	0
Department of the Army	79,518	38,875	0	9,739	3,409	4,799	22,096	91	509
Department of the Navy	138,240	5,801	0	820	11,709	2,962	116,948	0	0
Department of Energy	117,139	0	0	59,994	20,700	0	36,445	0	0
Department of Health and Human									
Services	6,735,982	5,988,814	220,164	127,667	81,523	13,804	67,805	91,418	144,787
Administration for Children and Families	16,900	0	0	0	0	0	0	16,900	0
Agency for Healthcare Research	•								
and Quality Centers for Disease Control and	106,244	81,489	33	310	0	1,696	0	10,133	12,583
Prevention	38,348	38,348	0	0	0	0	0	0	0
Centers for Medicare and									
Medicaid Services	4,549	4,549	0	0	0	0	0	0	0
Food and Drug Administration	21,954	21,954	0	0	0	0	0	0	0
Health Resources and Services									
Administration	8,990	8,990	0	0 127,357	01 522	12.100	(7.005	(4.205	122.204
National Institutes of Health	6,538,997	5,833,484	220,131	127,337	81,523	12,108	67,805	64,385	132,204
Other agencies									
National Aeronautics and Space	204 420	1E 442	0.47	140 045	25 (27	20.442	41 407	0	10.42/
Administration National Science Foundation	284,638 125,222	15,443 7,660	947 310	140,045 10,931	35,627 1,486	20,663 14,541	61,487 66,468	0 11,365	10,426 12,461
	.20,222	7,000	0.10	. 5,701	1,100	. 1,0 11	33,100	. 1,000	.2,101

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 94 percent of total Federal applied research obligations to universities and colleges in FY 2003. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-75. Preliminary Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: FY 2004 (Dollars in thousands)

Agency	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, nec
All agencies	8,698,744	6,863,157	241,739	390,453	156,772	261,428	462,006	139,260	183,929
Departments Department of Agriculture Agricultural Research Service Cooperative State Research,	286,267 21,598	233,278 19,842	0	11,900 1,439	1,532 95	241 28	8,132 194	30,780 0	404 0
Ed., and Extension Service Economic Research Service	243,642 6,481	202,213 0	0	10,094 0	1,247 0	0	7,711 0	22,377 6,481	0 0
Foreign Agricultural Service Forest Service National Agricultural	414 14,097	414 10,809	0	0 367	0 190	0 178	0 227	0 1,922	0 404
Statistics Service	35	0	0	0	0	35	0	0	0
Department of Defense Defense Agencies Chemical and Biological	560,306 398,430	100,026 71,250	500 500	25,249 12,927	8,357 0	210,838 204,258	210,546 105,326	66 0	4,724 4,169
Defense  Defense Advanced Research	25,589	20,471	0	5,118	0	0	0	0	0
Projects Agency Defense Logistics Agency	360,720 500	41,239 0	0 500	7,809 0	0	203,732 0	103,771 0	0	4,169 0
Defense Threat Reduction Agency Special Operations Command Washington Headquarters	682 1,775	0 376	0	0	0	526 0	156 1,399	0	0
Services  Department of the Air Force Air Force, Materials Command	9,164 15,608 15,608	9,164 0 0	0 0 0	0 2,225 2,225	0 0 0	0 619 619	0 12,764 12,764	0 0 0	0 0 0
Department of the Army Department of the Navy	51,227 95,041	24,788 3,988	0	9,533 564	308 8,049	3,924 2,037	12,053 80,403	66 0	555 0
Department of Energy	111,021	0	0	50,466	20,869	0	39,686	0	0
Department of Health and Human Services Administration for Children	7,314,269	6,505,259	239,974	139,105	88,861	14,755	73,908	96,744	155,663
and Families Agency for Healthcare Research	17,254	0	0	0	0	0	0	17,254	0
and Quality  Centers for Disease Control and	97,606	74,864	30	285	0	1,558	0	9,309	11,560
Prevention Centers for Medicare and	40,265	40,265	0	0	0	0	0	0	0
Medicaid Services	3,224	3,224	0	0	0	0	0	0	0
Food and Drug Administration Health Resources and Services	21,046	21,046	0	0	0	0	0	0	0
Administration National Institutes of Health	7,323 7,127,551	7,323 6,358,537	0 239,944	0 138,820	0 88,861	0 13,197	0 73,908	0 70,181	0 144,103
Other agencies National Aeronautics and Space Administration National Science Foundation	298,306 128,575	16,729 7,865	947 318	152,509 11,224	35,627 1,526	20,663 14,931	61,487 68,247	0 11,670	10,344 12,794

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 94 percent of total Federal applied research obligations to universities and colleges in FY 2004. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-76. Federal obligations for applied research performed at universities and colleges in psychology and life sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands)

		Psych	ology				Life scie	ences		
Agency	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, nec	Total	Bio- logical (excl environ)	Environ- mental biology	Agri- cultural	Medical	Life sciences, nec
All agencies	188,006	1,188	1,661	185,157	5,458,235	3,323,934	63,405	150,010	1,322,863	598,023
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service Cooperative State Research,	0 0 0	0 0 0	0 0 0	0 0 0	266,988 188 25,234	61,075 0 1,758	55,104 0 3,425	147,427 188 19,603	3,382 0 448	0 0 0
Ed., and Extension Service	0	0	0	0	230,377	52,734	47,453	127,256	2,934	0
Foreign Agricultural Service Forest Service	0	0 0	0	0 0	380 10,809	0 6,583	0 4,226	380 0	0	0
Department of Defense Defense Agencies Chaptical and Biological	2,376 2,376	1,188 1,188	1,188 1,188	0	123,910 87,349	50,760 41,120	1,172 1,106	1,204 1,188	66,000 43,485	4,774 450
Chemical and Biological Defense	0	0	0	0	37,185	11,697	0	0	25,488	0
Defense Advanced Research Projects Agency Defense Threat Reduction	0	0	0	0	27,905	27,655	0	0	250	0
Agency	0	0	0	0	355	0	0	0	355	0
Special Operations Command TRICARE Management Activity <sup>1</sup> Washington Headquarters	0	0	0	0	450 1,106	0	0 1,106	0 0	0 0	450 0
Services Department of the Army Department of the Navy	2,376 0 0	1,188 0 0	1,188 0 0	0 0 0	20,348 31,399 5,162	1,768 9,102 538	0 66 0	1,188 16 0	17,392 21,654 861	0 561 3,763
Department of Energy	0	0	0	0	1,157	1,157	0	0	0	0
Department of Health and Human Services	184,394	0	107	184,287	5,043,587	3,200,890	0	0	1,252,840	589,857
Agency for Healthcare Research and Quality	32	0	32	0	80,154	0	0	0	79,869	285
Agency for Toxic Substances and Disease Registry Centers for Disease Control and	75	0	75	0	2,029	2,029	0	0	0	0
Prevention Centers for Medicare and	0	0	0	0	36,522	0	0	0	36,522	0
Medicaid Services	0	0	0	0	10,810	0	0	0	0	10,810
Food and Drug Administration Health Resources and Services	0	0	0	0	21,449	21,449	0	0	0	0
Administration National Institutes of Health	0 184,287	0	0	0 184,287	9,022 4,883,601	0 3,177,412	0	0	9,022 1,127,427	0 578,762
Other agencies National Aeronautics and Space Administration National Science Foundation	947 289	0	77 289	870 0	15,443 7,150	9,393 659	638 6,491	1,379 0	641 0	3,392 0

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Applied research obligations of the six agencies included in this table represent approximately 94 percent of total Federal applied research obligations to universities and colleges in FY 2002.

Colleges in FY 2002.

Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

nec = Not elsewhere classified.

TABLE C-77. Federal obligations for applied research performed at universities and colleges in physical and environmental sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands)

		Ph	ysical scienc	es		Environmental sciences				
Agency	Total	Astrono- my	Chem- istry	Physics	Physical sciences, nec	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, nec
All agencies Departments	360,591	147,264	139,088	11,945	62,294	152,854	16,355	6,739	13,769	115,991
Department of Agriculture Agricultural Research Service Cooperative State Research,	11,237 1,829	0	11,152 1,744	85 85	0 0	2,568 121	2,565 118	3	0	0
Ed., and Extension Service Forest Service	9,041 367	0 0	9,041 367	0	0 0	2,257 190	2,257 190	0	0	0
Department of Defense Defense Agencies	33,619 19,426	0	23,411 14,039	5,495 1,718	4,713 3,669	17,553 2,376	5,870 1,188	111 0	9,523 1,188	2,049 0
Chemical and Biological Defense	11,697	0	11,697	0	0	0	0	0	0	0
Defense Advanced Research Projects Agency Washington Headquarters	4,744	0	1,075	0	3,669	0	0	0	0	0
Services	2,985	0	1,267	1,718	0	2,376	1,188	0	1,188	0
Department of the Air Force Air Force, Materials Command Department of the Army Department of the Navy	2,118 2,118 11,345 730	0 0 0 0	217 217 9,155 0	1,901 1,901 1,876 0	0 0 314 730	0 0 4,760 10,417	0 0 3,850 832	0 0 111 0	0 0 2 8,333	0 0 797 1,252
Department of Energy	44,894	0	9,336	0	35,558	27,148	0	5,540	0	21,608
Department of Health and Human Services	106,924	0	93,340	0	13,584	68,571	0	323	0	68,248
Agency for Healthcare Research and Quality	305	0	305	0	0	0	0	0	0	0
Agency for Toxic Substances and Disease Registry National Institutes of Health	0 106,619	0 0	0 93,035	0	0 13,584	323 68,248	0 0	323 0	0	0 68,248
Other agencies National Aeronautics and Space Administration National Science Foundation	153,713 10,204	145,843 1,421	501 1,348	3,265 3,100	4,104 4,335	35,627 1,387	7,791 129	548 214	3,761 485	23,527 559

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Applied research obligations of the six agencies included in this table represent approximately 94 percent of total Federal applied research obligations to universities and colleges in FY 2002.

Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-78. Federal obligations for applied research performed at universities and colleges in engineering, by selected agency and detailed field: FY 2002 (Dollars in thousands)

Agency	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, nec
All agencies	472,492	27,357	18,347	26,396	16,540	71,854	9,755	44,088	258,155
Departments Department of Agriculture	7,666	0	0	124	38	22	27	0	7,455
Agricultural Research Service Cooperative State Research,	247	0	0	124	38	22	27	0	36
Ed., and Extension Service	7,192	0	0	0	0	0	0	0	7,192
Forest Service	227	0	0	0	0	0	0	0	227
Department of Defense Defense Agencies	241,464 99,355	15,232 3,837	849 0	2,636 1,776	3,851 1,776	54,946 32,883	7,784 1,797	38,880 30,243	117,286 27,043
Ballistic Missile Defense Organization Defense Advanced Research	368	0	0	0	0	0	0	0	368
Projects Agency Defense Threat Reduction	89,039	3,837	0	0	0	30,814	0	30,243	24,145
Agency	507	0	0	0	0	272	0	0	235
Special Operations Command Washington Headquarters	1,795	0	0	0	0	0	0	0	1,795
Services	7,646	0	0	1,776	1,776	1,797	1,797	0	500
Department of the Air Force	13,037	7,727	0	30	628	3,085	244	920	403
Air Force, Materials Command	13,037	7,727	0	30	628	3,085	244	920	403
Department of the Army Department of the Navy	25,030 104,042	199 3,469	0 849	830 0	1,447 0	3,801 15,177	2,442 3,301	2,618 5,099	13,693 76,147
реранненног те мачу	104,042	3,409	049	U	U	13,177	3,301	3,099	70,147
Department of Energy	43,063	0	0	13,704	4,764	3,163	28	31	21,373
Department of Health and Human									
Services	56,764	0	0	0	0	0	0	0	56,764
National Institutes of Health	56,764	0	0	0	0	0	0	0	56,764
Other agencies National Aeronautics and Space									
Administration	61,487	12,125	17,498	175	0	1,843	1,318	4,231	24,297
National Science Foundation	62,048	0	0	9,757	7,887	11,880	598	946	30,980

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Applied research obligations of the six agencies included in this table represent approximately 94 percent of total Federal applied research obligations to universities and colleges in FY 2002.

Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-79. Federal obligations for applied research performed at universities and colleges in mathematics and computer sciences and in social sciences, by selected agency and detailed field: FY 2002 (Dollars in thousands)

	Mathe	matics and	computer scie	ences			Social s	sciences		
Agency	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, nec	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Socia sciences ne
All agencies	242,400	16,535	217,577	8,288	122,208	434	29,971	638	7,662	83,50
Departments Department of Agriculture Agricultural Research Service Cooperative State Research,	281 36	281 36	0	0	31,049 0	0	24,509 0	0	6,540 0	
Ed., and Extension Service Economic Research Service	0	0	0	0	24,807 4,103	0	18,365 4,103	0 0	6,442 0	
Forest Service National Agricultural	178	178	0	0	1,922	0	1,824	0	98	
Statistics Service Rural Business-Cooperative	67	67	0	0	0	0	0	0	0	
Service Service	0	0	0	0	217	0	217	0	0	
Department of Defense Defense Agencies Chemical and Biological	196,064 183,647	5,519 5,375	187,231 175,027	3,314 3,245	69 0	11 0	0	0	2	
Defense  Defense Advanced Research	373	373	0	0	0	0	0	0	0	
Projects Agency Defense Threat Reduction	175,676	1,435	171,461	2,780	0	0	0	0	0	
Agency	465	0	0	465	0	0	0	0	0	
Washington Headquarters Services Department of the Air Force Air Force, Materials Command Department of the Army Department of the Navy	7,133 888 888 8,894 2,635	3,567 36 36 108 0	3,566 796 796 8,773 2,635	0 56 56 13 0	0 0 0 69 0	0 0 0 11 0	0 0 0 0	0 0 0 0	0 0 0 2 0	
Department of Energy	13	0	0	13	0	0	0	0	0	
Department of Health and Human Services Administration for Children	11,804	10,405	500	899	80,480	0	2,853	0	545	77,0
and Families Agency for Healthcare Research	0	0	0	0	16,552	0	0	0	0	16,5
and Quality Agency for Toxic Substances	1,668	269	500	899	9,967	0	2,853	0	485	6,6
and Disease Registry National Institutes of Health	0 10,136	0 10,136	0	0	60 53,901	0 0	0	0 0	60 0	53,9
Other agencies National Aeronautics and Space Administration	20,663	144	16,457	4,062	0	0	0	0	0	
National Science Foundation	13,575	186	13,389	0	10,610	423	2,609	638	575	6,36

NOTES: Only the following six agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. Applied research obligations of the six agencies included in this table represent approximately 94 percent of total Federal applied research obligations to universities and colleges in FY 2002.

Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

TABLE C-80. Federal obligations for research and development to foreign performers, by region, country, and agency: FY 2002 (Dollars in thousands)

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Region and country	Total	USDA	DOD	DOE	HHS	AID	NASA	NSF	Other <sup>1</sup>
Total, all areas & organizations	391,560	4,214	235,526	2,435	122,187	0	12,737	7,822	6,639
Africa, total Angola Benin Botswana Congo	28,240 641 61 578 106	155 0 0 0 0	16,685 641 61 497 52	0 0 0 0	11,400 0 0 81 54	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Egypt Eritrea Ethiopia Gabon Ghana	1,766 624 802 650 1,247	0 0 0 0	1,766 624 802 650 165	0 0 0 0	0 0 0 0 1,082	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Kenya Malawi Mali Namibia Nigeria	361 293 160 784 1,013	0 0 0 0	307 0 0 784 1,013	0 0 0 0	54 293 160 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Senegal Sierra Leone South Africa Swaziland Togo	36 50 12,014 272 100	36 0 119 0	0 50 2,757 272 100	0 0 0 0	0 0 9,138 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0
Uganda Zambia Other Africa	218 117 6,347	0 0 0	62 9 6,073	0 0 0	156 108 274	0 0 0	0 0 0	0 0 0	0 0 0
North America, total Bermuda Canada Costa Rica Dominican Republic	93,960 1,789 86,565 1,970 54	964 0 568 30 0	51,181 0 50,771 0	367 0 367 0	36,534 0 32,397 1,940 54	0 0 0 0	512 0 512 0 0	1,899 1,789 110 0	2,503 0 1,840 0
Haiti Jamaica Mexico Montserrat United States	81 837 2,264 309 91	0 42 324 0 0	0 0 10 309 91	0 0 0 0	81 795 1,267 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 663 0
South America, total Argentina Bolivia Brazil Chile	6,422 192 14 4,156 570	347 0 0 209 0	549 0 14 0	267 0 0 0 267	2,276 192 0 964 303	0 0 0 0	0 0 0 0	2,970 0 0 2,970 0	13 0 0 13 0
Colombia Ecuador Peru Uruguay	89 43 1,244 114	35 43 0 60	0 0 535 0	0 0 0 0	54 0 709 54	0 0 0	0 0 0	0 0 0 0	0 0 0 0
Asia, total Bangladesh Cambodia China Hong Kong	98,027 150 54 4,258 397	426 0 0 147 0	87,618 0 0 8 0	0 0 0 0	9,779 150 54 4,103 397	0 0 0 0	0 0 0 0	95 0 0 0	109 0 0 0 0
India Indonesia Israel Japan Kazakhstan	504 1,348 88,676 880 18	7 0 2 50 18	0 1,348 84,990 648 0	0 0 0 0	497 0 3,609 157 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 75 25 0
Korea, Republic of Lebanon Pakistan Philippines Singapore	623 95 25 258 236	0 0 0 0	308 0 0 0 236	0 0 0 0	315 0 25 258 0	0 0 0 0	0 0 0 0	0 95 0 0	0 0 0 0

TABLE C-80. Federal obligations for research and development to foreign performers, by region, country, and agency: FY 2002 (Dollars in thousands)

Page 2 of 2

Region and country	Total	USDA	DOD	DOE	HHS	AID	NASA	NSF	Other <sup>1</sup>
Asia, continued Syrian Arab Republic Taiwan Thailand Turkey Turkmenistan Vietnam	110 145 161 14 3 72	110 65 0 5 3	0 80 0 0 0	0 0 0 0 0	0 0 161 0 0 53	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 9 0
Europe, total Austria Belgium Bulgaria Croatia	127,888 120 763 107 430	1,852 0 5 3 0	72,847 120 199 0 430	1,641 0 0 0 0	41,482 0 559 54 0	0 0 0 0	3,560 0 0 0 0	2,838 0 0 0 0	3,668 0 0 50 0
Czech Republic Denmark Finland France Germany	146 691 628 8,221 11,343	4 0 0 155 0	105 242 100 2,624 8,750	0 8 0 0 55	37 391 528 1,861 1,231	0 0 0 0	0 0 0 387 1,088	0 50 0 2,115 190	0 0 0 1,079 29
Greece Hungary Iceland Ireland Italy	16 238 4,729 76 3,041	0 0 0 0 236	16 238 0 76 583	0 0 0 0	0 0 4,729 0 2,013	0 0 0 0	0 0 0 0 95	0 0 0 0 100	0 0 0 0 14
Netherlands Norway Poland Portugal Romania	1,309 3,323 909 3 65	0 0 20 3 21	482 1,789 10 0 44	9 0 0 0	466 153 772 0 0	0 0 0 0	289 597 0 0	0 0 0 0	63 784 107 0 0
Russian Federation Slovenia Spain Sweden Switzerland	1,137 50 934 5,691 2,786	122 50 0 9 53	234 0 502 2,027 637	35 0 0 0	387 0 432 3,507 1,271	0 0 0 0	0 0 0 0	0 0 0 148 0	359 0 0 0 825
Ukraine United Kingdom Other Europe	12,514 68,484 134	0 1,171 0	12,514 41,105 20	0 1,534 0	0 23,091 0	0 0 0	0 990 114	0 235 0	0 358 0
Oceania, total Australia New Zealand Pacific Islands (Palau) Other Oceania	34,501 32,708 396 1,385 12	470 448 10 0 12	6,446 6,446 0 0	160 160 0 0	18,394 16,623 386 1,385 0	0 0 0 0	8,665 8,665 0 0	20 20 0 0	346 346 0 0
International Organizations	2,522	0	200	0	2,322	0	0	0	0

<sup>1</sup> Includes data for the Departments of Commerce, Interior, and Transportation; the Environmental Protection Agency; and the Nuclear Regulatory Commission.

NOTES: Data for only those countries and agencies that had obligations in the variables represented by this table appear in the table. Prior to the Vol. 48 (FYs 1998-2000) survey cycle, the National Science Foundation's Division of Science Resources Statistics updated the list of foreign performers in the Federal funds survey to match the list of countries and territories in the 1996 UNESCO Statistical Yearbook.

USDA = Department of Agriculture; DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; AID = Agency for International Development; NASA = National Aeronautics and Space Administration; NSF = National Science Foundation.

TABLE C-81. Federal obligations for basic research to foreign performers, by region, country, and agency: FY 2002 (Dollars in thousands)

Page 1 of 2

Region and country	Total	USDA	DOD	DOE	HHS	DOT	EPA	NASA	NSF
Total, all areas & organizations	96,720	2,150	12,085	1,367	68,993	25	194	4,120	7,786
Africa, total Botswana Congo Gabon Ghana	7,519 47 31 400 628	139 0 0 0 0	747 0 0 400 0	0 0 0 0	6,633 47 31 0 628	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Kenya Malawi Mali Senegal South Africa	31 170 93 20 5,428	0 0 0 20 119	0 0 0 0	0 0 0 0	31 170 93 0 5,309	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Uganda Zambia Other Africa	90 63 518	0 0 0	0 0 347	0 0 0	90 63 171	0 0 0	0 0 0	0 0 0	0 0 0
North America, total Bermuda Canada Costa Rica Dominican Republic	25,421 1,789 21,096 1,127 31	470 0 281 0 0	2,340 0 2,131 0 0	299 0 299 0 0	20,295 0 18,157 1,127 31	0 0 0 0	51 0 51 0	67 0 67 0	1,899 1,789 110 0
Haiti Jamaica Mexico Montserrat United States	47 485 647 134 65	0 23 166 0	0 0 10 134 65	0 0 0 0	47 462 471 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
South America, total Argentina Bolivia Brazil Chile	4,784 112 14 3,618 443	162 0 0 86 0	61 0 14 0 0	267 0 0 0 267	1,322 112 0 560 176	0 0 0 0	2 0 0 2 0	0 0 0 0	2,970 0 0 2,970 0
Colombia Ecuador Peru Uruguay	50 24 459 64	19 24 0 33	0 0 47 0	0 0 0	31 0 412 31	0 0 0 0	0 0 0	0 0 0 0	0 0 0 0
Asia, total Bangladesh Cambodia China Hong Kong	6,953 87 31 2,451 231	191 0 0 64 0	961 0 0 4 0	0 0 0 0	5,681 87 31 2,383 231	25 0 0 0 0	0 0 0 0	0 0 0 0	95 0 0 0
India Israel Japan Kazakhstan Korea, Republic of	292 2,202 646 10 302	4 1 0 10 0	0 104 530 0 119	0 0 0 0	288 2,097 91 0 183	0 0 25 0	0 0 0 0	0 0 0 0	0 0 0 0
Lebanon Pakistan Philippines Singapore Syrian Arab Republic	95 15 150 124 61	0 0 0 0 61	0 0 0 124 0	0 0 0 0	0 15 150 0 0	0 0 0 0	0 0 0 0	0 0 0 0	95 0 0 0
Taiwan Thailand Turkey Turkmenistan Vietnam	116 94 3 2 41	36 0 3 2 10	80 0 0 0	0 0 0 0	0 94 0 0 31	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0

TABLE C-81. Federal obligations for basic research to foreign performers, by region, country, and agency: FY 2002 (Dollars in thousands)

Page 2 of 2

Region and country	Total	USDA	DOD	DOE	HHS	DOT	EPA	NASA	NSF
Europe, total	36,353	930	7,081	641	23,844	0	135	920	2,802
Austria	51	0	51	0	0	0	0	0	0
Belgium	412	3	84	0	325	0	0	0	0
Bulgaria	39	0	0	0	31	0	8	0	0
Denmark	400	0	115	8	227	0	0	0	50
Finland	407	0	100	0	307	0	0	0	0
France	4,459	85	1,285	0	907	0	0	72	2,110
Germany	1,939	0	647	55	715	0	0	358	164
Greece	16	0	16	0	0	0	0	0	0
Hungary	238	0	238	0	0	0	0	0	0
Iceland	2,747	0	0	0	2,747	0	0	0	0
Ireland	76	0	76	0	0	0	0	0	0
Italy	1,829	130	406	0	1,169	0	0	24	100
Netherlands	414	0	134	9	271	0	0	0	0
Norway	337	0	37	0	89	0	0	211	0
Poland	464	6	10	0	448	0	0	0	0
Portugal	2	2	0	0	0	0	0	0	0
Romania	44	0	44	0	0	0	0	0	0
Russian Federation	348	0	88	35	225	0	0	0	0
Slovenia	27	27	0	0	0	0	0	0	0
Spain	568	0	317	0	251	0	0	0	0
Sweden	2,703	5	513	0	2,037	0	0	0	148
Switzerland	895	29	0	0	739	0	127	0	0
United Kingdom	17,916	643	2,920	534	13,356	0	0	233	230
Other Europe	22	0	0	0	0	0	0	22	0
Oceania, total	14,352	258	895	160	9,880	0	6	3,133	20
Australia	14,116	246	895	160	9,656	0	6	3,133	20
New Zealand	224	0	0	0	224	0	0	0	0
Other Oceania	12	12	0	0	0	0	0	0	0
International Organizations	1,338	0	0	0	1,338	0	0	0	0

USDA = Department of Agriculture
DOD = Department of Defense
DOE = Department of Energy
HHS = Department of Health and Human Services
DOT = Department of Transportation
EPA = Environmental Protection Agency
NASA = National Aeronautics and Space Administration
NSE = National Science Equipation

NSF = National Science Foundation

NOTES: Data for only those countries and agencies that had obligations in the variables represented by this table appear in the table. Prior to the Vol. 48 (FYs 1998-2000) survey cycle, the National Science Foundation's Division of Science Resources Statistics updated the list of foreign performers in the Federal funds survey to match the list of countries and territories in the 1996 UNESCO Statistical Yearbook. The basic research obligations of the eight agencies included in this table represent over 99.9 percent of total Federal research obligations to foreign performers for basic research in FY 2002.

TABLE C-82. Federal obligations for research and development and for R&D plant for selected agencies, by state: FY 2002 (Dollars in thousands) Page 1 of 2

state	Total, R&D and R&D plant	R&D	R&D plant
otal	88,268,040	83,978,309	4,289,731
Alabama	2,880,890	2,704,834	176,056
Alaska	555,148	273,779	281,369
Arizona	2,064,004	2,057,261	6,743
Arkansas	154,264	141,267	12,997
California	16,209,928	15,686,055	523,873
Colorado	1,727,303	1,608,971	118,332
Connecticut	1,968,505	1,916,926	51,579
Delaware	79,865	78,846	1,019
District of Columbia	2,902,355	2,849,531	52,824
Florida	2,496,664	2,300,550	196,114
Georgia	2,037,199	2,019,248	17,951
Hawaii	381,591	375,159	6,432
Idaho	243,646	230,910	12,736
Illinois	1,794,673	1,693,942	100,731
Indiana	537,680	525,745	11,935
lowa	420,888	404,545	16,343
Kansas	296,082	290,516	5,566
Kentucky	322,155	321,284	871
Louisiana	467,853	431,989	35,864
Maine	262,592	254,518	8,074
Maryland	7,402,565	7,192,243	210,322
Massachusetts	4,682,845	4,658,616	24,229
Michigan	1,249,309	1,244,244	5,065
Minnesota	1,159,024	1,150,839	8,185
Mississippi	666,135	622,714	43,421
Missouri	1,207,912	1,202,671	5,241
Montana	120,928	112,924	8,004
Nebraska	149,466	144,671	4,795
Nevada	352,466	335,989	16,477
New Hampshire	297,871	296,575	1,296
New Jersey	2,050,680	2,021,450	29,230
New Mexico	2,873,949	2,746,139	127,810
New York	3,876,054	3,746,837	129,217
North Carolina	1,399,045	1,390,440	8,605
North Dakota	103,822	102,136	1,686
Ohio	2,159,725	2,103,409	56,316
Oklahoma	275,861	271,565	4,296
Oregon	509,537	502,284	7,253
Pennsylvania	3,196,819	3,162,026	34,793
Rhode Island	519,763	501,299	18,464
South Carolina	377,753	371,006	6,747
South Dakota	61,821	58,679	3,142
Tennessee Texas	1,294,412 4,773,644	961,149 3,374,405	333,263 1,399,239
Utah Verment	417,134 126,407	408,747 126,274	8,387
Vermont	136,497 5 954 101	136,374	123
Virginia Washington	5,856,191 2,017,550	5,756,339	99,852
Washington West Virginia	2,017,550 262,936	1,998,915 254,239	18,635 8,697
	. ,		
3	/40.745	F04.047	22.022
Wisconsin Wyoming	618,745 40,159	594,816 39,585	23,929 574

TABLE C-82. Federal obligations for research and development and for R&D plant for selected agencies,

by state: FY 2002 (Dollars in thousands)

Page 2 of 2

State	Total, R&D and R&D plant	R&D	R&D plant
Outlying areas	289,196	284,702	4,494
Puerto Rico	139,788	135,294	4,494
Other areas Offices abroad	149,408 64.941	149,408 64,406	535

R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major supporting agencies included in this table represent approximately 98 percent of total Federal R&D and R&D plant obligations in FY 2002. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

TABLE C-83. Federal obligations for research and development for selected agencies, by state and performer: FY 2002 (Dollars in thousands)

Page 1 of 2

						Extramural			
State <sup>1</sup>	Total R&D	Intra- mural <sup>2</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	University FFRDCs	Other nonprofit institu- tions	Nonprofit FFRDCs	State and local govts
Total California Maryland Virginia Massachusetts	83,978,309 15,686,055 7,192,243 5,756,339 4,658,616	20,258,819 2,611,075 2,779,379 1,842,918 676,831	29,446,784 6,697,037 2,439,542 3,136,106 1,240,619	1,330,007 0 307,238 0 0	21,034,444 2,849,449 1,348,168 377,993 1,170,695	4,629,818 2,504,494 0 109,185 256,559	5,458,609 821,157 310,804 75,618 1,202,935	1,389,345 177,679 0 207,321 103,895	430,483 25,164 7,112 7,198 7,082
New York Texas Pennsylvania District of Columbia New Mexico	3,746,837 3,374,405 3,162,026 2,849,531 2,746,139	502,546 807,925 433,556 2,018,586 471,029	832,148 1,236,785 1,045,767 359,419 232,541	0 0 0 0 867,125	1,696,397 1,201,436 1,350,959 231,980 158,564	0 0 17,614 0 996,750	388,519 119,616 306,808 232,399 16,818	234,926 0 0 3,877 0	92,301 8,643 7,322 3,270 3,312
Alabama Florida Ohio Arizona New Jersey	2,704,834 2,300,550 2,103,409 2,057,261 2,021,450	945,309 669,799 742,602 273,791 677,353	1,377,944 1,037,911 568,354 1,439,099 935,703	0 0 0 0	341,752 543,262 564,308 238,312 318,925	0 0 0 45,618 64,336	28,964 35,444 219,915 48,569 19,811	0 0 0 0	10,865 14,134 8,230 11,872 5,322
Georgia Washington Connecticut Illinois Colorado	2,019,248 1,998,915 1,916,926 1,693,942 1,608,971	729,696 342,280 94,056 204,492 324,123	804,316 652,696 1,344,658 75,778 569,861	0 0 0 0	458,203 595,907 402,745 775,319 413,403	0 0 0 509,496 83,927	21,807 233,483 65,102 108,689 71,234	0 166,649 0 0 138,982	5,226 7,900 10,365 20,168 7,441
North Carolina Michigan Missouri Minnesota Tennessee	1,390,440 1,244,244 1,202,671 1,150,839 961,149	335,891 231,707 140,832 116,889 115,583	149,604 298,827 510,998 568,390 78,353	0 0 0 0	822,547 653,670 508,516 293,852 346,254	0 0 0 0 11,311	79,216 51,622 39,294 166,218 51,875	0 0 0 0 356,016	3,182 8,418 3,031 5,490 1,757
Mississippi Wisconsin Indiana Oregon Rhode Island	622,714 594,816 525,745 502,284 501,299	174,061 114,177 98,510 133,466 294,710	316,027 35,461 141,045 36,139 44,476	0 0 0 0	121,107 423,928 276,361 255,417 99,869	0 0 0 0	8,419 15,975 4,453 52,379 59,621	0 0 0 0	3,100 5,275 5,376 24,883 2,623
Louisiana Utah Iowa Hawaii South Carolina	431,989 408,747 404,545 375,159 371,006	121,696 90,336 77,770 124,279 74,302	90,468 98,817 45,538 81,020 56,446	0 0 0 0 30,832	204,943 208,135 249,494 111,569 154,623	0 0 21,119 0 0	5,442 5,957 5,703 55,587 46,293	0 0 0 0	9,440 5,502 4,921 2,704 8,510
Nevada Kentucky New Hampshire Kansas Alaska	335,989 321,284 296,575 290,516 273,779	27,532 28,318 58,362 32,021 112,811	231,390 19,165 108,847 21,030 67,169	0 0 0 0	42,810 148,444 125,072 117,154 69,020	0 0 0 0	29,933 111,082 3,667 106,164 14,827	0 0 0 0	4,324 14,275 627 14,147 9,952
Oklahoma Maine West Virginia Idaho Nebraska	271,565 254,518 254,239 230,910 144,671	78,048 19,929 101,901 23,518 45,968	68,600 106,267 56,088 28,363 8,355	0 0 0 124,812 0	99,863 35,723 56,701 51,173 80,213	0 0 0 0	21,389 90,228 34,517 1,369 8,101	0 0 0 0	3,665 2,371 5,032 1,675 2,034
Arkansas Vermont Montana North Dakota Delaware	141,267 136,374 112,924 102,136 78,846	58,211 19,724 32,692 32,128 7,530	5,735 38,776 7,023 7,829 12,908	0 0 0 0	71,315 75,499 54,231 57,418 53,049	0 0 0 0	3,721 1,501 15,118 2,836 3,760	0 0 0 0	2,285 874 3,860 1,925 1,599
South Dakota Wyoming	58,679 39,585	17,888 9,633	10,877 2,903	0	26,211 18,570	0	2,341 6,774	0	1,362 1,705

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						Extramural			
State <sup>1</sup>	Total R&D	Intra- mural <sup>2</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	University FFRDCs	Other nonprofit institu- tions	Nonprofit FFRDCs	State and local govts
Outlying areas Puerto Rico Other areas Offices abroad	284,702 135,294 149,408 64,406	130,013 21,596 108,417 31,037	34,459 667 33,792 33,107	0 0 0	83,654 76,608 7,046 262	9,409 9,409 0	25,535 25,382 153 0	0 0 0	1,632 1,632 0 0

States in order of total Federal research and development obligations.

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major Research and Development (R&D) supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in FY 2002. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

 $TABLE\ C-83a.\ \ Percentage\ distribution\ of\ Federal\ obligations\ for\ research\ and\ development\ to\ each\ performer\ for\ selected\ agencies,\ by\ state:\ FY\ 2002$ 

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						Extramural			
State <sup>1</sup>	Total R&D	Intra- mural <sup>2</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	University FFRDCs	Other nonprofit institu- tions	Nonprofit FFRDCs	State and local govts
Total California Maryland Virginia Massachusetts	100.0 18.7 8.6 6.9 5.5	100.0 12.9 13.7 9.1 3.3	100.0 22.7 8.3 10.7 4.2	100.0 .0 23.1 .0	100.0 13.5 6.4 1.8 5.6	100.0 54.1 .0 2.4 5.5	100.0 15.0 5.7 1.4 22.0	100.0 12.8 .0 14.9 7.5	100.0 5.8 1.7 1.7 1.6
New York Texas Pennsylvania District of Columbia New Mexico	4.5 4.0 3.8 3.4 3.3	2.5 4.0 2.1 10.0 2.3	2.8 4.2 3.6 1.2	.0 .0 .0 .0 65.2	8.1 5.7 6.4 1.1 .8	.0 .0 .4 .0 21.5	7.1 2.2 5.6 4.3 .3	16.9 .0 .0 .3 .0	21.4 2.0 1.7 .8 .8
Alabama Florida Ohio Arizona New Jersey	3.2 2.7 2.5 2.4 2.4	4.7 3.3 3.7 1.4 3.3	4.7 3.5 1.9 4.9 3.2	.0 .0 .0 .0	1.6 2.6 2.7 1.1 1.5	.0 .0 .0 1.0 1.4	.5 .6 4.0 .9	.0 .0 .0 .0	2.5 3.3 1.9 2.8 1.2
Georgia Washington Connecticut Illinois Colorado	2.4 2.4 2.3 2.0 1.9	3.6 1.7 .5 1.0 1.6	2.7 2.2 4.6 .3 1.9	.0 .0 .0 .0	2.2 2.8 1.9 3.7 2.0	.0 .0 .0 11.0 1.8	.4 4.3 1.2 2.0 1.3	.0 12.0 .0 .0 10.0	1.2 1.8 2.4 4.7 1.7
North Carolina Michigan Missouri Minnesota Tennessee	1.7 1.5 1.4 1.4	1.7 1.1 .7 .6 .6	.5 1.0 1.7 1.9	.0 .0 .0 .0	3.9 3.1 2.4 1.4 1.6	.0 .0 .0 .0	1.5 .9 .7 3.0 1.0	.0 .0 .0 .0 25.6	.7 2.0 .7 1.3 .4
Mississippi Wisconsin Indiana Oregon Rhode Island	.7 .7 .6 .6	.9 .6 .5 .7 1.5	1.1 .1 .5 .1	.0 .0 .0 .0	.6 2.0 1.3 1.2 .5	.0 .0 .0 .0	.2 .3 .1 1.0 1.1	.0 .0 .0 .0	.7 1.2 1.2 5.8 .6
Louisiana Utah Iowa Hawaii South Carolina	.5 .5 .5 .4 .4	.6 .4 .4 .6 .4	.3 .3 .2 .3 .2	.0 .0 .0 .0 2.3	1.0 1.0 1.2 .5	.0 .0 .5 .0	.1 .1 .1 1.0 .8	.0 .0 .0 .0	2.2 1.3 1.1 .6 2.0
Nevada Kentucky New Hampshire Kansas Alaska	.4 .4 .4 .3 .3	.1 .1 .3 .2 .6	.8 .1 .4 .1	.0 .0 .0 .0	.2 .7 .6 .6	.0 .0 .0 .0	.5 2.0 .1 1.9 .3	.0 .0 .0 .0	1.0 3.3 .1 3.3 2.3
Oklahoma Maine West Virginia Idaho Nebraska	.3 .3 .3 .3 .2	.4 .1 .5 .1	.2 .4 .2 .1	.0 .0 .0 9.4 .0	.5 .2 .3 .2 .4	.0 .0 .0 .0	.4 1.7 .6 *	.0 .0 .0 .0	.9 .6 1.2 .4 .5
Arkansas Vermont Montana North Dakota Delaware	.2 .2 .1 .1	.3 .1 .2 .2	.1 .* .*	.0 .0 .0 .0	.3 .4 .3 .3	.0 .0 .0 .0	.1 * .3 .1	.0 .0 .0 .0	.5 .2 .9 .4
South Dakota Wyoming	.1	.1	*	.0 .0	.1 .1	.0 .0	.1	.0 .0	.3 .4

						Extramural			
State <sup>1</sup>	Total R&D	Intra- mural <sup>2</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	University FFRDCs	Other nonprofit institu- tions	Nonprofit FFRDCs	State and local govts
Outlying areas Puerto Rico Other areas Offices abroad	0.3 .2 .2 .1	0.6 .1 .5 .2	0.1 * .1 .1	.0 .0 .0	0.4	0.2 .2 .0 .0	0.5 .5 *	.0 .0 .0	0.4 .4 .0

States in order of total Federal research and development obligations.

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency: the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major Research and Development (R&D) supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in FY 2002. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

<sup>=</sup> Amount greater than 0 but less than 0.5 percent.

 $\label{thm:control} \text{TABLE C-83b. Percentage distribution of Federal obligations for research and development to each state for selected agencies, by performer: FY 2002 \\$ 

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						Extramural			
State <sup>1</sup>	Total R&D	Intra- mural <sup>2</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	University FFRDCs	Other nonprofit institu- tions	Nonprofit FFRDCs	State and local govts
Total California Maryland Virginia Massachusetts	100.0 100.0 100.0 100.0 100.0	24.1 16.6 38.6 32.0 14.5	35.1 42.7 33.9 54.5 26.6	1.6 .0 4.3 .0	25.0 18.2 18.7 6.6 25.1	5.5 16.0 .0 1.9 5.5	6.5 5.2 4.3 1.3 25.8	1.7 1.1 .0 3.6 2.2	0.5 .2 .1 .1
New York Texas Pennsylvania District of Columbia New Mexico	100.0 100.0 100.0 100.0 100.0	13.4 23.9 13.7 70.8 17.2	22.2 36.7 33.1 12.6 8.5	.0 .0 .0 .0 31.6	45.3 35.6 42.7 8.1 5.8	.0 .0 .6 .0 36.3	10.4 3.5 9.7 8.2 .6	6.3 .0 .0 .1	2.5 .3 .2 .1 .1
Alabama Florida Ohio Arizona New Jersey	100.0 100.0 100.0 100.0 100.0	34.9 29.1 35.3 13.3 33.5	50.9 45.1 27.0 70.0 46.3	.0 .0 .0 .0	12.6 23.6 26.8 11.6 15.8	.0 .0 .0 2.2 3.2	1.1 1.5 10.5 2.4 1.0	.0 .0 .0 .0	.4 .6 .4 .6
Georgia Washington Connecticut Illinois Colorado	100.0 100.0 100.0 100.0 100.0	36.1 17.1 4.9 12.1 20.1	39.8 32.7 70.1 4.5 35.4	.0 .0 .0 .0	22.7 29.8 21.0 45.8 25.7	.0 .0 .0 30.1 5.2	1.1 11.7 3.4 6.4 4.4	.0 8.3 .0 .0 8.6	.3 .4 .5 1.2
North Carolina Michigan Missouri Minnesota Tennessee	100.0 100.0 100.0 100.0 100.0	24.2 18.6 11.7 10.2 12.0	10.8 24.0 42.5 49.4 8.2	.0 .0 .0 .0	59.2 52.5 42.3 25.5 36.0	.0 .0 .0 .0	5.7 4.1 3.3 14.4 5.4	.0 .0 .0 .0 .0 37.0	.2 .7 .3 .5
Mississippi Wisconsin Indiana Oregon Rhode Island	100.0 100.0 100.0 100.0 100.0	28.0 19.2 18.7 26.6 58.8	50.7 6.0 26.8 7.2 8.9	.0 .0 .0 .0	19.4 71.3 52.6 50.9 19.9	.0 .0 .0 .0	1.4 2.7 .8 10.4 11.9	.0 .0 .0 .0	.5 .9 1.0 5.0 .5
Louisiana Utah Iowa Hawaii South Carolina	100.0 100.0 100.0 100.0 100.0	28.2 22.1 19.2 33.1 20.0	20.9 24.2 11.3 21.6 15.2	.0 .0 .0 .0 8.3	47.4 50.9 61.7 29.7 41.7	.0 .0 5.2 .0	1.3 1.5 1.4 14.8 12.5	.0 .0 .0 .0	2.2 1.3 1.2 .7 2.3
Nevada Kentucky New Hampshire Kansas Alaska	100.0 100.0 100.0 100.0 100.0	8.2 8.8 19.7 11.0 41.2	68.9 6.0 36.7 7.2 24.5	.0 .0 .0 .0	12.7 46.2 42.2 40.3 25.2	.0 .0 .0 .0	8.9 34.6 1.2 36.5 5.4	.0 .0 .0 .0	1.3 4.4 .2 4.9 3.6
Oklahoma Maine West Virginia Idaho Nebraska	100.0 100.0 100.0 100.0 100.0	28.7 7.8 40.1 10.2 31.8	25.3 41.8 22.1 12.3 5.8	.0 .0 .0 54.1 .0	36.8 14.0 22.3 22.2 55.4	.0 .0 .0 .0	7.9 35.5 13.6 .6 5.6	.0 .0 .0 .0	1.3 .9 2.0 .7 1.4
Arkansas Vermont Montana North Dakota Delaware	100.0 100.0 100.0 100.0 100.0	41.2 14.5 29.0 31.5 9.6	4.1 28.4 6.2 7.7 16.4	.0 .0 .0 .0	50.5 55.4 48.0 56.2 67.3	.0 .0 .0 .0	2.6 1.1 13.4 2.8 4.8	.0 .0 .0 .0	1.6 .6 3.4 1.9 2.0
South Dakota Wyoming	100.0 100.0	30.5 24.3	18.5 7.3	.0 .0	44.7 46.9	.0 .0	4.0 17.1	.0 .0	2.3 4.3

						Extramural			
State <sup>1</sup>	Total R&D	Intra- mural <sup>2</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	University FFRDCs	Other nonprofit institu- tions	Nonprofit FFRDCs	State and local govts
Outlying areas Puerto Rico Other areas Offices abroad	100.0 100.0 100.0 100.0	45.7 16.0 72.6 48.2	12.1 .5 22.6 51.4	.0 .0 .0	29.4 56.6 4.7 .4	3.3 7.0 .0	9.0 18.8 .1 .0	.0 .0 .0	0.6 1.2 .0

FFRDCs = Federally funded research and development centers.

R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major Research and Development (R&D) supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in FY 2002. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

States in order of total Federal research and development obligations. Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

TABLE C-84. Federal obligations for research and development, by state and selected agency: FY 2002 (Dollars in thousands)

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State <sup>1</sup>	Total R&D	Dept of Agricul- ture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Total	83,978,309	1,967,541	1,150,931	37,321,587	7,041,729	23,889,427	631,164	814,314	413,937	7,495,493	3,252,186
California	15,686,055	115,099	85,030	7,915,109	1,306,156	3,105,359	99,459	27,535	15,768	2,492,779	523,761
Maryland	7,192,243	148,852	407,360	3,182,799	23,065	1,915,003	15,926	19,086	9,224	1,381,858	89,070
Virginia	5,756,339	15,866	19,420	4,360,759	88,421	318,593	97,981	42,754	12,654	674,841	125,050
Massachusetts	4,658,616	26,954	33,229	1,760,424	84,616	2,235,967	13,086	67,207	12,695	189,453	234,985
New York	3,746,837	41,679	30,202	682,748	569,709	2,074,525	4,930	10,496	10,786	74,623	247,139
Texas	3,374,405	81,626	12,058	1,398,956	39,802	1,216,427	11,243	13,770	9,645	498,647	92,231
Pennsylvania	3,162,026	60,193	7,396	990,111	398,811	1,489,656	4,548	7,644	10,988	47,381	145,298
District of Columbia	2,849,531	148,789	7,503	1,192,921	567,954	318,635	5,241	233,905	34,235	235,065	105,283
New Mexico	2,746,139	11,761	5,065	788,916	1,757,077	107,048	3,648	16,043	3,991	28,808	23,782
Alabama	2,704,834	24,712	1,691	1,928,172	18,496	309,013	2,851	8,676	2,701	393,170	15,352
Florida	2,300,550	54,071	49,375	1,335,578	12,989	342,017	32,232	9,706	12,706	348,283	103,593
Ohio	2,103,409	25,527	8,044	902,591	14,666	702,024	3,709	31,593	55,910	296,694	62,651
Arizona	2,057,261	25,707	2,016	1,610,299	6,484	206,401	10,436	4,202	572	82,013	109,131
New Jersey	2,021,450	8,330	31,647	1,389,459	81,804	267,993	4,349	140,541	4,371	25,331	67,625
Georgia	2,019,248	69,955	2,947	983,019	33,300	801,219	9,532	3,111	12,536	31,699	71,930
Washington	1,998,915	46,297	76,704	751,113	182,191	800,036	17,242	5,217	7,663	30,913	81,539
Connecticut	1,916,926	9,804	5,236	1,327,266	17,311	489,128	761	11,905	647	22,914	31,954
Illinois	1,693,942	58,006	7,998	151,988	551,957	701,755	2,631	12,922	2,252	19,919	184,514
Colorado	1,608,971	40,040	114,398	524,845	159,379	353,531	90,562	13,664	17,110	155,402	140,040
North Carolina	1,390,440	43,895	21,265	178,183	17,642	931,107	4,412	2,443	88,438	34,973	68,082
Michigan	1,244,244	23,393	16,902	398,745	23,318	611,111	10,764	25,810	9,189	20,182	104,830
Missouri	1,202,671	33,292	2,405	513,367	7,895	575,137	9,025	3,385	1,660	20,538	35,967
Minnesota	1,150,839	33,387	8,580	583,661	10,540	444,102	4,236	3,117	11,306	9,488	42,422
Tennessee	961,149	10,624	3,209	125,509	368,881	389,736	4,571	1,824	917	28,166	27,712
Mississippi	622,714	96,215	8,703	391,313	3,668	48,583	4,926	2,149	3,425	53,269	10,463
Wisconsin	594,816	46,535	4,295	36,046	23,879	398,013	10,739	3,822	650	16,098	54,739
Indiana	525,745	16,959	1,822	201,345	14,594	203,789	2,749	3,560	3,002	14,982	62,943
Oregon	502,284	46,433	18,662	18,374	38,755	305,872	10,053	2,185	14,905	11,962	35,083
Rhode Island	501,299	2,320	4,966	314,452	2,966	137,932	2,254	489	9,966	4,916	21,038
Louisiana	431,989	46,627	4,539	148,841	5,199	144,052	20,594	3,128	3,423	31,473	24,113
Utah	408,747	20,783	1,577	137,031	9,920	178,828	5,374	1,288	301	27,203	26,442
Iowa	404,545	56,708	1,107	49,580	33,390	212,596	2,583	10,061	1,960	12,981	23,579
Hawaii	375,159	29,342	32,829	171,203	3,305	93,139	7,797	647	166	20,444	16,287
South Carolina	371,006	17,054	8,273	114,349	45,256	150,275	2,876	4,636	770	4,952	22,565
Nevada	335,989	2,683	876	27,341	217,666	55,631	3,951	2,832	9,643	2,649	12,717
Kentucky	321,284	14,038	756	21,147	3,193	252,990	2,056	4,271	1,873	5,557	15,403
New Hampshire	296,575	8,949	13,584	136,760	1,598	93,873	1,607	1,979	779	19,728	17,718
Kansas	290,516	16,907	835	17,941	8,193	207,653	2,940	9,444	459	4,311	21,833
Alaska	273,779	16,769	62,850	93,734	9,709	15,092	26,302	3,832	125	21,864	23,502
Oklahoma	271,565	20,579	10,512	80,168	8,451	83,912	2,246	23,871	7,606	15,459	18,761
Maine	254,518	6,858	2,336	122,657	790	100,643	2,765	1,129	362	1,187	15,791
West Virginia	254,239	33,969	3,358	40,957	86,061	32,037	6,641	2,940	0	42,676	5,600
Idaho	230,910	22,913	1,062	12,320	159,264	13,720	4,784	1,480	398	7,831	7,138
Nebraska	144,671	34,560	2,297	3,948	2,589	72,665	9,375	1,916	489	1,129	15,703
Arkansas	141,267	40,048	22	6,317	311	84,315	2,498	804	250	365	6,337
Vermont	136,374	9,048	1,036	39,574	1,432	75,725	839	681	550	2,799	4,690
Montana	112,924	26,563	76	17,338	2,225	35,883	7,412	1,992	701	10,748	9,986
North Dakota	102,136	35,395	758	19,050	6,078	21,810	5,962	1,043	1,425	4,214	6,401
Delaware	78,846	5,247	2,882	17,948	2,144	30,609	500	842	1,974	5,195	11,505
South Dakota	58,679	8,536	12	2,326	3,491	20,760	12,838	2,184	263	5,316	2,953
Wyoming	39,585	8,234	411	1,475	4,513	9,378	3,012	3,646	508	997	7,411

TABLE C-84. Federal obligations for research and development, by state and selected agency: FY 2002 (Dollars in thousands)

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State <sup>1</sup>	Total R&D	Dept of Agricul- ture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Outlying areas	284,702	115,073	815	42,144	625	104,129	2,116	208	0	2,048	17,544
Puerto Rico	135,294	10,800	0	868	625	102,068	1,351	208	0	2,048	17,326
Other areas	149,408	104,273	815	41,276	0	2,061	765	0	0	0	218
Offices abroad	64,406	4,337	0	59,370	0	0	0	699	0	0	0

States in order of total Federal research and development obligations.

EPA = Environmental Protection Agency. NASA = National Aeronautics and Space Administration. R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major Research and Development (R&D) supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in FY 2002. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

TABLE C-84a. Percentage distribution of Federal obligations for research and development of each selected agency, by state: FY 2002

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State <sup>1</sup>	Total R&D	Dept of Agricul- ture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Total California Maryland Virginia Massachusetts	100.0 18.7 8.6 6.9 5.5	100.0 5.8 7.6 .8 1.4	100.0 7.4 35.4 1.7 2.9	100.0 21.2 8.5 11.7 4.7	100.0 18.5 .3 1.3	100.0 13.0 8.0 1.3 9.4	100.0 15.8 2.5 15.5 2.1	100.0 3.4 2.3 5.3 8.3	100.0 3.8 2.2 3.1 3.1	100.0 33.3 18.4 9.0 2.5	100.0 16.1 2.7 3.8 7.2
New York Texas Pennsylvania District of Columbia New Mexico	4.5 4.0 3.8 3.4 3.3	2.1 4.1 3.1 7.6 .6	2.6 1.0 .6 .7 .4	1.8 3.7 2.7 3.2 2.1	8.1 .6 5.7 8.1 25.0	8.7 5.1 6.2 1.3	.8 1.8 .7 .8 .6	1.3 1.7 .9 28.7 2.0	2.6 2.3 2.7 8.3 1.0	1.0 6.7 .6 3.1 .4	7.6 2.8 4.5 3.2
Alabama Florida Ohio Arizona New Jersey	3.2 2.7 2.5 2.4 2.4	1.3 2.7 1.3 1.3	.1 4.3 .7 .2 2.7	5.2 3.6 2.4 4.3 3.7	.3 .2 .2 .1 1.2	1.3 1.4 2.9 .9 1.1	.5 5.1 .6 1.7	1.1 1.2 3.9 .5 17.3	.7 3.1 13.5 .1 1.1	5.2 4.6 4.0 1.1 .3	.5 3.2 1.9 3.4 2.1
Georgia Washington Connecticut Illinois Colorado	2.4 2.4 2.3 2.0 1.9	3.6 2.4 .5 2.9 2.0	.3 6.7 .5 .7 9.9	2.6 2.0 3.6 .4 1.4	.5 2.6 .2 7.8 2.3	3.4 3.3 2.0 2.9 1.5	1.5 2.7 .1 .4 14.3	.4 .6 1.5 1.6 1.7	3.0 1.9 .2 .5 4.1	.4 .4 .3 .3 2.1	2.2 2.5 1.0 5.7 4.3
North Carolina Michigan Missouri Minnesota Tennessee	1.7 1.5 1.4 1.4	2.2 1.2 1.7 1.7 .5	1.8 1.5 .2 .7	.5 1.1 1.4 1.6 .3	.3 .3 .1 .1 5.2	3.9 2.6 2.4 1.9 1.6	.7 1.7 1.4 .7	.3 3.2 .4 .4 .2	21.4 2.2 .4 2.7 .2	.5 .3 .3 .1 .4	2.1 3.2 1.1 1.3 .9
Mississippi Wisconsin Indiana Oregon Rhode Island	.7 .7 .6 .6	4.9 2.4 .9 2.4 .1	.8 .4 .2 1.6 .4	1.0 .1 .5 *	.1 .3 .2 .6	.2 1.7 .9 1.3 .6	.8 1.7 .4 1.6	.3 .5 .4 .3	.8 .2 .7 3.6 2.4	.7 .2 .2 .2 .1	.3 1.7 1.9 1.1 .6
Louisiana Utah Iowa Hawaii South Carolina	.5 .5 .4 .4	2.4 1.1 2.9 1.5	.4 .1 .1 2.9 .7	.4 .4 .1 .5	.1 .1 .5 *	.6 .7 .9 .4 .6	3.3 .9 .4 1.2 .5	.4 .2 1.2 .1 .6	.8 .1 .5 *	.4 .4 .2 .3 .1	.7 .8 .7 .5 .7
Nevada Kentucky New Hampshire Kansas Alaska	.4 .4 .4 .3	.1 .7 .5 .9	.1 .1 1.2 .1 5.5	.1 .1 .4 *	3.1 * * .1 .1	.2 1.1 .4 .9	.6 .3 .3 .5 4.2	.3 .5 .2 1.2 .5	2.3 .5 .2 .1	.1 .3 .1 .3	.4 .5 .5 .7 .7
Oklahoma Maine West Virginia Idaho Nebraska	.3 .3 .3 .3	1.0 .3 1.7 1.2 1.8	.9 .2 .3 .1	.2 .3 .1 *	.1 * 1.2 2.3 *	.4 .4 .1 .1	.4 .4 1.1 .8 1.5	2.9 .1 .4 .2	1.8 .1 .0 .1 .1	.2 * .6 .1 *	.6 .5 .2 .2
Arkansas Vermont Montana North Dakota Delaware	.2 .2 .1 .1	2.0 .5 1.4 1.8 .3	.1 .1 .1 .3	.1 * .1	* * .1 *	.4 .3 .2 .1	.4 .1 1.2 .9 .1	.1 .1 .2 .1	.1 .1 .2 .3 .5	.1 .1 .1	.2 .1 .3 .2 .4
South Dakota Wyoming	.1	.4 .4	*	*	.1	.1	2.0 .5	.3 .4	.1 .1	.1	.1 .2

State <sup>1</sup>	Total R&D	Dept of Agricul- ture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Outlying areas Puerto Rico Other areas Offices abroad	0.3 .2 .2 .1	5.8 .5 5.3 .2	0.1 .0 .1 .0	0.1 * .1 .2	.0 .0	0.4 .4 *	0.3 .2 .1	.0 0.1	.0 .0 .0	.0 .0	0.5 .5 *

States in order of total Federal research and development obligations.

EPA = Environmental Protection Agency.

NASA = National Aeronautics and Space Administration.

R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major Research and Development (R&D) supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in FY 2002. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

<sup>\* =</sup> Amount greater than 0 but less than 0.5 percent.

TABLE C-84b. Percentage distribution of Federal obligations for research and development of each State, by selected agency: FY 2002

Page 1 of 2

State <sup>1</sup>	Total R&D	Dept of Agricul- ture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Total California Maryland Virginia Massachusetts	100.0 100.0 100.0 100.0 100.0	2.3 .7 2.1 .3 .6	1.4 .5 5.7 .3 .7	44.4 50.5 44.3 75.8 37.8	8.4 8.3 .3 1.5	28.4 19.8 26.6 5.5 48.0	0.8 .6 .2 1.7	1.0 .2 .3 .7 1.4	0.5 .1 .1 .2	8.9 15.9 19.2 11.7 4.1	3.9 3.3 1.2 2.2 5.0
New York Texas Pennsylvania District of Columbia New Mexico	100.0 100.0 100.0 100.0 100.0	1.1 2.4 1.9 5.2 .4	.8 .4 .2 .3 .2	18.2 41.5 31.3 41.9 28.7	15.2 1.2 12.6 19.9 64.0	55.4 36.0 47.1 11.2 3.9	.1 .3 .1 .2 .1	.3 .4 .2 8.2 .6	.3 .3 .3 1.2	2.0 14.8 1.5 8.2 1.0	6.6 2.7 4.6 3.7
Alabama Florida Ohio Arizona New Jersey	100.0 100.0 100.0 100.0 100.0	.9 2.4 1.2 1.2	.1 2.1 .4 .1 1.6	71.3 58.1 42.9 78.3 68.7	.7 .6 .7 .3 4.0	11.4 14.9 33.4 10.0 13.3	.1 1.4 .2 .5	.3 .4 1.5 .2 7.0	.1 .6 2.7 *	14.5 15.1 14.1 4.0 1.3	.6 4.5 3.0 5.3 3.3
Georgia Washington Connecticut Illinois Colorado	100.0 100.0 100.0 100.0 100.0	3.5 2.3 .5 3.4 2.5	.1 3.8 .3 .5 7.1	48.7 37.6 69.2 9.0 32.6	1.6 9.1 .9 32.6 9.9	39.7 40.0 25.5 41.4 22.0	.5 .9 * .2 5.6	.2 .3 .6 .8	.6 .4 * .1 1.1	1.6 1.5 1.2 1.2 9.7	3.6 4.1 1.7 10.9 8.7
North Carolina Michigan Missouri Minnesota Tennessee	100.0 100.0 100.0 100.0 100.0	3.2 1.9 2.8 2.9 1.1	1.5 1.4 .2 .7 .3	12.8 32.0 42.7 50.7 13.1	1.3 1.9 .7 .9 38.4	67.0 49.1 47.8 38.6 40.5	.3 .9 .8 .4	.2 2.1 .3 .3	6.4 .7 .1 1.0 .1	2.5 1.6 1.7 .8 2.9	4.9 8.4 3.0 3.7 2.9
Mississippi Wisconsin Indiana Oregon Rhode Island	100.0 100.0 100.0 100.0 100.0	15.5 7.8 3.2 9.2 .5	1.4 .7 .3 3.7 1.0	62.8 6.1 38.3 3.7 62.7	.6 4.0 2.8 7.7 .6	7.8 66.9 38.8 60.9 27.5	.8 1.8 .5 2.0	.3 .6 .7 .4	.6 .1 .6 3.0 2.0	8.6 2.7 2.8 2.4 1.0	1.7 9.2 12.0 7.0 4.2
Louisiana Utah Iowa Hawaii South Carolina	100.0 100.0 100.0 100.0 100.0	10.8 5.1 14.0 7.8 4.6	1.1 .4 .3 8.8 2.2	34.5 33.5 12.3 45.6 30.8	1.2 2.4 8.3 .9 12.2	33.3 43.8 52.6 24.8 40.5	4.8 1.3 .6 2.1 .8	.7 .3 2.5 .2 1.2	.8 .1 .5 *	7.3 6.7 3.2 5.4 1.3	5.6 6.5 5.8 4.3 6.1
Nevada Kentucky New Hampshire Kansas Alaska	100.0 100.0 100.0 100.0 100.0	.8 4.4 3.0 5.8 6.1	.3 .2 4.6 .3 23.0	8.1 6.6 46.1 6.2 34.2	64.8 1.0 .5 2.8 3.5	16.6 78.7 31.7 71.5 5.5	1.2 .6 .5 1.0 9.6	.8 1.3 .7 3.3 1.4	2.9 .6 .3 .2	.8 1.7 6.7 1.5 8.0	3.8 4.8 6.0 7.5 8.6
Oklahoma Maine West Virginia Idaho Nebraska	100.0 100.0 100.0 100.0 100.0	7.6 2.7 13.4 9.9 23.9	3.9 .9 1.3 .5	29.5 48.2 16.1 5.3 2.7	3.1 .3 33.9 69.0 1.8	30.9 39.5 12.6 5.9 50.2	.8 1.1 2.6 2.1 6.5	8.8 .4 1.2 .6 1.3	2.8 .1 .0 .2 .3	5.7 .5 16.8 3.4 .8	6.9 6.2 2.2 3.1 10.9
Arkansas Vermont Montana North Dakota Delaware	100.0 100.0 100.0 100.0 100.0	28.3 6.6 23.5 34.7 6.7	.8 .1 .7 3.7	4.5 29.0 15.4 18.7 22.8	.2 1.1 2.0 6.0 2.7	59.7 55.5 31.8 21.4 38.8	1.8 .6 6.6 5.8 .6	.6 .5 1.8 1.0	.2 .4 .6 1.4 2.5	.3 2.1 9.5 4.1 6.6	4.5 3.4 8.8 6.3 14.6
South Dakota Wyoming	100.0 100.0	14.5 20.8	* 1.0	4.0 3.7	5.9 11.4	35.4 23.7	21.9 7.6	3.7 9.2	.4 1.3	9.1 2.5	5.0 18.7

State <sup>1</sup>	Total R&D	Dept of Agricul- ture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Outlying areas Puerto Rico Other areas Offices abroad	100.0 100.0 100.0 100.0	40.4 8.0 69.8 6.7	0.3 .0 .5 .0	14.8 .6 27.6 92.2	0.2 .5 .0	36.6 75.4 1.4 .0	0.7 1.0 .5 .0	0.1 .2 .0 1.1	.0 .0 .0	0.7 1.5 .0	6.2 12.8 .1

States in order of total Federal research and development obligations.

EPA = Environmental Protection Agency.

NASA = National Aeronautics and Space Administration.

R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major Research and Development (R&D) supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in FY 2002. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

<sup>\* =</sup> Amount greater than 0 but less than 0.5 percent.

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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		I =	Extramural							
State and agency		Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts	
Alabama	2,704,834	945,309	1,377,944	0	341,752	0	28,964	0	10,865	
Department of Agriculture	24,712	9,234	0	0	15,478	0	0	0	0	
Department of Commerce	1,691	63	137	0	1,491	0	0	0	0	
Department of Defense, research <sup>2</sup> Department of Defense, total	103,068	40,580	43,092	0	16,211	0	3,185	0	0	
development <sup>3</sup>	1,825,104	615,501	1,205,132	0	2,903	0	1,568	0	0	
Department of Energy Department of Health and Human	18,496	74	601	0	17,723	0	98	0	0	
Services	309,013	55,751	5,704	0	234,315	0	12,460	0	783	
Department of the Interior	2,851	2,101	61	0	529	0	0	0	160	
Department of Transportation	8,676	1,089	526	0	1,825	0	0	0	5,236	
Environmental Protection Agency	2,701	0	830	0	1,180	0	516	0	175	
National Aeronautics and Space										
Administration	393,170	220,916	120,607	0	35,999	0	11,137	0	4,511	
National Science Foundation	15,352	0	1,254	0	14,098	0	0	0	0	
Alaska	273,779	112,811	67,169	0	69,020	0	14,827	0	9,952	
Department of Agriculture	16,769	9,965	0	0	6,416	0	0	0	388	
Department of Commerce	62,850	48,801	2	0	7,073	0	4,274	0	2,700	
Department of Defense, research <sup>2</sup>	2,694	114	812	0	1,768	0	0	0	0	
Department of Defense, total development <sup>3</sup>	91,040	27,400	56,339	0	7,301	0	0	0	0	
Department of Energy Department of Health and Human	9,709	0	5,992	0	2,861	0	0	0	856	
Services	15,092	2,544	318	0	7,640	0	1,286	0	3,304	
Department of the Interior	26,302	18,585	2,787	0	3,949	0	840	0	141	
Department of Transportation	3,832	0	20	0	49	0	1,200	0	2,563	
Environmental Protection Agency	125	0	0	0	100	0	25	0	0	
National Aeronautics and Space										
Administration	21,864	5,402	160	0	13,026	0	3,276	0	0	
National Science Foundation	23,502	0	739	0	18,837	0	3,926	0	0	
Arizona	2,057,261	273,791	1,439,099	0	238,312	45,618	48,569	0	11,872	
Department of Agriculture	25,707	18,922	0	0	6,750	0	35	0	0	
Department of Commerce	2,016	547	658	0	811	0	0	0	0	
Department of Defense, research <sup>2</sup>	68,031	25,416	22,128	0	20,487	0	0	0	0	
Department of Defense, total development <sup>3</sup>	1,542,268	188,358	1,349,693	0	553	0	0	0	3,664	
Department of Energy Department of Health and Human	6,484	0	0	0	6,484	0	0	0	0	
Services	206,401	28,259	12,299	0	117,926	0	44,364	0	3,553	
Department of the Interior	10,436	7,963	264	0	1,943	0	31	0	235	
Department of Transportation	4,202	0	536	0	355	0	56	0	3,255	
Environmental Protection Agency	572	0	0	0	459	0	0	0	113	
National Aeronautics and Space	20.04-	,	F0 105	_	00.775	-	0.105		4.050	
Administration	82,013	4,326	52,435	0	20,778	0 45 (10	3,422	0	1,052	
National Science Foundation	109,131	0	1,086	0	61,766	45,618	661	0	0	

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural								
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts		
Arkansas	141,267	58,211	5,735	0	71,315	0	3,721	0	2,285		
Department of Agriculture	40,048	23,918	0	0	16,126	0	4	0	0		
Department of Commerce	22	0	22	0	0	0	0	0	0		
Department of Defense, research <sup>2</sup>	2,052	33	4	0	2,015	0	0	0	0		
Department of Defense, total	40/5	221	2.044	0	0	0	0	0	0		
development <sup>3</sup>	4,265	321	3,944	0	0	0	0	0	0		
Department of Energy Department of Health and Human	311	0	0	0	311	0	0	0	0		
Services	84,315	31,796	1,360	0	46,012	0	3,717	0	1,430		
Department of the Interior	2,498	2,143	6	0	298	0	0	0	51		
Department of Transportation	804	0	0	0	0	0	0	0	804		
Environmental Protection Agency	250	0	0	0	250	0	0	0	0		
National Aeronautics and Space											
Administration	365	0	0	0	365	0	0	0	0		
National Science Foundation	6,337	0	399	0	5,938	0	0	0	0		
California	15,686,055	2,611,075	6,697,037	0	2,849,449	2,504,494	821,157	177,679	25,164		
Department of Agriculture	115,099	78,612	541	0	34,927	0	833	0	186		
Department of Commerce	85,030	36,354	36,347	0	10,844	588	516	0	381		
Department of Defense, research <sup>2</sup>	979,688	194,511	427,179	0	268,624	30,131	34,561	24,682	0		
Department of Defense, total development <sup>3</sup>	/ ODE 401	1 424 004	E 2E2 400	0	EE 140	20.250	12 725	140 545	0		
development 3	6,935,421	1,424,086	5,253,608	0	55,168	39,259	13,735	149,565	U		
Department of Energy Department of Health and Human	1,306,156	9,809	61,970	0	122,864	1,091,931	19,310	0	272		
Services	3,105,359	548,672	160,171	0	1,693,959	42,092	653,946	0	6,519		
Department of the Interior	99,459	90,669	1,955	0	5,865	0	377	0	593		
Department of Transportation	27,535	5,091	4,732	0	3,281	50	20	0	14,361		
Environmental Protection Agency	15,768	181	1,221	0	12,612	0	1,139	0	615		
National Aeronautics and Space											
Administration _	2,492,779	223,024	724,837	0	182,244	1,300,401	56,957	3,079	2,237		
National Science Foundation	523,761	66	24,476	0	459,061	42	39,763	353	0		
Colorado	1,608,971	324,123	569,861	0	413,403	83,927	71,234	138,982	7,441		
Department of Agriculture	40,040	30,357	0	0	8,982	0	84	0	617		
Department of Commerce	114,398	101,029	2,847	0	10,522	0	0	0	0		
Department of Defense, research <sup>2</sup>	75,759	11,155	32,520	0	27,548	0	4,436	100	0		
Department of Defense, total development <sup>3</sup>	449,086	23,018	419,676	0	4,569	0	1,823	0	0		
de reiopinient					·	·		-			
Department of Energy Department of Health and Human	159,379	1,607	5,568	0	9,850	0	3,472	138,882	0		
Services	353,531	63,934	13,712	0	232,123	0	40,346	0	3,416		
Department of the Interior Department of Transportation	90,562 13,664	85,486 0	1,244 4,812	0	3,100 70	0 6,740	60 0	0 0	672 2,042		
Environmental Protection Agency	17,110	197	1,350	0	4,852	0,740	10,510	0	2,042		
3 ,	,		.,	-	.,	,	.,	,			
National Aeronautics and Space	155 400	/ 000	0.4.504	0	E 4 E 0.0	201	0 /70	^	402		
Administration National Science Foundation	155,402 140,040	6,822 518	84,521 3,611	0	54,503 57,284	391 76,796	8,672 1,831	0 0	493 0		
National Science I Dunidation	140,040	210	3,011	U	51,204	10,170	1,031	U	U		

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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		lodos -	Extramural							
State and agency	Total R&D	Intra- <sup>—</sup> mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts	
Connecticut	1,916,926	94,056	1,344,658	0	402,745	0	65,102	0	10,365	
Department of Agriculture	9,804	1,845	0	0	6,847	0	0	0	1,112	
Department of Commerce Department of Defense, research <sup>2</sup>	5,236 47,653	500 743	620 32,089	0	4,116 10,418	0	4 402	0	0	
Department of Defense, total	47,003	743	32,009	U	10,410	U	4,403	U	U	
development <sup>3</sup>	1,279,613	2,425	1,274,539	0	545	0	2,104	0	0	
Department of Energy	17,311	0	7,639	0	9,672	0	0	0	0	
Department of Health and Human Services	489,128	80,036	9,574	0	338,025	0	55,017	0	6,476	
Department of the Interior	761	590	9,574	0	330,025	0	03,017	0	86	
Department of Transportation	11,905	7,917	1,918	Ö	0	Ő	Ő	Ő	2,070	
Environmental Protection Agency	647	0	140	0	0	0	0	0	507	
National Aeronautics and Space		_						_		
Administration	22,914	0	15,523	0	4,015 29,022	0	3,376	0	114	
National Science Foundation	31,954	0	2,616	0	29,022	0	202	0	114	
Delaware	78,846	7,530	12,908	0	53,049	0	3,760	0	1,599	
Department of Agriculture	5,247	1,619	0	0	3,523	0	100	0	5	
Department of Commerce	2,882	58	1,204	0	1,620	0	0	0	0	
Department of Defense, research <sup>2</sup>	13,281	22	3,942	0	9,317	0	0	0	0	
Department of Defense, total development <sup>3</sup>	4,667	151	4,288	0	228	0	0	0	0	
Department of Energy Department of Health and Human	2,144	0	0	0	2,144	0	0	0	0	
Services	30,609	5,330	1,197	0	22,435	0	765	0	882	
Department of the Interior	500	350	0	0	150	0	0	0	0	
Department of Transportation	842	0	94	0	93	0	0	0	655	
Environmental Protection Agency	1,974	0	350	0	1,567	0	0	0	57	
National Aeronautics and Space	5.405				4 000		0.455			
Administration National Science Foundation	5,195 11,505	0	1,447 386	0	1,093 10,879	0	2,655 240	0 0	0	
National Science Foundation	11,303	U	300	U	10,079	U	240	U	U	
District of Columbia	2,849,531	2,018,586	359,419	0	231,980	0	232,399	3,877	3,270	
Department of Agriculture	148,789	132,735	14,707	0	812	0	299	0	236	
Department of Commerce	7,503	5,148	804	0	758	0	793	0	0	
Department of Defense, research <sup>2</sup>	361,252	280,570	28,670	0	42,680	0	9,332	0	0	
Department of Defense, total development <sup>3</sup>	831,669	643,251	168,420	0	16,342	0	3,579	0	77	
Department of Energy	567,954	546,435	4,832	0	2,011	0	14,676	0	0	
Department of Energy  Department of Health and Human	301,734		4,032	O	2,011	U	14,070	U	U	
Services	318,635	57,161	32,096	0	148,193	0	78,580	0	2,605	
Department of the Interior	5,241	2,594	2,105	0	197	0	265	0	80	
Department of Transportation Environmental Protection Agency	233,905 34,235	141,865 25,929	82,234 0	0	754 400	0	8,840 7,906	0 0	212 0	
Environmental Frotection Agency	34,233	23,727	U	U	400	U	1,700	U	U	
National Aeronautics and Space										
Administration	235,065	176,632	24,121	0	7,273	0	26,989	0	50	
National Science Foundation	105,283	6,266	1,430	0	12,560	0	81,140	3,877	10	

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural							
State and agency	Total R&D m	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts	
Florida	2,300,550	669,799	1,037,911	0	543,262	0	35,444	0	14,134	
Department of Agriculture	54,071	33,701	0	0	20,270	0	0	0	100	
Department of Commerce	49,375	30,320	4,469	0	11,067	0	1,935	0	1,584	
Department of Defense, research <sup>2</sup>	249,453	84,636	73,098	0	85,465	0	6,254	0	0	
Department of Defense, total development <sup>3</sup>	1,086,125	283,645	782,853	0	19,467	0	0	0	160	
Department of Energy	12,989	0	2,781	0	9,634	0	574	0	0	
Department of Health and Human	12,707	U	2,701	O	7,054	O	3/4	U	O	
Services	342,017	60,216	10,111	0	249,266	0	21,521	0	903	
Department of the Interior	32,232	24,575	1,275	0	6,176	0	21	0	185	
Department of Transportation	9,706	0	2,228	0	1,028	0	0	0	6,450	
Environmental Protection Agency	12,706	7,550	270	0	3,439	0	140	0	1,307	
National Aeronautics and Space										
Administration	348,283	145,156	158,736	0	37,331	0	3,615	0	3,445	
National Science Foundation	103,593	0	2,090	0	100,119	0	1,384	0	0	
Georgia	2,019,248	729,696	804,316	0	458,203	0	21,807	0	5,226	
Department of Agriculture	69,955	51,801	0	Ö	17,942	Ö	192	Õ	20	
Department of Commerce	2,947	246	1,450	0	1,251	0	0	0	0	
Department of Defense, research <sup>2</sup>	180,945	143,590	8,326	0	26,981	0	2,048	0	0	
Department of Defense, total										
development <sup>3</sup>	802,074	17,963	764,292	0	18,588	0	1,231	0	0	
Department of Energy Department of Health and Human	33,300	160	16,700	0	11,052	0	5,388	0	0	
Services	801,219	497,368	6,170	0	294,202	0	1,823	0	1,656	
Department of the Interior	9,532	8,684	21	0	757	0	0	0	70	
Department of Transportation	3,111	0	705	0	121	0	0	0	2,285	
Environmental Protection Agency	12,536	7,399	140	0	4,416	0	517	0	64	
National Aeronautics and Space										
Administration	31,699	2,415	3,275	0	15,659	0	10,156	0	194	
National Science Foundation	71,930	70	3,237	0	67,234	0	452	0	937	
Hawaii	375,159	124,279	81,020	0	111,569	0	55,587	0	2,704	
Department of Agriculture	29,342	14,800	0	0	9,528	0	5,014	0	0	
Department of Commerce	32,829	18,669	581	0	11,975	0	1,544	0	60	
Department of Defense, research <sup>2</sup>	54,503	17,692	15,174	0	16,279	0	5,358	0	0	
Department of Defense, total development <sup>3</sup>	116,700	54,412	61,446	0	842	0	0	0	0	
development -		J4,41Z	01,440	U		U	U	U	U	
Department of Energy Department of Health and Human	3,305	0	0	0	2,695	0	610	0	0	
Services	93,139	11,436	3,063	0	41,519	0	35,125	0	1,996	
Department of the Interior	7,797	6,976	0,009	0	821	0	0	0	0	
Department of Transportation	647	0	0	0	0	Ō	0	0	647	
Environmental Protection Agency	166	0	0	0	166	0	0	0	0	
National Aeronautics and Space										
Administration	20,444	294	450	0	12,166	0	7,533	0	1	
National Science Foundation	16,287	0	306	0	15,578	Ő	403	0	0	
	-,				-,					

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural								
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts		
ldaho	230,910	23,518	28,363	124,812	51,173	0	1,369	0	1,675		
Department of Agriculture	22,913	15,637	0	0	7,276	0	0	Ō	0		
Department of Commerce	1,062	361	649	0	52	0	0	0	0		
Department of Defense, research 2	6,013	44	648	1,012	4,309	0	0	0	0		
Department of Defense, total		4 407	0.540	4.050				•			
development <sup>3</sup>	6,307	1,407	3,542	1,358	0	0	0	0	0		
Department of Energy Department of Health and Human	159,264	10	23,187	122,017	14,050	0	0	0	0		
Services	13,720	2,111	132	0	10,930	0	531	0	16		
Department of the Interior	4,784	3,948	0	0	836	0	0	0	0		
Department of Transportation	1,480	0	1	425	0	0	0	0	1,054		
Environmental Protection Agency	398	0	0	0	256	0	0	0	142		
National Aeronautics and Space		_				_					
Administration	7,831	0	204	0	6,326	0	838	0	463		
National Science Foundation	7,138	0	0	0	7,138	0	0	0	0		
Illinois	1,693,942	204,492	75,778	0	775,319	509,496	108,689	0	20,168		
Department of Agriculture	58,006	41,754	902	0	15,045	0	305	0	204		
Department of Commerce Department of Defense, research <sup>2</sup>	7,998 76,523	240 9,364	5,806 11,881	0 0	862 52,547	0 2,528	694 203	0	396 0		
Department of Defense, research 2  Department of Defense, total	70,323	9,304	11,001	U	32,347	2,320	203	U	U		
development <sup>3</sup>	75,465	28,488	31,150	0	8,955	5,689	1,183	0	0		
Department of Energy Department of Health and Human	551,957	2,420	1,855	0	44,912	499,902	2,868	0	0		
Services	701,755	118,817	16,603	0	457,818	0	95,903	0	12,614		
Department of the Interior	2,631	2,090	47	0	474	0	20	0	0		
Department of Transportation	12,922	0	4,216	0	1,602	0	206	0	6,898		
Environmental Protection Agency	2,252	93	0	0	2,159	0	0	0	0		
National Aeronautics and Space											
Administration	19,919	1,226	1,633	0	14,704	1,161	1,035	0	160		
National Science Foundation	184,514	0	1,685	0	176,241	216	6,272	0	100		
Indiana	525,745	98,510	141,045	0	276,361	0	4,453	0	5,376		
Department of Agriculture	16,959	5,669	0	0	11,243	0	30	0	17		
Department of Commerce	1,822	183	606	0	1,033	0	0	0	0		
Department of Defense, research <sup>2</sup>	34,981	3,993	13,521	0	16,213	0	1,254	0	0		
Department of Defense, total development <sup>3</sup>	166,364	49,914	116,010	0	440	0	0	0	0		
			.,.								
Department of Energy Department of Health and Human	14,594	0	0	0	14,594	0	0	0	0		
Services	203,789	35,853	6,994	0	158,185	0	633	0	2,124		
Department of the Interior	2,749	2,106	22	0	561	0	0	0	60		
Department of Transportation	3,560	0	252	0	133	0	0	0	3,175		
Environmental Protection Agency	3,002	0	192	0	1,985	0	825	0	0		
National Aeronautics and Space											
Administration	14,982	792	3,138	0	9,341	0	1,711	0	0		
National Science Foundation	62,943	0	310	0	62,633	0	0	0	0		

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural							
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts	
lowa Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	404,545 56,708 1,107 15,565	77,770 38,089 122 0	45,538 0 788 2,257	0 0 0 0	249,494 18,587 197 13,292	21,119 0 0 16	5,703 25 0	0 0 0 0	4,921 7 0 0	
development <sup>3</sup>	34,015	457	31,310	0	2,248	0	0	0	0	
Department of Energy Department of Health and Human	33,390	0	0	0	8,817	20,516	4,057	0	0	
Services Department of the Interior Department of Transportation Environmental Protection Agency	212,596 2,583 10,061 1,960	37,490 1,612 0 0	3,013 2 4,733 0	0 0 0 0	168,490 753 2,152 1,833	0 0 587 0	1,613 8 0 0	0 0 0 0	1,990 208 2,589 127	
National Aeronautics and Space Administration National Science Foundation	12,981 23,579	0	3,435 0	0	9,546 23,579	0	0	0	0	
Kansas Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	290,516 16,907 835 7,492	32,021 8,720 0 249	21,030 0 835 2,614	0 0 0 0	117,154 8,118 0 4,629	0 0 0 0	106,164 0 0 0	0 0 0 0	14,147 69 0 0	
development <sup>3</sup>	10,449	3,655	6,273	0	521	0	0	0	0	
Department of Energy Department of Health and Human	8,193	0	462	0	7,731	0	0	0	0	
Services Department of the Interior Department of Transportation Environmental Protection Agency	207,653 2,940 9,444 459	16,901 2,371 0 125	3,415 2 4,448 0	0 0 0 0	69,907 556 3,200 208	0 0 0 0	105,159 0 0 126	0 0 0 0	12,271 11 1,796 0	
National Aeronautics and Space Administration National Science Foundation	4,311 21,833	0	1,190 1,791	0	2,242 20,042	0	879 0	0	0	
Kentucky Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup>	321,284 14,038 756 11,922	28,318 1,288 0 917	19,165 0 756 3,475	0 0 0 0	148,444 12,750 0 7,530	0 0 0 0	111,082 0 0 0	0 0 0 0	14,275 0 0 0	
Department of Defense, total development <sup>3</sup>	9,225	1,334	7,506	0	385	0	0	0	0	
Department of Energy Department of Health and Human	3,193	0	308	0	2,885	0	0	0	0	
Services Department of the Interior Department of Transportation Environmental Protection Agency	252,990 2,056 4,271 1,873	23,533 1,097 0 0	6,427 46 0 0	0 0 0 0	103,002 848 1,884 1,664	0 0 0	109,244 36 0 209	0 0 0 0	10,784 29 2,387 0	
National Aeronautics and Space Administration National Science Foundation	5,557 15,403	149 0	523 124	0	2,423 15,073	0	1,387 206	0	1,075 0	

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural							
State and agency	Intra- Total R&D mural <sup>1</sup>	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts	
Louisiana	431,989	121,696	90,468	0	204,943	0	5,442	0	9,440	
Department of Agriculture	46,627	34,849	0	0	11,738	0	40	0	172	
Department of Commerce	4,539	53 2.105	749 953	0	2,504	0	1,060	0	173 0	
Department of Defense, research <sup>2</sup> Department of Defense, total	28,763	3,195	953	U	24,304	U	311	U	U	
development <sup>3</sup>	120,078	23,658	79,082	0	15,898	0	1,440	0	0	
Department of Energy Department of Health and Human	5,199	0	23	0	5,176	0	0	0	0	
Services	144,052	26,989	2,339	0	110,213	0	2,491	0	2,020	
Department of the Interior	20,594	12,095	5,043	0	3,194	0	100	0	162	
Department of Transportation	3,128	0	165	0	15	0	0	0	2,948	
Environmental Protection Agency	3,423	0	0	0	2,929	0	0	0	494	
National Aeronautics and Space										
Administration	31,473	20,800	2,014	0	8,659	0	0	0	0	
National Science Foundation	24,113	57	100	0	20,313	0	0	0	3,643	
Maine	254,518	19,929	106,267	0	35,723	0	90,228	0	2,371	
Department of Agriculture	6,858	1,993	15	Ö	4,060	Ö	75	Ö	715	
Department of Commerce	2,336	520	0	0	1,283	0	475	0	58	
Department of Defense, research <sup>2</sup>	14,678	3	891	0	13,288	0	496	0	0	
Department of Defense, total development <sup>3</sup>	107,979	1,532	103,064	0	1,930	0	1,453	0	0	
Department of Energy Department of Health and Human	790	0	300	0	323	0	167	0	0	
Services	100,643	13,971	1,454	0	3,095	0	81,243	0	880	
Department of the Interior	2,765	1,910	0	0	766	0	0	0	89	
Department of Transportation	1,129	0	0	0	500	0	0	0	629	
Environmental Protection Agency	362	0	0	0	362	0	0	0	0	
National Aeronautics and Space										
Administration	1,187	0	43	0	278	0	866	0	0	
National Science Foundation	15,791	0	500	0	9,838	0	5,453	0	0	
Maryland	7,192,243	2,779,379	2,439,542	307,238	1,348,168	0	310,804	0	7,112	
Department of Agriculture	148,852	139,457	75	0	8,580	0	740	0	. 0	
Department of Commerce	407,360	388,476	8,750	0	8,032	0	1,585	0	517	
Department of Defense, research <sup>2</sup>	657,501	327,954	175,605	0	144,842	0	9,100	0	0	
Department of Defense, total development <sup>3</sup>	2,525,298	1,151,199	1,161,179	0	195,677	0	17,179	0	64	
Department of Energy Department of Health and Human	23,065	3,934	3,672	0	12,656	0	2,803	0	0	
Services	1,915,003	433,299	355,211	307,238	665,705	0	151,403	0	2,147	
Department of the Interior	15,926	14,415	767	0	639	0	5	0	100	
Department of Transportation	19,086	5,827	4,259	0	5,105	0	49	0	3,846	
Environmental Protection Agency	9,224	186	4,092	0	4,406	0	340	0	200	
National Aeronautics and Space										
Administration	1,381,858	312,711	723,962	0	227,284	0	117,663	0	238	
National Science Foundation	89,070	1,921	1,970	0	75,242	0	9,937	0	0	

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural							
State and agency		Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts	
Massachusetts	4,658,616	676,831	1,240,619	0	1,170,695	256,559	1,202,935	103,895	7,082	
Department of Agriculture	26,954	17,100	947	0	6,929	0	1,966	0	12	
Department of Commerce	33,229	13,791	13,197	0	4,770	0	830	0	641	
Department of Defense, research <sup>2</sup>	371,203	51,760	131,782	0	118,319	42,998	23,461	2,873	10	
Department of Defense, total development <sup>3</sup>	1,389,221	126,291	893,683	0	41,313	213,266	13,646	101,022	0	
Department of Energy Department of Health and Human	84,616	0	1,399	0	76,884	0	6,333	0	0	
Services	2,235,967	392,138	124,271	0	673,060	0	1,042,430	0	4,068	
Department of the Interior	13,086	12,030	306	0	679	0	71	0	0	
Department of Transportation	67,207	44,703	20,303	0	75	295	175	0	1,656	
Environmental Protection Agency	12,695	189	1,799	0	5,061	0	4,951	0	695	
National Aeronautics and Space										
Administration	189,453	18,754	41,810	0	45,721	0	83,168	0	0	
National Science Foundation	234,985	75	11,122	0	197,884	0	25,904	0	0	
Michigan	1,244,244	231,707	298,827	0	653,670	0	51,622	0	8,418	
Department of Agriculture	23,393	6,933	51	0	16,409	0	0	0	0	
Department of Commerce	16,902	7,649	7,460	0	1,778	0	0	0	15	
Department of Defense, research <sup>2</sup>	107,338	28,478	36,401	0	42,064	0	395	0	0	
Department of Defense, total development <sup>3</sup>	291,407	76,538	210,621	0	3,860	0	388	0	0	
Department of Energy Department of Health and Human	23,318	0	655	0	22,663	0	0	0	0	
Services	611,111	101,512	16,070	0	442,580	0	48,095	0	2,854	
Department of the Interior	10,764	9,912	4	0	616	0	25	0	207	
Department of Transportation	25,810	15	19,066	0	1,238	0	149	0	5,342	
Environmental Protection Agency	9,189	605	170	0	6,039	0	2,375	0	0	
National Aeronautics and Space Administration	20,182	65	3,969	0	14 1 10	0	0	0	0	
National Science Foundation	104,830	0	4,360	0	16,148 100,275	0	195	0	0	
Minnesota	1,150,839	116,889	568,390	0	293,852	0	166,218	0	5,490	
Department of Agriculture	33,387	19,507	23	0	13,453	0	0	0	404	
Department of Commerce	8,580	2,023	5,497	0	1,060	0	0	0	0	
Department of Defense, research <sup>2</sup>	53,222	74	38,725	0	9,958	0	4,465	0	0	
Department of Defense, total development <sup>3</sup>	530,439	3,605	505,489	0	3,400	0	17,945	0	0	
Department of Energy Department of Health and Human	10,540	0	1,350	0	9,190	0	0	0	0	
Services	444,102	78,326	10,441	0	209,579	0	143,440	0	2,316	
Department of the Interior	4,236	3,322	23	Ö	755	Ö	25	Ö	111	
Department of Transportation	3,117	262	196	0	0	0	0	0	2,659	
Environmental Protection Agency	11,306	9,280	0	0	2,026	0	0	0	0	
National Aeronautics and Space										
Administration	9,488	490	4,316	0	4,398	0	284	0	0	
National Science Foundation	42,422	0	2,330	0	40,033	0	59	0	0	

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural							
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts	
Mississippi	622,714	174,061	316,027	0	121,107	0	8,419	0	3,100	
Department of Agriculture	96,215	66,983	0	0	27,717	0	1,515	0	0	
Department of Commerce	8,703	4,043	0	0	3,502	0	1,158	0	0	
Department of Defense, research <sup>2</sup> Department of Defense, total	58,849	44,006	4,690	0	10,153	0	0	0	0	
development <sup>3</sup>	332,464	47,411	275,353	0	9,700	0	0	0	0	
Department of Energy	3,668	0	0	0	3,668	0	0	0	0	
Department of Health and Human Services	48,583	7,342	802	0	39,048	0	0	0	1,391	
Department of the Interior	4,926	3,876	002	0	164	0	760	0	1,371	
Department of the interior	2,149	0,070	667	0	0	ő	0	0	1,482	
Environmental Protection Agency	3,425	0	0	0	3,425	0	0	0	0	
National Aeronautics and Space										
Administration	53,269	400	34,275	0	13,577	0	4,916	0	101	
National Science Foundation	10,463	0	240	0	10,153	0	70	0	0	
Missouri	1,202,671	140,832	510,998	0	508,516	0	39,294	0	3,031	
Department of Agriculture	33,292	16,277	0	0	16,925	0	90	0	0	
Department of Commerce	2,405	144	1,689	0	182	0	390	0	0	
Department of Defense, research <sup>2</sup>	41,936	1,015	34,220	0	6,701	0	0	0	0	
Department of Defense, total development <sup>3</sup>	471,431	12,914	455,339	0	3,178	0	0	0	0	
Department of Energy Department of Health and Human	7,895	0	180	0	7,505	0	210	0	0	
Services	575,137	102,129	5,934	0	429,788	0	37,039	0	247	
Department of the Interior	9,025	8,345	26	0	641	0	0	0	13	
Department of Transportation	3,385	8	217	0	0	0	539	0	2,621	
Environmental Protection Agency	1,660	0	70	0	1,590	0	0	0	0	
National Aeronautics and Space	00.500						0.40			
Administration	20,538	0 0	9,044	0	11,126	0	368	0	0 150	
National Science Foundation	35,967	U	4,279	0	30,880	U	658	0	150	
Montana	112,924	32,692	7,023	0	54,231	0	15,118	0	3,860	
Department of Agriculture	26,563	14,263	18	0	9,752	0	2,530	0	0	
Department of Commerce	76	35	0	0	41	0	0	0	0	
Department of Defense, research <sup>2</sup>	13,678	7,181	328	0	6,169	0	0	0	0	
Department of Defense, total development <sup>3</sup>	3,660	6	2,610	0	1,044	0	0	0	0	
•			, -							
Department of Energy Department of Health and Human	2,225	0	0	0	1,608	0	617	0	0	
Services	35,883	4,960	1,647	0	19,398	0	8,277	0	1,601	
Department of the Interior	7,412	6,049	2	0	1,020	0	0	0	341	
Department of Transportation	1,992	0	0	0	250	0	0	0	1,742	
Environmental Protection Agency	701	0	0	0	525	0	0	0	176	
National Aeronautics and Space										
Administration	10,748	198	1,470	0	8,580	0	500	0	0	
National Science Foundation	9,986	0	948	0	5,844	0	3,194	0	0	

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural								
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts		
Nebraska	144,671	45,968	8,355	0	80,213	0	8,101	0	2,034		
Department of Agriculture	34,560	23,758	0	0	10,758	0	0	0	44		
Department of Commerce	2,297	225	1,290	0	107	0	675	0	0		
Department of Defense, research <sup>2</sup>	2,531	199	57	0	2,275	0	0	0	0		
Department of Defense, total development <sup>3</sup>	1,417	414	879	0	124	0	0	0	0		
development 3	1,417	414	0/9	U	124	U	U	U	U		
Department of Energy Department of Health and Human	2,589	0	0	0	2,589	0	0	0	0		
Services	72,665	12,663	1,293	0	50,660	0	7,426	0	623		
Department of the Interior	9,375	8,709	1	0	665	0	0	0	0		
Department of Transportation	1,916	0	0	0	549	0	0	0	1,367		
Environmental Protection Agency	489	0	0	0	489	0	0	0	0		
National Aeronautics and Space											
Administration	1,129	0	0	0	1,129	0	0	0	0		
National Science Foundation	15,703	ŏ	4,835	ŏ	10,868	Ö	Ő	Ö	Ö		
	•		·								
Nevada	335,989	27,532	231,390	0	42,810	0	29,933	0	4,324		
Department of Agriculture	2,683	498	0	0	2,099	0	86	0	0		
Department of Commerce Department of Defense, research <sup>2</sup>	876 8,907	12 6,620	3 1,034	0 0	861 1,253	0	0	0	0		
Department of Defense, research =	0,707	0,020	1,034	U	1,233	U	U	U	U		
development <sup>3</sup>	18,434	2,708	15,726	0	0	0	0	0	0		
'											
Department of Energy Department of Health and Human	217,666	35	211,722	0	3,212	0	2,697	0	0		
Services	55,631	4,070	1,413	0	20,506	0	26,943	0	2,699		
Department of the Interior	3,951	3,031	420	0 0	920	0	0	0	1 410		
Department of Transportation Environmental Protection Agency	2,832 9,643	775 9,543	639 0	0	0 100	0	0	0	1,418 0		
Environmental Polection Agency	7,043	7,545	U	U	100	U	U	U	U		
National Aeronautics and Space											
Administration	2,649	240	651	0	1,344	0	207	0	207		
National Science Foundation	12,717	0	202	0	12,515	0	0	0	0		
New Hampshire	296,575	58,362	108,847	0	125,072	0	3,667	0	627		
Department of Agriculture	8,949	5,957	0	0	2,966	0	0,007	0	26		
Department of Commerce	13,584	90	800	Õ	12,694	Ö	Ő	Ö	0		
Department of Defense, research <sup>2</sup>	40,173	10,645	22,716	0	6,212	0	600	0	0		
Department of Defense, total	0	04.007	70.507								
development <sup>3</sup>	96,587	21,887	72,587	0	977	0	1,136	0	0		
Department of Energy	1,598	0	676	0	922	0	0	0	0		
Department of Health and Human											
Services	93,873	16,555	4,950	0	72,255	0	32	0	81		
Department of the Interior Department of Transportation	1,607 1,070	1,231 315	0 20	0	334 1,356	0	0	0	42 288		
Environmental Protection Agency	1,979 779	315	20 70	0 0	1,356 555	0	0	0	288 154		
Environmental Frotection Agency	117	U	70	U	555	U	U	J	137		
National Aeronautics and Space											
Administration	19,728	527	6,442	0	10,824	0	1,899	0	36		
National Science Foundation	17,718	1,155	586	0	15,977	0	0	0	0		

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural							
State and agency		Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts	
New Jersey	2,021,450	677,353	935,703	0	318,925	64,336	19,811	0	5,322	
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup>	8,330 31,647 150,094	3 27,402 61,109	0 3,177 56,951	0 0 0	8,010 1,068 31,763	0 0 0	0 0 271	0 0 0	317 0 0	
Department of Defense, total development <sup>3</sup>	1,239,365	497,968	733,355	0	7,293	639	110	0	0	
Department of Energy Department of Health and Human	81,804	122	270	0	17,028	63,697	687	0	0	
Services	267,993	45,912	29,490	0	173,498	0	17,930	0	1,163	
Department of the Interior	4,349	3,470	165	0	259	0	0	0	455	
Department of Transportation	140,541	36,355	99,820	0	1,079	0	0	0	3,287	
Environmental Protection Agency	4,371	1,567	309	0	2,110	0	285	0	100	
National Aeronautics and Space										
Administration	25,331	3,357	8,982	0	12,589	0	403	0	0	
National Science Foundation	67,625	88	3,184	0	64,228	0	125	0	0	
New Mexico	2,746,139	471,029	232,541	867,125	158,564	996,750	16,818	0	3,312	
Department of Agriculture	11,761	6,684	15	0	4,951	0	111	Ö	0	
Department of Commerce	5,065	141	2,805	15	1,744	0	360	0	0	
Department of Defense, research <sup>2</sup>	228,443	156,998	26,617	15,447	17,728	10,648	1,005	0	0	
Department of Defense, total	5/0.470	0.45.0.47	470.057	100 (00	47.440	40 474	0.040	•		
development <sup>3</sup>	560,473	245,047	179,956	103,620	16,410	13,171	2,269	0	0	
Department of Energy Department of Health and Human	1,757,077	25,299	1,402	741,063	29,887	957,300	2,126	0	0	
Services	107,048	18,538	3,334	1,000	61,414	15,050	6,108	0	1,604	
Department of the Interior	3,648	2,793	7.047	0	468	0	0	0	387	
Department of Transportation Environmental Protection Agency	16,043 3,991	600 0	7,867 169	5,980 0	275 624	0	0 3,198	0	1,321 0	
Environmental Protection Agency	3,771	U	107	U	024	U	3,170	U	U	
National Aeronautics and Space	20.000	14 (20	7.017	0	/ /11	407	115	0	0	
Administration National Science Foundation	28,808 23,782	14,639 290	7,017 3,359	0	6,611 18,452	426 155	115 1,526	0	0	
National Science Foundation	25,702	270	3,337	U	10,432	133	1,520	U	U	
New York	3,746,837	502,546	832,148	0	1,696,397	0	388,519	234,926	92,301	
Department of Agriculture	41,679	17,324	0	0	22,494	0	1,811	0	50	
Department of Commerce	30,202	4,676	15,705	0	9,523 83,053	0	298	0 459	0	
Department of Defense, research <sup>2</sup> Department of Defense, total	209,220	72,318	49,739	U	83,053	0	3,651	459	U	
development <sup>3</sup>	473,528	34,554	421,820	0	14,856	0	2,161	137	0	
Department of Energy Department of Health and Human	569,709	970	267,948	0	71,069	0	5,821	223,901	0	
Services	2,074,525	362,002	53,246	0	1,223,767	0	339,957	9,938	85,615	
Department of the Interior	4,930	4,518	0	0	285	0	15	0	112	
Department of Transportation	10,496	485	2,464	0	2,173	0	3	0	5,371	
Environmental Protection Agency	10,786	88	639	0	6,796	0	2,622	0	641	
National Aeronautics and Space										
Administration	74,623	5,611	15,007	0	35,476	0	18,038	491	0	
National Science Foundation	247,139	0	5,580	0	226,905	0	14,142	0	512	

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

			Extramural								
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts		
North Carolina	1,390,440	335,891	149,604	0	822,547	0	79,216	0	3,182		
Department of Agriculture	43,895	24,706	0	0	19,017	0	127	0	45		
Department of Commerce	21,265	15,448	4,542	0	575	0	700	0	0		
Department of Defense, research <sup>2</sup> Department of Defense, total	100,646	26,714	20,778	0	46,226	0	6,928	0	U		
development <sup>3</sup>	77,537	32,474	41,502	0	3,261	0	300	0	0		
Department of Energy Department of Health and Human	17,642	218	0	0	12,865	0	4,559	0	0		
Services	931,107	162,488	56,970	0	654,199	0	55,985	0	1,465		
Department of the Interior	4,412	2,971	15	0	1,348	0	78	0	0		
Department of Transportation	2,443	0	225	Ö	1,249	Ö	0	Ö	969		
Environmental Protection Agency	88,438	70,693	7,453	0	7,493	0	2,718	0	81		
National Aeronautics and Space	0.4.070	470	45.040		44 = //		7.000				
Administration	34,973	179	15,313	0	11,566	0	7,293	0	622		
National Science Foundation	68,082	0	2,806	0	64,748	0	528	0	0		
North Dakota	102,136	32,128	7,829	0	57,418	0	2,836	0	1,925		
Department of Agriculture	35,395	25,581	0	0	9,633	0	175	0	6		
Department of Commerce	758	35	25	0	698	0	0	0	0		
Department of Defense, research <sup>2</sup> Department of Defense, total	7,381	0	1,329	0	6,052	0	0	0	0		
development <sup>3</sup>	11,669	60	1,477	0	10,132	0	0	0	0		
Department of Energy Department of Health and Human	6,078	0	0	0	6,078	0	0	0	0		
Services	21,810	2,963	3,905	0	11,639	0	2,403	0	900		
Department of the Interior	5,962	3,342	0	0	2,586	0	6	0	28		
Department of Transportation	1,043	147	0	0	0	0	0	0	896		
Environmental Protection Agency	1,425	0	0	0	1,330	0	0	0	95		
National Aeronautics and Space	4.214	0	0	0	3,962	0	252	0	0		
Administration National Science Foundation	4,214 6,401	0	0 1,093	0 0	5,962 5,308	0 0	252 0	0 0	0		
Ohio	2,103,409	742,602	568,354	0	564,308	0	219,915	0	8,230		
Department of Agriculture	2,103,409	9,669	000,304	0	14,981	0	857	0	0,230 20		
Department of Agriculture  Department of Commerce	8,044	251	2,506	0	527	0	4,256	0	504		
Department of Defense, research <sup>2</sup>	454,494	272,423	118,399	Ö	43,461	Ö	20,211	Õ	0		
Department of Defense, total development <sup>3</sup>	448,097	123,442	301,473	0	11,558	0	11,624	0	0		
Department of Energy	14,666	0	2,862	0	11,098	0	706	0	0		
Department of Health and Human											
Services Department of the Interior	702,024 3,709	129,786 2,821	21,097 6	0 0	399,559 427	0	149,008 213	0	2,574 242		
Department of the interior  Department of Transportation	31,593	14,100	10,278	0	846	0	1,992	0	4,377		
Environmental Protection Agency	55,910	36,093	13,822	0	1,314	0	4,431	0	250		
National Aeronautics and Space											
Administration .	296,694	154,010	93,606	0	22,655	0	26,160	0	263		
National Science Foundation	62,651	7	4,305	0	57,882	0	457	0	0		

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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Sate and agency   Total RAD   March   Principal   Industry   Ind				Extramural								
Department of Agriculture	State and agency	Total R&D		Industry		sities and	sity	nonprofit institu-	profit	and local		
Department of Commerce   10,512   7,476   12   0   3,074   0   0   0   0   0   0   0   0   0				68,600	0		0	21,389	0	3,665		
Department of Defense, research 2   23,123   33,174   5,417   0   4,532   0   0   0   0   0   0   0   0   0												
Department of Defense, total development						3,074						
Department of Energy   S.7,045   S.348   47,044   O   1,293   O   O   O   O   O   O   Department of Energy   Services   S.3,912   1,4,270   2,393   O   45,295   O   20,447   O   1,507   O   Department of the Interior   2,246   1,776   O   O   4770   O   O   O   O   O   Department of Transportation   23,871   10,674   11,052   O   50   O   O   O   O   Department of Transportation   23,871   10,674   11,052   O   50   O   O   O   O   Department of Department of Transportation   23,871   10,674   11,052   O   50   O   O   O   O   Department of		23,123	13,174	5,417	0	4,532	0	0	0	0		
Department of Health and Human   Services   88,912   14,270   2,393   0   45,295   0   20,447   0   1,507	development <sup>3</sup>	57,045	8,348	47,404	0	1,293	0	0	0	0		
Department of Health and Human   Services   88,912   14,270   2,393   0   45,295   0   20,447   0   1,507	Department of Energy	8 <b>4</b> 51	1 658	998	0	5 795	0	0	0	0		
Services	Department of Health and Human	0,401	1,000	770	O	3,773	U	O	O	O		
Department of Transportation   23,871   10,674   11,052   0   50   0   0   0   0   2,095	Services	83,912	14,270	2,393	0	45,295	0	20,447	0	1,507		
Environmental Protection Agency   7,606   6,583   70   0   953   0   0   0   0   0   0   0   National Aeronautics and Space Administration   15,459   2,478   355   0   12,253   0   373   0   0   0   0   0   0   0   0   0	Department of the Interior											
National Aeronautics and Space   Administration   15,459   2,478   355   0   12,253   0   373   0   0   0   0												
Administration National Science Foundation 15.459 2.478 355 0 12.253 0 373 0 0 0 National Science Foundation 18.761 0 899 0 17.293 0 5699 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Environmental Protection Agency	7,606	6,583	70	0	953	0	0	0	0		
Administration National Science Foundation 15.459 2.478 355 0 12.253 0 373 0 0 0 National Science Foundation 18.761 0 899 0 17.293 0 5699 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	National Aeronautics and Space											
National Science Foundation   18,761   0   899   0   17,293   0   569   0   0   0		15.459	2,478	355	0	12.253	0	373	0	0		
Department of Agriculture							0					
Department of Agriculture	Orogon	EU3 304	122 466	26 120	0	255 /17	0	F2 270	0	24 002		
Department of Commerce			3// 000									
Department of Defense, research 2   12,033   612   2,844   0   8,577   0   0   0   0   0   0   0   0   0												
Department of Defense, total development 3												
Department of Energy   38,755   20,729   10,091   0   5,691   0   144   0   2,100	Department of Defense, total	,		,		-,-						
Department of Health and Human Services 305,872 48,851 13,804 0 178,870 0 49,545 0 14,802 Department of the Interior 10,053 8,633 81 0 1,143 0 0 0 0 196 Department of Transportation 2,185 0 0 0 0 500 0 10 0 1,675 Environmental Protection Agency 14,905 10,350 0 0 4,063 0 43 0 449 National Aeronautics and Space Administration 35,083 0 882 0 34,111 0 90 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	development <sup>3</sup>	6,341	208	4,634	0	1,356	0	143	0	0		
Department of the Interior   10,053   8,633   81   0   1,143   0   0   0   196		38,755	20,729	10,091	0	5,691	0	144	0	2,100		
Department of Transportation   2,185   0   0   0   500   0   10   0   1,675												
National Aeronautics and Space   Administration   11,962   176   2,626   0   7,148   0   2,012   0   0   0   0   0   0   0   0   0												
National Aeronautics and Space     Administration												
Administration	Environmental Protection Agency	14,905	10,350	U	U	4,003	U	43	U	449		
National Science Foundation         35,083         0         882         0         34,111         0         90         0         0           Pennsylvania         3,162,026         433,556         1,045,767         0         1,350,959         17,614         306,808         0         7,322           Department of Agriculture         60,193         43,492         0         0         15,209         0         1,492         0         0           Department of Commerce         7,396         173         4,014         0         3,204         0         5         0         0           Department of Defense, research 2         161,306         7,443         37,840         0         102,804         54         13,165         0         0           Department of Defense, research 3         828,805         61,295         639,397         0         82,079         17,560         28,474         0         0           Department of Energy         398,811         50,820         313,120         0         29,318         0         5,553         0         0           Department of Health and Human         5         1,489,656         265,430         34,138         0         938,477         0         248,857												
Pennsylvania 3,162,026 433,556 1,045,767 0 1,350,959 17,614 306,808 0 7,322 Department of Agriculture 60,193 43,492 0 0 15,209 0 1,492 0 0 Department of Commerce 7,396 173 4,014 0 3,204 0 5 0 0 Department of Defense, research 2 161,306 7,443 37,840 0 102,804 54 13,165 0 0 Department of Defense, total development 3 828,805 61,295 639,397 0 82,079 17,560 28,474 0 0 Department of Health and Human Services 1,489,656 265,430 34,138 0 938,477 0 248,857 0 2,754 Department of the Interior 4,548 3,957 0 0 417 0 134 0 40 Department of Transportation 7,644 30 2,533 0 554 0 83 0 4,444 Environmental Protection Agency 10,988 102 70 0 10,216 0 600 0 0  National Aeronautics and Space Administration 47,381 814 11,114 0 33,158 0 2,211 0 84												
Department of Agriculture         60,193         43,492         0         0         15,209         0         1,492         0         0           Department of Commerce         7,396         173         4,014         0         3,204         0         5         0         0           Department of Defense, research 2         161,306         7,443         37,840         0         102,804         54         13,165         0         0           Department of Defense, total development 3         828,805         61,295         639,397         0         82,079         17,560         28,474         0         0           Department of Energy development 3         398,811         50,820         313,120         0         29,318         0         5,553         0         0           Department of Health and Human Services         1,489,656         265,430         34,138         0         938,477         0         248,857         0         2,754           Department of the Interior Agency         4,548         3,957         0         0         417         0         134         0         40           Department of Transportation Environmental Protection Agency         10,988         102         70         0         10,216	National Science Foundation	35,083	0	882	0	34,111	0	90	0	0		
Department of Agriculture         60,193         43,492         0         0         15,209         0         1,492         0         0           Department of Commerce         7,396         173         4,014         0         3,204         0         5         0         0           Department of Defense, research 2         161,306         7,443         37,840         0         102,804         54         13,165         0         0           Department of Defense, total development 3         828,805         61,295         639,397         0         82,079         17,560         28,474         0         0           Department of Energy development 3         398,811         50,820         313,120         0         29,318         0         5,553         0         0           Department of Health and Human Services         1,489,656         265,430         34,138         0         938,477         0         248,857         0         2,754           Department of the Interior Agency         4,548         3,957         0         0         417         0         134         0         40           Department of Transportation Environmental Protection Agency         10,988         102         70         0         10,216	Pennsylvania	3,162,026	433,556	1,045,767	0	1,350,959	17,614	306,808	0	7,322		
Department of Defense, research 2 161,306 7,443 37,840 0 102,804 54 13,165 0 0 Department of Defense, total development 3 828,805 61,295 639,397 0 82,079 17,560 28,474 0 0 0 Department of Energy 398,811 50,820 313,120 0 29,318 0 5,553 0 0 Department of Health and Human Services 1,489,656 265,430 34,138 0 938,477 0 248,857 0 2,754 Department of the Interior 4,548 3,957 0 0 417 0 134 0 40 Department of Transportation 7,644 30 2,533 0 554 0 83 0 4,444 Environmental Protection Agency 10,988 102 70 0 10,216 0 600 0 0 0 National Aeronautics and Space Administration 47,381 814 11,114 0 33,158 0 2,211 0 84	Department of Agriculture	60,193	43,492	0		15,209	0	1,492	0	0		
Department of Defense, total development <sup>3</sup> 828,805 61,295 639,397 0 82,079 17,560 28,474 0 0 0  Department of Energy 398,811 50,820 313,120 0 29,318 0 5,553 0 0  Department of Health and Human Services 1,489,656 265,430 34,138 0 938,477 0 248,857 0 2,754  Department of the Interior 4,548 3,957 0 0 417 0 134 0 40  Department of Transportation 7,644 30 2,533 0 554 0 83 0 4,444  Environmental Protection Agency 10,988 102 70 0 10,216 0 600 0 0  National Aeronautics and Space Administration 47,381 814 11,114 0 33,158 0 2,211 0 84												
development 3         828,805         61,295         639,397         0         82,079         17,560         28,474         0         0           Department of Energy Department of Health and Human Services         1,489,656         265,430         34,138         0         938,477         0         248,857         0         2,754           Department of the Interior Department of the Interior At,548         3,957         0         0         417         0         134         0         40           Department of Transportation Fransportation Environmental Protection Agency         10,988         102         70         0         10,216         0         600         0         0           National Aeronautics and Space Administration         47,381         814         11,114         0         33,158         0         2,211         0         84		161,306	7,443	37,840	0	102,804	54	13,165	0	0		
Department of Health and Human Services 1,489,656 265,430 34,138 0 938,477 0 248,857 0 2,754 Department of the Interior 4,548 3,957 0 0 417 0 134 0 40 Department of Transportation 7,644 30 2,533 0 554 0 83 0 4,444 Environmental Protection Agency 10,988 102 70 0 10,216 0 600 0 0  National Aeronautics and Space Administration 47,381 814 11,114 0 33,158 0 2,211 0 84		828,805	61,295	639,397	0	82,079	17,560	28,474	0	0		
Department of Health and Human Services 1,489,656 265,430 34,138 0 938,477 0 248,857 0 2,754 Department of the Interior 4,548 3,957 0 0 417 0 134 0 40 Department of Transportation 7,644 30 2,533 0 554 0 83 0 4,444 Environmental Protection Agency 10,988 102 70 0 10,216 0 600 0 0  National Aeronautics and Space Administration 47,381 814 11,114 0 33,158 0 2,211 0 84	Department of Energy	200 011	50 820	313 130	0	20 219	0	5 552	Λ	Λ		
Services         1,489,656         265,430         34,138         0         938,477         0         248,857         0         2,754           Department of the Interior         4,548         3,957         0         0         417         0         134         0         40           Department of Transportation         7,644         30         2,533         0         554         0         83         0         4,444           Environmental Protection Agency         10,988         102         70         0         10,216         0         600         0         0           National Aeronautics and Space Administration         47,381         814         11,114         0         33,158         0         2,211         0         84	Department of Energy  Department of Health and Human	370,011	JU,02U	313,120	U	۷۶,۵۱۵	U	3,333	U	U		
Department of Transportation 7,644 30 2,533 0 554 0 83 0 4,444 Environmental Protection Agency 10,988 102 70 0 10,216 0 600 0 0 National Aeronautics and Space Administration 47,381 814 11,114 0 33,158 0 2,211 0 84	Services			34,138	0	938,477	0		0	2,754		
Environmental Protection Agency       10,988       102       70       0       10,216       0       600       0       0         National Aeronautics and Space <ul> <li>Administration</li> <li>47,381</li> <li>814</li> <li>11,114</li> <li>0</li> <li>33,158</li> <li>0</li> <li>2,211</li> <li>0</li> <li>84</li> </ul> Administration     47,381				-								
National Aeronautics and Space Administration 47,381 814 11,114 0 33,158 0 2,211 0 84		7,644										
Administration · 47,381 814 11,114 0 33,158 0 2,211 0 84	Environmental Protection Agency	10,988	102	70	0	10,216	0	600	0	0		
Administration · 47,381 814 11,114 0 33,158 0 2,211 0 84	National Aeronautics and Space											
	Administration	47,381	814	11,114	0		0	2,211	0	84		
	National Science Foundation	145,298	0	3,541	0	135,523	0	6,234	0	0		

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural								
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts		
Rhode Island	501,299	294,710	44,476	0	99,869	0	59,621	0	2,623		
Department of Agriculture	2,320	0	0	0	2,274	0	46	0	0		
Department of Commerce Department of Defense, research <sup>2</sup>	4,966 48,266	698 27,608	667 5,870	0	3,601 14,714	0	0 74	0	0		
Department of Defense, total	40,200	27,000	3,070	U	17,717	U	7 -	U	U		
development <sup>3</sup>	266,186	231,818	32,980	0	1,388	0	0	0	0		
Department of Energy Department of Health and Human	2,966	0	0	0	2,863	0	103	0	0		
Services	137,932	24,099	3,713	0	49,377	0	58,497	0	2,246		
Department of the Interior	2,254	1,432	2	0	820	0	0	0	0		
Department of Transportation Environmental Protection Agency	489 9,966	0 9,052	112 0	0	0 914	0	0	0	377 0		
Environmental Protection Agency	9,900	9,052	U	U	914	U	U	U	U		
National Aeronautics and Space											
Administration	4,916	3	782	0	4,013	0	118	0	0		
National Science Foundation	21,038	0	350	0	19,905	0	783	0	0		
South Carolina	371,006	74,302	56,446	30,832	154,623	0	46,293	0	8,510		
Department of Agriculture	17,054	9,753	0	0	7,296	0	5	0	0		
Department of Commerce	8,273	4,757	626	0	1,000	0	0	0	1,890		
Department of Defense, research <sup>2</sup>	18,962	2,109	3,324	0	13,529	0	0	0	0		
Department of Defense, total development <sup>3</sup>	95,387	33,696	45,000	466	3,245	0	12,980	0	0		
Department of Energy Department of Health and Human	45,256	0	0	30,366	14,808	0	82	0	0		
Services	150,275	21,936	6,709	0	95,920	0	22,854	0	2,856		
Department of the Interior	2,876	2,051	156	0	447	0	0	0	222		
Department of Transportation	4,636	0	360	0	1,914	0	0	0	2,362		
Environmental Protection Agency	770	U	172	0	378	0	0	U	220		
National Aeronautics and Space											
Administration	4,952	0	99 0	0	2,892	0	1,001 9,371	0	960 0		
National Science Foundation	22,565	U	U	0	13,194	U	9,371	U	U		
South Dakota	58,679	17,888	10,877	0	26,211	0	2,341	0	1,362		
Department of Agriculture	8,536	3,650	0	0	4,777	0	0	0	109		
Department of Commerce	12	6	0	0	6	0	0	0	0		
Department of Defense, research <sup>2</sup> Department of Defense, total	1,961	8	26	0	1,922	0	5	U	0		
development <sup>3</sup>	365	102	263	0	0	0	0	0	0		
Department of Energy	3,491	0	3,491	0	0	0	0	0	0		
Department of Health and Human						*	_	-	-		
Services	20,760	2,892	3,189	0	12,266	0	2,314	0	99		
Department of the Interior Department of Transportation	12,838 2,184	6,338 0	2,595 638	0	3,902 558	0 0	0	0	3 988		
Environmental Protection Agency	263	0	100	0	0	0	0	0	163		
3 ,											
National Aeronautics and Space Administration	E 21/	4 000	0	0	424	0	0	0	0		
National Science Foundation	5,316 2,953	4,892 0	575	0	2,356	0	22	0	0		
National Colonics / Califaction	2,700	U	373	U	2,000	0	22	J	U		

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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					Ex	tramural			
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts
Tennessee Department of Agriculture Department of Commerce	961,149 10,624 3,209	115,583 0 908	78,353 0 1,021	0 0 0	346,254 10,394 1,280	11,311 0 0	51,875 230 0	356,016 0 0	1,757 0 0
Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup>	34,190 91,319	3,764 32,803	6,444 47,118	0	18,288 1,059	727 935	0	4,967 9,404	0
·	•	·							
Department of Energy Department of Health and Human	368,881	578	4,881	0	12,316	9,607	44	341,455	0
Services Department of the Interior Department of Transportation Environmental Protection Agency	389,736 4,571 1,824 917	68,747 3,159 680 0	2,848 20 86 619	0 0 0 0	266,025 1,340 49 298	0 0 42 0	51,358 0 0 0	0 0 20 0	758 52 947 0
National Aeronautics and Space Administration National Science Foundation	28,166 27,712	4,938 6	14,506 810	0	8,722 26,483	0	0 243	0 170	0
Texas Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	3,374,405 81,626 12,058 231,266	807,925 58,700 294 109,055	1,236,785 40 9,351 43,600	0 0 0 0	1,201,436 22,886 2,413 69,691	0 0 0 0	119,616 0 0 8,920	0 0 0 0	8,643 0 0 0
development <sup>3</sup>	1,167,690	141,854	989,471	0	30,674	0	5,691	0	0
Department of Energy Department of Health and Human	39,802	0	9,116	0	29,469	0	1,217	0	0
Services Department of the Interior Department of Transportation Environmental Protection Agency	1,216,427 11,243 13,770 9,645	216,066 6,241 0 94	20,933 452 5,946 365	0 0 0 0	898,087 4,461 1,256 7,217	0 0 0 0	79,619 89 0 1,696	0 0 0	1,722 0 6,568 273
National Aeronautics and Space Administration National Science Foundation	498,647 92,231	275,621 0	154,548 2,963	0	47,628 87,654	0	20,850 1,534	0	0 80
Utah Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup>	408,747 20,783 1,577 28,380	90,336 12,955 162 9,026	98,817 0 826 12,311	0 0 0	208,135 7,828 219 6,212	0 0 0	5,957 0 0 831	0 0 0	5,502 0 370 0
Department of Defense, total development <sup>3</sup>	108,651	32,948	72,117	0	1,986	0	1,600	0	0
Department of Energy Department of Health and Human	9,920	113	1,497	0	7,790	0	345	0	175
Services Department of the Interior Department of Transportation Environmental Protection Agency	178,828 5,374 1,288 301	31,197 3,935 0 0	9,815 20 102 237	0 0 0 0	132,862 1,147 123 0	0 0 0 0	1,396 0 0 0	0 0 0 0	3,558 272 1,063 64
National Aeronautics and Space Administration National Science Foundation	27,203 26,442	0	986 906	0	24,850 25,118	0 0	1,367 418	0	0

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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					Ex	tramural			
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts
Vermont	136,374	19,724	38,776	0	75,499	0	1,501	0	874
Department of Agriculture	9,048	2,021	99	0	6,897	0	20	0	11
Department of Commerce	1,036	0	0	0	1,036	0	0	0	0
Department of Defense, research <sup>2</sup>	2,609	0	2,139	0	470	0	0	0	0
Department of Defense, total	2/ 0/5	2.510	22.455	0	0	0	0	0	0
development <sup>3</sup>	36,965	3,510	33,455	0	0	0	0	0	0
Department of Energy Department of Health and Human	1,432	0	204	0	1,228	0	0	0	0
Services	75,725	13,543	887	0	59,994	0	1,301	0	0
Department of the Interior	839	650	0	0	85	0	0	0	104
Department of Transportation	681	0	0	0	0	0	0	0	681
Environmental Protection Agency	550	0	0	0	292	0	180	0	78
National Aeronautics and Space									
Administration	2,799	0	1,807	0	992	0	0	0	0
National Science Foundation	4,690	0	185	Ō	4,505	Ō	Ō	Ō	Ō
				_					
Virginia	5,756,339	1,842,918	3,136,106	0	377,993	109,185	75,618	207,321	7,198
Department of Agriculture	15,866	1,032	12.221	0	12,973	0	1,861	0	0
Department of Commerce Department of Defense, research <sup>2</sup>	19,420 697,498	4,122 219,672	12,331 406,738	0	2,262 44,526	0 900	705 2,894	0 22,768	0
Department of Defense, total	077,470	219,072	400,730	U	44,320	900	2,074	22,700	U
development <sup>3</sup>	3,663,261	1,218,279	2,247,736	0	11,111	0	2,982	183,153	0
'									
Department of Energy Department of Health and Human	88,421	6,200	5,349	0	7,858	67,263	1,751	0	0
Services	318,593	53,587	52,931	0	207,156	0	3,958	550	411
Department of the Interior	97,981 42.754	95,741	122	0	1,869	0	1 720	0	249
Department of Transportation	42,754	7,674 757	26,469 4,468	0	1,896 1,184	0 0	1,738 6,105	223 0	4,754 140
Environmental Protection Agency	12,654	131	4,400	U	1,104	U	0,103	U	140
National Aeronautics and Space									
Administration	674,841	232,786	374,553	0	28,798	0	37,192	0	1,512
National Science Foundation	125,050	3,068	5,409	0	58,360	41,022	16,432	627	132
Washington	1,998,915	342,280	652,696	0	595,907	0	233,483	166,649	7,900
Department of Agriculture	46,297	29,824	0	0	15,042	Ő	1,369	0	62
Department of Commerce	76,704	66,443	5,236	Ö	4,467	Ö	0	Ö	558
Department of Defense, research <sup>2</sup>	98,591	3,030	36,814	0	48,064	0	5,296	5,306	81
Department of Defense, total									
development <sup>3</sup>	652,522	85,021	553,504	0	9,159	0	882	3,956	0
Department of Energy Department of Health and Human	182,191	52	5,596	0	24,026	0	316	152,201	0
Services	800,036	143,060	26,022	0	403,250	0	221,047	4,248	2,409
Department of the Interior	17,242	14,041	1,211	0	1,683	0	39	0	268
Department of Transportation	5,217	0	1,233	0	672	0	25	281	3,006
Environmental Protection Agency	7,663	298	240	0	4,874	0	1,049	0	1,202
National Aeronautics and Space									
Administration	30,913	507	19,406	0	9,616	0	547	523	314
National Science Foundation	81,539	4	3,434	0	75,054	Ő	2,913	134	0
	•								

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural									
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts			
West Virginia	254,239	101,901	56,088	0	56,701	0	34,517	0	5,032			
Department of Agriculture	33,969	25,360	0	0	7,485	0	1,089	0	35			
Department of Commerce	3,358	264	64	0	1,958	0	0	0	1,072			
Department of Defense, research <sup>2</sup> Department of Defense, total	10,376	2,308	5,559	0	1,519	0	990	0	0			
development <sup>3</sup>	30,581	661	27,567	0	575	0	1,778	0	0			
development	30,301	001	21,501	U	373	U	1,770	U	U			
Department of Energy Department of Health and Human	86,061	58,810	13,568	0	10,979	0	2,654	0	50			
Services	32,037	8,236	2,933	0	18,071	0	677	0	2,120			
Department of the Interior	6,641	6,252	0	0	214	0	0	0	175			
Department of Transportation National Aeronautics and Space	2,940	10	0	0	1,350	0	0	0	1,580			
Administration	42,676	0	5,997	0	9,450	0	27,229	0	0			
National Science Foundation	5,600	0	400	0	5,100	0	100	0	0			
Wisconsin	594,816	114,177	35,461	0	423,928	0	15,975	0	5,275			
Department of Agriculture	46,535	31,837	33,401	0	14,603	0	39	0	18			
Department of Agriculture  Department of Commerce	4,295	1,200	1,317	0	458	0	700	0	620			
Department of Defense, research <sup>2</sup>	19,367	20	5,616	0	13,731	0	0	0	0			
Department of Defense, total	,,,,,		,,,									
development <sup>3</sup>	16,679	46	12,440	0	4,193	0	0	0	0			
Department of Energy Department of Health and Human	23,879	0	0	0	23,879	0	0	0	0			
Services	398,013	70,740	10,110	0	301,520	0	13,767	0	1,876			
Department of the Interior	10,739	9,977	0	0	762	0	0	0	0			
Department of Transportation	3,822 650	357 0	330 449	0 0	600 0	0	0	0	2,535 201			
Environmental Protection Agency	000	U	449	U	U	U	U	U	201			
National Aeronautics and Space	44.000		0.474		100/0							
Administration	16,098	0	3,674	0	10,969	0	1,455	0	0			
National Science Foundation	54,739	0	1,487	0	53,213	0	14	0	25			
Wyoming	39,585	9,633	2,903	0	18,570	0	6,774	0	1,705			
Department of Agriculture	8,234	5,576	0	0	2,658	0	0	0	0			
Department of Commerce	411	0	0	0	411	0	0	0	0			
Department of Defense, research <sup>2</sup>	1,277	0	0	0	1,277	0	0	0	0			
Department of Defense, total development <sup>3</sup>	198	1	30	0	167	0	0	0	0			
		_		_		_		_				
Department of Energy Department of Health and Human	4,513	0	0	0	501	0	3,992	0	20			
Services	9,378	1,583	1,135	0	6,054	0	0	0	606			
Department of the Interior	3,012	2,473	25	0	444	0	70	0	0			
Department of Transportation	3,646	0	0	0	0	0	2,712	0	934			
Environmental Protection Agency	508	0	0	0	363	0	0	0	145			
National Aeronautics and Space Administration	997	0	263	0	734	0	0	0	0			
National Science Foundation	7,411	0	263 1,450	0	7.34 5.961	0	0	0	0			
National Science Foundation	1,411	U	1,430	U	5,701	U	U	U	U			

TABLE C-85. Federal obligations for research and development, by state, selected agency, and performer: FY 2002 (Dollars in thousands)

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			Extramural									
State and agency	Total R&D	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts			
Outlying areas <sup>4</sup> Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	284,702 115,073 815 930	130,013 105,542 704 19	34,459 0 15 65	0 0 0 0	83,654 9,519 96 846	9,409 0 0 0	25,535 12 0 0	0 0 0 0	1,632 0 0			
development <sup>3</sup>	41,214	7,382	33,772	0	60	0	0	0	0			
Department of Energy Department of Health and Human	625	0	0	0	625	0	0	0	0			
Services Department of the Interior Department of Transportation National Aeronautics and Space	104,129 2,116 208	14,711 1,655 0	0 0 0	0 0 0	62,263 461 208	0 0 0	25,523 0 0	0 0 0	1,632 0 0			
Administration National Science Foundation	2,048 17,544	0	0 607	0 0	2,048 7,528	0 9,409	0	0 0	0			
Puerto Rico <sup>4</sup> Department of Agriculture Department of Defense, research <sup>2</sup> Department of Defense, total	135,294 10,800 858	21,596 5,963 0	667 0 60	0 0 0	76,608 4,825 798	9,409 0 0	25,382 12 0	0 0 0	1,632 0 0			
development <sup>3</sup> Department of Energy	10 625	0 0	0 0	0 0	10 625	0 0	0 0	0 0	0			
Department of Health and Human Services Department of the Interior Department of Transportation National Aeronautics and Space Administration National Science Foundation	102,068 1,351 208 2,048 17,326	14,367 1,266 0 0	0 0 0 0	0 0 0	60,699 85 208 2,048 7,310	0 0 0 0 9,409	25,370 0 0 0	0 0 0	1,632 0 0			
Other areas <sup>4</sup> Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup>	149,408 104,273 815 72 41,204	108,417 99,579 704 19 7,382	33,792 0 15 5	0 0 0 0	7,046 4,694 96 48	0 0 0 0	153 0 0 0	0 0 0 0	0 0 0 0			
Department of Health and Human Services Department of the Interior National Science Foundation	2,061 765 218	344 389 0	0 0 0	0 0 0	1,564 376 218	0 0 0	153 0 0	0 0 0	0 0 0			

			Extramural									
State and agency	Total R&D	Intra- <sup>—</sup> mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts			
Offices abroad	64,406	31,037	33,107	0	262	0	0	0	0			
Department of Agriculture Department of Defense, research <sup>2</sup> Department of Defense, total	4,337 10,556	4,337 10,556	0	0	0	0	0	0 0	0			
development <sup>3</sup> Department of Transportation	48,814 699	15,707 437	33,107 0	0	0 262	0	0	0 0	0 0			

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major Research and Development (R&D) supporting agencies included in this table represent approximately 98 percent of total Federal R&D and R&D plant obligations in FY 2002. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

actual intramural performance.

Beginning with Vol. 40 (FYs 1990-92), Department of Defense (DOD) research is reported separately from DOD development.

DOD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced teaching and major systems.

technology and major systems. Geographic data for these categories are not reported; therefore, this table shows only total

Outlying areas, total, represents the sum of Puerto Rico, total, and Other areas, total.

TABLE C-86. Federal obligations for R&D plant for selected agencies, by state and category of performer supported: FY 2002 (Dollars in thousands)

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						Extramural			
State	Total	Intra- <sup>-</sup> mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts
Total Alabama Alaska Arizona Arkansas	4,289,731 176,056 281,369 6,743 12,997	411,452 8,503 0 459 9,556	2,524,906 161,114 281,321 318 0	109,085 0 0 0 0	241,123 6,439 48 1,230 3,178	583,309 0 0 4,736 0	29,058 0 0 0 263	388,799 0 0 0 0	1,999 0 0 0
California Colorado Connecticut Delaware District of Columbia	523,873 118,332 51,579 1,019 52,824	44,466 12,924 222 58 44,282	46,198 40,331 50,064 51 7,177	0 0 0 0	22,105 5,482 1,284 910 104	406,779 54,163 0 0	4,134 152 9 0 1,261	191 5,280 0 0	0 0 0 0
Florida Georgia Hawaii Idaho Illinois	196,114 17,951 6,432 12,736 100,731	10,088 10,092 2,829 2,321 6,856	182,100 788 104 4,203 2,463	0 0 0 3,512 0	1,908 7,071 3,499 2,700 10,165	0 0 0 0 80,421	2,018 0 0 0 826	0 0 0 0	0 0 0 0
Indiana Iowa Kansas Kentucky Louisiana	11,935 16,343 5,566 871 35,864	2,653 10,556 3,862 524 9,173	3,829 0 0 0 18,499	0 0 0 0	5,453 2,704 1,704 347 3,192	0 3,083 0 0	0 0 0 0 5,000	0 0 0 0	0 0 0 0
Maine Maryland Massachusetts Michigan Minnesota	8,074 210,322 24,229 5,065 8,185	3,934 68,101 3,366 1,808 1,933	0 135,788 2,810 254 2,050	0 0 0 0	1,440 6,433 13,186 3,003 4,202	0 0 0 0	2,700 0 2,867 0	0 0 2,000 0 0	0 0 0 0
Mississippi Missouri Montana Nebraska Nevada	43,421 5,241 8,004 4,795 16,477	15,760 1,590 4,141 2,365 0	27,307 1,603 24 0 13,941	0 0 0 0	354 2,048 3,839 2,430 2,536	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
New Hampshire New Jersey New Mexico New York North Carolina	1,296 29,230 127,810 129,217 8,605	259 1,838 2,588 24,945 3,009	157 16,758 11,731 13,481 0	0 0 105,475 0 0	880 4,056 2,402 30,100 5,596	0 6,578 5,614 0 0	0 0 0 4,913 0	0 0 0 53,779 0	0 0 0 1,999 0
North Dakota Ohio Oklahoma Oregon Pennsylvania	1,686 56,316 4,296 7,253 34,793	1,342 3,205 3,364 2,810 6,341	0 47,822 20 603 16,716	0 0 0 0	344 5,237 0 3,840 11,458	0 0 0 0	0 52 912 0 278	0 0 0 0	0 0 0 0
Rhode Island South Carolina South Dakota Tennessee Texas	18,464 6,747 3,142 333,263 1,399,239	11,098 3,898 2,784 5,466 15,855	4,785 0 0 4,054 1,366,540	0 98 0 0	2,581 2,250 358 6,344 13,672	0 0 0 1,019 0	0 501 0 0 3,172	0 0 0 316,380 0	0 0 0 0
Utah Vermont Virginia Washington West Virginia	8,387 123 99,852 18,635 8,697	7,278 0 23,031 3,156 968	31 17 47,359 65 7,527	0 0 0 0	1,078 106 8,546 4,245 202	0 0 20,916 0 0	0 0 0 0	0 0 0 11,169 0	0 0 0 0
Wisconsin Wyoming	23,929 574	2,711 284	4,903 0	0	16,315 290	0	0	0	0

						Extramural			
State	Total	Intra- mural <sup>1</sup>	Industry	Industry FFRDCs	Univer- sities and colleges	Univer- sity FFRDCs	Other nonprofit institu- tions	Non- profit FFRDCs	State and local govts
Outlying areas Puerto Rico Offices abroad	4,494 4,494 535	2,265 2,265 535	0 0 0	0 0 0	2,229 2,229 0	0 0 0	0 0 0	0 0 0	0 0 0

Federal installations.

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency: the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major Research and Development (R&D) supporting agencies included in this table represent over 99 percent of total Federal R&D plant obligations in FY 2002. Geographic distribution of development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

TABLE C-87. Federal obligations for R&D plant, by state and selected agency: FY 2002 (Dollars in thousands)

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State	Total	Dept of Agricul- ture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	Dept of the Interior	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Total Alabama Alaska Arizona Arkansas	4,289,731 176,056 281,369 6,743 12,997	118,799 617 0 459 644	29,140 0 0 0 0	365,080 0 281,321 0 0	1,028,002 0 0 0 0	247,480 11,483 0 0 11,317	2,077 0 0 0 0	51,692 0 0 0	0 0 0 0	2,206,630 163,517 0 318 0	240,831 439 48 5,966 1,036
California Colorado Connecticut Delaware District of Columbia	523,873 118,332 51,579 1,019 52,824	11,226 1,540 0 58 2,025	7,668 0 0	19,118 16,134 222 0 18	379,772 5,280 200 0	27,655 3,834 0 0 1,114	0 0 0 0	0 424 323 0 36,000	0 0 0 0	73,093 25,709 49,914 48 8,632	13,009 57,743 920 913 5,035
Florida Georgia Hawaii Idaho Illinois	196,114 17,951 6,432 12,736 100,731	2,300 4,049 2,191 400 4,885	0 0 0 0	87 1 0 0 93	0 0 0 7,712 80,421	3,828 11,987 1,336 3,826 3,828	0 0 0 0	0 0 0 0	0 0 0 0	187,973 1,101 104 98 2,513	1,926 813 2,801 700 8,991
Indiana Iowa Kansas Kentucky Louisiana	11,935 16,343 5,566 871 35,864	692 9,078 2,581 348 1,537	0 0 0 0	0 36 0 0 3	320 3,083 0 0	3,827 3,095 2,681 369 15,311	0 0 0 0	0 0 0 0	0 0 0 0	3,963 0 0 0 18,499	3,133 1,051 304 154 514
Maine Maryland Massachusetts Michigan Minnesota	8,074 210,322 24,229 5,065 8,185	1,467 16,902 594 468 1,232	21,472 0 0 0	0 23,732 2,133 5 25	0 0 5,636 250 0	5,167 12,645 3,591 2,757 1,468	0 0 0 0	0 0 0 0	0 0 0 0	0 130,428 3,742 254 2,050	1,440 5,143 8,533 1,331 3,410
Mississippi Missouri Montana Nebraska Nevada	43,421 5,241 8,004 4,795 16,477	15,740 0 1,400 543 0	0 0 0 0	38 5 0 0	0 0 0 0 13,941	0 3,320 5,741 3,822 0	0 60 0 0	0 0 0 0	0 0 0 0	27,307 1,207 24 0	336 649 839 430 2,536
New Hampshire New Jersey New Mexico New York North Carolina	1,296 29,230 127,810 129,217 8,605	0 0 665 8,631 1,181	0 0 0 0	20 34 963 75 89	0 6,578 111,081 57,029 917	0 3,828 2,027 13,675 3,828	2,010 0 0 0	0 14,450 0 0 0	0 0 0 0	157 278 11,731 19,994 0	1,119 2,052 1,343 29,813 2,590
North Dakota Ohio Oklahoma Oregon Pennsylvania	1,686 56,316 4,296 7,253 34,793	1,342 49 2,496 982 2,112	0 0 0 0	5,814 55 0	0 0 0 600 12,406	0 5,040 1,745 3,828 8,826	0 0 0 0 7	0 0 0 0	0 0 0 0	0 42,757 0 3 4,310	344 2,656 0 1,840 7,132
Rhode Island South Carolina South Dakota Tennessee Texas	18,464 6,747 3,142 333,263 1,399,239	0 389 2,784 0 4,165	0 0 0 0	14,017 118 0 90 196	0 0 0 317,309 200	3,828 3,828 0 11,385 22,487	0 0 0 0	0 0 0 0	0 0 0 0	38 0 0 4,084 1,367,406	581 2,412 358 395 4,785
Utah Vermont Virginia Washington West Virginia	8,387 123 99,852 18,635 8,697	7,266 0 0 660 968	0 0 0 0	12 17 2 43 0	12 0 8,790 11,351 5,114	0 0 7,468 5,179 0	0 0 0 0	0 0 495 0 0	0 0 0 0	31 0 48,440 65 2,413	1,066 106 34,657 1,337 202
Wisconsin Wyoming	23,929 574	1,451 284	0	29 0	0	2,639 0	0	0	0	4,429 0	15,381 290

State	Total	Dept of Agricul- ture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health and Human Services	Dept of the Interior	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Outlying areas	4,494	398	0	0	0	3,867	0	0	0	0	229
Puerto Rico	4,494	398	0	0	0	3,867	0	0	0	0	229
Offices abroad	535	0	0	535	0	0	0	0	0	0	0

EPA = Environmental Protection Agency.

NASA = National Aeronautics and Space Administration.

R&D = Research and development.

NOTES: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major Research and Development (R&D) supporting agencies included in this table represent over 99 percent of total Federal R&D plant obligations in FY 2002. Geographic distribution of development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

TABLE C-88. Federal obligations for research and development to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

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		2002				Prelimi	nary		
Agency			Per-		2003			2004	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
All agencies	21,044,762	8,584,035	41	23,243,879	9,375,467	40	24,164,054	9,517,369	39
Departments Department of Agriculture	1,330,038	774,598	58	1,350,672	773,734	57	1,356,844	778,087	57
Agricultural Marketing Service	4,641	2,655	57	5,397	2,880	53	5,446	2,740	50
Agricultural Research Service	971,450	529,920	55	999,833	535,110	54	1,005,212	537,989	54
Animal and Plant Health	19,677	13,184	67	no	no	na	no	na	no
Inspection Service	19,077	13,184	07	na	na	na	na	na	na
Cooperative State Research,									
Ed., and Extension Service	33,921	13,029	38	40,331	17,020	42	37,363	17,623	47
Economic Research Service	57,650 808	43,846 808	76 100	61,374 912	46,878 912	76 100	65,676 912	48,550 912	74 100
Foreign Agricultural Service Forest Service	229,821	161,000	70	229,821	160,000	70	228,821	159,000	69
Grain Inspection Packers and	227,021	101,000	70	227,021	100,000	70	220,021	107,000	0,
Stockyards Administration	6,029	4,823	80	6,814	5,450	80	7,114	5,690	80
National Agricultural Statistics Service Rural Business-Cooperative	4,530	3,822	84	4,686	3,980	85	4,796	4,079	85
Service Service	1,511	1,511	100	1,504	1,504	100	1,504	1,504	100
Department of Commerce	804,629	381,360	47	818,809	402,464	49	856,408	407,509	48
Bureau of the Census	28,706	2,429	8	16,242	3,571	22	13,475	3,571	27
Economic Development									
Administration National Institute of	50	50	100	50	50	100	50	50	100
Standards and Technology  National Oceanic and	272,757	168,298	62	300,282	183,002	61	307,058	183,029	60
Atmospheric Administration  National Telecommunications and	495,962	203,429	41	493,016	206,622	42	529,147	214,181	40
Information Administration	7,154	7,154	100	9,219	9,219	100	6,678	6,678	100
Department of Defense Defense Agencies Ballistic Missile Defense	9,933,898 2,318,045	3,428,636 558,383	35 24	11,151,248 2,605,499	3,799,306 636,676	34 24	11,516,458 2,758,563	3,823,472 658,608	33 24
Organization	1,022,508	169,766	17	1,118,084	164,080	15	1,368,976	190,433	14
Chemical and Biological Defense	114,244	48,229	42	231,354	54,578	24	253,856	51,010	20
Defense Advanced Research Projects Agency	248,921	181,847	73	355,201	256,934	72	397,722	288,664	73
Defense Information Systems									
Agency	65,999	39,496	60	62,622	39,151	63	61,693	39,468	64
Defense Logistics Agency Defense Threat Reduction	58,088	3	*	81,614	852	1	35,255	802	2
Agency	263,628	2,635	1	112,258	1,122	1	79,307	792	1
Joint Staff	59,444	1	*	99,305	1	*	119,115	1	*
Special Operations Command	137,139	15,084	11	149,451	16,709	11	153,567	16,891	11
TRICARE Management Activity <sup>1</sup> Washington Headquarters	44,893	13,634	30	76,963	19,394	25	17,161	5,149	30
Services	303,181	87,688	29	318,647	83,855	26	271,911	65,398	24
Department of the Air Force Air Force, Materials Command	1,437,222	315,062	22	1,584,367 1,472,219	364,960	23	1,870,994 1,537,666	353,928	19
Air Force, Materials Command  Air Force, Space Command	1,335,727 101,495	315,058 4	24	1,472,219	364,557 403	25	333,328	353,525 403	23
Department of the Army	2,138,816	899,272	42	2,357,257	923,462	39	2,407,876	987,469	41
Department of the Army Department of the Navy Operational Test and Evaluation,	3,966,338	1,646,218	42	4,532,597	1,864,759	41	4,390,854	1,811,815	41
Director	73,477	9,701	13	71,528	9,449	13	88,171	11,652	13

TABLE C-88. Federal obligations for research and development to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

		2002				Prelimir	nary		
Agency			Per-		2003			2004	
geney	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of Education	13,427	8,890	66	12,511	8,152	65	13,269	8,409	63
Department of Energy Energy Efficiency and	730,053	101,978	14	646,046	107,306	17	900,482	106,827	12
Renewable Energy Fossil Energy National Nuclear Security	289,071 111,026	41,879 57,043	14 51	307,279 115,335	44,517 59,038	14 51	299,737 116,554	43,423 59,952	14 51
Administration Defense Programs	279,275 277,604	7 2	*	141,525 130,465	7 2	*	412,956 401,896	7 2	*
Fissile Materials Disposition Naval Reactors Nonproliferation and	1 1	1 1	100 100	1 1	1 1	100 100	1 1	1 1	100 100
Verification Office of Science	1,669 18,460	3 7	*	11,058 46,979	3 7	*	11,058 34,304	3 7	*
Other Department of Energy programs Bonneville Power	32,221	3,042	9	34,928	3,737	11	36,931	3,438	9
Administration Civilian Radioactive Waste	20,729	700	3	20,617	700	3	23,365	550	2
Management Environmental Management Nuclear Energy	11,438 3 1	2,288 3 1	20 100 100	14,093 2 2	2,819 2 2	20 100 100	13,348 2 2	2,670 2 2	20 100 100
Office of Intelligence	50	50	100	214	214	100	214	214	100
Department of Health and Human Services	4,591,799	1,772,497	39	5,188,661	1,895,452	37	5,442,057	1,906,905	35
Administration for Children and Families Administration on Aging Agency for Healthcare Research	1,403 91	1,164 91	83 100	1,432 0	1,188 0	83 0	1,463 0	1,213 0	83 0
and Quality Agency for Toxic Substances	59,992	28,451	47	60,991	31,660	52	56,031	33,071	59
and Disease Registry	2,278	2,204	97	0	0	0	0	0	0
Centers for Disease Control and Prevention Centers for Medicare and	448,199	380,969	85	487,558	414,424	85	450,736	383,126	85
Medicaid Services Food and Drug Administration Health Resources and Services	452 103,338	10 82,670	2 80	50 106,029	10 84,823	20 80	50 102,551	10 82,041	20 80
Administration National Institutes of Health	2,634 3,969,345	2,533 1,274,004	96 32	2,593 4,524,701	2,494 1,360,446	96 30	2,626 4,823,118	2,526 1,404,336	96 29
Office of the Secretary Office of the Assistant	4,066	400	10	5,306	406	8	5,481	581	11
Secretary, Planning and Evaluation Office of Public Health and	3,740	74	2	5,000	100	2	5,000	100	2
Science Substance Abuse and Mental Health	326	326	100	306	306	100	481	481	100
Services Administration	1	1	100	1	1	100	1	1	100
Department of Homeland Security Animal and Plant Health	na	na	na	126,207	27,354	22	191,530	24,106	13
Inspection Service Transportation Security	na	na	na	24,052	16,115	67	21,089	14,129	67
Administration United States Coast Guard United States Customs Service	na na na	na na na	na na na	85,000 15,955 1,200	3 10,036 1,200	63 100	154,500 15,941 0	3 9,974 0	63 0

TABLE C-88. Federal obligations for research and development to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

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		2002				Prelimina	ary		
Agency			Per-		2003			2004	
rgoloy	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of Housing and Urban Development	27,559	16,000	58	28,500	16,400	58	28,924	16,900	58
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service National Park Service <sup>2</sup>	537,091 6,993 515,338 6,721 8,039	239,054 4,987 227,296 5,413 1,358	45 71 44 81 17	519,813 6,941 505,838 7,034	313,148 4,948 302,967 5,233 0	60 71 60 74 0	503,952 5,408 491,752 6,792 0	291,294 3,857 282,225 5,212 0	58 71 57 77 0
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	40,558 2,864 33,562 4,132	4,641 2,700 1,899 42	11 94 6 1	51,027 3,000 42,700 5,327	4,601 2,600 1,947 54	9 87 5 1	44,674 3,150 34,145 7,379	4,852 2,750 2,027 75	11 87 6 1
Department of Labor Bureau of Labor Statistics	150,511 9,900	10,878 7,400	7 75	153,723 10,100	9,928 6,200	6 61	14,381 10,400	10,381 6,400	72 62
Employment and Training Administration Occupational Safety and Health	137,135	2	*	139,897	2	*	0	0	0
Administration Office of the Secretary	2,118 200	2,118 200	100 100	2,205 200	2,205 200	100 100	2,271 200	2,271 200	100 100
Pension and Welfare Benefits Administration Pension Benefit Guaranty	802	802	100	951	951	100	1,129	1,129	100
Corporation	356	356	100	370	370	100	381	381	100
Department of State	675	675	100	702	702	100	723	723	100
Department of Transportation Coast Guard Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	279,416 15,029 86,045 39,573	101,463 9,481 60,924 11,744	36 63 71 30	205,975 na 82,912 46,928	78,794 na 45,966 12,049	38 na 55 26	230,272 na 70,590 88,919	83,577 na 49,381 12,339	36 na 70 14
Administration	1,335	294	22	1,028	225	22	542	119	22
Federal Railroad Administration Federal Transit Administration National Highway Traffic Safety	13,836 3,833	2,074 720	15 19	14,677 2,320	2,570 420	18 18	14,869 640	2,770 240	19 38
Administration Office of the Secretary Research and Special Programs	36,611 18,425	11,715 2,554	32 14	36,605 14,133	11,714 3,693	32 26	37,968 10,836	12,150 3,868	32 36
Administration Transportation Security Administration	5,729 59,000	1,954 3	34	7,372 na	2,157 na	29 na	5,908 na	2,710 na	46 na
Department of the Treasury Bureau of Engraving and	59,679	12,153	20	65,768	12,793	19	65,816	12,837	20
Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service	7,074 50,539 147 1,108	58 10,108 112 1,108	1 20 76 100	7,070 57,550 162 na	220 11,510 123 na	3 20 76 na	7,070 57,550 177 na	220 11,510 136 na	3 20 77 na
United States Mint United States Secret Service	200 611	156 611	78 100	209 777	163 777	78 100	215 804	167 804	78 100
Department of Veterans Affairs	328,806	167,692	51	353,564	180,318	51	380,471	194,040	51

TABLE C-88. Federal obligations for research and development to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

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		2002			Preliminary						
Agency			Per-		2003			2004			
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total		
Other agencies											
Agency for International	33.174	22,550	40	28,015	23,009	82	22.270	27,760	0.4		
Development Appalachian Regional Commission	33,174 1	22,550 1	68 100	28,015	23,009 1	100	32,370	27,700	86 100		
Broadcasting Board of Governors	250	7	3	243	14	6	51	2	4		
Environmental Protection Agency	196,954	181,309	92	297,181	185,714	62	287,675	199,712	69		
Federal Communications	170,754	101,307	12	277,101	103,714	02	201,013	177,112	0,		
Commission	4,417	4,417	100	6,265	6,265	100	2,759	2,759	100		
Federal Trade Commission	1,803	1,244	69	1,554	1,072	69	1.679	1,159	69		
Library of Congress	2,753	486	18	4,233	491	12	4,802	509	11		
National Aeronautics and Space											
Administration	1,841,350	1,269,295	69	2,077,868	1,426,985	69	2,136,701	1,521,028	71		
National Archives and Records											
Administration	120	120	100	120	120	100	120	120	100		
National Science Foundation	13,591	2	*	14,172	2	*	15,406	2	*		
Nuclear Regulatory Commission	13,730	12,709	93	17,175	15,666	91	16,329	14,748	90		
Smithsonian Institution	106,000	68,900	65	109,000	70,850	65	115,000	74,750	65		
Social Security Administration	2,480	2,480	100	14,826	14,826	100	4,900	4,900	100		

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

 $<sup>^{\</sup>star}$  = Amount greater than 0 but less than 0.5 percent. na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-89. Federal obligations for basic research to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

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		2002				Prelimir	nary		
Agency			Per-		2003			2004	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
All agencies	4,460,029	1,851,945	42	4,880,520	1,970,958	40	5,354,904	2,079,524	39
Departments Department of Agriculture Agricultural Research Service Cooperative State Research,	657,660 534,298	363,794 285,956	55 54	676,252 549,908	373,887 294,311	55 54	678,385 552,866	375,515 295,894	55 54
Ed., and Extension Service Economic Research Service	15,000 6,705	5,602 4,385	37 65	17,693 6,867	7,319 4,688	41 68	16,446 7,666	7,578 4,855	46 63
Foreign Agricultural Service Forest Service	565 99,580	565 66,010	100 66	638 99,580	638 65,600	100 66	638 99,170	638 65,190	100 66
National Agricultural Statistics Service	1,512	1,276	84	1,566	1,331	85	1,599	1,360	85
Department of Commerce Bureau of the Census	64,076 2,795	38,092 662	59 24	69,971 2,142	40,791 872	58 41	90,390 1,949	43,331 872	48 45
Economic Development Administration National Institute of	5	5	100	25	25	100	25	25	100
Standards and Technology  National Oceanic and	50,178	31,452	63	57,354	34,188	60	76,958	36,401	47
Atmospheric Administration	11,098	5,973	54	10,450	5,706	55	11,458	6,033	53
Department of Defense Defense Agencies Chemical and Biological	520,982 91,844	172,684 28,228	33 31	551,279 117,158	177,789 31,802	32 27	784,464 51,874	176,235 13,853	22 27
Defense  Defense Advanced Research	25,054	2,180	9	36,958	2,254	6	34,230	2,511	7
Projects Agency TRICARE Management Activity <sup>1</sup> Washington Headquarters	9,323 41,895	7,029 12,761	75 30	12,388 50,494	9,291 11,454	75 23	10,449 0	7,837 0	75 0
Services	15,572	6,258	40	17,318	8,803	51	7,195	3,505	49
Department of the Air Force Air Force, Materials Command Air Force, Space Command Department of the Army	139,936 121,956 17,980 149,048	9,073 9,072 1 73,827	6 7 * 50	144,539 108,196 36,343 149,459	10,101 10,100 1 74,344	7 9 * 50	384,755 122,032 262,723 185,397	12,151 12,150 1 78,888	3 10 *
Department of the Navy	140,154	61,556	44	140,123	61,542	44	162,438	71,343	44
Department of Education	313	207	66	254	165	65	318	201	63
Department of Energy Energy Efficiency and	42,972	3,518	8	70,861	3,542	5	60,176	3,371	6
Renewable Energy Fossil Energy National Nuclear Security	23,471 60	3,400 60	14 100	23,267 65	3,370 65	14 100	22,411 68	3,246 68	14 100
Administration Nonproliferation and	1	1	100	1	1	100	1	1	100
Verification Office of Science	1 18,459	1 6	100	1 46,978	1 6	100	1 34,303	1 6	100
Other Department of Energy programs	981	51	5	550	100	18	3,393	50	1
Bonneville Power Administration Environmental Management	980 1	50 1	5 100	550 0	100 0	18 0	3,393 0	50 0	1

TABLE C-89. Federal obligations for basic research to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

		2002				Prelimin	nary		
Agency			Per-		2003			2004	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of Health and Human Services	2,311,657	742,265	32	2,544,637	792,451	31	2,664,219	817,968	31
Health Resources and Services Administration National Institutes of Health Office of the Secretary Office of the Assistant Secretary, Planning	2,121 2,305,796 3,740	2,121 740,070 74	100 32 2	2,068 2,537,569 5,000	2,068 790,283 100	100 31 2	2,088 2,657,131 5,000	2,088 815,780 100	100 31 2
and Evaluation	3,740	74	2	5,000	100	2	5,000	100	2
Department of Homeland Security Transportation Security	na	na	na	27,200	1	*	54,400	1	*
Administration	na	na	na	27,200	1	*	54,400	1	*
Department of the Interior Geological Survey National Park Service <sup>2</sup>	40,741 39,353 1,388	26,342 26,232 110	65 67 8	39,467 39,467 0	26,164 26,164 0	66 66 0	37,628 37,628 0	20,921 20,921 0	56 56 0
Department of Justice Office of Justice Programs	1 1	1 1	100 100	1 1	1 1	100 100	1 1	1 1	100 100
Department of Labor Bureau of Labor Statistics Employment and Training	19,838 2,000	401 400	2 20	22,497 2,600	501 500	2 19	2,900 2,900	500 500	17 17
Administration	17,838	1	*	19,897	1	*	0	0	0
Department of Transportation Federal Highway Administration Transportation Security	25,378 6,498	1,763 1,762	7 27	6,089 6,089	1,807 1,807	30 30	10,538 10,538	1,851 1,851	18 18
Administration	18,880	1	*	na	na	na	na	na	na
Department of the Treasury Bureau of Engraving and	703	12	2	224	44	20	224	44	20
Printing	703	12	2	224	44	20	224	44	20
Department of Veterans Affairs	141,705	72,270	51	152,375	77,711	51	163,971	83,625	51
Other agencies Agency for International									
Development Environmental Protection Agency National Aeronautics and Space	20 30,264	10 27,860	50 92	15 47,921	9 29,947	60 62	20 42,427	10 29,454	50 69
Administration National Science Foundation Smithsonian Institution	484,275 13,444 106,000	333,825 1 68,900	69 * 65	548,463 14,014 109,000	375,297 1 70,850	68 * 65	634,600 15,243 115,000	451,745 1 74,750	71 * 65

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only;

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

data for the NPS cultural resources program were not available for this survey cycle.

 $<sup>^{\</sup>star}$  = Amount greater than 0 but less than 0.5 percent. na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-90. Federal obligations for applied research to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

		2002				Prelimir	nary		
Agency			Per-		2003			2004	
, igoloj	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
All agencies	7,397,368	3,526,017	48	7,737,449	3,792,778	49	8,072,376	3,693,760	46
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service	523,048 3,867 349,722	313,084 2,275 187,171	60 59 54	541,396 4,591 359,941	323,388 2,430 192,640	60 53 54	544,783 4,633 361,877	325,808 2,345 193,676	60 51 54
Cooperative State Research, Ed., and Extension Service	18,921	7,427	39	22,638	9,701	43	20,917	10,045	48
Economic Research Service Foreign Agricultural Service Forest Service National Agricultural	50,945 243 94,821	39,461 243 72,450	77 100 76	54,507 274 94,821	42,190 274 72,000	77 100 76	58,010 274 94,371	43,695 274 71,550	75 100 76
Statistics Service Rural Business-Cooperative	3,018	2,546	84	3,120	2,649	85	3,197	2,719	85
Service	1,511	1,511	100	1,504	1,504	100	1,504	1,504	100
Department of Commerce Bureau of the Census Economic Development	679,961 3,192	314,397 747	46 23	703,388 2,426	333,509 983	47 41	729,533 2,204	343,735 983	47 45
Administration National Institute of	45	45	100	25	25	100	25	25	100
Standards and Technology National Oceanic and	205,049	125,950	61	228,128	136,938	60	218,395	139,892	64
Atmospheric Administration National Telecommunications and Information Administration	467,593 4,082	183,573 4,082	39 100	467,369 5,440	190,123 5,440	41 100	502,231 6,678	196,157 6,678	39 100
Department of Defense	1,771,743	831,783	47	1,684,081	860,643	51	1,568,677	776,000	49
Defense Agencies Ballistic Missile Defense	373,175	122,955	33	318,107	123,803	39	317,338	137,654	43
Organization Chemical and Biological	224	5	2	0	0	0	0	0	0
Defense Defense Advanced Research	48,324	35,503	73	117,225	33,180	28	114,798	36,848	32
Projects Agency	105,872	79,404	75	116,934	87,701	75	124,805	93,604	75
Defense Logistics Agency Defense Threat Reduction	6,392	1	*	8,808	850	10	9,858	800	8
Agency Special Operations Command TRICARE Management Activity <sup>1</sup> Washington Headquarters	175,236 8,403 354	1,752 924 106	1 11 30	50,032 9,334 0	500 1,027 0	1 11 0	50,020 8,312 0	500 914 0	1 11 0
Services Department of the Air Force	28,370 625,268	5,260 219,956	19 35	15,774 618,497	545 220,705	3 36	9,545 647,142	4,988 191,413	52 30
Air Force, Materials Command	624,857	219,955	35	618,142	220,704	36	647,141	191,412	30
Air Force, Space Command Department of the Army Department of the Navy	411 472,986 300,314	314,780 174,092	67 58	355 446,076 301,401	1 341,413 174,722	77 58	1 396,219 207,978	1 326,368 120,565	100 82 58
Department of Education	8,116	5,374	66	7,823	5,097	65	9,312	5,901	63
Department of Energy Energy Efficiency and	405,471	31,084	8	263,105	33,402	13	536,521	34,829	6
Renewable Energy Fossil Energy National Nuclear Security	91,256 30,172	13,221 15,220	14 50	97,824 32,520	14,173 16,005	14 49	107,956 33,010	15,640 16,214	14 49
Administration Defense Programs	261,513 260,576	2 1	*	107,258 105,469	2 1	*	370,553 368,764	2	*
Nonproliferation and Verification Office of Science	937 1	1	* 100	1,789 1	1 1	100	1,789 1	1 1	* 100

TABLE C-90. Federal obligations for applied research to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

		2002				Prelimir	nary		
Agency			Per-		2003			2004	
· · g-····	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Other Department of Energy programs	22,529	2,640	12	25,502	3,221	13	25,001	2,972	12
Bonneville Power Administration	11,089	350	3	11,407	400	4	11,651	300	3
Civilian Radioactive Waste  Management	11,438	2,288	20	14,093	2,819	20	13,348	2,670	20
Environmental Management Nuclear Energy	1	1 1	100 100	1 1	1 1	100 100	1 1	1 1	100 100
Department of Health and Human Services Administration for Children	2,255,916	1,006,006	45	2,619,420	1,078,397	41	2,755,035	1,066,134	39
and Families Administration on Aging Agency for Healthcare Research	1,403 91	1,164 91	83 100	1,432 0	1,188 0	83 0	1,463 0	1,213 0	83 0
and Quality Agency for Toxic Substances	36,094	4,553	13	36,695	7,364	20	33,711	10,751	32
and Disease Registry	2,278	2,204	97	0	0	0	0	0	0
Centers for Disease Control and Prevention Centers for Medicare and	448,199	380,969	85	487,558	414,424	85	450,736	383,126	85
Medicaid Services Food and Drug Administration Health Resources and Services	452 103,338	10 82,670	2 80	50 106,029	10 84,823	20 80	50 102,551	10 82,041	20 80
Administration National Institutes of Health	512 1,663,549	411 533,934	80 32	524 1,987,132	425 570,163	81 29	537 2,165,987	437 588,556	81 27
Department of Homeland Security Transportation Security	na	na	na	44,977	3,797	8	85,581	3,638	4
Administration United States Coast Guard	na na	na na	na na	40,800 4,177	1 3,796	91	81,600 3,981	1 3,637	91
Department of Housing and Urban Development	9,319	6,000	64	10,052	6,400	64	10,232	6,500	64
Department of the Interior Bureau of Reclamation Geological Survey Minerals Management Service National Park Service <sup>2</sup>	435,899 2,447 423,639 6,721 3,092	190,546 1,745 182,555 5,413 833	44 71 43 81 27	423,482 2,430 414,018 7,034 0	265,146 1,732 258,181 5,233 0	63 71 62 74 0	413,750 1,892 405,066 6,792 0	248,717 1,350 242,155 5,212 0	60 71 60 77 0
Department of Justice Bureau of Prisons Office of Justice Programs	3,092 2,450 642	2,306 2,300 6	75 94 1	2,915 2,500 415	2,204 2,200 4	76 88 1	2,969 2,650 319	2,353 2,350 3	79 89 1
Department of Labor Bureau of Labor Statistics Occupational Safety and Health	10,985 7,900	10,085 7,000	92 89	10,823 7,500	9,023 5,700	83 76	11,069 7,500	9,469 5,900	86 79
Administration Office of the Secretary Pension and Welfare Benefits	2,118 100	2,118 100	100 100	2,205 100	2,205 100	100 100	2,271 100	2,271 100	100 100
Administration Pension Benefit Guaranty	802	802	100	951	951	100	1,129	1,129	100
Corporation	65	65	100	67	67	100	69	69	100
Department of State	675	675	100	702	702	100	723	723	100

TABLE C-90. Federal obligations for applied research to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

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		2002				Prelimin	ary		
Agency			Per-		2003			2004	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of Transportation Coast Guard Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	184,130 3,949 75,002 24,386	77,021 3,611 51,881 6,459	42 91 69 26	146,671 na 70,619 22,203	55,537 na 33,673 6,627	38 na 48 30	170,746 na 57,568 57,691	59,529 na 36,359 6,786	35 na 63 12
Administration Federal Railroad Administration Federal Transit Administration	2 12,586 592	1 1,908 202	50 15 34	1 14,172 0	2,390 0	100 17 0	469 14,369 0	103 2,465 0	22 17 0
National Highway Traffic Safety Administration Research and Special Programs	36,611	11,715	32	36,605	11,714	32	37,968	12,150	32
Administration Transportation Security Administration	2,682 28,320	1,243 1	46	3,071 na	1,132 na	37 na	2,681 na	1,666 na	62 na
	·								
Department of the Treasury Bureau of Engraving and	55,927	10,863	19	64,775	12,476	19	64,817	12,516	19
Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	4,615 50,539 147 15 611	17 10,108 112 15 611	20 76 100 100	6,286 57,550 162 na 777	66 11,510 123 na 777	1 20 76 na 100	6,286 57,550 177 na 804	66 11,510 136 na 804	1 20 77 na 100
Department of Veterans Affairs	172,601	88,027	51	185,597	94,655	51	199,722	101,858	51
Other agencies Agency for International									
Development Appalachian Regional Commission Broadcasting Board of Governors Environmental Protection Agency	30,954 1 250 123,286	20,540 1 7 113,493	66 100 3 92	25,500 1 243 168,206	21,500 1 14 105,115	84 100 6 62	30,000 1 51 174,954	26,000 1 2 121,458	87 100 4 69
Federal Communications Commission	4,417	4,417	100	6,265	6,265	100	2,759	2,759	100
Federal Trade Commission Library of Congress National Aeronautics and Space	1,803 1,743	1,244 153	69 9	1,554 1,780	1,072 141	69 8	1,679 788	1,159 147	69 19
Administration  National Archives and Records	701,554	483,601	69	792,414	543,681	69	737,162	524,755	71
Administration National Science Foundation	120 147	120 1	100 1	120 158	120 1	100 1	120 163	120 1	100 1
Nuclear Regulatory Commission Social Security Administration	13,730 2,480	12,709 2,480	93 100	17,175 14,826	15,666 14,826	91 100	16,329 4,900	14,748 4,900	90 100

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only;

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

data for the NPS cultural resources program were not available for this survey cycle.

 $<sup>^{\</sup>star}$  = Amount greater than 0 but less than 0.5 percent. na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-91. Federal obligations for development to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

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		2002				Prelimi	nary		
Agency			Per-		2003			2004	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
All agencies	9,187,365	3,206,073	35	10,625,910	3,611,731	34	10,736,774	3,744,085	35
Departments Department of Agriculture Agricultural Marketing Service Agricultural Research Service	149,330 774 87,430	97,720 380 56,793	65 49 65	133,024 806 89,984	76,459 450 48,159	57 56 54	133,676 813 90,469	76,764 395 48,419	57 49 54
Animal and Plant Health Inspection Service	19,677	13,184	67	09,904 na	46,139 na	na	90,469 na	40,419 na	na
Forest Service	35,420	22,540	64	35,420	22,400	63	35,280	22,260	63
Grain Inspection Packers and Stockyards Administration	6,029	4,823	80	6,814	5,450	80	7,114	5,690	80
Department of Commerce Bureau of the Census National Institute of Standards	60,592 22,719	28,871 1,020	48 4	45,450 11,674	28,164 1,716	62 15	36,485 9,322	20,443 1,716	56 18
and Technology  National Oceanic and	17,530	10,896	62	14,800	11,876	80	11,705	6,736	58
Atmospheric Administration National Telecommunications and	17,271	13,883	80	15,197	10,793	71	15,458	11,991	78
Information Administration	3,072	3,072	100	3,779	3,779	100	0	0	0
Department of Defense Defense Agencies Ballistic Missile Defense	7,641,173 1,853,026	2,424,169 407,200	32 22	8,915,888 2,170,234	2,760,874 481,071	31 22	9,163,317 2,389,351	2,871,237 507,101	31 21
Organization Chemical and Biological	1,022,284	169,761	17	1,118,084	164,080	15	1,368,976	190,433	14
Defense  Defense Advanced Research	40,866	10,546	26	77,171	19,144	25	104,828	11,651	11
Projects Agency	133,726	95,414	71	225,879	159,942	71	262,468	187,223	71
Defense Information Systems Agency Defense Logistics Agency Defense Threat Reduction	65,999 51,696	39,496 2	60	62,622 72,806	39,151 2	63	61,693 25,397	39,468 2	64
Agency Joint Staff Special Operations Command	88,392 59,444 128,736	883 1 14,160	1 * 11	62,226 99,305 140,117	622 1 15,682	1 * 11	29,287 119,115 145,255	292 1 15,977	1 * 11
TRICARE Management Activity <sup>1</sup>	2,644	767	29	26,469	7,940	30	17,161	5,149	30
Washington Headquarters Services Department of the Air Force Air Force, Materials Command	259,239 672,018 588,914	76,170 86,033 86,031	29 13 15	285,555 821,331 745,881	74,507 134,154 133,753	26 16 18	255,171 839,097 768,493	56,905 150,364 149,963	22 18 20
Air Force, Space Command  Department of the Army Department of the Navy	83,104 1,516,782 3,525,870	510,665 1,410,570	34 40	75,450 1,761,722 4,091,073	401 507,705 1,628,495	1 29 40	70,604 1,826,260 4,020,438	401 582,213 1,619,907	32 40
Operational Test and Evaluation, Director	73,477	9,701	13	71,528	9,449	13	88,171	11,652	13

TABLE C-91. Federal obligations for development to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

		2002				Prelimin	nary		
Agency			Per-		2003			2004	
gonej	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per cer tota
Department of Defense, advanced technology Defense Agencies	1,293,949 612,509	479,216 150,115	37 25	1,629,052 804,613	554,257 221,344	34 28	1,432,535 749,001	467,006 216,422	3
Ballistic Missile Defense Organization Chemical and Biological	58,388	5,496	9	63,886	5,647	9	66,643	5,076	
Defense  Defense Advanced Research	4,486	142	3	36,499	9,052	25	40,332	800	
Projects Agency	99,870	74,903	75	181,389	136,042	75	217,970	163,478	
Defense Logistics Agency Defense Threat Reduction	51,438	1	*	72,706	1	*	25,297	1	
Agency Joint Staff Special Operations Command	88,392 59,444 54,069	883 1 5,947	1 * 11	62,226 99,305 58,849	622 1 6,743	1 * 11	29,287 119,115 61,007	292 1 6,710	
TRICARE Management Activity 1	699	183	26	0	0	0	0	0	
Washington Headquarters Services Department of the Air Force Air Force, Materials	195,723 145,076	62,559 56,659	32 39	229,753 156,698	63,236 61,781	28 39	189,350 144,099	40,064 38,655	
Command Air Force, Space Command Department of the Army <sup>2</sup>	128,074 17,002 285,657	56,658 1 180,728	44 *	149,074 7,624 406,461	61,780 1 175,619	41 *	136,456 7,643 325,352	38,654 1 133,971	
Department of the Navy Operational Test and Evaluation, Director	248,941 1,766	91,461 253	37 14	259,132 2,148	95,205 308	37 14	210,980 3,103	77,514 444	
Department of Defense, major systems Defense Agencies Ballistic Missile Defense	6,347,224 1,240,517	1,944,953 257,085	31 21	7,286,836 1,365,621	2,206,617 259,727	30 19	7,730,782 1,640,350	2,404,231 290,679	
Organization Chemical and Biological Defense	963,896 36,380	164,265 10,404	17 29	1,054,198 40,672	158,433 10,092	15 25	1,302,333 64,496	185,357 10,851	
Defense Advanced Research Projects Agency	33,856	20,511	61	44,490	23,900	54	44,498	23,745	
Defense Information Systems Agency Defense Logistics Agency	65,999 258	39,496 1	60	62,622 100	39,151 1	63 1	61,693 100	39,468 1	
Special Operations Command TRICARE Management	74,667	8,213	11	81,268	8,939	11	84,248	9,267	
Activity <sup>1</sup> Washington Headquarters Services	1,945 63,516	584 13,611	30 21	26,469 55,802	7,940 11,271	30 20	17,161 65,821	5,149 16,841	
Department of the Air Force	526,942	29,374	6	664,633	72,373	11	694,998	111,709	
Air Force, Materials Command Air Force, Space Command	460,840 66,102	29,373 1	6	596,807 67,826	71,973 400	12 1	632,037 62,961	111,309 400	
Department of the Army Department of the Navy Operational Test and	1,231,125 3,276,929	329,937 1,319,109	27 40	1,355,261 3,831,941	332,086 1,533,290	25 40	1,500,908 3,809,458	448,242 1,542,393	
Evaluation, Director	71,711	9,448	13	69,380	9,141	13	85,068	11,208	
Department of Education	4,998	3,309	66	4,434	2,890	65	3,639	2,307	

TABLE C-91. Federal obligations for development to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

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		2002				Prelimina	ary		
gency			Per-		2003			2004	
<b>3</b> . 5	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of Energy Energy Efficiency and	281,610	67,376	24	312,080	70,362	23	303,785	68,627	23
Renewable Energy Fossil Energy	174,344 80,794	25,258 41,763	14 52	186,188 82,750	26,974 42,968	14 52	169,370 83,476	24,537 43,670	14 52
National Nuclear Security Administration Defense Programs	17,761 17,028	4 1	*	34,266 24,996	4 1	*	42,402 33,132	4 1	*
Fissile Materials Disposition Naval Reactors	1 1	1 1	100 100	1 1	1 1	100 100	1 1	1 1	100 100
Nonproliferation and Verification	731	1	*	9,268	1	*	9,268	1	*
Other Department of Energy programs Bonneville Power	8,711	351	4	8,876	416	5	8,537	416	5
Administration Environmental Management Nuclear Energy Office of Intelligence	8,660 1 0 50	300 1 0 50	3 100 0 100	8,660 1 1 214	200 1 1 214	2 100 100 100	8,321 1 1 214	200 1 1 214	2 100 100 100
Department of Health and Human Services Agency for Healthcare Research	24,226	24,226	100	24,604	24,604	100	22,803	22,803	100
and Quality Health Resources and Services	23,898	23,898	100	24,296	24,296	100	22,320	22,320	100
Administration Office of the Secretary Office of Public Health and	1 326	1 326	100 100	1 306	1 306	100 100	1 481	1 481	100 100
Science Substance Abuse and Mental Health Services	326	326	100	306	306	100	481	481	100
Administration <sup>3</sup>	1	1	100	1	1	100	1	1	100
Department of Homeland Security Animal and Plant Health Inspection Service	na	na	na	54,030 24,052	23,556 16,115	44 67	51,549 21,089	20,467 14,129	40 67
Transportation Security Administration	na na	na na	na na	17,000	1	*	18,500	1	*
United States Coast Guard United States Customs Service	na na	na na	na na	11,778 1,200	6,240 1,200	53 100	11,960 0	6,337 0	53 0
Department of Housing and Urban Development	18,240	10,000	55	18,448	10,000	54	18,692	10,400	56
Department of the Interior Bureau of Reclamation Geological Survey National Park Service <sup>4</sup>	60,451 4,546 52,346 3,559	22,166 3,242 18,509 415	37 71 35 12	56,864 4,511 52,353 0	21,838 3,216 18,622 0	38 71 36 0	52,574 3,516 49,058 0	21,656 2,507 19,149 0	41 71 39 0
Department of Justice Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	37,465 414 33,562 3,489	2,334 400 1,899 35	6 97 6 1	48,111 500 42,700 4,911	2,396 400 1,947 49	5 80 5 1	41,704 500 34,145 7,059	2,498 400 2,027 71	6 80 6 1
Department of Labor Employment and Training	119,688	392	*	120,403	404	*	412	412	100
Administration Office of the Secretary	119,297 100	1 100	100	120,000 100	1 100	100	0 100	0 100	0 100
Pension Benefit Guaranty Corporation	291	291	100	303	303	100	312	312	100

TABLE C-91. Federal obligations for development to intramural performers for personnel costs, by agency: FYs 2002-04 (Dollars in thousands)

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		2002				Prelimina	ary		
Agency			Per-		2003			2004	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of Transportation Coast Guard Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety	69,908 11,080 11,043 8,689	22,679 5,870 9,043 3,523	32 53 82 41	53,215 na 12,293 18,636	21,450 na 12,293 3,615	40 na 100 19	48,988 na 13,022 20,690	22,197 na 13,022 3,702	45 na 100 18
Administration	1,333	293	22	1,027	224	22	73	16	22
Federal Railroad Administration Federal Transit Administration Office of the Secretary Research and Special Programs	1,250 3,241 18,425	166 518 2,554	13 16 14	505 2,320 14,133	180 420 3,693	36 18 26	500 640 10,836	305 240 3,868	61 38 36
Administration Transportation Security Administration	3,047 11.800	711 1	23	4,301 na	1,025 na	24 na	3,227 na	1,044 na	32 na
Department of the Treasury	3,049	1,278	42	769	273	36	775	277	36
Bureau of Engraving and Printing United States Customs Service United States Mint	1,756 1,093 200	29 1,093 156	2 100 78	560 na 209	110 na 163	20 na 78	560 na 215	110 na 167	20 na 78
Department of Veterans Affairs	14,500	7,395	51	15,592	7,952	51	16,778	8,557	51
Other agencies Agency for International									
Development Environmental Protection Agency Library of Congress	2,200 43,404 1,010	2,000 39,956 333	91 92 33	2,500 81,054 2,453	1,500 50,652 350	60 62 14	2,350 70,294 4,014	1,750 48,800 362	74 69 9
National Aeronautics and Space Administration	655,521	451,869	69	736,991	508,007	69	764,939	544,528	71

NOTES: Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

<sup>1</sup> TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services, their family members, and their survivors.

2 The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy and Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown. For accounting purposes the funds are shown in the advanced technology total for the Department of the Army.

3 Data for FYs 2002-2004 from Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

4 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

<sup>\* =</sup> Amount greater than 0 but less than 0.5 percent.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-92. Federal outlays for research, development, and R\&D plant, by agency: FYs 1983-93 (Dollars in millions) \\ \end{tabular}$ 

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Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies	37,959.4	41,330.1	45,860.3	52,090.3	53,214.2	56,556.6	61,476.4	64,151.1	63,676.4	65,719.0	68,385.8
Departments Department of Agriculture Agricultural Cooperative	858.8	893.5	923.2	953.0	994.0	1,049.7	1,129.8	1,196.7	1,269.4	1,382.8	1,453.4
Service Agricultural Marketing	2.1	2.2	2.9	2.6	2.8	2.7	2.8	2.7	2.8	3.4	2.9
Service Agricultural Research	.6	1.7	1.3	1.7	1.4	1.6	1.5	2.7	3.7	4.3	4.7
Service	469.4	479.3	492.9	500.5	526.5	540.4	579.7	603.4	622.9	686.5	732.6
Animal and Plant Health Inspection Service Cooperative State Research, Ed., and	.0	.0	.0	4.2	4.9	6.2	7.7	14.0	15.7	16.7	17.1
Extension Service	220.4	239.5	243.6	256.5	274.1	294.8	336.9	361.9	395.6	415.1	433.2
Economic Research Service	36.8	40.9	45.1	46.0	43.2	47.2	50.0	50.7	53.0	57.5	61.5
Forest Service	111.1	109.2	113.8	113.5	120.7	138.0	136.4	144.5	159.8	182.0	185.8
Grain Inspection Packers											
and Stockyards Administration	.0	.0	.9	1.0	1.2	1.0	1.1	.6	.7	1.8	1.8
Human Nutrition Information Service	5.8	7.9	7.2	10.6	9.6	8.2	8.4	9.0	8.9	9.7	7.3
National Agricultural Statistics Service	7.6	8.2	8.4	8.0	3.5	3.6	2.8	2.7	3.2	3.5	3.9
Office of International Cooperation and	7.0	0.2				3.0		2.1		3.5	3.7
Development	4.1	3.6	5.8	7.5	5.1	5.0	2.5	4.3	3.1	2.4	2.6
Office of Transportation	.8	1.0	1.3	1.0	1.0	1.1	na	na	na	na	na
Department of Commerce	335.2	336.3	377.8	380.1	311.1	389.4	403.2	441.5	500.7	643.4	652.0
Bureau of the Census Economic Development	4.3	4.4	4.8	4.6	4.5	5.6	5.0	6.7	6.6	5.5	5.0
Administration National Institute of	5.3	5.1	7.8	7.8	7.2	2.7	1.3	1.5	1.0	1.1	.7
Standards and Technology National Oceanic	94.0	103.3	106.5	109.2	102.1	111.4	121.5	120.3	144.1	160.6	189.8
and Atmospheric Administration National Telecommunications	222.0	214.7	249.1	248.7	189.2	263.5	269.1	306.7	345.3	472.2	452.4
and Information Administration	9.6	8.6	9.0	8.5	7.8	6.1	6.2	6.2	3.6	4.0	4.2
Office of the Secretary	*	.1	.6	1.2	.3	.1	.1	*	*	*	*
Department of Defense Defense Agencies	21,373.5 1,817.3	22,999.4 1,217.8	27,143.7 2,290.0	32,491.1 4,068.2	33,611.8 4,995.8	34,573.0 5,690.3	36,869.1 6,501.3	37,140.0 6,853.6	33,447.2 6,685.3	34,631.7 7,450.3	34,525.9 6,689.7
Department of the Air Force	9,640.9	10,849.7	12,263.7	14,133.1	14,101.0	14,774.5	15,390.5	14,888.1	13,043.8	12,532.3	12,287.9
Department of the Army	3,848.5	4,017.4	4,230.0	4,278.5	5,009.7	4,899.6	5,241.3	5,797.1	5,724.5	6,295.2	6,125.3
Department of the Navy	6,023.5	6,859.8	8,304.9	9,939.8	9,422.1	9,081.9	9,559.5	9,453.5	7,902.0	8,115.0	9,187.5
Operational Test and Evaluation, Director Test and Evaluation,	na	na	na	.0	4.4	7.2	31.6	32.0	22.3	9.4	12.3
Deputy Under Secretary of Defense	43.3	54.7	55.1	71.6	78.8	119.6	145.0	115.8	69.4	229.4	223.2
Department of Education	111.5	181.3	95.7	125.3	138.3	142.9	155.7	150.7	117.2	135.5	186.7
Department of Energy	5,641.9	5,656.4	5,803.0	5,381.7	5,432.7	5,743.7	6,039.0	6,365.3	6,827.1	7,232.7	7,668.3

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-92. Federal outlays for research, development, and R\&D plant, by agency: FYs 1983-93 (Dollars in millions) \\ \end{tabular}$ 

Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Health and	4.110.7	4.404.0	F 0.40 /	F F24 4	F 7F1 0	( 000 0	7 770 4	0.2/2.0	0.000.1	0.001.5	10.475.0
Human Services Administration for Children	4,118.6	4,484.9	5,049.6	5,531.4	5,751.0	6,923.2	7,773.4	8,363.8	9,822.1	9,091.5	10,475.2
and Families Administration on Aging	na na	na na	na na	na na	na na	na na	na na	na na	110.2 20.6	35.1 20.2	19.3 20.9
Agency for Healthcare Research and Quality Alcohol, Drug Abuse,	na	na	na	na	na	na	na	5.3	11.9	113.5	87.6
and Mental Health Administration	289.8	276.1	349.8	396.6	476.1	554.8	695.7	842.7	1,460.6	na	na
Centers for Disease									,		
Control and Prevention Centers for Medicare and	80.4	46.3	47.6	52.7	66.2	88.7	117.8	95.6	113.4	146.9	162.5
Medicaid Services Food and Drug	30.2	33.1	33.5	28.1	36.1	31.4	32.5	14.4	21.7	63.9	69.5
Administration Health Resources and	75.6	86.9	96.2	89.1	85.6	91.3	96.0	95.0	143.5	150.0	174.2
Services Administration Human Development Service	16.3 22.3	13.4 15.4	16.0 21.4	13.0 52.0	9.2 51.1	10.0 50.9	10.5 73.3	11.9 76.7	11.0 na	10.5 na	11.0 na
National Institutes of Health	3,562.9	3,981.1	4,446.3	4,867.2	4,985.2	6,060.2	6,699.0	7,181.1	7,890.4	8,491.4	9,893.3
Office of the Assistant Secretary for Health	16.9	11.5	15.8	21.6	23.5	20.0	26.0	22.3	18.2	21.7	15.8
Office of the Secretary Social Security	14.4	10.4	9.6	6.1	8.2	4.7	7.8	5.0	8.8	5.0	5.2
Administration	9.6	10.7	13.3	5.0	9.8	11.1	14.8	13.9	11.9	33.4	15.9
Department of Housing and Urban Development	30.9	24.9	18.6	13.9	19.7	14.9	20.7	21.7	18.1	23.5	28.4
Department of the Interior	412.7	435.9	417.0	445.4	394.7	419.6	485.3	503.0	556.2	628.4	651.8
Bureau of Land Management	3.9	3.8	4.4	3.4	3.6	3.7	3.0	2.8	8.8	6.3	8.9
Bureau of Mines Bureau of Reclamation	102.0 11.1	111.4 10.1	100.4 10.5	131.0 12.0	91.2 10.6	87.6 4.4	92.6 4.2	96.7 5.8	97.7 8.7	113.9 12.2	111.8 9.6
Geological Survey	171.4	228.4	230.8	226.5	211.2	238.6	300.9	301.3	319.5	370.3	385.2
Minerals Management Service National Park Service	1.3 13.7	1.5 14.0	1.5 15.0	1.1 17.3	1.0 18.5	1.2 19.4	1.9 19.4	2.0 20.1	2.7 27.5	4.1 31.1	6.1 38.1
Office of the Secretary Office of Surface Mining	1.3	.6	.3	.6	2.0	.4	.4	.2	.6	.9	.4
Reclam and Enforcement Office of Water Research	1.5	.8	2.0	2.3	1.0	1.0	.7	.8	1.0	.3	.4
and Technology United States Fish and	8.3	2.6	na	na	na	na	na	na	na	na	na
Wildlife Service	98.3	62.8	52.1	51.2	55.7	63.3	62.2	73.3	89.7	89.3	91.3
Department of Justice Bureau of Prisons	27.6 1.7	26.5 1.6	32.7 1.5	32.1 3.0	39.0 6.9	48.1 6.0	36.0 3.8	38.2 3.2	40.4 5.7	42.9 5.9	46.2 6.1
Drug Enforcement Administration	2.5	2.0	1.6	2.5	2.2	2.5	2.7	2.4	2.8	1.5	1.1
Federal Bureau of Investigation Immigration and	1.9	2.5	8.9	6.9	6.9	12.7	6.5	8.2	10.8	10.9	11.3
Naturalization Service Office of Justice Programs	.2 21.1	.6 19.6	.4 20.1	.4 19.2	.4 22.4	5.2 21.6	.4 22.5	.4 24.0	.4 20.7	.4 24.1	.4 27.2
Office of Legal Policy	.2	.3	.2	.2	.2	.0	.0	.0	.0	.0	.0

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-92. Federal outlays for research, development, and R\&D plant, by agency: FYs 1983-93 (Dollars in millions) \end{tabular}$ 

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Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Labor Bureau of Labor Statistics	16.8 .7	14.1 .5	13.7 .6	10.9 .6	20.3 6.5	31.8 7.0	28.9 7.0	45.2 7.3	45.6 7.5	70.8 7.6	57.8 6.9
Employment Standards Administration	1.3	1.3	*	.0	1.0	.1	.1	.1	.0	.0	.0
Employment and Training Administration	6.0	3.5	4.5	3.4	4.4	11.2	9.2	25.6	23.7	51.0	39.2
Labor-Management Relations and Cooperative Programs	na	.3	.3	.2	.3	.4	.3	na	na	na	na
Labor-Management Services Administration	.9	na									
Occupational Safety and Health Administration Office of the Secretary Pension and Welfare	5.3 1.5	5.1 1.9	4.5 2.6	3.6 2.1	4.1 2.7	4.2 6.1	4.5 6.1	2.5 7.1	2.6 8.7	3.1 5.7	2.5 5.4
Benefits Administration Pension Benefit Guaranty	na	1.2	1.1	.9	1.0	2.6	1.3	2.1	2.5	2.6	2.6
Corporation	1.1	.3	.2	.1	.3	.3	.3	.5	.5	.9	1.3
Department of State	1.5	1.6	1.5	1.5	3.0	4.2	4.7	4.7	5.9	5.6	5.3
Department of Transportation Coast Guard Federal Aviation	282.3 19.6	357.5 19.5	430.2 19.0	445.2 16.7	347.7 17.8	332.1 14.9	291.5 18.1	287.3 21.4	361.0 14.9	411.1 22.8	455.3 32.2
Administration Federal Highway	99.5	167.5	283.7	317.6	190.5	190.2	153.5	185.5	216.0	250.7	260.1
Administration Federal Railroad	32.5	51.1	47.5	46.1	76.3	60.1	76.5	44.0	86.1	81.2	87.5
Administration Federal Transit	18.5	14.7	16.2	15.4	10.9	10.6	7.0	7.0	14.3	21.5	22.8
Administration	36.5	31.2	18.6	8.8	9.4	1.4	2.0	2.3	2.1	1.5	16.5
Maritime Administration National Highway Traffic	13.5	11.1	10.2	14.1	7.2	2.6	.0	.9	1.5	1.7	1.7
Safety Administration Office of the Secretary Research and Special	51.1 4.0	53.2 5.0	28.0 4.7	19.1 5.2	28.9 4.7	45.2 5.2	28.5 4.2	16.9 6.9	19.2 4.7	24.5 5.0	28.3 4.4
Programs Administration	7.1	4.2	2.4	2.3	2.1	2.0	1.6	2.4	2.2	2.3	1.7
Department of the Treasury Bureau of Engraving and	15.6	13.6	24.3	23.0	26.4	25.8	23.5	25.2	30.4	24.5	16.6
Printing Financial Crimes	3.9	3.6	5.0	4.2	4.5	2.0	1.7	2.1	3.5	2.0	3.2
Enforcement Network Internal Revenue Service United States Customs	0. 0.8	.0 7.9	.0 15.9	.0 13.4	.0 14.1	.0 14.0	.0 14.0	.0 16.3	1.8 17.3	1.5 17.3	1.5 6.5
Service	3.4	1.9	2.3	4.9	7.1	9.3	6.9	6.3	3.8	2.3	4.1
United States Mint United States Secret Service	.0 .4	.0	.6 .6	.5	.1 .5	.2 .4	.3	.1 .5	.5 .4	.0 .6	.6
Department of Veterans Affairs	164.7	193.6	222.7	.5	198.8	201.9	186.4	219.0	221.6	207.6	250.8

TABLE C-92. Federal outlays for research, development, and R&D plant, by agency: FYs 1983-93 (Dollars in millions)

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gency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Other agencies											
Advisory Commission on											
Intergovernmental Relations	1.9	2.1	2.0	2.0	1.6	1.4	1.2	1.2	1.2	1.5	2.1
Agency for International											
Development	225.2	207.2	233.0	255.5	263.2	229.1	279.1	334.0	344.0	205.9	321.7
Appalachian Regional					_				_		
Commission	.2	.4	.2	.2	.1	.2	.8	.4	.7	1.9	.9
Consumer Product Safety											4.0
Commission	na	1.2									
Environmental Protection	212 5	2//1	274.0	207.0	225.0	240.0	242.0	200 5	400.1	411.0	407.7
Agency	312.5	266.1	274.8	306.9	325.9	340.0	343.2	388.5	400.1	411.9	497.7
Federal Communications	1.0	0	1 1	0	1.0	1.0	1 1	1.0	1.4	1 /	1 /
Commission	1.3	.9	1.1	.9	1.0	1.2	1.1	1.3	1.4	1.6	1.6
Federal Emergency Management											
Agency	3.2	10.9	4.6	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.6	1.7	1.8	.5	.4	.4	.5	1.0	1.3	.9
General Services											
Administration	.5	2.4	.4	1.9	1.6	2.3	.5	.7	3.6	20.9	7.6
Library of Congress	6.7	7.2	6.3	6.9	6.5	7.1	8.0	8.4	8.6	10.0	10.7
National Aeronautics and											
Space Administration	2,646.2	3,730.6	3,217.1	3,730.6	3,564.3	4,230.4	5,506.1	6,762.2	7,675.0	8,386.6	8,885.4
National Archives and Records											
Administration	.0	.0	.5	1.0	1.1	.7	.3	.4	.7	.7	.3
National Science Foundation	na	na	1,250.0	1,468.1	1,459.9	1,550.7	1,613.4	1,563.0	1,687.1	1,813.6	1,841.7
Nuclear Regulatory Commission	244.0	198.6	161.1	136.0	124.4	113.5	113.2	111.5	107.5	116.5	119.6
Office of Thrift Supervision	3.0	2.6	2.8	3.3	3.4	3.4	4.1	4.1	.0	.0	.0
Smithsonian Institution	57.3	55.2	59.8	64.0	71.5	74.8	82.6	95.4	98.5	95.4	97.2
Tennessee Valley Authority	63.7	66.3	81.0	79.5	76.9	86.9	61.7	66.7	72.3	103.5	109.6
United States Arms Control											
and Disarmament Agency	1.0	1.3	1.1	.9	4.6	3.4	2.8	.2	.4	2.1	1.5
United States Information	*		1.1	2.4	10.0	4 -	1.0	0	^	^	^
Agency	^	^	1.1	2.4	10.0	1.5	1.0	.0	.2	.2	.2
United States International	4.7	г о	г о		7.0	0.1	0.7	0.1	0.0	10.0	100
Trade Commission	4.7	5.0	5.8	6.9	7.2	8.1	8.7	9.1	9.9	12.3	12.2

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had outlays in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
R&D = Research and development.

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-92a. Federal outlays for research, development, and R\&D plant, by agency: FYs 1994-2004 (Dollars in millions) \\ \end{tabular}$ 

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
, igo.io)	.,,,	.,,,			.,,,	.,,,	2000	2001		2003	2004
All agencies	68,328.3	68,694.4	68,007.6	70,892.7	72,466.1	72,613.9	74,077.1	79,692.2	85,100.8	95,139.5	100,756.4
Departments Department of Agriculture	1,486.9	1,504.3	1,438.3	1,464.4	1,538.6	1,612.8	1,659.6	1,869.5	2,026.1	2,182.7	2,094.5
Agricultural Cooperative Service	3.7	na	na	na							
Agricultural Marketing Service	4.6	5.0	4.5	4.5	4.2	4.4	4.8	4.7	5.2	5.4	5.4
Agricultural Research Service	735.3	758.4	739.9	770.4	782.1	847.4	886.8	1.014.6	1,131.4	1,364.6	1,206.7
Animal and Plant Health Inspection Service	19.2	19.1	19.5	19.8	20.5	20.4	20.6	25.4	23.7	na	na
Cooperative State Research, Ed., and Extension Service Economic Research Service Food Safety Inspection	456.9 57.3	463.9 52.0	434.9 50.1	435.8 42.4	474.2 55.0	464.8 57.8	425.4 63.9	478.9 66.1	487.6 69.9	512.5 72.0	497.2 77.0
Service	.0	.0	*	*	.2	.7	2.3	2.6	.0	.0	.0
Foreign Agricultural Service Forest Service Grain Inspection Packers and Stockyards	1.1 195.7	.9 197.8	1.3 180.4	1.4 181.8	1.4 190.6	1.4 206.0	1.4 244.0	1.4 263.0	1.4 292.0	1.6 211.0	1.6 291.0
Administration	1.8	1.5	2.5	2.8	2.7	2.7	3.6	6.1	6.0	6.8	7.1
Human Nutrition Information Service National Agricultural	5.3	na	na	na							
Statistics Service Rural Business-	3.6	4.2	3.7	3.0	3.3	3.6	3.6	4.3	4.6	4.8	4.9
Cooperative Service	2.4	1.6	1.4	2.5	4.4	3.5	3.1	2.4	4.2	4.0	3.5
Department of Commerce Bureau of the Census Economic Development	810.3 5.4	886.4 5.1	945.1 6.6	1,037.6 5.1	1,036.6 8.6	1,036.1 12.0	1,086.3 32.0	1,015.8 19.0	1,232.6 22.7	1,227.5 18.9	1,281.5 14.1
Administration National Institute of Standards and	.3	1.0	.6	.6	.6	.6	.6	.6	.4	.5	.£
Technology National Oceanic and Atmospheric	237.8	350.4	404.9	473.3	482.3	456.0	433.6	474.2	532.2	514.4	552.1
Administration	562.9	523.6	528.5	530.9	519.6	547.2	597.1	501.0	651.3	643.7	686.9
National Telecommunica- tions and Information Administration Office of the Secretary	3.9	6.4	4.5 .0	27.8 .0	25.5 .0	20.3	23.0	21.0 .0	26.0 .0	50.0 .0	28.0 .0
Department of Defense Defense Agencies	35,179.2 8,125.3	34,001.9 7,112.1	35,501.6 7,198.7	35,699.0 7,182.6	35,530.3 8,047.4	33,814.9 6,207.4	31,468.8 5,611.3	33,220.6 7,287.9	34,447.2 10,479.1	38,169.2 11,199.3	42,136.1 11,867.0
Department of the Air Force Air Force, Materials	12,799.2	12,051.8	13,474.4	14,912.1	14,246.2	13,972.6	11,729.1	10,229.7	6,576.6	7,159.4	7,885.5
Command Air Force, Space	na	4,402.3	5,020.6	5,483.0							
Command	na	2,174.3	2,138.8	2,402.4							
Department of the Army Department of the Navy Operational Test and	5,797.8 8,213.3	5,137.3 9,454.1	4,954.4 9,605.0	4,889.9 8,417.1	4,920.4 8,038.1	5,071.8 8,261.2	4,821.7 9,016.3	5,797.0 9,675.4	6,619.9 10,576.2	7,068.3 12,512.3	8,256.3 13,870.7
Evaluation, Director Test and Evaluation, Deputy Under Secretary	11.9	12.4	22.1	21.5	27.8	44.7	32.9	205.3	195.5	230.0	256.6
of Defense	231.8	234.3	247.1	275.8	250.4	257.3	257.4	25.3	.0	.0	.0
Department of Education	179.2	180.6	172.0	169.1	192.0	201.6	222.4	251.0	243.1	393.2	303.8

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-92a. Federal outlays for research, development, and R\&D plant, by agency: FYs 1994-2004 (Dollars in millions) \\ \end{tabular}$ 

Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	inary
Ç ,									_	2003	2004
Department of Energy	6,896.5	7,016.3	6,656.1	6,485.3	6,652.9	6,836.9	6,874.2	7,415.6	8,034.6	8,682.2	8,648.3
Department of Health and Human Services Administration for	10,352.5	11,245.2	10,419.0	11,457.7	12,983.8	14,280.2	18,406.8	21,296.7	23,892.1	28,005.4	28,643.3
Children and Families Administration on Aging	11.3 19.1	12.0 20.7	11.9 2.9	12.7 4.0	15.8 10.4	23.1 18.5	25.4 1.1	26.4 1.6	21.7 2.1	21.4 3.2	21.9 2.0
Agency for Healthcare Research and Quality Agency for Toxic	111.0	133.0	80.0	110.0	77.0	79.0	50.8	33.5	.0	.0	.0
Substances and Disease Registry	na	na	na	na	na	na	14.7	13.1	12.4	.0	.0
Centers for Disease Control and Prevention Centers for Medicare and	206.8	317.4	296.7	306.0	343.6	433.3	439.0	544.0	521.0	564.0	531.0
Medicaid Services <sup>1</sup> Food and Drug	72.3	72.9	75.4	66.3	51.3	48.1	44.4	53.0	72.9	73.7	63.4
Administration Health Resources and	160.5	147.9	138.8	165.9	155.9	133.3	143.8	152.4	129.7	126.4	121.4
Services Administration	17.8	14.4	11.9	13.8	13.8	13.0	36.2	51.6	54.7	45.6	21.5
National Institutes of Health Office of the Assistant	9,725.7	10,511.5	9,779.8	10,687.0	12,035.6	13,226.0	17,134.8	19,771.3	22,343.5	26,429.7	26,945.8
Secretary for Health Office of the Secretary	.7 5.0	.6 3.5	na 5.0	na 22.9	na 7.0	na 16.6	na 18.7	na 15.6	na 16.5	na 17.5	na 19.5
Office of the Assistant											
Secretary, Planning and Evaluation Office of Public Health	na	na	3.0	21.0	5.0	13.9	16.7	13.9	14.9	16.0	16.0
and Science Social Security	na	na	2.0	1.9	2.0	2.6	2.0	1.7	1.6	1.5	3.5
Administration Substance Abuse and	22.2	11.3	na	na	na	na	na	na	na	na	na
Mental Health Services Administration	na	na	16.7	69.1	273.4	289.3	497.8	634.3	717.6	723.9	916.8
Department of Homeland Security	na	na	na	na	na	na	na	na	na	168.1	220.4
Animal and Plant Health Inspection Service Transportation Security	na	na	na	na	na	na	na	na	na	29.0	25.4
Administration U.S. Coast Guard	na na	na na	na na	na na	na na	na na	na na	na na	na na	110.0 25.6	172.0 22.9
U.S. Customs Service	na	na	na	na	na	na	na	na	na	3.5	.0
Department of Housing and Urban Development	28.5	38.0	36.2	31.7	31.6	27.5	43.7	64.2	57.7	51.6	50.7
Department of the Interior Bureau of Mines	644.9 107.9	558.8 .0	547.2	572.6	566.9	608.1	581.2	623.2	633.2	612.3	577.0
Bureau of Reclamation	7.4	8.0	na 6.5	na 6.8	na 8.8	na 10.3	na 9.8	na 9.7	na 10.4	na 11.8	na 10.4
Geological Survey Minerals Management	375.5	359.3	498.6	517.2	499.9	545.7	506.1	572.6	565.0	555.1	521.3
Service National Biological	19.5	20.8	21.7	22.6	28.4	29.7	30.5	28.0	31.7	29.7	29.3
Service	110.3	151.0	na	na	na	na	na	na	na	na	na
National Park Service <sup>2</sup> Office of the Secretary	24.2 .1	19.7	20.2	26.0 .0	29.7 .0	22.5 .0	34.7 .0	12.9 .0	26.2 .0	15.7 .0	16.0 .0

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-92a. Federal outlays for research, development, and R\&D plant, by agency: FYs 1994-2004 (Dollars in millions) \\ \end{tabular}$ 

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ncy	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimin	ary
,										Prelimina  2003  84.2 9.0 .0 42.7 na 32.5 149.2 22.4 120.0 3.9 1.7 .5 .7 1.2  643.5 na 295.0 226.0 3.0  45.8 3.3 .0 47.7 11.7 11.0 na 70.7 7.1 62.1 .2 na .4 1.0 353.9	2004
Department of Justice Bureau of Prisons	42.0 5.4	49.0 5.7	72.7 5.2	75.5 4.6	73.2 8.1	85.3 9.3	42.8 6.6	67.4 12.0	67.7 8.7		66.8 9.2
Drug Enforcement Administration Federal Bureau of	1.7	.4	1.2	*	.0	.0	.0	.0	.0	.0	.0
Investigation Immigration and	7.0	10.9	33.5	35.5	35.8	36.3	10.0	19.0	33.6	42.7	34.1
Naturalization Service Office of Justice	.4	.4	.2	.4	.0	.2	.6	.9	.0	na	na
Programs	27.6	31.5	32.6	35.0	29.3	39.5	25.7	35.5	25.4	32.5	23.5
Department of Labor Bureau of Labor	60.7	51.7	50.1	39.1	25.2	25.8	82.7	95.5	164.6	149.2	28.7
Statistics Employment and Training	7.1	13.1	13.3	12.6	12.4	12.4	12.3	21.5	20.7	22.4	22.3
Administration Occupational Safety and	41.8	23.1	24.6	18.2	4.7	6.1	60.9	60.9	137.1	120.0	.0
Health Administration Office of the Secretary Pension and Welfare	3.2 5.2	4.3 6.2	6.6 2.6	5.4 .2	4.6 .2	3.7 1.0	5.7 1.3	5.7 5.4	3.8 1.2		4.0 1.2
Benefits Administration Pension Benefit Guaranty	2.7	3.6	2.3	2.0	2.7	1.8	1.8	1.3	.9	.5	.5
Corporation	.7	1.4	.6	.7	.6	.7	.7	.7	.7	.7	.8
Department of State	.4	.5	1.0	.6	.5	1.0	.9	1.6	1.6	1.2	1.2
Department of Transportation Coast Guard Federal Aviation	536.9 26.1	661.4 21.1	593.0 23.4	548.4 23.3	537.3 20.1	523.9 20.7	449.6 20.0	515.4 19.3	732.9 20.0		806.4 na
Administration	258.9	270.8	265.8	236.0	229.5	187.9	230.2	203.0	309.0	295.0	255.0
Federal Highway Administration Federal Motor Carrier	178.5	260.6	236.5	218.0	210.4	230.7	106.7	201.9	209.0	226.0	435.0
Safety Administration	na	na	na	na	na	na	.4	5.5	2.0	3.0	6.0
Federal Railroad Administration Federal Transit	19.6	22.8	20.0	18.1	23.0	22.1	25.3	21.0	28.4	45.8	34.5
Administration Maritime Administration National Highway Traffic	18.5 1.7	33.4 2.3	22.4 .0	19.5 .0	10.2 .0	10.6 .0	12.0 .0	3.7 .0	2.3		4.2 .0
Safety Administration Office of the Secretary Research and Special	26.9 2.5	41.4 4.0	15.0 2.8	23.0 2.0	33.3 3.7	40.3 3.7	40.5 7.5	46.7 7.0	47.1 11.1		49.1 11.6
Programs Administration Transportation Security	4.1	4.9	7.0	8.4	7.2	7.9	7.0	7.5	9.0	11.0	11.0
Administration	na	95.0	na	na							
Department of the Treasury Bureau of Engraving and	20.7	61.5	60.2	59.8	65.2	64.8	60.4	65.1	70.7		70.7
Printing Internal Revenue Service Office of Thrift	3.4 11.3	1.8 49.7	1.7 51.2	1.7 50.8	2.8 52.0	2.1 55.8	2.8 53.3	4.7 56.6	7.1 55.5		7.1 62.1
Supervision United States Customs	.5	.6	.5	.6	.7	.1	.1	.1	.1	.2	.2
Service	4.6	8.6	6.3	6.3	9.2	5.4	1.9	2.2	7.1		na
United States Mint United States Secret Service	.4 .5	.6	.0 .5	.4	.1 .5	.8 .5	1.3 1.0	.8 .7	.8		.4 1.0
Department of Veterans Affairs	246.0	258.3	240.6	243.2	248.1	339.4	342.0	345.3	329.2	353.9	380.8

TABLE C-92a. Federal outlays for research, development, and R&D plant, by agency: FYs 1994-2004 (Dollars in millions)

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	inary
v .									_	2003	2004
Other agencies Advisory Commission on Intergovernmental											
Relations	1.4	1.4	na								
Agency for International  Development  Application Degices!	372.6	256.8	251.0	206.4	212.0	203.0	179.0	195.0	202.0	206.0	200.0
Appalachian Regional Commission Broadcasting Board of	.9	.9	.9	.9	.7	.8	.6	.7	.7	.7	.3
Governors	na	na	na	na	na	na	.1	*	.3	.1	.2
Consumer Product Safety Commission	.4	.4	.1	.1	*	.0	.0	.1	.0	.0	.0
Environmental Protection Agency	558.3	495.5	476.3	537.0	524.0	593.0	492.0	550.0	561.0	584.0	550.0
Federal Communications Commission Federal Trade Commission	1.7 .7	2.3 .6	2.8 .5	3.1 .7	3.0 1.1	4.5 1.3	2.8 .7	2.7 .7	4.4 1.8	6.3 1.6	2.8 1.7
General Services Administration Library of Congress	5.5 12.5	1.3 7.7	4.1 11.0	1.6 2.5	.0 1.6	.0 2.1	.1 2.2	.6 1.8	* 2.8	* 4.2	* 5.8
National Aeronautics and Space Administration <sup>3</sup> National Archives and	8,576.8	9,116.2	8,094.0	9,715.0	9,741.0	9,752.0	9,291.0	9,167.0	9,142.0	9,772.0	10,755.0
Records Administration National Science Foundation Nuclear Regulatory	.3 1,983.6	.1 1,977.0	.1 2,212.0	.1 2,318.0	.1 2,302.0	.1 2,399.0	.1 2,616.0	.1 2,762.0	.1 3,074.0	.1 3,533.0	.1 3,697.0
Commission Smithsonian Institution	92.4 127.4	88.8 125.0	75.2 125.0	67.5 126.0	54.3 115.5	48.0 88.5	47.0 95.5	40.0 95.5	47.0 103.5	44.0 107.0	45.0 112.0
Social Security Administration	na	na	11.5	13.6	17.4	53.3	28.8	28.9	27.9	85.7	76.4
Tennessee Valley Authority United States Arms Control	97.9	93.1	6.1	8.9	2.7	.0	.0	.0	.0	.0	.0
and Disarmament Agency United States Information	1.3	1.1	.7	1.2	1.2	.0	.0	.0	.0	.0	.0
Agency United States Information United States International	.6	.3	.1	.2	.2	.1	na	na	na	na	na
Trade Commission	9.4	12.2	3.2	5.7	7.2	9.7	.0	.0	.0	.0	.0

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had outlays in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

As of July 1, 2001, the Health Care Financing Administration became the Centers for Medicare and Medicaid Services.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only: data for the NPS cultural resources program were not available for this survey cycle.
 Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
R&D = Research and development.

TABLE C-93. Federal outlays for research and development, by agency: FYs 1983-93 (Dollars in millions)  $\,$ 

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Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies	36,659.4	39,691.0	44,171.4	50,609.1	51,611.7	54,739.4	59,450.4	62,135.3	61,130.4	62,934.5	65,241.3
Departments Department of Agriculture Agricultural Cooperative	826.0	864.3	889.0	918.0	922.9	971.2	1,037.5	1,072.5	1,189.4	1,246.0	1,303.9
Service Agricultural Marketing	2.1	2.2	2.9	2.6	2.8	2.7	2.8	2.7	2.8	3.4	2.9
Service Agricultural Research	.6	1.7	1.3	1.7	1.4	1.6	1.5	2.7	3.7	4.3	4.7
Service	438.7	454.3	466.2	468.1	463.2	482.1	528.0	548.1	573.5	617.1	643.4
Animal and Plant Health Inspection Service Cooperative State Research, Ed., and	.0	.0	.0	4.2	4.9	5.6	7.4	8.0	15.7	16.7	17.1
Extension Service	219.6	235.7	236.7	254.8	267.1	277.3	298.3	303.9	380.1	354.9	379.4
Economic Research Service	36.8	40.9	45.1	46.0	43.2	47.2	50.0	50.7	53.0	57.5	61.5
Forest Service	109.8	108.8	113.1	112.5	119.9	135.8	134.7	139.6	144.7	174.8	179.3
Grain Inspection Packers											
and Stockyards Administration	.0	.0	.9	1.0	1.2	1.0	1.1	.6	.7	1.8	1.8
Human Nutrition Information Service	5.8	7.9	7.2	10.6	9.6	8.2	8.4	9.0	8.9	9.7	7.3
National Agricultural Statistics Service	7.6	8.2	8.4	8.0	3.5	3.6	2.8	2.7	3.2	3.5	3.9
Office of International Cooperation and											
Development	4.1	3.6	5.8	7.5	5.1	5.0	2.5	4.3	3.1	2.4	2.6
Office of Transportation	.8	1.0	1.3	1.0	1.0	1.1	na	na	na	na	na
Department of Commerce	334.5	327.0	373.6	372.6	307.0	378.6	394.0	426.8	485.1	622.1	629.6
Bureau of the Census Economic Development	4.3	4.4	4.8	4.6	4.5	5.6	5.0	6.7	6.6	5.5	5.0
Administration  National Institute of	5.3	5.1	7.8	7.8	7.2	2.4	1.1	1.5	1.0	1.1	.7
Standards and Technology National Oceanic	93.3	94.1	102.2	103.3	100.0	101.3	113.0	112.3	135.9	149.1	180.1
and Atmospheric Administration National Telecommunications	222.0	214.7	249.1	247.2	187.1	263.0	268.6	300.1	338.0	462.4	439.5
and Information	9.6	0.4	9.0	8.5	7.8	4 1	6.2	4.2	3.6	4.0	4.2
Administration Office of the Secretary	9.0 *	8.6 .1	.6	1.2	.3	6.1 .1	.1	6.2	3.0	4.0	4.2
Department of Defense Defense Agencies Department of the Air Force Department of the Army	21,105.8 1,811.5 9,537.2 3,827.0	22,619.3 1,213.6 10,658.5 3,983.0	26,742.0 2,285.2 12,063.9 4,176.6	32,210.5 4,062.4 14,044.0 4,223.5	33,254.4 4,958.4 13,906.8 4,949.0	34,156.8 5,622.1 14,567.0 4,837.8	36,453.4 6,409.5 15,190.8 5,201.6	36,703.2 6,765.0 14,687.9 5,750.2	33,013.5 6,621.8 12,825.6 5,659.5	34,220.8 7,358.7 12,346.1 6,273.2	34,152.7 6,628.0 12,056.9 6,118.3
Department of the Navy	5,886.8	6,709.4	8,161.1	9,809.1	9,357.1	9,003.1	9,475.0	9,352.3	7,815.0	8,004.0	9,114.0
Operational Test and Evaluation, Director Test and Evaluation.	na	na	na	.0	4.4	7.2	31.6	32.0	22.3	9.4	12.3
Deputy Under Secretary of Defense	43.3	54.7	55.1	71.6	78.8	119.6	145.0	115.8	69.4	229.4	223.2
Department of Education	111.5	181.3	95.7	124.5	122.6	131.8	153.4	147.9	114.5	133.0	173.8
Department of Energy	4,817.5	4,740.3	4,947.7	4,655.8	4,711.3	4,964.7	5,200.6	5,508.4	5,727.2	6,034.7	6,185.1

TABLE C-93. Federal outlays for research and development, by agency: FYs 1983-93 (Dollars in millions)

Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Health and	4.002.0	4.450.2	E 007.0	E 400.7	E 710 E	4 000 F	7 717 4	0 200 7	0.427.2	0.004.0	10 225 0
Human Services Administration for Children	4,092.0	4,450.3	5,007.0	5,498.7	5,719.5	6,892.5	7,717.4	8,308.7	9,627.3	8,994.8	10,325.9
and Families Administration on Aging Agency for Healthcare	na na	na na	na na	na na	na na	na na	na na	na na	110.2 20.6	35.1 20.2	19.3 20.9
Research and Quality Alcohol, Drug Abuse,	na	na	na	na	na	na	na	5.3	11.9	113.5	87.6
and Mental Health Administration	288.8	272.0	348.4	396.1	475.5	554.8	695.7	842.7	1,460.6	na	na
Centers for Disease Control and Prevention	80.4	46.3	47.6	52.7	66.2	88.7	117.8	95.6	113.4	146.9	162.5
Centers for Medicare and Medicaid Services	30.2	33.1	33.5	28.1	36.1	31.4	32.5	14.4	21.7	63.9	69.5
Food and Drug Administration	73.5	76.9	81.2	79.1	83.7	89.6	94.0	94.0	125.0	135.7	154.5
Health Resources and Services Administration	16.3	13.4	16.0	13.0 52.0	9.2	10.0 50.9	10.5 73.3	11.9 76.7	11.0	10.1	9.6
Human Development Service	22.3	15.4	21.4	52.0	51.1	50.9	73.3	70.7	na	na	na
National Institutes of Health Office of the Assistant	3,539.5	3,960.6	4,420.1	4,845.0	4,956.2	6,031.2	6,645.0	7,127.0	7,714.0	8,409.2	9,765.1
Secretary for Health Office of the Secretary	16.9 14.4	11.5 10.4	15.8 9.6	21.6 6.1	23.5 8.2	20.0 4.7	26.0 7.8	22.3 5.0	18.2 8.8	21.7 5.0	15.8 5.2
Social Security Administration	9.6	10.7	13.3	5.0	9.8	11.1	14.8	13.9	11.9	33.4	15.9
Department of Housing and Urban Development	30.9	24.9	18.6	13.9	19.7	14.9	20.7	21.7	18.1	23.5	28.4
·			412.8	439.3				492.5	535.6		
Department of the Interior  Bureau of Land Management	410.3 3.9	430.7 3.8	412.0	3.4	390.0 3.6	414.6 3.7	478.4 3.0	2.8	8.8	610.6 6.3	631.0 8.9
Bureau of Mines	101.9	111.3	100.4	131.0	91.2	87.6	90.6	93.6	96.3	113.9	111.8
Bureau of Reclamation Geological Survey	11.1 169.9	10.1 227.2	10.5 229.9	12.0 225.6	10.6 210.4	4.4 237.9	4.2 299.5	5.8 300.0	8.7 316.6	12.2 365.9	9.6 381.2
Minerals Management Service National Park Service	1.3 13.7	1.5 14.0	1.5 15.0	1.1 17.3	1.0 18.5	1.2 19.4	1.9 19.4	1.8 20.1	2.5 27.5	3.4 31.1	5.1 38.1
Office of the Secretary Office of Surface Mining	1.3	.6	.3	.6	2.0	.4	.4	.2	.6	.9	.4
Reclam and Enforcement Office of Water Research	1.5	.8	2.0	2.3	1.0	1.0	.7	.8	1.0	.3	.4
and Technology United States Fish and	8.3	2.6	na	na	na	na	na	na	na	na	na
Wildlife Service	97.5	58.8	48.8	46.0	51.7	59.0	58.8	67.3	73.6	76.6	75.5
Department of Justice Bureau of Prisons Drug Enforcement	27.6 1.7	26.5 1.6	32.7 1.5	32.1 3.0	38.7 6.9	48.1 6.0	36.0 3.8	38.2 3.2	40.4 5.7	42.9 5.9	46.2 6.1
Administration Federal Bureau of	2.5	2.0	1.6	2.5	2.2	2.5	2.7	2.4	2.8	1.5	1.1
Investigation Immigration and	1.9	2.5	8.9	6.9	6.6	12.7	6.5	8.2	10.8	10.9	11.3
Naturalization Service Office of Justice Programs Office of Legal Policy	.2 21.1 .2	.6 19.6 .3	.4 20.1 .2	.4 19.2 .2	.4 22.4 .2	5.2 21.6 .0	.4 22.5 .0	.4 24.0 .0	.4 20.7 .0	.4 24.1 .0	.4 27.2 .0

TABLE C-93. Federal outlays for research and development, by agency: FYs 1983-93 (Dollars in millions)

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ency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Labor	16.8	14.1	13.7	10.9	20.3	31.8	28.9	45.2	45.6	70.8	57.8
Bureau of Labor Statistics Employment Standards	.7	.5	.6	.6	6.5	7.0	7.0	7.3	7.5	7.6	6.9
Administration	1.3	1.3	*	.0	1.0	.1	.1	.1	.0	.0	.0
Employment and Training Administration Labor-Management Relations	6.0	3.5	4.5	3.4	4.4	11.2	9.2	25.6	23.7	51.0	39.2
and Cooperative Programs Labor-Management Services	na	.3	.3	.2	.3	.4	.3	na	na	na	na
Administration	.9	na									
Occupational Safety and											
Health Administration	5.3	5.1	4.5	3.6	4.1	4.2	4.5	2.5	2.6	3.1	2.5
Office of the Secretary Pension and Welfare	1.5	1.9	2.6	2.1	2.7	6.1	6.1	7.1	8.7	5.7	5.4
Benefits Administration Pension Benefit Guaranty	na	1.2	1.1	.9	1.0	2.6	1.3	2.1	2.5	2.6	2.6
Corporation	1.1	.3	.2	.1	.3	.3	.3	.5	.5	.9	1.3
Department of State	1.5	1.6	1.5	1.5	3.0	4.2	4.7	4.7	5.9	5.6	5.3
Department of Transportation Coast Guard	272.4 19.6	344.6 19.5	416.1 19.0	429.8 16.7	336.6 17.8	321.0 14.6	278.6 18.1	270.6 21.0	342.6 14.5	394.0 22.4	425.2 31.7
Federal Aviation Administration	90.3	155.1	270.1	303.3	180.1	179.6	141.0	169.2	199.6	234.9	234.5
Federal Highway Administration	32.5	51.1	47.5	45.5	76.0	60.1	76.5	44.0	86.1	81.2	87.1
Federal Railroad Administration Federal Transit	18.3	14.7	16.2	15.4	10.9	10.3	6.7	7.0	12.8	20.6	21.6
Administration	36.5	31.2	18.6	8.8	9.4	1.4	2.0	2.3	2.1	1.5	14.3
Maritime Administration National Highway Traffic	13.5	11.1	10.2	14.1	7.2	2.6	.0	.9	1.5	1.7	1.7
Safety Administration Office of the Secretary	50.6 4.0	52.7 5.0	27.5 4.7	18.6 5.2	28.4 4.7	45.2 5.2	28.5 4.2	16.9 6.9	19.2 4.7	24.5 5.0	28.3 4.4
Research and Special											
Programs Administration	7.1	4.2	2.4	2.3	2.1	2.0	1.6	2.4	2.2	2.3	1.7
Department of the Treasury Bureau of Engraving and	15.5	13.5	24.2	22.9	26.3	25.7	23.4	25.1	30.3	24.4	16.5
Printing Financial Crimes	3.9	3.6	5.0	4.2	4.5	2.0	1.7	2.1	3.5	2.0	3.2
Enforcement Network	.0	.0	.0	.0	.0	.0	.0	.0	1.8	1.5	1.5
Internal Revenue Service United States Customs	8.0	7.9	15.9	13.4	14.1	14.0	14.0	16.3	17.3	17.3	6.5
Service	3.3	1.8	2.2	4.8	7.0	9.2	6.8	6.2	3.7	2.2	4.0
United States Mint United States Secret	.0	.0	.6	*	.1	.2	.3	.1	.5	.0	*
Service	.4	.2	.6	.4	.5	.4	.6	.5	.4	.5	.6
Department of Veterans Affairs	154.1	189.0	215.1	181.2	195.1	197.3	184.9	206.6	213.4	202.1	246.0

TABLE C-93. Federal outlays for research and development, by agency: FYs 1983-93 (Dollars in millions)

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gency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Other agencies											
Advisory Commission on											
Intergovernmental Relations	1.9	2.1	2.0	2.0	1.6	1.4	1.2	1.2	1.2	1.5	2.1
Agency for International	040.0	405.0	000.0	0.44 5	040.7	04//	070.4	0040	0440	005.0	004.7
Development	212.8	195.8	220.3	241.5	248.7	216.6	279.1	334.0	344.0	205.9	321.7
Appalachian Regional	2	4	2	2	1	n	.8	4	7	1.0	.9
Commission Consumer Product Safety	.2	.4	.2	.2	.1	.2	.8	.4	.7	1.9	.9
Commission	na	1.2									
Environmental Protection	Ha	IId	1.2								
Agency	312.5	266.1	274.8	306.9	325.9	340.0	343.2	388.5	400.1	411.9	495.2
Federal Communications	312.3	200.1	274.0	300.7	JZJ.7	340.0	343.2	300.3	400.1	411.7	473.2
Commission	1.3	.9	1.1	.9	1.0	1.2	1.1	1.3	1.4	1.6	1.6
Federal Emergency Management											
Agency	3.2	10.9	4.6	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.6	1.7	1.8	.5	.4	.4	.5	1.0	1.3	.9
General Services											
Administration	.5	2.4	.4	1.2	1.6	2.3	.5	.7	.0	.0	.0
Library of Congress	6.7	7.2	6.3	6.9	6.5	7.1	8.0	8.4	8.6	10.0	10.7
National Aeronautics and											
Space Administration	2,538.0	3,538.7	2,970.3	3,431.5	3,250.4	3,831.7	4,974.8	6,324.3	7,071.2	7,616.5	8,087.0
National Archives and Records											
Administration	.0	.0	.5	1.0	1.1	.7	.3	.4	.7	.7	.3
National Science Foundation	na	na	1,186.0	1,410.7	1,410.0	1,494.0	1,556.7	1,524.9	1,630.6	1,732.7	1,754.2
Nuclear Regulatory Commission	244.0	198.6	161.1	136.0	124.4	113.5	113.2	111.5	107.5	116.5	119.6
Office of Thrift Supervision	3.0	2.6	2.8	3.3	3.4	3.4	4.1	4.1	.0	.0	.0
Smithsonian Institution	56.2	54.6	58.9	62.5	69.9	73.2	79.8	90.8	94.0	94.2	96.0
Tennessee Valley Authority	63.3	66.0	80.7	78.9	76.5	86.4	61.6	61.8	68.6	98.8	108.6
United States Arms Control											
and Disarmament Agency	1.0	1.3	1.1	.9	3.6	3.4	2.8	.2	.4	2.1	1.5
United States Information											
Agency	*	*	1.1	2.4	10.0	1.5	1.0	.0	.2	.2	.2
United States International											
Trade Commission	4.7	5.0	5.8	6.9	7.2	8.1	8.7	9.1	9.9	12.3	12.2

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had outlays in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-93a. Federal outlays for research and development, by agency: FYs 1994-2004 (Dollars in millions)

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	nary
									_	2003	2004
All agencies Departments	66,150.8	66,662.0	66,142.0	68,897.9	70,631.9	70,585.2	69,807.4	75,335.7	80,712.5	89,964.1	96,608.4
Department of Agriculture	1,353.6	1,375.8	1,335.7	1,342.2	1,379.5	1,446.2	1,551.2	1,754.3	1,919.1	2,034.9	1,934.6
Agricultural Cooperative Service	3.7	na	na	na							
Agricultural Marketing Service	4.6	5.0	4.5	4.5	4.2	4.4	4.8	4.7	5.2	5.4	5.4
Agricultural Research Service	660.0	679.3	672.4	699.5	687.1	733.5	790.4	912.3	1,039.4	1,234.9	1,064.9
Animal and Plant Health Inspection Service	19.2	19.1	18.0	19.8	20.5	20.4	20.6	25.4	23.7	na	na
Cooperative State Research, Ed., and Extension Service Economic Research Service Food Safety Inspection	404.1 57.3	418.8 52.0	403.8 50.1	386.5 42.4	412.7 55.0	424.2 57.8	425.4 63.9	478.9 66.1	487.6 69.9	512.5 72.0	497.2 77.0
Service Foreign Agricultural	.0	.0	Ŷ	Ŷ	.2	.7	2.3	2.6	.0	.0	.0
Service Forest Service Grain Inspection Packers and Stockyards	.7 190.8	.9 193.5	1.3 177.9	1.4 179.8	1.4 188.0	1.4 194.0	1.4 232.0	1.4 250.0	1.4 277.0	1.6 193.0	1.6 273.0
Administration	1.8	1.5	2.5	2.8	2.7	2.7	3.6	6.1	6.0	6.8	7.1
Human Nutrition Information Service National Agricultural	5.3	na	na	na							
Statistics Service Rural Business-	3.6	4.2	3.7	3.0	3.3	3.6	3.6	4.3	4.6	4.8	4.9
Cooperative Service	2.4	1.6	1.4	2.5	4.4	3.5	3.1	2.4	4.2	4.0	3.5
Department of Commerce Bureau of the Census Economic Development	797.4 5.4	863.0 5.1	918.1 6.6	967.1 5.1	994.1 8.6	999.8 12.0	1,065.6 32.0	966.5 19.0	1,113.7 22.7	1,184.7 18.9	1,236.3 14.1
Administration National Institute of Standards and	.3	1.0	.6	.6	.6	.6	.6	.6	.4	.5	.5
Technology National Oceanic and Atmospheric	225.2	327.4	378.0	424.4	439.8	419.6	412.8	424.9	413.3	471.6	506.8
Administration	562.6	523.1	528.5	509.3	519.6	547.2	597.1	501.0	651.3	643.7	686.9
National Telecommunica- tions and Information Administration Office of the Secretary	3.9	6.4	4.5 .0	27.8 .0	25.5 .0	20.3	23.0	21.0 .0	26.0 .0	50.0 .0	28.0 .0
Department of Defense Defense Agencies	34,918.2 8,084.7	33,920.9 7,099.7	35,387.0 7,170.3	35,646.6 7,177.3	35,490.6 8,038.4	33,687.3 6,188.5	31,428.8 5,608.5	33,158.9 7,285.7	34,077.8 10,196.9	37,953.6 11,061.2	41,903.4 11,710.7
Department of the Air Force Air Force, Materials	12,645.5	12,024.9	13,420.3	14,886.7	14,242.5	13,899.4	11,726.8	10,219.9	6,571.2	7,156.4	7,882.5
Command	na	4,396.9	5,017.6	5,480.0							
Air Force, Space Command	na	2,174.3	2,138.8	2,402.4							
Department of the Army Department of the Navy	5,794.0 8,150.5	5,133.0 9,416.6	4,948.7 9,578.5	4,885.2 8,400.2	4,916.3 8,015.2	5,067.8 8,229.7	4,820.1 8,983.2	5,796.7 9,626.1	6,619.8 10,494.5	7,068.3 12,437.8	8,256.3 13,797.3
Operational Test and Evaluation, Director Test and Evaluation, Deputy Under Secretary	11.9	12.4	22.1	21.5	27.8	44.7	32.9	205.3	195.5	230.0	256.6
Deputy Under Secretary of Defense	231.8	234.3	247.1	275.8	250.4	257.3	257.4	25.3	.0	.0	.0
Department of Education	177.2	179.6	172.0	169.1	192.0	201.6	222.4	251.0	243.1	393.2	303.8

TABLE C-93a. Federal outlays for research and development, by agency: FYs 1994-2004 (Dollars in millions)

Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
5									_	2003	2004
Department of Energy	5,974.7	6,152.2	5,846.2	5,678.6	5,876.7	6,035.0	6,067.6	6,539.1	7,010.3	7,575.1	7,649.2
Department of Health and Human Services Administration for	10,218.2	10,978.2	10,278.5	11,337.2	12,826.9	14,056.8	18,187.1	21,002.4	23,647.8	26,774.7	28,559.6
Children and Families Administration on Aging	11.3 19.1	12.0 20.7	11.9 2.9	12.7 4.0	15.8 10.4	23.1 18.5	25.4 1.1	26.4 1.6	21.7 2.1	21.4 3.2	21.9 2.0
Agency for Healthcare Research and Quality Agency for Toxic	111.0	133.0	80.0	110.0	77.0	79.0	50.8	33.5	.0	.0	.0
Substances and Disease Registry	na	na	na	na	na	na	14.7	13.1	12.4	.0	.0
Centers for Disease Control and Prevention Centers for Medicare and	206.8	317.4	296.7	306.0	343.6	433.3	439.0	544.0	521.0	564.0	531.0
Medicaid Services <sup>1</sup> Food and Drug	72.3	72.9	75.4	66.3	51.3	48.1	44.4	53.0	72.9	73.7	63.4
Administration Health Resources and	138.6	131.3	133.3	157.3	142.9	130.8	141.2	149.4	119.4	122.5	118.3
Services Administration	16.4	12.8	11.2	13.1	12.9	12.4	35.6	51.0	54.1	45.0	20.9
National Institutes of Health	9,614.8	10,262.8	9,645.6	10,575.9	11,892.5	13,005.7	16,918.3	19,480.7	22,110.1	25,203.6	26,865.8
Office of the Assistant Secretary for Health Office of the Secretary	.7 5.0	.6 3.5	na 5.0	na 22.9	na 7.0	na 16.6	na 18.7	na 15.6	na 16.5	na 17.5	na 19.5
Office of the Assistant											
Secretary, Planning and Evaluation Office of Public Health	na	na	3.0	21.0	5.0	13.9	16.7	13.9	14.9	16.0	16.0
and Science Social Security	na	na	2.0	1.9	2.0	2.6	2.0	1.7	1.6	1.5	3.5
Administration Substance Abuse and	22.2	11.3	na	na	na	na	na	na	na	na	na
Mental Health Services Administration <sup>2</sup>	na	na	16.7	69.1	273.4	289.3	497.8	634.3	717.6	723.9	916.8
Department of Homeland Security	na	na	na	na	na	na	na	na	na	142.7	217.4
Animal and Plant Health Inspection Service Transportation Security	na	na	na	na	na	na	na	na	na	29.0	25.4
Administration U.S. Coast Guard	na na	na na	na na	na na	na na	na na	na na	na na	na na	85.0 25.2	170.0 21.9
U.S. Customs Service	na	na	na	na	na	na	na	na	na	3.5	.0
Department of Housing and Urban Development	28.5	38.0	36.2	31.7	31.6	27.5	43.7	64.2	57.7	51.6	50.7
Department of the Interior	637.4	552.3	545.1	566.1	565.3	606.7	579.8	621.1	631.1	608.7	572.2
Bureau of Mines Bureau of Reclamation	107.9 7.4	0. 8.0	na 6.5	na 6.8	na 8.8	na 10.3	na 9.8	na 9.7	na 10.4	na 10.3	na 8.0
Geological Survey Minerals Management	369.1	354.1	497.6	512.5	499.9	545.7	506.1	572.6	565.0	555.1	521.3
Service National Biological	18.3	19.8	20.7	20.8	26.8	28.2	29.1	25.9	29.6	27.6	26.9
Service	110.3	150.7	na	na	na	na	na	na	na	na	na
National Park Service <sup>3</sup> Office of the Secretary	24.2 .1	19.7	20.2	26.0 .0	29.7 .0	22.5 .0	34.7 .0	12.9 .0	26.2 .0	15.7 .0	16.0 .0

TABLE C-93a. Federal outlays for research and development, by agency: FYs 1994-2004 (Dollars in millions)

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ncy	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimin	ary
										Prelimina 2003  84.2 9.0 .0 42.7 na 32.5 149.2 22.4 120.0 3.9 1.7 .5 .7 1.2 627.4 na 280.0 226.0	2004
Department of Justice Bureau of Prisons	42.0 5.4	49.0 5.7	72.7 5.2	75.5 4.6	73.2 8.1	85.3 9.3	42.8 6.6	67.4 12.0	67.7 8.7		66.8 9.2
Drug Enforcement Administration Federal Bureau of	1.7	.4	1.2	*	.0	.0	.0	.0	.0	.0	.0
Investigation Immigration and	7.0	10.9	33.5	35.5	35.8	36.3	10.0	19.0	33.6	42.7	34.1
Naturalization Service Office of Justice	.4	.4	.2	.4	.0	.2	.6	.9	.0	na	na
Programs	27.6	31.5	32.6	35.0	29.3	39.5	25.7	35.5	25.4	32.5	23.5
Department of Labor Bureau of Labor	60.7	51.7	50.1	39.1	25.2	25.8	82.7	95.5	164.6	149.2	28.7
Statistics Employment and Training	7.1	13.1	13.3	12.6	12.4	12.4	12.3	21.5	20.7	22.4	22.3
Administration Occupational Safety and	41.8	23.1	24.6	18.2	4.7	6.1	60.9	60.9	137.1	120.0	.0
Health Administration Office of the Secretary Pension and Welfare	3.2 5.2	4.3 6.2	6.6 2.6	5.4 .2	4.6 .2	3.7 1.0	5.7 1.3	5.7 5.4	3.8 1.2		4.0 1.2
Benefits Administration Pension Benefit Guaranty	2.7	3.6	2.3	2.0	2.7	1.8	1.8	1.3	.9	.5	.5
Corporation	.7	1.4	.6	.7	.6	.7	.7	.7	.7	.7	.8
Department of State	.4	.5	1.0	.6	.5	1.0	.9	1.6	1.6	1.2	1.2
Department of Transportation Coast Guard	519.9 25.5	634.7 20.6	578.8 22.8	527.6 22.9	516.0 19.9	508.4 20.4	436.7 19.8	510.6 19.0	681.5 19.7		789.1 na
Federal Aviation Administration	247.2	256.8	259.8	218.0	210.5	173.7	217.6	199.0	295.0	280.0	239.0
Federal Highway Administration Federal Motor Carrier	174.7	249.6	230.4	215.6	209.3	230.7	106.7	201.9	209.0	226.0	435.0
Safety Administration	na	na	na	na	na	na	.4	5.5	2.0	3.0	6.0
Federal Railroad Administration Federal Transit	18.6	21.5	18.5	18.1	22.0	21.1	25.3	20.4	27.3	44.7	33.3
Administration Maritime Administration National Highway Traffic	18.5 1.7	33.4 2.3	22.4 .0	19.5 .0	10.2 .0	10.6 .0	12.0 .0	3.7 .0	2.3	3.3 .0	4.2 .0
Safety Administration Office of the Secretary Research and Special	26.9 2.5	41.4 4.0	15.0 2.8	23.0 2.0	33.3 3.7	40.3 3.7	40.5 7.5	46.7 7.0	47.1 11.1	47.7 11.7	49.1 11.6
Programs Administration Transportation Security	4.1	4.9	7.0	8.4	7.2	7.9	7.0	7.5	9.0	11.0	11.0
Administration	na	59.0	na	na							
Department of the Treasury Bureau of Engraving and	18.9	61.4	60.0	59.7	65.1	64.7	60.3	65.1	70.7	70.7	70.7
Printing Internal Revenue Service Office of Thrift	1.7 11.3	1.8 49.7	1.7 51.2	1.7 50.8	2.8 52.0	2.1 55.8	2.8 53.3	4.7 56.6	7.1 55.5	7.1 62.1	7.1 62.1
Supervision United States Customs	.5	.6	.5	.6	.7	.1	.1	.1	.1	.2	.2
Service United States Mint	4.5 .4	8.5 .3	6.2 .0	6.1	9.0 .1	5.3 .8	1.8 1.3	2.2 .8	7.1	na .4	na .4
United States Secret Service	.5	.5	.5	.4	.5	.5	1.0	.7	.8	1.0	1.0
Department of Veterans Affairs	240.8	251.1	232.1	234.9	246.9	339.1	341.7	345.0	328.8	353.6	380.5

TABLE C-93a. Federal outlays for research and development, by agency: FYs 1994-2004 (Dollars in millions)

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gency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	nary
									_	2003	2004
Other agencies											
Advisory Commission on											
Intergovernmental	1.4	1.4									
Relations Agency for International	1.4	1.4	na	na	na	na	na	na	na	na	na
Development	372.6	256.8	251.0	206.4	212.0	203.0	179.0	195.0	202.0	206.0	200.0
Appalachian Regional	372.0	250.0	201.0	200.4	212.0	200.0	177.0	175.0	202.0	200.0	200.0
Commission	.9	.9	.9	.9	.7	.8	.6	.7	.7	.7	.3
Broadcasting Board of											
Governors	na	na	na	na	na	na	.1	*	.3	.1	.2
Consumer Product Safety Commission	.4	.4	.1	.1	*	.0	.0	.1	.0	.0	.0
Commission	.4	.4	. I	.1		.0	.0	.1	.0	.0	.0
Environmental Protection											
Agency	553.5	492.5	476.3	515.0	503.0	532.0	472.0	520.0	561.0	584.0	550.0
Federal Communications											
Commission	1.7	2.3	2.8	3.1	3.0	4.5	2.8	2.7	4.4	6.3	2.8
Federal Trade Commission	.7	.6	.5	.7	1.1	1.3	.7	.7	1.8	1.6	1.7
Library of Congress National Aeronautics and	12.5	7.7	11.0	2.5	1.6	2.1	2.2	1.8	2.8	4.2	5.8
Space Administration <sup>4</sup>	8,023.3	8,600.7	7,614.0	9,273.0	9,421.0	9,415.0	6,424.0	6,444.0	6,945.0	7,701.0	8,455.0
Space Naministration	0,023.3	0,000.7	7,014.0	7,275.0	7,721.0	7,415.0	0,121.0	0,111.0	0,743.0	7,701.0	0,455.0
National Archives and											
Records Administration	.3	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
National Science Foundation	1,873.0	1,876.0	2,054.0	2,000.0	2,010.0	2,144.0	2,446.0	2,566.0	2,803.0	3,221.0	3,398.0
Nuclear Regulatory Commission	92.4	88.8	75.2	67.5	54.3	48.0	47.0	40.0	47.0	44.0	45.0
Smithsonian Institution	92.4 121.2	00.0 119.0	121.0	123.0	113.0	46.0 86.0	93.0	93.0	101.0	104.0	109.0
Social Security	121.2	117.0	121.0	123.0	113.0	00.0	73.0	73.0	101.0	104.0	107.0
Administration	na	na	11.5	13.6	17.4	53.3	28.8	28.9	27.9	85.7	76.4
Tennessee Valley Authority	97.9	93.1	6.1	8.9	2.7	.0	.0	.0	.0	.0	.0
United States Arms Control											
and Disarmament Agency	1.3	1.1	.7	1.2	1.2	.0	.0	.0	.0	.0	.0
United States Information											
Agency	.6	.3	.1	.2	.2	.1	na	na	na	na	na
United States International						• • •					110
Trade Commission	9.4	12.2	3.2	5.7	7.2	9.7	.0	.0	.0	.0	.0

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had outlays in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

As of July 1, 2001, the Health Care Financing Administration became the Centers for Medicare and Medicaid Services.

Data for FYs 2002-2004 from the Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-94. Federal outlays for R&D plant, by agency: FYs 1983-93 (Dollars in millions)

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Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies Departments	1,299.9	1,639.2	1,688.9	1,481.2	1,602.4	1,817.2	2,026.1	2,015.8	2,546.1	2,784.5	3,144.5
Department of Agriculture	32.8	29.2	34.3	35.0	71.1	78.5	92.3	124.2	80.1	136.8	149.5
Agricultural Research Service	30.7	25.0	26.7	32.4	63.3	58.3	51.7	55.3	49.4	69.4	89.2
Animal and Plant Health Inspection Service Cooperative State	.0	.0	.0	.0	.0	.5	.3	6.1	.0	.0	.0
Research, Ed., and Extension Service Forest Service	.8 1.3	3.8 .4	6.9 .7	1.6 1.0	7.0 .8	17.5 2.2	38.6 1.7	58.0 4.9	15.5 15.1	60.2 7.2	53.8 6.5
Department of Commerce	.7	9.2	4.3	7.4	4.2	10.9	9.1	14.7	15.5	21.3	22.4
Economic Development Administration	.0	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0
National Institute of Standards and Technology National Oceanic	.7	9.2	4.3	6.0	2.1	10.1	8.5	8.1	8.3	11.4	9.6
and Atmospheric Administration	.0	.0	.0	1.5	2.1	.5	.5	6.6	7.3	9.9	12.8
Department of Defense Defense Agencies Department of the Air Force Department of the Army Department of the Navy	267.7 5.8 103.7 21.5 136.7	380.1 4.2 191.2 34.4 150.3	401.7 4.7 199.8 53.4 143.8	280.6 5.8 89.1 55.0 130.7	357.3 37.4 194.3 60.7 65.0	416.2 68.1 207.5 61.8 78.8	415.6 91.8 199.7 39.7 84.5	436.8 88.6 200.2 46.8 101.2	433.7 63.5 218.2 65.0 87.0	410.9 91.6 186.3 22.0 111.0	373.2 61.7 231.0 7.0 73.5
Department of Education	.0	.0	.0	.8	15.8	11.1	2.3	2.8	2.6	2.5	12.8
Department of Energy	824.5	916.1	855.3	725.8	721.3	779.0	838.3	856.9	1,099.8	1,198.0	1,483.2
Department of Health and Human Services Alcohol, Drug Abuse,	26.5	34.6	42.6	32.7	31.5	30.7	56.0	55.1	194.8	96.7	149.3
and Mental Health Administration	1.0	4.1	1.4	.5	.6	.0	.0	.0	.0	na	na
Food and Drug Administration	2.1	10.0	15.0	10.0	1.9	1.7	2.0	1.0	18.4	14.3	19.7
Health Resources and Services Administration	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	1.4
National Institutes of Health	23.4	20.5	26.2	22.2	29.0	29.0	54.0	54.1	176.4	82.1	128.2
Social Security Administration	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	.0
Department of the Interior Bureau of Mines Geological Survey Minerals Management Service	2.4 .1 1.5 .0	5.2 .1 1.1 .0	4.2 .0 .9 .0	6.1 .0 .9	4.8 .0 .8 .0	5.1 .0 .8 .0	6.8 2.1 1.4 .0	10.5 3.0 1.3 .2	20.7 1.5 2.9	17.8 .0 4.4 .7	20.8 .0 4.0 1.0
United States Fish and Wildlife Service	.8	4.0	3.3	5.2	4.0	4.3	3.4	6.0	16.1	12.7	15.8
Department of Justice	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
Federal Bureau of Investigation	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
Department of Transportation Coast Guard	9.9 .0	12.9 .0	14.1 .0	15.5 .0	11.2 .0	11.1 .3	12.9 .0	16.7 .4	18.4 .4	17.1 .4	30.0 .5
Federal Aviation Administration	9.2	12.4	13.6	14.3	10.4	.s 10.5	12.6	16.3	16.5	15.9	25.6
Federal Highway Administration	.0	.0	.0	.7	.3	.0	.0	.0	.0	.0	.4
Federal Railroad Administration	.2	.0	.0	.0	.0	.2	.3	*	1.5	.8	1.3
Federal Transit  Administration	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2
National Highway Traffic Safety Administration	.5	.5	.5	.5	.5	.0	.0	.0	.0	.0	.0

TABLE C-94. Federal outlays for R&D plant, by agency: FYs 1983-93 (Dollars in millions)

Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of the Treasury United States Customs	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Service	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
United States Secret Service	.0	.0	.0	.1	*	*	*	*	*	*	*
Department of Veterans Affairs	10.6	4.6	7.6	3.9	3.7	4.6	1.5	12.4	8.2	5.5	4.8
Other agencies Agency for International Development	12.3	11.4	12.8	14.0	14.4	12.6	.0	.0	.0	.0	.0
Environmental Protection Agency General Services	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5
Administration National Aeronautics and	.0	.0	.0	.7	.0	.0	.0	.0	3.6	20.9	7.6
Space Administration National Science Foundation	108.1 na	191.9 na	246.8 64.0	299.1 57.3	313.9 49.9	398.7 56.7	531.3 56.7	437.9 38.1	603.8 56.5	770.2 80.9	798.4 87.5
Smithsonian Institution Tennessee Valley Authority United States Arms Control	1.1 .4	.6 .2	.9 .3	1.5 .6	1.6 .4	1.6 .5	2.8 .2	4.6 4.9	4.5 3.7	1.2 4.6	1.2 1.0
and Disarmament Agency	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had outlays in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
R&D = Research and development.

TABLE C-94a. Federal outlays for R&D plant, by agency: FYs 1994-2004 (Dollars in millions)  $\,$ 

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	nary
									_	2003	2004
All agencies	2,177.6	2,032.4	1,865.6	1,994.8	1,834.2	2,028.7	4,269.7	4,356.5	4,388.3	5,175.3	4,148.0
Departments Department of Agriculture Agricultural Research	133.4	128.4	102.6	122.3	159.1	166.6	108.4	115.2	107.0	147.8	159.9
Service Animal and Plant Health	75.3	79.1	67.5	70.9	95.0	113.9	96.4	102.2	92.0	129.8	141.9
Inspection Service Cooperative State Research, Ed., and	.0	.0	1.5	.0	.0	.0	.0	.0	.0	na	na
Extension Service Foreign Agricultural	52.8	45.1	31.1	49.3	61.5	40.6	.0	.0	.0	.0	.0
Service Forest Service	.4 4.9	.0 4.3	.0 2.5	.0 2.0	.0 2.6	.0 12.0	.0 12.0	.0 13.0	.0 15.0	.0 18.0	.0 18.0
Department of Commerce National Institute of Standards and	12.9	23.5	26.9	70.5	42.5	36.3	20.7	49.4	118.9	42.8	45.2
Technology National Oceanic and Atmospheric	12.7	23.0	26.9	48.9	42.5	36.3	20.7	49.3	118.9	42.8	45.2
Administration	.3	.5	.0	21.6	.0	.0	.0	.1	.0	.0	.0
Department of Defense Defense Agencies Department of the Air	261.0 40.6	81.0 12.4	114.7 28.3	52.4 5.3	39.7 9.0	127.6 18.8	40.0 2.8	61.6 2.2	369.4 282.3	215.6 138.1	232.7 156.3
Force Air Force, Materials	153.7	26.9	54.2	25.4	3.7	73.1	2.4	9.8	5.4	3.0	3.0
Command Department of the Army Department of the Navy	na 3.8 62.9	na 4.2 37.5	na 5.6 26.6	na 4.8 16.9	na 4.1 22.9	na 4.1 31.5	na 1.7 33.1	na .3 49.3	5.4 .1 81.6	3.0 .0 74.4	3.0 .0 73.4
Department of Education	1.9	1.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
Department of Energy	921.8	864.1	809.9	806.7	776.3	801.9	806.7	876.5	1,024.3	1,107.1	999.1
Department of Health and Human Services Food and Drug	134.2	267.0	140.5	120.5	156.9	223.4	219.7	294.3	244.3	1,230.7	83.7
Administration Health Resources and	21.9	16.7	5.5	8.7	13.0	2.5	2.6	3.0	10.2	4.0	3.1
Services Administration National Institutes of	1.4	1.6	.7	.7	.9	.6	.6	.6	.6	.6	.6
Health <sup>1</sup>	110.9	248.8	134.3	111.1	143.0	220.3	216.5	290.6	233.4	1,226.1	80.0
Department of Homeland Security Transportation Security	na	na	na	25.3	3.0						
Administration U.S. Coast Guard	na na	na na	na na	25.0 .3	2.0 1.0						
Department of the Interior Bureau of Reclamation Geological Survey	7.5 .0 6.3	6.5 .0 5.3	2.1 .0 1.1	6.6 .0 4.8	1.6 .0 .0	1.5 .0 .0	1.4 .0 .0	2.1 .0 .0	2.1 .0 .0	3.6 1.5 .0	4.8 2.4 .0
Minerals Management Service	1.1	1.0	1.0	1.8	1.6	1.5	1.4	2.1	2.1	2.1	2.4
National Biological Service	.1	.3	na	na	na	na	na	na	na	na	na

TABLE C-94a. Federal outlays for R&D plant, by agency: FYs 1994-2004 (Dollars in millions)

Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	nary
										2003	2004
Department of											
Transportation Coast Guard	17.0 .5	26.7 .5	14.2 .5	20.8 .3	21.3 .3	15.5 .3	12.9 .3	4.8 .3	51.4 .3	16.2 na	17.2 na
Federal Aviation Administration	11.7	14.0	6.0	18.0	18.9	14.3	12.6	4.0	14.0	15.0	16.0
Federal Highway Administration Federal Railroad	3.8	10.9	6.1	2.5	1.1	.0	.0	.0	.0	.0	.0
Administration Transportation Security	1.0	1.3	1.6	.0	1.0	.9	.0	.6	1.1	1.2	1.2
Administration	na	na	36.0	na	na						
Department of the Treasury Bureau of Engraving and	1.9	.2	.2	.1	.1	.1	.1	.0	.0	.0	.0
Printing United States Customs	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Service United States Secret	.1	.1	.1	.1	.1	.1	.1	.0	.0	na	na
Service Service	*	*	*	.0	.0	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	5.2	7.2	8.5	8.3	1.2	.3	.3	.4	.4	.4	.4
Other agencies Environmental Protection											
Agency General Services	4.8	3.0	.0	22.0	21.0	61.0	20.0	30.0	.0	.0	.0
Administration National Aeronautics and	5.5	1.3	4.1	1.6	.0	.0	.1	.6	*	*	*
Space Administration <sup>2</sup> National Science Foundation Smithsonian Institution	553.5 110.6 6.2	515.4 101.0 6.0	480.0 158.0 4.0	442.0 318.0 3.0	320.0 292.0 2.5	337.0 255.0 2.5	2,867.0 170.0 2.5	2,723.0 196.0 2.5	2,197.0 271.0 2.5	2,071.0 312.0 3.0	2,300.0 299.0 3.0

Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research.
<sup>2</sup> Beginni

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had outlays in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
R&D = Research and development.

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-95. Federal obligations for research, development, and R\&D plant, by agency: FYs 1983-93 (Dollars in millions) \\ \end{tabular}$ 

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Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies Departments	40,009.0	44,012.1	50,180.4	52,951.2	57,099.7	58,826.5	63,571.6	65,831.2	64,148.0	68,577.2	70,414.7
Department of Agriculture Agricultural Cooperative	881.5	905.4	983.6	1,007.9	1,059.6	1,151.8	1,127.5	1,210.6	1,381.3	1,491.8	1,470.2
Service Agricultural Marketing	2.1	2.2	2.9	2.6	2.7	2.7	2.8	2.7	2.8	3.4	2.9
Service Agricultural Research	1.4	1.5	1.7	1.6	1.5	1.6	1.5	2.7	4.2	4.7	4.7
Service	466.8	480.1	498.7	532.6	522.4	561.2	578.7	589.9	655.7	725.2	705.5
Animal and Plant Health Inspection Service Cooperative State Research, Ed., and	.0	.0	.0	4.2	4.9	6.2	7.7	14.0	15.7	16.7	17.1
Extension Service	242.3	245.7	294.3	278.6	338.3	374.7	339.4	371.1	438.3	481.2	479.2
Economic Research Service	38.8	43.7	46.4	44.6	44.8	48.1	49.5	50.5	54.4	58.9	58.9
Forest Service Grain Inspection Packers	108.1	108.8	114.8	114.0	127.1	138.4	133.0	163.5	193.1	184.3	186.3
and Stockyards											
Administration	.0	.0	.9	1.0	1.2	1.0	1.1	.6	.7	1.5	1.8
Human Nutrition Information Service	8.2	6.0	6.7	12.8	6.8	8.2	8.4	9.0	9.9	10.7	8.4
National Agricultural Statistics Service	7.6	8.2	8.4	8.0	3.4	3.6	2.9	2.8	3.2	3.6	3.9
Office of International Cooperation and	7.0	0.2	0.4	0.0	3.4	3.0	2.7	2.0	3.2	3.0	3.7
Development	5.3	8.2	7.7	7.0	5.6	5.0	2.5	3.6	3.1	1.5	1.5
Office of Transportation	.8	1.0	1.2	1.0	1.1	1.1	na	na	na	na	na
Department of Commerce	335.7	367.6	403.0	408.4	407.5	400.2	407.0	453.5	505.4	672.2	681.7
Bureau of the Census	4.3	4.4	4.9	4.7	4.7	5.7	4.9	6.9	6.6	5.3	5.4
Economic Development Administration National Institute of	5.3	5.1	13.0	10.3	5.0	4.2	1.0	1.2	1.4	.5	.0
Standards and Technology National Oceanic	95.7	104.9	104.7	108.5	100.7	118.7	124.2	131.0	148.4	190.2	219.8
and Atmospheric Administration National Telecommunications	222.0	244.3	269.8	276.2	289.3	263.5	269.1	306.7	345.3	472.2	452.4
and Information					7.0						
Administration Office of the Secretary	8.3	8.7 .1	9.1 1.4	8.4	7.8	8.1 .0	7.8 .0	7.7 .0	3.6 .0	4.0 .0	4.2 .0
Department of Defense Defense Agencies Department of the Air Force Department of the Army	23,305.3 2,058.1 10,951.3 4,024.4	25,902.1 1,405.7 12,377.0 4,281.7	30,322.4 2,786.3 13,552.2 4,623.7	33,224.1 4,771.9 13,723.9 4,863.3	35,708.7 5,291.8 15,618.0 5,085.2	35,684.6 5,957.3 15,011.0 4,898.8	38,076.2 6,973.3 15,487.6 5,704.5	37,755.5 6,996.8 15,153.6 5,737.2	32,560.5 7,200.9 11,089.8 6,172.5	36,526.0 7,670.5 13,606.8 6,876.2	36,220.7 7,723.3 12,866.9 6,227.2
Department of the Navy	6,209.9	7,779.0	9,309.5	9,747.9	9,576.8	9,588.9	9,755.7	9,646.6	7,860.0	8,126.8	9,148.3
Operational Test and Evaluation, Director	na	na	na	.0	8.4	68.2	14.4	32.6	13.6	12.4	12.3
Test and Evaluation, Deputy Under Secretary of Defense	61.6	58.6	50.6	117.1	128.5	160.3	140.7	188.7	223.7	233.2	242.5
Department of Education	111.7	115.7	126.0	127.9	153.5	145.9	161.0	178.8	175.2	170.9	179.9
Department of Energy	5,294.4	5,526.0	5,834.4	5,430.6	5,529.4	5,951.4	6,065.6	6,546.6	7,203.2	7,493.0	7,723.7

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-95. Federal obligations for research, development, and R\&D plant, by agency: FYs 1983-93 (Dollars in millions) \\ \end{tabular}$ 

Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Health and	4.400.4	4.0/1.0	F 402.2	F / OF F	/ / / 2 0	7 177 /	7 001 4	0.512.4	0.042.2	0.004./	10 400 F
Human Services Administration for Children	4,400.4	4,861.8	5,493.2	5,695.5	6,643.0	7,177.6	7,981.4	8,513.4	9,842.3	9,084.6	10,498.5
and Families Administration on Aging	na na	129.0 20.6	39.2 20.2	19.9 20.9							
Agency for Healthcare Research and Quality Alcohol, Drug Abuse,	na	49.7	101.1	106.3	114.8						
and Mental Health Administration	304.0	337.5	377.9	396.6	476.1	554.8	695.7	842.7	1,460.6	na	na
Centers for Disease									·		
Control and Prevention Centers for Medicare and	78.2	46.3	47.6	52.2	66.2	88.7	117.8	95.6	113.4	146.9	162.5
Medicaid Services Food and Drug	30.2	33.1	33.5	29.0	27.3	28.2	49.1	49.1	69.1	75.5	68.2
Administration Health Resources and	102.7	80.8	95.1	87.4	85.8	91.5	122.0	122.0	143.5	150.0	174.2
Services Administration Human Development Service	13.3 23.4	18.5 18.3	19.7 24.3	12.3 54.6	9.3 53.0	10.0 54.0	10.5 101.7	11.9 95.4	11.0 na	10.5 na	11.0 na
National Institutes of Health	3,806.8	4,285.2	4,856.5	5,034.5	5,886.2	6,309.9	6,833.8	7,221.3	7,763.4	8.491.4	9,893.3
Office of the Assistant					,						
Secretary for Health Office of the Secretary Social Security	16.6 14.4	18.1 10.4	18.6 9.6	17.3 6.1	21.2 8.2	21.0 4.7	27.2 7.8	6.9 5.0	10.0 8.8	6.7 5.0	1.2 8.0
Administration	10.8	13.5	10.4	5.6	9.8	14.7	15.8	13.9	11.9	33.0	24.5
Department of Housing and	22.1	10.0	10 E	15.0	1/ 2	10.4	10.0	10.2	27.0	25.1	22.4
Urban Development	32.1	18.2	18.5	15.3	16.3	18.4	18.0	19.3	27.8		23.6
Department of the Interior Bureau of Land Management	384.9 3.9	416.1 3.8	395.9 4.4	389.6 3.4	415.7 3.7	426.1 3.7	479.8 3.0	522.6 2.8	615.1 8.8	627.6 6.3	642.2 8.9
Bureau of Mines	88.6	108.8	89.9	84.4	88.8	91.3	101.2	102.3	108.2	107.1	111.9
Bureau of Reclamation	10.0	10.4	13.2	10.2	10.7	4.4	4.2	5.8	8.7	13.2	10.3
Geological Survey	158.4	209.9	215.7	219.5	227.6	236.9	281.1	309.7	359.8	365.7	360.4
Minerals Management Service	1.5	1.5	1.4	1.1	1.0	1.2	2.2	2.0	2.9	4.8	6.9
National Park Service Office of the Secretary Office of Surface Mining	13.7 7.4	14.0 .1	15.0 1.9	17.3 1.0	18.5 .0	19.4 .4	19.4 .4	20.1 .2	27.5 .6	31.1 .9	38.1 .4
Reclam and Enforcement Office of Water Research	1.5	.8	2.0	2.3	1.0	1.0	.7	.7	1.0	.3	.5
and Technology United States Fish and	2.2	3.6	na								
Wildlife Service	97.7	63.3	52.4	50.5	64.3	67.8	67.5	78.9	97.6	98.2	104.8
Department of Justice Bureau of Prisons	31.4 1.7	24.5 1.6	36.0 1.5	36.5 3.0	53.5 7.1	43.1 6.0	38.2 5.1	40.5 4.5	48.9 5.2	48.0 5.9	48.9 6.1
Drug Enforcement Administration Federal Bureau of	2.5	1.9	1.6	2.5	2.2	2.5	2.7	2.4	2.7	1.4	.9
Investigation Immigration and	2.5	1.0	9.5	7.2	19.1	12.7	7.7	8.2	10.8	10.9	11.3
Naturalization Service Office of Justice Programs Office of Legal Policy	.6 23.8 .3	.6 19.5 .0	.4 22.7 .3	.4 23.2 .2	.4 24.6 .1	.3 21.5 .0	.1 22.5 .0	.4 25.0 .0	.4 29.8 .0	.4 29.4 .0	.4 30.2 .0

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-95. Federal obligations for research, development, and R\&D plant, by agency: FYs 1983-93 (Dollars in millions) \\ \end{tabular}$ 

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Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Labor Bureau of Labor Statistics	19.9 .7	16.3 .5	13.3 .6	10.4 .6	21.6 6.5	35.6 7.0	35.4 7.0	73.0 7.3	44.0 7.5	51.7 7.6	55.0 6.9
Employment Standards Administration	1.4	.9	*	.0	1.0	.1	.1	.1	.0	.0	.0
Employment and Training Administration	9.0	6.1	3.5	3.5	5.7	14.9	15.7	53.4	22.1	31.7	35.9
Labor-Management Relations and Cooperative Programs Labor-Management Services	na	.3	.3	.2	.3	.4	.3	na	na	na	na
Administration	.9	na									
Occupational Safety and Health Administration Office of the Secretary	5.3 1.5	5.1 1.9	4.5 2.6	3.6 2.1	4.1 2.7	4.2 6.1	4.5 6.1	2.5 7.1	2.6 8.7	3.1 5.9	2.5 5.8
Pension and Welfare Benefits Administration	na	1.2	1.6	.3	1.0	2.7	1.4	2.1	2.5	2.6	2.6
Pension Benefit Guaranty Corporation	1.1	.3	.2	.1	.3	.3	.3	.5	.5	.9	1.3
Department of State	1.5	1.6	1.5	1.5	3.0	4.2	4.7	4.7	5.9	5.6	5.3
Department of Transportation Coast Guard Federal Aviation	369.6 19.6	465.2 19.5	437.9 19.0	397.5 16.9	336.2 17.0	318.5 21.4	318.9 17.9	388.3 20.6	398.3 25.9	470.3 20.5	577.6 33.4
Administration Federal Highway	147.6	282.6	294.8	271.5	177.7	173.8	162.3	237.5	236.4	260.2	271.3
Administration Federal Railroad	50.4	46.4	49.0	46.1	76.9	74.1	91.0	91.5	86.9	131.0	175.7
Administration Federal Transit	16.5	19.2	15.0	15.4	11.2	10.4	9.0	10.2	17.6	22.8	26.8
Administration	57.0	20.1	10.2	8.2	12.6	2.3	1.4	1.6	1.7	1.7	31.3
Maritime Administration National Highway Traffic	15.0	9.9	13.9	9.4	5.8	.5	.0	.9	1.7	1.8	1.7
Safety Administration Office of the Secretary Research and Special	52.5 4.9	57.4 4.9	28.6 4.8	22.9 5.1	28.4 4.5	28.3 5.7	29.7 5.5	16.9 6.8	21.4 4.3	25.8 4.1	31.6 4.5
Programs Administration	6.2	5.2	2.7	2.0	2.1	2.1	2.0	2.4	2.4	2.5	1.3
Department of the Treasury Bureau of Engraving and	15.6	13.9	24.4	24.2	27.0	26.2	25.7	25.7	31.0	24.8	16.8
Printing Financial Crimes	3.9	3.6	5.0	4.2	4.5	2.0	1.7	2.1	3.5	2.0	3.2
Enforcement Network Internal Revenue Service United States Customs	.0 8.0	.0 8.2	.0 15.9	.0 14.2	.0 14.6	.0 14.4	.0 14.4	.0 16.8	2.3 17.9	1.2 17.9	1.5 6.5
Service Service	3.4	1.9	2.3	4.9	7.1	9.3	6.9	6.3	3.8	2.3	4.1
United States Mint United States Secret Service	.0 .3	.0	.6 .6	.3 .5	.2 .5	.1 .4	2.0	.1 .5	.1 .4	.0 .6	.1 .6
Department of Veterans Affairs	.s 171.9	196.4	229.9	.5 191.0	215.4	234.8	245.7	241.0	220.0	229.6	239.5

TABLE C-95. Federal obligations for research, development, and R&D plant, by agency: FYs 1983-93 (Dollars in millions)

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gency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Other agencies											
Advisory Commission on											
Intergovernmental Relations	2.1	2.1	2.4	2.1	1.9	1.8	1.1	1.5	1.7	1.7	2.1
Agency for International	000.0	0.45.0	007.0	050.7	0040	040 /	070.4	0047	077.7	0.45.0	000.0
Development	232.0	245.0	227.2	258.7	224.3	210.6	279.1	334.6	377.7	365.9	382.2
Appalachian Regional Commission	.2	.5	.2	.2	.1	.2	.8	.4	.7	1.9	.9
Consumer Product Safety	.2	.5	.2	.2	.1	.2	.8	.4	.1	1.9	.9
Commission	na	1.2									
Environmental Protection	па	IIa	IIa	IIa	IId	Ha	Ha	IIa	Ha	Ha	1.2
Agency	240.7	261.2	320.4	317.3	348.2	347.4	380.3	419.7	432.6	483.9	497.8
Federal Communications	2.0	20112	02011	01710	0.0.2	01711	00010		10210	10017	17710
Commission	1.3	.9	1.2	.9	1.0	1.2	1.1	1.3	1.4	1.6	1.6
Federal Emergency Management											
Agency	3.3	11.5	4.1	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.6	1.7	1.8	.5	.4	.4	.5	1.0	1.3	.9
General Services											
Administration	.5	2.4	.4	20.0	1.6	2.3	.5	19.5	22.6	6.5	1.0
Library of Congress	7.4	7.5	7.1	6.6	6.5	7.1	8.0	8.4	9.0	10.3	10.5
National Aeronautics and											
Space Administration	2,762.3	3,066.1	3,561.5	3,694.8	4,096.5	4,758.6	5,913.0	7,060.3	8,003.8	8,475.4	8,769.2
National Archives and Records											
Administration	.0	.0	.5	1.0	1.1	.7	.3	.4	.7	.7	.3
National Science Foundation	na	na	1,419.1	1,406.5	1,531.8	1,589.6	1,724.0	1,728.8	1,944.8	1,970.0	2,012.3
Nuclear Regulatory Commission	207.3	190.7	150.0	123.8	122.5	108.5	114.8	108.8	108.8	119.0	119.8
Office of Thrift Supervision	3.0	2.6	2.8	3.3	3.4	3.4	4.1	4.1	.0	.0	.0
Smithsonian Institution	57.0	63.8	72.7	64.0	74.4	75.8	83.6	88.8	99.5	101.8	107.0
Tennessee Valley Authority	63.3	68.3	80.0	78.3	78.2	87.7	62.8	69.8	73.1	100.5	109.6
United States Arms Control	1.0	1.3	1 1	0	4.7	3.4	2.8	.2	4	2.1	1.5
and Disarmament Agency	1.0	1.3	1.1	.9	4.6	3.4	2.8	.2	.4	2.1	1.5
United States Information	*							_		_	
Agency	*	1.4	.1	2.0	3.5	.4	.1	.5	.1	.0	1.1
United States International	4.7	F 0	г о		7.0	0.1	0.7	0.1	0.0	10.0	10.0
Trade Commission	4.7	5.0	5.8	6.9	7.2	8.1	8.7	9.1	9.9	12.3	12.2

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
R&D = Research and development.

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-95a. Federal obligations for research, development, and R\&D plant, by agency: FYs 1994-2004 (Dollars in millions) \\ \end{tabular}$ 

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
										2003	2004
All agencies Departments	69,450.8	70,442.9	69,399.2	71,753.4	73,914.0	77,386.4	77,356.2	84,003.0	90,157.7	101,008.1	105,220.2
Department of Agriculture	1,525.6	1,523.6	1,428.7	1,572.8	1,530.8	1,745.2	1,833.5	2,076.0	2,090.6	2,231.3	2,047.8
Agricultural Cooperative Service	3.7	na	na	na							
Agricultural Marketing Service	4.8	4.8	4.9	4.8	4.7	4.7	5.1	4.8	5.2	5.4	5.4
Agricultural Research Service	757.0	751.0	743.1	806.6	844.2	973.6	959.3	1,098.3	1,163.6	1,221.0	1,185.9
Animal and Plant Health Inspection Service	19.2	19.1	19.5	19.8	20.5	20.4	20.6	25.4	23.7	na	na
Cooperative State Research, Ed., and Extension Service Economic Research Service	471.6 55.2	489.0 53.8	418.9 53.0	496.7 53.0	387.3 71.5	463.1 62.5	535.0 64.2	615.1 65.6	546.7 67.0	648.1 68.7	492.8 76.7
Food Safety Inspection Service	.0	.0	*	*	.2	.7	2.3	2.6	.0	.0	.0
Foreign Agricultural Service Forest Service Grain Inspection Packers and Stockyards	1.1 198.0	.9 197.8	1.3 180.4	1.4 181.8	1.4 190.4	1.4 209.0	1.4 235.0	1.4 250.0	1.4 268.0	1.6 271.0	1.6 270.0
Administration	1.8	1.5	2.5	2.8	2.7	2.7	3.6	6.1	6.0	6.8	7.1
Human Nutrition Information Service National Agricultural	7.0	na	na	na							
Statistics Service Rural Business-	3.9	4.0	3.8	3.4	3.3	3.6	3.9	4.2	4.6	4.8	4.9
Cooperative Service	2.4	1.6	1.4	2.5	4.4	3.5	3.1	2.4	4.2	4.0	3.5
Department of Commerce Bureau of the Census Economic Development	857.3 4.8	1,213.7 4.9	1,152.0 6.3	1,046.5 5.1	970.0 8.6	1,009.8 15.0	1,237.1 13.0	1,021.7 24.0	1,180.5 28.7	1,211.2 16.2	1,122.5 13.5
Administration National Institute of Standards and	.6	.5	.6	.6	.6	.6	.6	.6	.5	.6	.6
Technology National Oceanic and Atmospheric	284.1	640.5	601.0	482.1	415.7	421.8	604.7	445.7	480.5	541.4	414.8
Administration	562.9	561.4	528.5	530.9	519.5	547.2	597.1	501.0	651.3	643.7	686.9
National Telecommunica- tions and Information Administration	4.8	6.4	15.7	27.8	25.5	25.2	21.8	50.4	19.6	9.2	6.7
Office of the Secretary	.0	*	*	.0	.0	.0	.0	.0	.0	.0	.0
Department of Defense Defense Agencies Department of the Air	34,818.9 7,367.8	33,856.8 7,369.1	34,582.2 7,742.0	34,873.8 7,509.1	35,352.0 7,981.9	35,753.4 7,476.0	33,215.2 7,195.9	35,570.0 9,380.8	37,922.2 12,359.8	42,741.6 13,248.9	46,062.3 13,456.7
Force Air Force, Materials	12,626.8	11,835.7	13,066.5	13,990.6	13,865.2	14,069.5	11,060.5	10,024.6	6,907.9	8,136.2	9,002.5
Command Air Force, Space	na	4,651.3	5,643.9	6,255.3							
Command	na	2,256.5	2,492.3	2,747.1							
Department of the Army Department of the Navy Operational Test and	5,576.2 9,005.1	5,424.7 8,974.5	4,879.7 8,614.4	4,825.2 8,252.5	5,041.7 8,190.8	5,043.5 8,862.4	5,323.7 9,345.1	6,223.7 9,710.3	7,076.6 11,344.5	7,228.5 13,900.3	8,978.3 14,343.9
Evaluation, Director Test and Evaluation,	11.2	21.7	21.9	26.6	30.3	44.7	32.9	205.3	233.5	227.7	281.0
Deputy Under Secretary of Defense	231.8	231.0	257.7	269.7	242.0	257.3	257.0	25.3	.0	.0	.0
Department of Education	178.4	179.4	173.7	181.2	204.5	223.7	247.3	277.6	285.6	302.9	297.3

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-95a. Federal obligations for research, development, and R\&D plant, by agency: FYs 1994-2004 (Dollars in millions) \\ \end{tabular}$ 

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	nary
									_	2003	2004
Department of Energy	6,959.8	6,890.0	6,050.8	6,332.8	6,600.9	6,875.9	6,873.8	7,651.4	8,072.2	8,552.9	8,650.4
Department of Health and Human Services Administration for	11,141.7	11,711.0	12,084.2	13,045.3	14,187.9	16,167.6	18,645.5	21,641.9	24,259.1	28,325.4	28,941.5
Children and Families Administration on Aging	11.3 19.1	12.0 20.7	12.6 3.7	17.4 4.4	23.5 10.4	24.9 18.5	27.3 2.8	28.4 3.7	23.3 3.7	23.8 .0	24.3 .0
Agency for Healthcare Research and Quality Agency for Toxic	154.4	135.3	125.2	144.0	146.5	182.3	198.8	269.7	298.7	303.7	279.0
Substances and Disease Registry	na	na	na	na	na	na	14.7	13.1	12.4	.0	.0
Centers for Disease Control and Prevention Centers for Medicare and	206.8	317.4	296.7	323.0	343.6	433.3	505.0	544.0	521.0	564.0	531.0
Medicaid Services <sup>1</sup> Food and Drug	80.0	74.5	52.7	43.6	51.2	49.7	61.5	138.0	117.0	74.2	63.4
Administration Health Resources and	177.8	175.8	176.4	173.1	171.0	133.4	146.7	160.4	149.7	142.2	138.4
Services Administration National Institutes of	17.8	14.8	11.8	13.8	13.8	13.4	36.2	51.6	54.7	45.6	21.5
Health <sup>2</sup> Office of the Assistant	10,439.9	10,930.6	11,377.9	12,237.9	13,137.5	15,005.0	17,134.8	19,771.3	22,343.5	26,429.7	26,945.8
Secretary for Health Office of the Secretary	.8 11.7	.3 9.1	na 10.7	na 19.0	na 17.0	na 17.7	na 19.8	na 27.4	na 17.4	na 18.3	na 21.3
Office of the Assistant											
Secretary, Planning and Evaluation Office of Public Health	na	na	9.0	18.4	13.9	13.9	16.7	24.9	14.9	16.0	16.0
and Science	na	na	1.7	.6	3.1	3.8	3.1	2.5	2.5	2.3	5.3
Social Security Administration Substance Abuse and	22.2	20.4	na	na	na	na	na	na	na	na	na
Mental Health Services Administration <sup>3</sup>	na	na	16.7	69.1	273.4	289.3	497.8	634.3	717.6	723.9	916.8
Department of Homeland Security	na	na	na	na	na	na	na	na	na	167.9	221.8
Animal and Plant Health Inspection Service Transportation Security	na	na	na	na	na	na	na	na	na	29.0	25.4
Administration U.S. Coast Guard	na na	na na	na na	na na	na na	na na	na na	na na	na na	110.0 23.7	172.0 24.3
U.S. Customs Service	na	na	na	na	na	na	na	na	na	5.2	.0
Department of Housing and Urban Development	39.6	41.8	33.1	33.5	28.0	57.0	45.6	52.9	45.3	47.0	47.7
Department of the Interior Bureau of Mines	703.1 107.9	568.3 .0	569.5 na	587.1 na	533.5 na	642.9 na	581.2 na	622.1 na	634.9 na	595.7 na	560.7 na
Bureau of Reclamation Geological Survey Minerals Management	7.4 377.4	8.0 367.4	6.5 520.1	7.1 531.2	8.8 464.1	10.3 579.1	9.8 506.1	9.7 572.6	10.4 565.0	11.8 555.1	10.4 521.3
Service  National Biological	21.8	21.0	22.6	22.8	30.8	30.1	30.5	27.0	33.3	28.8	29.0
Service	164.2	152.1	na	na	na	na	na	na	na	na	na
National Park Service <sup>4</sup> Office of the Secretary	24.2 .1	19.7	20.2	26.0 .0	29.7 .0	23.4	34.7 .0	12.9 .0	26.2 .0	.0 .0	.0 .0

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-95a. Federal obligations for research, development, and R\&D plant, by agency: FYs 1994-2004 (Dollars in millions) \\ \end{tabular}$ 

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ncy	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimina	ary
										2003  115.7 9.0 .0 42.7 na 64.0 170.6 22.4 139.9 3.9 1.7 2.0 .7 1.9  752.4 na 231.0 381.6 6.2 35.3 4.3 .0 58.2 14.1 21.7 na 70.6 7.1 62.1 .2 na .3 1.0	200
Department of Justice Bureau of Prisons	45.0 5.4	57.9 5.7	77.3 5.2	84.7 4.6	100.6 8.1	118.6 11.0	80.5 7.8	103.4 14.1	99.2 8.7		109. 9.
Drug Enforcement Administration Federal Bureau of	.9	.4	1.2	*	.0	.0	.0	.0	.0	.0	
Investigation Immigration and	7.0	10.9	33.5	35.5	35.8	36.3	10.0	19.0	33.6	42.7	34.
Naturalization Service Office of Justice	.4	.4	.2	.4	.0	.2	.6	.9	.0	na	r
Programs	31.4	40.5	37.2	44.2	56.7	71.1	62.2	69.3	56.9	64.0	66
Department of Labor Bureau of Labor	59.7	55.4	52.4	35.1	27.8	54.1	83.7	97.4	166.4	170.6	30
Statistics Employment and Training	7.1	14.8	13.3	12.6	12.4	12.4	12.3	21.5	20.7	22.4	22
Administration Occupational Safety and	40.0	25.6	26.9	14.1	7.2	33.8	60.9	60.9	137.1	139.9	
Health Administration Office of the Secretary Pension and Welfare	3.3 5.3	4.4 6.3	6.6 2.6	5.5 .2	4.6 .2	3.8 1.0	5.8 1.3	5.7 5.3	3.8 1.2		4 1
Benefits Administration Pension Benefit Guaranty	2.7	3.6	2.3	2.0	2.7	2.5	2.7	3.3	2.7	2.0	2
Corporation	1.3	.8	.7	.7	.6	.7	.7	.7	.7	.7	
Department of State	.4	.5	.9	1.0	.9	1.5	1.5	2.2	2.3	1.9	1
Department of Transportation Coast Guard	661.7 22.8	755.8 20.2	584.3 20.5	545.9 23.3	583.7 20.7	681.5 20.5	479.3 20.3	690.5 23.8	867.2 22.4		682 r
Federal Aviation Administration	318.6	310.1	228.9	226.3	242.3	219.6	230.5	300.6	359.6	231.0	193
Federal Highway Administration	242.0	315.6	247.3	211.2	229.3	333.2	126.7	240.8	258.3	381.6	361
Federal Motor Carrier Safety Administration	na	na	na	na	na	na	3.9	11.4	3.7	6.2	6
Federal Railroad Administration	20.6	30.1	30.1	19.5	22.6	20.9	27.4	26.2	34.1	35.3	31
Federal Transit Administration Maritime Administration National Highway Traffic	19.9 1.7	28.7 2.5	13.7 .0	17.0 .0	17.6 .0	20.5 .0	8.9 .0	8.0 .0	5.8 .0		2
National Highway Traffic Safety Administration Office of the Secretary Research and Special	25.3 5.4	39.7 3.9	33.2 2.8	36.4 3.5	41.6 3.4	50.4 9.1	50.6 4.0	58.3 13.0	59.6 18.4		59 10
Programs Administration Transportation Security	5.3	5.0	7.7	8.7	6.3	7.3	6.9	8.4	10.2	21.7	15
Administration	na	95.0	na	ı							
Department of the Treasury Bureau of Engraving and	19.1	61.5	60.2	59.8	65.2	64.8	61.5	67.7	74.4		70
Printing Internal Revenue Service	1.7 11.3	1.8 49.7	1.7 51.2	1.7 50.8	2.8 52.0	2.1 55.8	2.8 54.4	4.7 57.3	7.1 55.5		7 62
Office of Thrift Supervision United States Customs	.5	.6	.5	.6	.7	.1	.1	.1	.1	.2	
Service	4.6	8.6	6.3	6.3	9.2	5.4	1.9	4.0	10.6		
United States Mint United States Secret Service	.5 .5	.6	.0 .5	.4	.1 .5	.8 .5	1.3 1.0	.8 .7	.3		1
Department of Veterans Affairs	259.7	245.1	259.9	284.0	277.5	339.4	342.0	345.3	329.2	353.9	380

TABLE C-95a. Federal obligations for research, development, and R&D plant, by agency: FYs 1994-2004 (Dollars in millions)

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	nary
										2003	2004
Other agencies Advisory Commission on											
Intergovernmental Relations	1.4	1.4	na								
Agency for International  Development	254.3	302.5	223.0	206.4	212.0	203.0	218.8	267.0	269.8	262.0	273.8
Appalachian Regional Commission Broadcasting Board of	.9	.9	.9	.9	.7	.8	.6	.7	.7	.7	.3
Governors Consumer Product Safety	na	na	na	na	na	na	.1	*	.3	.2	.1
Commission	.3	.4	*	.1	.0	.0	.0	.1	.0	.0	.0
Environmental Protection Agency Federal Communications	558.3	556.3	464.3	517.2	637.2	668.8	523.2	472.5	415.2	627.0	606.9
Commission Federal Trade Commission	1.7 .7	2.3	2.8 .5	3.1 .7	3.0 1.1	4.5 1.3	2.8 .7	2.7 .7	4.4 1.8	6.3 1.6	2.8 1.7
General Services				./				./			1.7
Administration Library of Congress	.3 10.0	5.1 10.2	.1 10.6	2.4	.0 1.5	.0 2.4	.0 2.5	3.1	.0 3.0	.0 4.2	4.8
National Aeronautics and Space Administration <sup>5</sup> National Archives and	8,811.5	9,639.7	8,987.5	9,661.1	9,918.0	9,885.2	9,754.9	9,524.2	9,726.5	10,540.4	10,796.7
Records Administration National Science Foundation	.3 2,212.2	.1 2,438.9	.1 2,375.5	.1 2,452.3	.1 2,473.7	.1 2,679.6	.1 2,942.1	.1 3,328.7	.1 3,500.8	.1 3,651.0	.1 4,035.3
Nuclear Regulatory Commission Smithsonian Institution	90.7 129.2	88.2 129.0	70.9 132.0	62.1 134.0	51.7 123.0	49.0 93.0	53.0 101.0	53.0 101.0	74.3 109.0	75.0 113.0	75.1 119.0
Social Security Administration	na	na	11.5	13.6	17.4	53.3	28.8	28.9	22.8	85.7	76.4
Tennessee Valley Authority	97.9	93.1	6.1	8.9	2.7	.0	.0	.0	.0	.0	.0
United States Arms Control and Disarmament Agency	1.3	1.1	.7	1.2	1.2	.0	.0	.0	.0	.0	.0
United States Information Agency	.6	.3	.1	.2	.3	.1	na	na	na	na	na
United States International Trade Commission	9.4	12.2	3.2	5.7	7.2	9.7	.0	.0	.0	.0	.0

As of July 1, 2001, the Health Care Financing Administration became the Centers for Medicare and Medicaid Services. Beginning in FY 2000, the National Institutes of Health classified all of its development activities

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

as research.

Data for FYs 2002-2004 from the Substance Abuse and Mental Health Services Administration (SAMHSA) are

Data for FYS 2002-2004 from the Substance Aduse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Obligations for FYS 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.

na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

R&D = Research and development.

TABLE C-96. Federal obligations for research and development, by agency: FYs 1983-93 (Dollars in millions)

Page 1 of 4

Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies Departments	38,711.5	42,224.9	48,359.6	51,412.4	55,253.7	56,769.4	61,406.5	63,559.5	61,295.2	65,592.6	67,314.0
Department of Agriculture Agricultural Cooperative	847.6	866.2	943.0	928.5	947.9	1,016.6	1,038.3	1,108.4	1,236.6	1,327.1	1,327.8
Service Agricultural Marketing	2.1	2.2	2.9	2.6	2.7	2.7	2.8	2.7	2.8	3.4	2.9
Service Agricultural Research	1.4	1.5	1.7	1.6	1.5	1.6	1.5	2.7	4.2	4.7	4.7
Service	443.4	451.3	469.7	463.4	478.6	505.7	523.5	545.5	591.0	627.1	627.2
Animal and Plant Health Inspection Service Cooperative State Research, Ed., and	.0	.0	.0	4.2	4.9	5.6	7.4	8.0	15.7	16.7	17.1
Extension Service	232.3	235.7	284.3	269.0	270.7	298.4	307.3	324.2	376.8	418.2	418.6
Economic Research Service	38.8	43.7	46.4	44.6	44.8	48.1	49.5	50.5	54.4	58.9	58.9
Forest Service Grain Inspection Packers	107.7	108.4	113.1	113.3	126.7	135.5	131.4	158.6	174.7	180.7	182.7
and Stockyards											
Administration	.0	.0	.9	1.0	1.2	1.0	1.1	.6	.7	1.5	1.8
Human Nutrition Information Service	8.2	6.0	6.7	12.8	6.8	8.2	8.4	9.0	9.9	10.7	8.4
National Agricultural	7.6	0.2	8.4	0.0	2.4	2.4	2.9	2.8	3.2	3.6	3.9
Statistics Service Office of International Cooperation and	7.0	8.2	8.4	8.0	3.4	3.6	2.9	2.8	3.2	3.0	3.9
Development	5.3	8.2	7.7	7.0	5.6	5.0	2.5	3.6	3.1	1.5	1.5
Office of Transportation	.8	1.0	1.2	1.0	1.1	1.1	na	na	na	na	na
Department of Commerce	335.0	358.2	398.8	399.2	402.2	388.9	397.9	438.2	489.6	651.2	656.3
Bureau of the Census Economic Development	4.3	4.4	4.9	4.7	4.7	5.7	4.9	6.9	6.6	5.3	5.4
Administration  National Institute of	5.3	5.1	13.0	10.3	5.0	4.2	1.0	1.2	1.4	.5	.0
Standards and Technology National Oceanic	95.0	95.5	100.5	100.8	98.6	107.9	115.5	122.3	140.0	179.0	207.2
and Atmospheric Administration National Telecommunications	222.0	244.3	269.8	274.7	286.1	263.0	268.6	300.1	338.0	462.4	439.5
and Information					7.0						
Administration Office of the Secretary	8.3	8.7 .1	9.1 1.4	8.4	7.8	8.1 .0	7.8 .0	7.7 .0	3.6 .0	4.0 .0	4.2 .0
Department of Defense Defense Agencies Department of the Air Force	22,992.8 2,052.3 10,812.6	25,372.9 1,391.5 12,091.6	29,791.5 2,781.7 13,260.9	32,937.9 4,767.4 13,593.8	35,231.5 5,219.7 15,347.7	35,248.9 5,832.9 14,867.3	37,576.9 6,858.9 15,237.4	37,268.1 6,945.2 14,831.4	32,134.8 7,072.5 10,937.5	36,129.5 7,571.7 13,427.1	35,849.1 7,647.0 12,635.3
Department of the Army	3,998.1	4,225.5	4,570.8	4,809.4	5,019.5	4,806.0	5,659.3	5,684.1	6,081.5	6,854.2	6,209.1
Department of the Navy Operational Test and	6,068.2	7,605.6	9,127.4	9,650.3	9,507.8	9,514.1	9,666.1	9,586.2	7,806.0	8,030.8	9,102.9
Evaluation, Director Test and Evaluation,	na	na	na	.0	8.4	68.2	14.4	32.6	13.6	12.4	12.3
Deputy Under Secretary of Defense	61.6	58.6	50.6	117.1	128.5	160.3	140.7	188.7	223.7	233.2	242.5
Department of Education	111.7	115.7	124.9	121.3	132.5	140.7	159.1	169.9	171.0	168.5	177.7
Department of Energy	4,536.7	4,673.6	4,966.0	4,688.3	4,757.2	5,036.4	5,192.6	5,630.6	5,983.1	6,172.2	6,262.1

 $\label{thm:condition} \parbox{TABLE C-96. Federal obligations for research and development, by agency: FYs 1983-93 (Dollars in millions)} \\$ 

Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Health and	4 252 5	4 020 7	F 4F1.0	F / F 7 /	/ /0/ 2	7.150.0	7,000,0	0.405./	0.75/.0	0.007.0	10 240 2
Human Services Administration for Children	4,352.5	4,830.7	5,451.0	5,657.6	6,606.3	7,158.0	7,902.8	8,405.6	9,756.0	8,987.8	10,349.2
and Families Administration on Aging	na na	na na	na na	na na	na na	na na	na na	na na	129.0 20.6	39.2 20.2	19.9 20.9
Agency for Healthcare Research and Quality Alcohol, Drug Abuse,	na	na	na	na	na	na	na	49.7	101.1	106.3	114.8
and Mental Health Administration	302.2	337.2	377.6	396.1	475.5	554.8	695.7	842.7	1,460.6	na	na
Centers for Disease											
Control and Prevention Centers for Medicare and	78.2	46.3	47.6	52.2	66.2	88.7	117.8	95.6	113.4	146.9	162.5
Medicaid Services Food and Drug	30.2	33.1	33.5	29.0	27.3	28.2	49.1	49.1	69.1	75.5	68.2
Administration Health Resources and	74.2	77.8	82.1	79.4	85.0	91.0	99.0	99.0	125.0	135.7	154.5
Services Administration Human Development Service	13.3 23.4	18.5 18.3	19.7 24.3	12.3 54.6	9.3 53.0	10.0 54.0	10.5 101.7	11.9 95.4	11.0 na	10.1 na	9.6 na
National Institutes of Health	3,789.2	4,257.4	4,827.7	5,005.1	5,850.9	6,290.9	6,778.3	7,136.5	7,695.5	8,409.2	9,765.1
Office of the Assistant Secretary for Health	16.6	18.1	18.6	17.3	21.2	21.0	27.2	6.9	10.0	6.7	1.2
Office of the Secretary Social Security	14.4	10.4	9.6	6.1	8.2	4.7	7.8	5.0	8.8	5.0	8.0
Administration	10.8	13.5	10.4	5.6	9.8	14.7	15.8	13.9	11.9	33.0	24.5
Department of Housing and Urban Development	32.1	18.2	18.5	15.3	16.3	18.4	18.0	19.3	27.8	25.1	23.6
Department of the Interior Bureau of Land Management Bureau of Mines Bureau of Reclamation Geological Survey	382.5 3.9 88.5 10.0 157.0	410.9 3.8 108.8 10.4 208.9	391.7 4.4 89.9 13.2 214.9	385.2 3.4 84.4 10.2 218.6	403.8 3.7 88.8 10.7 226.8	416.8 3.7 91.3 4.4 236.1	469.0 3.0 98.7 4.2 279.9	508.5 2.8 99.3 5.8 308.4	592.9 8.8 106.1 8.7 356.6	609.2 6.3 107.1 13.2 361.4	619.1 8.9 111.9 10.3 356.7
Minerals Management Service National Park Service Office of the Secretary	1.5 13.7 7.4	1.5 14.0 .1	1.4 15.0 1.9	1.1 17.3 1.0	1.0 18.5 .0	1.2 19.4 .4	2.2 19.4 .4	1.9 20.1 .2	2.7 27.5 .6	3.8 31.1 .9	5.8 38.1 .4
Office of Surface Mining Reclam and Enforcement Office of Water Research	1.5	.8	2.0	2.3	1.0	1.0	.7	.7	1.0	.3	.5
and Technology United States Fish and	2.2	3.6	na	na	na	na	na	na	na	na	na
Wildlife Service	96.7	59.1	49.0	47.0	53.3	59.2	60.6	69.4	81.0	85.1	86.5
Department of Justice Bureau of Prisons Drug Enforcement	31.4 1.7	24.5 1.6	36.0 1.5	36.5 3.0	42.4 7.1	43.1 6.0	38.2 5.1	40.5 4.5	48.9 5.2	48.0 5.9	48.9 6.1
Administration Federal Bureau of	2.5	1.9	1.6	2.5	2.2	2.5	2.7	2.4	2.7	1.4	.9
Investigation Immigration and	2.5	1.0	9.5	7.2	8.0	12.7	7.7	8.2	10.8	10.9	11.3
Naturalization Service Office of Justice Programs Office of Legal Policy	.6 23.8 .3	.6 19.5 .0	.4 22.7 .3	.4 23.2 .2	.4 24.6 .1	.3 21.5 .0	.1 22.5 .0	.4 25.0 .0	.4 29.8 .0	.4 29.4 .0	.4 30.2 .0

TABLE C-96. Federal obligations for research and development, by agency: FYs 1983-93 (Dollars in millions)

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Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Labor	19.9	16.3	13.3	10.4	21.6	35.6	35.4	73.0	44.0	51.7	55.0
Bureau of Labor Statistics Employment Standards	.7	.5	.6	.6	6.5	7.0	7.0	7.3	7.5	7.6	6.9
Administration Employment and Training	1.4	.9	^	.0	1.0	.1	.1	.1	.0	.0	.0
Administration Labor-Management Relations	9.0	6.1	3.5	3.5	5.7	14.9	15.7	53.4	22.1	31.7	35.9
and Cooperative Programs Labor-Management Services	na	.3	.3	.2	.3	.4	.3	na	na	na	na
Administration	.9	na									
Occupational Safety and	г э	Г 1	4.5	2.7	4.1	4.0	4.5	2.5	2./	2.1	2.5
Health Administration Office of the Secretary	5.3 1.5	5.1 1.9	4.5 2.6	3.6 2.1	4.1 2.7	4.2 6.1	4.5 6.1	2.5 7.1	2.6 8.7	3.1 5.9	2.5 5.8
Pension and Welfare Benefits Administration	na	1.2	1.6	.3	1.0	2.7	1.4	2.1	2.5	2.6	2.6
Pension Benefit Guaranty Corporation	1.1	.3	.2	.1	.3	.3	.3	.5	.5	.9	1.3
Department of State	1.5	1.6	1.5	1.5	3.0	4.2	4.7	4.7	5.9	5.6	5.3
Department of Transportation Coast Guard	347.7 19.6	448.3 19.5	428.9 19.0	385.5 16.9	325.0 17.0	304.6 21.1	303.3 17.9	366.6 20.2	379.9 25.5	445.0 20.1	545.3 32.9
Federal Aviation Administration Federal Highway	126.2	266.2	286.3	260.6	167.3	160.5	146.8	216.1	220.1	236.2	248.9
Administration Federal Railroad	50.4	46.4	49.0	45.5	76.7	74.1	91.0	91.5	86.9	130.2	174.9
Administration Federal Transit	16.5	19.2	15.0	15.4	11.2	10.0	9.0	10.2	15.9	22.7	25.2
Administration	57.0	20.1	10.2	8.2	12.6	2.3	1.4	1.6	1.7	1.7	24.3
Maritime Administration National Highway Traffic	15.0	9.9	13.9	9.4	5.8	.5	.0	.9	1.7	1.8	1.7
Safety Administration Office of the Secretary	52.0 4.9	56.9 4.9	28.1 4.8	22.4 5.1	27.9 4.5	28.3 5.7	29.7 5.5	16.9 6.8	21.4 4.3	25.8 4.1	31.6 4.5
Research and Special Programs Administration	6.2	5.2	2.7	2.0	2.1	2.1	2.0	2.4	2.4	2.5	1.3
Department of the Treasury	15.6	13.9	24.3	24.0	26.9	26.1	25.6	25.6	30.8	24.6	16.6
Bureau of Engraving and Printing	3.9	3.6	5.0	4.2	4.5	2.0	1.7	2.1	3.5	2.0	3.2
Financial Crimes	0	0	0	0	0	.0	0	.0	2.2	1.0	1 5
Enforcement Network Internal Revenue Service United States Customs	.0 8.0	.0 8.2	.0 15.9	.0 14.2	.0 14.6	.u 14.4	.0 14.4	16.8	2.3 17.9	1.2 17.9	1.5 6.5
Service Service	3.3	1.8	2.2	4.8	7.0	9.2	6.8	6.2	3.7	2.2	4.0
United States Mint United States Secret	.0	.0	.6	.3	.2	.1	2.0	.1	.1	.0	.1
Service Service	.3	.2	.6	.4	.5	.4	.6	.5	.4	.5	.6
Department of Veterans Affairs	161.4	190.3	226.6	186.2	209.5	215.3	234.7	237.7	216.6	223.9	236.2

TABLE C-96. Federal obligations for research and development, by agency: FYs 1983-93 (Dollars in millions)

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gency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Other agencies											
Advisory Commission on											
Intergovernmental Relations	2.1	2.1	2.4	2.1	1.9	1.8	1.1	1.5	1.7	1.7	2.1
Agency for International	007.0	007.0	000.4	054.0	047.5	0044	070.4	2047	077.7	0.45.0	000.0
Development	227.3	237.2	220.4	251.2	217.5	204.4	279.1	334.6	377.7	365.9	382.2
Appalachian Regional Commission	.2	.5	.2	.2	.1	.2	.8	4	.7	1.9	.9
Commission Consumer Product Safety	.2	.5	.2	.2	.1	.2	.8	.4	.1	1.9	.9
Commission	na	1.2									
Environmental Protection	Ha	IId	1.2								
Agency	240.7	261.2	320.4	317.3	348.2	347.4	380.3	419.7	432.6	483.9	495.3
Federal Communications	240.7	201.2	320.4	317.3	340.2	347.4	300.3	417.7	432.0	403.7	473.3
Commission	1.3	.9	1.2	.9	1.0	1.2	1.1	1.3	1.4	1.6	1.6
Federal Emergency Management											
Agency	3.3	11.5	4.1	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.6	1.7	1.8	.5	.4	.4	.5	1.0	1.3	.9
General Services											
Administration	.5	2.4	.4	1.2	1.6	2.3	.5	.7	.0	.0	.0
Library of Congress	7.4	7.5	7.1	6.6	6.5	7.1	8.0	8.4	9.0	10.3	10.5
National Aeronautics and											
Space Administration	2,661.6	2,821.9	3,327.2	3,419.8	3,787.1	4,330.4	5,393.5	6,533.2	7,280.2	7,657.6	8,019.9
National Archives and Records											
Administration	.0	.0	.5	1.0	1.1	.7	.3	.4	.7	.7	.3
National Science Foundation	na	na	1,345.6	1,353.3	1,470.5	1,532.8	1,670.4	1,689.5	1,785.2	1,868.4	1,881.9
Nuclear Regulatory Commission	207.3	190.7	150.0	123.8	122.5	108.5	114.8	108.8	108.8	119.0	119.8
Office of Thrift Supervision	3.0	2.6	2.8	3.3	3.4	3.4	4.1	4.1	.0	.0	.0
Smithsonian Institution	56.0	63.6	71.1	63.3	71.5	75.1	80.2	84.0	98.0	98.0	102.0
Tennessee Valley Authority	63.0	68.1	79.5	77.5	77.9	87.3	62.6	64.9	68.3	97.3	108.6
United States Arms Control											
and Disarmament Agency	1.0	1.3	1.1	.9	3.6	3.4	2.8	.2	.4	2.1	1.5
United States Information											
Agency	*	1.4	.1	2.0	3.5	.4	.1	.5	.1	.0	1.1
United States International	_	_				_		_			
Trade Commission	4.7	5.0	5.8	6.9	7.2	8.1	8.7	9.1	9.9	12.3	12.2

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-96a. Federal obligations for research and development, by agency: FYs 1994-2004 (Dollars in millions)

Page 1 of 4

Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
									_	2003	2004
All agencies Departments	67,235.4	68,186.8	67,653.0	69,826.8	72,100.7	75,340.6	72,863.3	79,933.2	85,853.0	95,755.8	101,054.7
Department of Agriculture	1,399.9	1,380.2	1,300.3	1,388.6	1,441.0	1,614.1	1,746.8	1,959.1	1,971.8	2,061.6	1,918.6
Agricultural Cooperative Service	3.7	na	na	na							
Agricultural Marketing Service	4.8	4.8	4.9	4.8	4.7	4.7	5.1	4.8	5.2	5.4	5.4
Agricultural Research Service	678.7	683.3	675.2	687.6	757.9	855.1	884.7	994.4	1,059.8	1,069.2	1,074.6
Animal and Plant Health Inspection Service	19.2	19.1	18.0	19.8	20.5	20.4	20.6	25.4	23.7	na	na
Cooperative State Research, Ed., and Extension Service Economic Research Service Food Safety Inspection	429.0 55.2	417.7 53.8	362.4 53.0	433.5 53.0	386.4 71.5	462.5 62.5	535.0 64.2	615.1 65.6	546.7 67.0	648.1 68.7	492.8 76.7
Service ' Foreign Agricultural	.0	.0	*	*	.2	.7	2.3	2.6	.0	.0	.0
Service Forest Service Grain Inspection Packers and Stockyards	1.1 193.1	.9 193.5	1.3 177.9	1.4 179.8	1.4 187.8	1.4 197.0	1.4 223.0	1.4 237.0	1.4 253.0	1.6 253.0	1.6 252.0
Administration	1.8	1.5	2.5	2.8	2.7	2.7	3.6	6.1	6.0	6.8	7.1
Human Nutrition Information Service National Agricultural	7.0	na	na	na							
Statistics Service Rural Business-	3.9	4.0	3.8	3.4	3.3	3.6	3.9	4.2	4.6	4.8	4.9
Cooperative Service	2.4	1.6	1.4	2.5	4.4	3.5	3.1	2.4	4.2	4.0	3.5
Department of Commerce Bureau of the Census Economic Development	826.1 4.8	1,136.0 4.9	1,067.5 6.3	1,003.1 5.1	948.6 8.6	990.2 15.0	1,036.6 13.0	997.9 24.0	1,151.4 28.7	1,157.4 16.2	1,052.9 13.5
Administration National Institute of Standards and	.6	.5	.6	.6	.6	.6	.6	.6	.5	.6	.6
Technology National Oceanic and Atmospheric	253.2	563.3	516.5	460.4	394.4	402.2	404.2	422.0	451.4	487.7	345.2
Administration	562.6	560.9	528.5	509.3	519.5	547.2	597.1	501.0	651.3	643.7	686.9
National Telecommunica- tions and Information Administration Office of the Secretary	4.8 .0	6.4	15.7	27.8 .0	25.5 .0	25.2 .0	21.8 .0	50.4 .0	19.6 .0	9.2 .0	6.7 .0
Department of Defense Defense Agencies	34,553.2 7,279.7	33,796.3 7,363.2	34,535.4 7,733.8	34,788.3 7,503.8	35,286.2 7,980.8	35,645.9 7,455.9	33,167.0 7,190.8	35,422.6 9,376.1	37,557.1 12,075.7	42,500.3 13,109.0	45,781.6 13,299.2
Department of the Air Force Air Force, Materials	12,527.4	11,797.9	13,042.1	13,951.5	13,839.1	14,022.3	11,055.0	9,992.7	6,884.4	8,113.1	8,946.3
Command	na	4,645.9	5,640.9	6,252.4							
Air Force, Space Command	na	2,238.4	2,472.2	2,693.9							
Department of the Army Department of the Navy Operational Test and	5,574.1 8,929.0	5,419.3 8,963.3	4,873.6 8,606.4	4,821.1 8,215.5	5,037.7 8,156.3	5,038.9 8,826.8	5,323.7 9,307.6	6,223.7 9,599.6	7,076.6 11,287.0	7,228.5 13,822.0	8,978.3 14,276.8
Evaluation, Director Test and Evaluation, Deputy Under Secretary	11.2	21.7	21.9	26.6	30.3	44.7	32.9	205.3	233.5	227.7	281.0
of Defense	231.8	231.0	257.7	269.7	242.0	257.3	257.0	25.3	.0	.0	.0
Department of Education	176.6	177.6	173.7	181.2	204.5	223.7	247.3	277.6	285.6	302.9	297.3

 $\label{thm:condition} \begin{tabular}{ll} TABLE C-96a. Federal obligations for research and development, by agency: FYs 1994-2004 (Dollars in millions) \\ \end{tabular}$ 

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	inary
Ç ,									_	2003	2004
Department of Energy	6,048.0	6,145.0	5,344.9	5,603.5	5,873.8	6,009.7	6,063.1	6,668.0	7,044.2	7,554.1	7,691.4
Department of Health and Human Services Administration for	11,021.5	11,455.2	11,951.1	12,785.3	13,901.7	15,914.7	18,425.9	21,341.9	24,011.6	27,096.2	28,857.3
Children and Families Administration on Aging	11.3 19.1	12.0 20.7	12.6 3.7	17.4 4.4	23.5 10.4	24.9 18.5	27.3 2.8	28.4 3.7	23.3 3.7	23.8 .0	24.3 .0
Agency for Healthcare Research and Quality Agency for Toxic	154.4	135.3	125.2	144.0	146.5	182.3	198.8	269.7	298.7	303.7	279.0
Substances and Disease Registry	na	na	na	na	na	na	14.7	13.1	12.4	.0	.0
Centers for Disease Control and Prevention Centers for Medicare and	206.8	317.4	296.7	323.0	343.6	433.3	505.0	544.0	521.0	564.0	531.0
Medicaid Services <sup>1</sup> Food and Drug	80.0	74.5	52.7	43.6	51.2	49.7	61.5	138.0	117.0	74.2	63.4
Administration Health Resources and	169.4	170.5	170.8	158.6	142.9	130.8	144.2	151.6	136.3	139.8	134.9
Services Administration National Institutes of	16.4	13.2	11.1	13.1	12.9	12.8	35.6	51.0	54.1	45.0	20.9
Health <sup>2</sup> Office of the Assistant	10,329.4	10,681.8	11,251.0	11,993.0	12,880.2	14,755.4	16,918.3	19,480.7	22,110.1	25,203.6	26,865.8
Secretary for Health Office of the Secretary	.8 11.7	.3 9.1	na 10.7	na 19.0	na 17.0	na 17.7	na 19.8	na 27.4	na 17.4	na 18.3	na 21.3
Office of the Assistant											
Secretary, Planning and Evaluation Office of Public Health	na	na	9.0	18.4	13.9	13.9	16.7	24.9	14.9	16.0	16.0
and Science	na	na	1.7	.6	3.1	3.8	3.1	2.5	2.5	2.3	5.3
Social Security Administration Substance Abuse and	22.2	20.4	na	na	na	na	na	na	na	na	na
Mental Health Services Administration <sup>3</sup>	na	na	16.7	69.1	273.4	289.3	497.8	634.3	717.6	723.9	916.8
Department of Homeland Security	na	na	na	na	na	na	na	na	na	142.6	203.3
Animal and Plant Health Inspection Service Transportation Security	na	na	na	na	na	na	na	na	na	29.0	25.4
Administration U.S. Coast Guard	na na	na na	na na	na na	na na	na na	na na	na na	na na	85.0 23.3	154.5 23.3
U.S. Customs Service	na	na	na	na	na	na	na	na	na	5.2	.0
Department of Housing and Urban Development	39.6	41.8	33.1	33.5	28.0	57.0	45.6	52.9	45.3	47.0	47.7
Department of the Interior	694.1	561.6	567.5	579.9	532.0	641.5	579.9	619.7	632.8	592.2	555.8
Bureau of Mines Bureau of Reclamation	107.9 7.4	0. 0.8	na 6.5	na 7.1	na 8.8	na 10.3	na 9.8	na 9.7	na 10.4	na 10.3	na 8.0
Geological Survey Minerals Management	371.1	362.0	518.9	526.3	464.1	579.1	506.1	572.6	565.0	555.1	521.3
Service National Biological	20.6	20.0	21.9	20.6	29.3	28.8	29.2	24.5	31.2	26.8	26.5
Service	162.8	151.8	na	na	na	na	na	na	na	na	na
National Park Service <sup>4</sup> Office of the Secretary	24.2 .1	19.7	20.2	26.0 .0	29.7 .0	23.4	34.7 .0	12.9 .0	26.2 .0	.0 .0	.0 .0

TABLE C-96a. Federal obligations for research and development, by agency: FYs 1994-2004 (Dollars in millions)

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimin	ary
										2003	2004
Department of Justice Bureau of Prisons	45.0 5.4	57.9 5.7	77.3 5.2	84.7 4.6	100.6 8.1	118.6 11.0	80.5 7.8	103.4 14.1	99.2 8.7	115.7 9.0	109.3 9.2
Drug Enforcement Administration Federal Bureau of	.9	.4	1.2	*	.0	.0	.0	.0	.0	.0	.0
Investigation Immigration and	7.0	10.9	33.5	35.5	35.8	36.3	10.0	19.0	33.6	42.7	34.1
Naturalization Service Office of Justice	.4	.4	.2	.4	.0	.2	.6	.9	.0	na	na
Programs	31.4	40.5	37.2	44.2	56.7	71.1	62.2	69.3	56.9	64.0	66.0
Department of Labor Bureau of Labor	59.7	55.4	52.4	35.1	27.8	54.1	83.7	97.4	166.4	170.6	30.4
Statistics Employment and Training	7.1	14.8	13.3	12.6	12.4	12.4	12.3	21.5	20.7	22.4	22.3
Administration Occupational Safety and	40.0	25.6	26.9	14.1	7.2	33.8	60.9	60.9	137.1	139.9	.0
Health Administration Office of the Secretary Pension and Welfare	3.3 5.3	4.4 6.3	6.6 2.6	5.5 .2	4.6 .2	3.8 1.0	5.8 1.3	5.7 5.3	3.8 1.2	3.9 1.7	4.0 1.2
Benefits Administration Pension Benefit Guaranty	2.7	3.6	2.3	2.0	2.7	2.5	2.7	3.3	2.7	2.0	2.1
Corporation	1.3	.8	.7	.7	.6	.7	.7	.7	.7	.7	.8
Department of State	.4	.5	.9	1.0	.9	1.5	1.5	2.2	2.3	1.9	1.9
Department of Transportation Coast Guard Federal Aviation	620.7 22.3	727.0 19.7	552.5 20.0	526.9 22.9	566.1 20.4	667.0 20.3	467.4 20.0	674.4 23.5	815.5 22.0	733.3 na	662.6 na
Administration Federal Highway	285.6	288.4	208.3	209.1	228.0	205.3	219.0	286.9	345.1	213.3	175.1
Administration Federal Motor Carrier	235.7	312.5	240.0	210.3	227.3	333.2	126.7	240.8	258.3	381.6	361.8
Safety Administration	na	na	na	na	na	na	3.9	11.4	3.7	6.2	6.7
Federal Railroad Administration Federal Transit	19.5	26.5	26.7	18.9	21.5	20.9	27.3	24.1	33.2	33.9	30.2
Administration Maritime Administration National Highway Traffic	19.9 1.7	28.7 2.5	13.7 .0	17.0 .0	17.6 .0	20.5	8.9 .0	8.0 .0	5.8 .0	4.3	2.6 .0
Safety Administration Office of the Secretary Research and Special	25.3 5.4	39.7 3.9	33.2 2.8	36.4 3.5	41.6 3.4	50.4 9.1	50.6 4.0	58.3 13.0	59.6 18.4	58.2 14.1	59.9 10.8
Programs Administration Transportation Security	5.3	5.0	7.7	8.7	6.3	7.3	6.9	8.4	10.2	21.7	15.4
Administration	na	59.0	na	na							
Department of the Treasury Bureau of Engraving and	19.0	61.4	60.0	59.7	65.1	64.7	61.4	67.7	74.4	70.6	70.7
Printing Internal Revenue Service Office of Thrift	1.7 11.3	1.8 49.7	1.7 51.2	1.7 50.8	2.8 52.0	2.1 55.8	2.8 54.4	4.7 57.3	7.1 55.5	7.1 62.1	7.1 62.1
Supervision United States Customs	.5	.6	.5	.6	.7	.1	.1	.1	.1	.2	.2
Service United States Mint United States Secret	4.5 .5	8.5 .3	6.2 .0	6.1	9.0 .1	5.3 .8	1.8 1.3	4.0 .8	10.6 .3	na .3	na .3
Service	.5	.5	.5	.4	.5	.5	1.0	.7	.8	1.0	1.0
Department of Veterans Affairs	248.0	237.9	256.1	252.7	277.1	339.1	341.7	345.0	328.8	353.6	380.5

TABLE C-96a. Federal obligations for research and development, by agency: FYs 1994-2004 (Dollars in millions)

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Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	nary
										2003	2004
Other agencies Advisory Commission on Intergovernmental											
Relations	1.4	1.4	na								
Agency for International Development Appalachian Regional	254.3	302.5	223.0	206.4	212.0	203.0	218.8	267.0	269.8	262.0	273.8
Commission Broadcasting Board of	.9	.9	.9	.9	.7	.8	.6	.7	.7	.7	.3
Governors	na	na	na	na	na	na	.1	*	.3	.2	.1
Consumer Product Safety Commission	.3	.4	*	.1	.0	.0	.0	.1	.0	.0	.0
Environmental Protection Agency	553.5	551.5	464.3	492.2	571.2	552.8	502.2	450.5	415.2	627.0	606.9
Federal Communications Commission Federal Trade Commission	1.7	2.3	2.8 .5	3.1 .7	3.0 1.1	4.5 1.3	2.8 .7	2.7 .7	4.4 1.8	6.3 1.6	2.8 1.7
General Services				• •							
Administration Library of Congress	.0 10.0	.0 10.2	.0 10.6	.0 2.4	.0 1.5	.0 2.4	.0 2.5	.0 3.1	.0 3.0	.0 4.2	.0 4.8
National Aeronautics and Space Administration <sup>5</sup> National Archives and	8,296.2	9,014.9	8,570.1	9,327.3	9,568.0	9,525.7	6,881.9	7,355.0	7,508.2	8,280.8	8,546.8
Records Administration National Science Foundation Nuclear Regulatory	.3 2,040.4	.1 2,149.3	.1 2,188.3	.1 2,248.5	.1 2,289.3	.1 2,506.0	.1 2,725.5	.1 3,043.5	.1 3,260.0	.1 3,403.6	.1 3,689.9
Commission	90.7	88.2	70.9	62.1	51.7	49.0	53.0	53.0	74.3	75.0	75.1
Smithsonian Institution Social Security	124.2	124.0	127.0	130.0	120.0	90.0	98.0	98.0	106.0	109.0	115.0
Administration	na	na	11.5	13.6	17.4	53.3	28.8	28.9	22.8	85.7	76.4
Tennessee Valley Authority United States Arms Control	97.9	93.1	6.1	8.9	2.7	.0	.0	.0	.0	.0	.0
and Disarmament Agency United States Information	1.3	1.1	.7	1.2	1.2	.0	.0	.0	.0	.0	.0
Agency United States International	.6	.3	.1	.2	.3	.1	na	na	na	na	na
Trade Commission	9.4	12.2	3.2	5.7	7.2	9.7	.0	.0	.0	.0	.0

As of July 1, 2001, the Health Care Financing Administration became the Centers for Medicare and Medicaid Services. Beginning in FY 2000, the National Institutes of Health classified all of its development activities

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

as research.

Data for FYs 2002-2004 from the Substance Abuse and Mental Health Services Administration (SAMHSA) are

Data for FYS 2002-2004 from the Substance Rouse and Mental Health Service S duffinistration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Obligations for FYS 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.

Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.

na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-97. Federal obligations for R&D plant, by agency: FYs 1983-93 (Dollars in millions)  $\,$ 

Page 1 of 2

Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies Departments	1,297.5	1,787.3	1,820.8	1,538.8	1,846.0	2,057.1	2,165.1	2,271.7	2,852.8	2,984.6	3,100.7
Department of Agriculture	33.9	39.2	40.6	79.4	111.8	135.2	89.2	102.2	144.6	164.7	142.4
Agricultural Research Service	23.4	28.8	29.0	69.2	43.9	55.5	55.2	44.4	64.7	98.1	78.3
Animal and Plant Health Inspection Service Cooperative State	.0	.0	.0	.0	.0	.5	.3	6.1	.0	.0	.0
Research, Ed., and Extension Service Forest Service	10.0 .5	10.0 .4	10.0 1.6	9.5 .6	67.6 .3	76.2 2.9	32.2 1.6	46.9 4.9	61.5 18.4	63.0 3.6	60.5 3.6
Department of Commerce	.7	9.4	4.2	9.3	5.2	11.2	9.1	15.4	15.7	21.0	25.4
National Institute of Standards and Technology National Oceanic	.7	9.4	4.2	7.7	2.0	10.7	8.6	8.8	8.5	11.2	12.6
and Atmospheric Administration	.0	.0	.0	1.5	3.2	.5	.5	6.6	7.3	9.9	12.8
Department of Defense Defense Agencies Department of the Air Force Department of the Army Department of the Navy	312.5 5.8 138.7 26.3 141.7	529.2 14.2 285.4 56.2 173.4	530.9 4.6 291.3 52.9 182.1	286.1 4.5 130.1 53.9 97.6	477.2 72.1 270.3 65.8 69.0	435.8 124.4 143.7 92.8 74.9	499.3 114.4 250.2 45.1 89.6	487.3 51.6 322.2 53.1 60.4	425.7 128.4 152.3 91.0 54.0	396.5 98.8 179.7 22.0 96.0	371.5 76.3 231.6 18.1 45.5
Department of Education	.0	.0	1.1	6.6	21.0	5.2	1.9	8.9	4.2	2.4	2.2
Department of Energy	757.7	852.4	868.4	742.3	772.2	915.0	873.0	916.0	1,220.1	1,320.8	1,461.5
Department of Health and Human Services Alcohol, Drug Abuse, and Mental Health	47.9	31.1	42.1	37.9	36.7	19.5	78.6	107.8	86.3	96.7	149.3
Administration	1.8	.3	.4	.5	.6	.0	.0	.0	.0	na	na
Food and Drug Administration Health Resources and	28.5	3.0	13.0	8.0	.8	.5	23.0	23.0	18.4	14.3	19.7
Services Administration National Institutes	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	1.4
of Health	17.5	27.8	28.8	29.4	35.3	19.0	55.6	84.8	67.8	82.1	128.2
Social Security Administration	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	.0
Department of the Interior Bureau of Mines	2.4 .1	5.2	4.2	4.3	11.8 .0	9.4 .0	10.8 2.6	14.0 3.0	22.2 2.1	18.4 .0	23.1 .0
Geological Survey Minerals Management Service	1.4 .0	1.0 .0	.8 .0	.8 .0	.8 .0	.8 .0	1.3 .0	1.3 .2	3.3 .3	4.3 1.0	3.8 1.1
United States Fish and Wildlife Service	.9	4.2	3.4	3.5	11.0	8.6	6.9	9.5	16.6	13.1	18.3
Department of Justice	.0	.0	.0	.0	11.1	.0	.0	.0	.0	.0	.0
Federal Bureau of Investigation	.0	.0	.0	.0	11.1	.0	.0	.0	.0	.0	.0
Department of Transportation	21.9	16.9	9.0	12.1	11.2	13.9	15.5	21.8	18.4	25.3	32.3
Coast Guard Federal Aviation Administration	.0 21.4	.0 16.4	.0 8.5	.0 10.9	.0 10.4	.3 13.2	.0 15.5	.4 21.4	.4 16.3	.4 24.0	.5 22.4
Federal Highway Administration	.0	.0	.0	.7	.3	.0	.0	.0	.0	.8	.9
Federal Railroad Administration	.0	.0	.0	.0	.0	.4	.0	.0	1.7	.1	1.6
Federal Transit											
Administration National Highway Traffic Safety Administration	.0 .5	.0 .5	.0 .5	.0 .5	.0 .5	.0	.0	.0	.0	.0	7.0

TABLE C-97. Federal obligations for R&D plant, by agency: FYs 1983-93 (Dollars in millions)

Agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of the Treasury United States Customs	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Service United States Secret	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Service	.0	.0	.0	.1	*	*	*	*	*	*	*
Department of Veterans Affairs	10.5	6.1	3.3	4.8	5.9	19.5	11.0	3.3	3.4	5.7	3.4
Other agencies Agency for International Development	4.8	7.8	6.9	7.5	6.8	6.1	.0	.0	.0	.0	.0
Environmental Protection Agency General Services	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5
Administration National Aeronautics and	.0	.0	.0	18.8	.0	.0	.0	18.8	22.6	6.5	1.0
Space Administration National Science Foundation	100.8 na	244.2 na	234.3 73.6	275.0 53.2	309.4 61.3	428.2 56.9	519.5 53.6	527.0 39.3	723.6 159.6	817.8 101.6	749.4 130.4
Smithsonian Institution Tennessee Valley Authority United States Arms Control	1.0 .3	.2 .2	1.6 .5	.7 .8	2.9 .3	.7 .4	3.4	4.8 4.9	1.5 4.8	3.8 3.2	5.0 1.0
and Disarmament Agency	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
R&D = Research and development.

TABLE C-97a. Federal obligations for R&D plant, by agency: FYs 1994-2004 (Dollars in millions)  $\,$ 

Page 1 of 2

Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	nary
									_	2003	2004
All agencies	2,215.4	2,256.1	1,746.1	1,926.7	1,813.3	2,045.7	4,492.8	4,069.8	4,304.7	5,252.3	4,165.5
Departments Department of Agriculture Agricultural Research	125.7	143.4	128.4	184.2	89.8	131.1	86.6	117.0	118.8	169.8	129.3
Service Animal and Plant Health	78.3	67.7	67.9	118.9	86.3	118.5	74.6	104.0	103.8	151.8	111.3
Inspection Service Cooperative State Research, Ed., and	.0	.0	1.5	.0	.0	.0	.0	.0	.0	na	na
Extension Service Forest Service	42.6 4.9	71.3 4.3	56.5 2.5	63.2 2.0	.9 2.6	.6 12.0	.0 12.0	.0 13.0	.0 15.0	.0 18.0	.0 18.0
Department of Commerce National Institute of Standards and	31.2	77.7	84.5	43.4	21.4	19.6	200.5	23.8	29.1	53.7	69.6
Technology National Oceanic and Atmospheric	30.9	77.2	84.5	21.8	21.4	19.6	200.5	23.8	29.1	53.7	69.6
Administration	.3	.5	.0	21.6	.0	.0	.0	.1	.0	.0	.0
Department of Defense Defense Agencies Department of the Air	265.7 88.2	60.5 5.9	46.8 8.3	85.5 5.3	65.8 1.1	107.6 20.2	48.2 5.1	147.4 4.7	365.1 284.1	241.4 140.0	280.7 157.5
Force Air Force, Materials	99.3	37.8	24.4	39.1	26.2	47.2	5.5	31.9	23.5	23.2	56.2
Command Air Force, Space	na	na	na	na	na	na	na	na	5.4	3.0	3.0
Command	na	na	na	na	na	na	na	na	18.1	20.2	53.2
Department of the Army Department of the Navy	2.1 76.1	5.5 11.3	6.2 8.0	4.1 37.0	3.9 34.6	4.6 35.6	.1 37.5	.0 110.7	.0 57.5	.0 78.2	.0 67.1
Department of Education	1.8	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
Department of Energy	911.8	745.1	705.9	729.3	727.1	866.2	810.8	983.4	1,028.0	998.8	959.0
Department of Health and Human Services	120.2	255.7	133.1	260.1	286.3	252.8	219.6	300.0	247.5	1,229.2	84.2
Food and Drug Administration Health Resources and	8.4	5.3	5.5	14.5	28.1	2.6	2.5	8.8	13.4	2.4	3.5
Services Administration National Institutes of	1.4	1.6	.7	.7	.9	.6	.6	.6	.6	.6	.6
Health	110.5	248.8	126.9	244.9	257.3	249.6	216.5	290.6	233.4	1,226.1	80.0
Department of Homeland Security Transportation Security	na	na	na	na	na	na	na	na	na	25.3	18.5
Administration U.S. Coast Guard	na na	na na	na na	na na	na na	na na	na na	na na	na na	25.0 .3	17.5 1.0
Department of the Interior Bureau of Reclamation Geological Survey	9.0 .0 6.4	6.7 .0 5.4	1.9 .0 1.2	7.2 .0 5.0	1.5 .0 .0	1.4 .0 .0	1.3 .0 .0	2.4 .0 .0	2.1 .0 .0	3.5 1.5 .0	4.9 2.4 .0
Minerals Management Service	1.2	1.0	.8	2.2	1.5	1.4	1.3	2.4	2.1	2.0	2.5
National Biological Service	1.4	.3	na	na	na	na	na	na	na	na	na

TABLE C-97a. Federal obligations for R&D plant, by agency: FYs 1994-2004 (Dollars in millions)

Agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimi	nary
										2003	2004
Department of											
Transportation Coast Guard Federal Aviation	40.9 .5	28.8 .5	31.8 .5	19.0 .3	17.6 .3	14.6 .3	11.9 .3	16.0 .3	51.7 .3	19.1 na	19.6 na
Administration Federal Highway	33.0	21.7	20.6	17.2	14.3	14.3	11.5	13.7	14.5	17.7	18.2
Administration Federal Railroad	6.3	3.0	7.3	.9	2.0	.0	.0	.0	.0	.0	.0
Administration Transportation Security	1.1	3.5	3.4	.6	1.1	*	.1	2.1	.9	1.4	1.4
Administration	na	na	36.0	na	na						
Department of the Treasury United States Customs	.2	.2	.2	.1	.1	.1	.1	.0	.0	.0	.0
Service United States Secret	.1	.1	.1	.1	.1	.1	.1	.0	.0	na	na
Service Service	*	*	*	.0	.0	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	11.7	7.2	3.8	31.3	.4	.3	.3	.4	.4	.4	.4
Other agencies Environmental Protection											
Agency General Services	4.8	4.8	.0	25.0	66.0	116.0	21.0	22.0	.0	.0	.0
Administration National Aeronautics and	.3	5.1	.1	*	.0	.0	.0	*	.0	.0	*
Space Administration <sup>1</sup> National Science Foundation Smithsonian Institution	515.3 171.9 5.0	624.8 289.6 5.0	417.4 187.2 5.0	333.8 203.8 4.0	350.0 184.3 3.0	359.5 173.5 3.0	2,873.0 216.6 3.0	2,169.3 285.2 3.0	2,218.3 240.8 3.0	2,259.6 247.4 4.0	2,249.9 345.4 4.0

Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
R&D = Research and development.

TABLE C-98. Federal obligations for research, by agency: FYs 1983-93 (Dollars in millions)

Page 1 of 4

Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies Departments	14,253.5	14,978.8	16,133.4	16,502.2	17,940.5	18,650.1	20,765.5	21,622.4	23,968.4	24,490.6	26,890.5
Department of Agriculture Agricultural Cooperative	817.6	834.9	910.9	896.4	918.9	985.2	1,002.2	1,061.3	1,175.5	1,261.0	1,251.7
Service Agricultural Marketing	2.1	2.2	2.9	2.6	2.7	2.7	2.8	2.7	2.8	3.4	2.9
Service Agricultural Research	1.1	1.2	1.3	1.3	1.2	1.3	1.3	2.2	3.7	4.1	4.1
Service	417.9	424.3	442.0	436.0	454.6	479.4	492.1	512.3	550.8	583.2	574.3
Animal and Plant Health Inspection Service Cooperative State Research, Ed., and	.0	.0	.0	4.2	4.9	5.6	7.4	.0	.0	.0	.0
Extension Service	232.3	235.7	284.3	269.0	270.7	298.4	307.3	324.2	376.8	418.2	418.6
Economic Research Service Forest Service Grain Inspection Packers and Stockyards	38.8 103.9	43.7 105.1	46.4 109.8	44.6 109.7	44.8 122.9	48.1 131.5	49.5 127.5	50.5 153.8	54.4 170.2	58.9 175.8	58.9 177.2
Administration	.0	.0	.8	.6	.7	.6	.8	.2	.7	1.5	1.8
Human Nutrition Information Service National Agricultural	8.2	6.0	6.7	12.8	6.8	8.2	8.4	9.0	9.9	10.7	8.4
Statistics Service Office of International Cooperation and	7.6	8.2	8.4	8.0	3.4	3.6	2.9	2.8	3.2	3.6	3.9
Development	4.8	7.5	7.3	6.6	5.3	4.8	2.3	3.4	3.0	1.5	1.5
Office of Transportation	.8	.9	1.1	.9	.9	.9	na	na	na	na	na
Department of Commerce Bureau of the Census	284.8 2.2	296.7 2.4	324.2 2.5	339.5 2.6	338.6 2.8	342.3 3.8	351.0 3.0	377.0 4.9	449.7 4.8	595.9 3.4	582.1 3.3
Economic Development Administration National Institute of	5.3	5.1	2.0	2.3	5.0	4.2	1.0	1.2	1.4	.5	.0
Standards and Technology National Oceanic and Atmospheric	81.5	83.7	86.5	89.1	89.4	98.9	105.6	111.8	124.3	149.4	172.9
Administration  National Telecommunications and Information	188.9	197.7	224.4	237.5	234.4	228.2	234.6	252.4	315.6	438.7	401.7
Administration Office of the Secretary	6.9	7.7	7.9 .9	7.6 .3	7.0	7.3 .0	6.9 .0	6.8	3.6 .0	4.0 .0	4.2 .0
Department of Defense Defense Agencies Department of the Air Force Department of the Army Department of the Navy	3,222.6 1,013.6 688.4 693.6 827.0	3,048.5 834.3 740.1 708.8 765.4	3,168.3 816.9 736.7 823.4 791.3	3,227.3 856.7 759.0 827.3 784.3	3,347.6 866.1 784.8 909.9 786.7	3,239.1 964.5 773.1 753.7 747.8	3,656.1 1,242.1 807.4 823.4 783.2	3,529.2 1,165.1 776.3 780.2 807.6	3,717.9 1,153.0 830.4 860.5 874.0	4,073.4 1,457.3 790.5 932.7 892.8	4,783.5 1,881.0 887.8 1,018.6 996.1
Department of Education	76.1	80.9	91.9	95.8	106.9	111.0	122.0	130.3	131.7	127.0	133.6
Department of Energy	1,961.1	2,024.9	2,141.0	2,040.3	2,097.9	2,235.4	2,431.7	2,570.5	3,273.6	3,412.5	3,440.2

TABLE C-98. Federal obligations for research, by agency: FYs 1983-93 (Dollars in millions)

Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Health and Human Services	4,020.8	4,466.0	5,028.3	5,189.6	6,021.9	6,497.0	7,088.4	7,467.1	8,162.5	7,945.5	9,192.6
Administration for Children and Families	na	na	na	na	na	na	na	na	13.5	34.3	18.5
Administration on Aging Agency for Healthcare	na	na	na	na	na	na	na	na	2.9	2.5	2.7
Research and Quality Alcohol, Drug Abuse, and Mental Health	na	na	na	na	na	na	na	44.2	93.0	97.8	105.6
Administration	300.4	336.0	376.4	394.9	473.3	552.4	692.6	801.2	923.0	na	na
Centers for Disease Control and Prevention Centers for Medicare and	78.2	46.3	47.6	52.2	66.2	88.7	117.8	95.6	113.4	146.9	162.5
Medicaid Services Food and Drug	30.2	33.1	33.5	29.0	27.3	28.2	49.1	49.1	69.1	75.5	68.2
Administration Health Resources and	74.2	77.8	82.1	79.4	85.0	91.0	99.0	99.0	125.0	135.7	154.5
Services Administration Human Development Service	11.0 6.9	16.2 4.5	18.2 5.8	12.3 6.8	9.3 9.4	10.0 7.1	10.5 8.5	11.9 7.7	11.0 na	10.1 na	9.6 na
National Institutes of Health Office of the Assistant	3,478.2	3,910.4	4,428.1	4,587.6	5,314.7	5,680.7	6,061.8	6,335.8	6,783.0	7,398.7	8,638.5
Secretary for Health Office of the Secretary	16.6 14.4	18.1 10.0	16.9 9.4	15.8 6.1	18.9 8.2	19.4 4.7	25.6 7.8	5.8 5.0	9.6 8.8	6.0 5.0	.0 8.0
Social Security Administration	10.8	13.5	10.4	5.6	9.8	14.7	15.8	11.8	10.2	33.0	24.5
Department of Housing and Urban Development	11.3	6.3	6.5	5.3	5.5	6.3	6.1	6.6	9.4	8.8	8.1
Department of the Interior Bureau of Land Management Bureau of Mines Bureau of Reclamation Geological Survey	357.7 2.0 79.4 8.8 154.7	380.2 1.8 97.2 9.0 204.0	369.3 2.8 86.5 11.2 210.5	367.9 2.1 81.6 9.7 211.2	382.1 2.1 85.2 10.2 216.5	392.5 2.2 86.2 3.7 225.3	441.9 2.0 93.2 3.5 266.9	475.2 2.1 89.9 5.3 293.2	553.4 5.9 99.0 7.8 338.4	570.6 5.9 102.9 10.7 344.5	580.1 8.0 105.0 7.4 343.9
Minerals Management Service National Park Service Office of the Secretary	1.5 13.7 7.4	1.5 14.0 .1	1.4 15.0 1.9	1.1 17.3 1.0	1.0 18.5 .0	1.2 19.4 .1	2.2 19.4 .0	1.9 20.1 .0	2.7 27.5 .1	3.8 31.1 .2	5.8 38.1 .2
Office of Surface Mining Reclam and Enforcement Office of Water Research	1.5	.8	2.0	2.3	1.0	1.0	.7	.7	1.0	.3	.5
and Technology United States Fish and	1.2	3.6	na	na	na	na	na	na	na	na	na
Wildlife Service	87.5	48.3	37.9	41.7	47.6	53.5	53.9	62.0	71.0	71.2	71.2
Department of Justice Bureau of Prisons	20.7 1.3	17.9 1.2	19.3 1.1	22.3 2.7	19.8 2.2	17.4 2.1	17.5 2.1	19.9 1.8	21.1 1.9	20.3 2.5	25.6 2.5
Drug Enforcement Administration Immigration and	.9	.7	.5	.8	.7	.6	.5	.4	.9	.1	*
Naturalization Service Office of Justice Programs Office of Legal Policy	.3 18.0 .2	.3 15.7 .0	.2 17.2 .3	.2 18.5 .2	.2 16.7 .1	.3 14.4 .0	.1 14.8 .0	.4 17.3 .0	.4 17.9 .0	.4 17.3 .0	.4 22.7 .0

TABLE C-98. Federal obligations for research, by agency: FYs 1983-93 (Dollars in millions)

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Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Labor Bureau of Labor Statistics	17.9 .7	16.3 .5	12.4 .6	9.5 .6	20.4 6.5	26.7 7.0	22.2 7.0	21.6 7.3	24.3 7.5	23.8 7.6	19.0 6.9
Employment Standards Administration	1.4	.9	*	.0	1.0	.1	.1	.1	.0	.0	.0
Employment and Training Administration	7.9	6.1	3.5	3.5	5.4	6.8	6.1	6.0	6.6	5.6	3.5
Labor-Management Relations											
and Cooperative Programs Labor-Management Services	na	.3	.3	.2	.3	.4	.3	na	na	na	na
Administration	.9	na	na	na	na	na	na	na	na	na	na
Occupational Safety and Health Administration	5.3	5.1	4.5	3.6	4.1	4.2	4.5	2.5	2.6	3.1	2.5
Office of the Secretary	1.5	1.9	1.7	1.3	1.8	5.2	2.5	3.3	4.7	4.1	2.9
Pension and Welfare Benefits Administration	na	1.2	1.6	.3	1.0	2.7	1.4	2.1	2.5	2.6	2.6
Pension Benefit Guaranty Corporation	.3	.3	.2	.1	.3	.3	.3	.3	.4	.8	.7
Department of State	1.5	1.6	1.5	1.5	3.0	4.2	4.7	4.7	5.9	5.6	5.3
Department of Transportation Coast Guard	72.6 1.2	77.7 7.2	71.2 5.4	68.2 3.5	68.8 3.7	91.2 5.4	120.5 4.6	119.2 5.1	114.6 6.4	156.9 5.0	226.1 8.2
Federal Aviation Administration Federal Highway	12.5	15.0	17.3	14.0	11.1	13.3	23.6	26.1	24.0	30.1	59.8
Administration Federal Railroad	7.3	6.1	6.3	14.7	20.7	43.7	56.6	57.6	46.1	73.2	91.7
Administration Federal Transit	2.8	12.3	11.4	12.5	10.4	8.2	7.5	8.5	13.2	18.9	20.9
Administration	18.3	1.0	.5	.0	.0	.0	.0	.0	.0	.0	10.9
Maritime Administration National Highway Traffic	6.2	8.6	8.0	6.8	3.3	.5	.0	.9	1.7	1.8	1.7
Safety Administration Office of the Secretary	21.4 .3	24.7 .9	20.9 .9	16.1 .4	18.9 .4	19.1 .7	26.2 1.3	16.9 1.7	21.4 .6	25.8 .7	31.6 .6
Research and Special Programs Administration	2.6	1.8	.5	.3	.2	.4	.7	2.4	1.4	1.4	.5
Department of the Treasury Bureau of Engraving and	10.2	10.6	18.3	17.7	17.4	15.9	16.3	18.7	24.1	20.8	11.1
Printing	2.0	2.2	3.4	3.1	2.8	1.2	1.4	1.4	2.7	1.8	3.2
Internal Revenue Service United States Customs	7.9	8.1	14.7	14.0	14.1	13.7	14.1	16.5	17.5	17.5	6.5
Service United States Secret	.0	.1	.1	.2	.2	.7	.4	.4	.5	.2	.1
Service	.3	.1	.2	.4	.2	.4	.4	.5	.4	.5	.6
Department of Veterans Affairs	146.1	171.9	209.1	169.9	190.3	196.1	213.7	215.6	193.8	200.9	207.4

TABLE C-98. Federal obligations for research, by agency: FYs 1983-93 (Dollars in millions)

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Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Other agencies											
Advisory Commission on											
Intergovernmental Relations	2.1	2.1	2.4	2.1	1.9	1.8	1.1	1.5	1.7	1.7	2.1
Agency for International	15/7	1/70	150.0	1040	1540	105 1	010.1	205.2	257.4	200.1	250.2
Development	156.7	167.0	159.8	184.9	154.0	135.1	219.1	305.2	357.4	300.1	359.2
Appalachian Regional Commission	.2	.4	.2	.2	.1	.2	.8	.4	.7	1.9	.9
Consumer Product Safety	.2	.4	.2	.2	.1	.2	.8	.4	.1	1.9	.9
Commission	na	.8									
Environmental Protection	11a	IIa	.0								
Agency	174.6	172.0	214.6	217.8	277.2	267.9	273.3	315.2	353.1	404.3	361.5
Federal Communications	171.0	172.0	211.0	217.0	277.2	207.7	270.0	010.2	000.1	101.0	001.0
Commission	1.3	.9	1.2	.9	1.0	1.2	1.1	1.3	1.4	1.6	1.6
Federal Emergency Management											
Agency	3.3	6.1	2.9	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	1.4	1.6	1.7	1.8	.5	.4	.4	.5	1.0	1.3	.9
General Services											
Administration	.2	.4	.4	.9	1.6	2.3	.5	.7	.0	.0	.0
Library of Congress	1.3	2.1	2.1	1.6	1.5	1.6	1.6	1.5	1.7	1.8	1.8
National Aeronautics and											
Space Administration	1,544.8	1,709.2	1,783.6	2,069.0	2,269.2	2,331.6	2,878.8	3,060.7	3,371.2	3,229.3	3,548.7
National Archives and Records											
Administration	.0	.0	.2	.0	.7	.5	.2	.3	.6	.6	.3
National Science Foundation	na	na	1,345.6	1,353.3	1,470.5	1,532.8	1,670.4	1,689.5	1,785.2	1,868.4	1,881.9
Nuclear Regulatory Commission	207.3	190.7	150.0	123.8	122.5	108.5	114.8	108.8	108.8	119.0	119.8
Office of Thrift Supervision	3.0	2.6	2.8	3.3	3.4	3.4	4.1	4.1	.0	.0	.0
Smithsonian Institution	56.0	63.6	71.1	63.3	71.5	75.1	80.2	84.0	98.0	98.0	102.0
Tennessee Valley Authority	12.3	14.3	14.4	17.8	17.7	18.5	14.6	21.7	18.8	24.4	27.9
United States Arms Control											
and Disarmament Agency	.8	1.2	1.1	.9	.4	.8	1.2	.2	.4	2.1	1.5
United States Information											
Agency	*	1.4	.1	1.6	.0	.1	.0	.5	.1	.0	1.1
United States International											
Trade Commission	4.7	5.0	5.8	6.9	7.2	8.1	8.7	9.1	9.9	12.3	12.2

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-98a. Federal obligations for research, by agency: FYs 1994-2004 (Dollars in millions)

Page 1 of 4

Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
J									-	2003	2004
All agencies Departments	27,411.2	28,434.4	28,259.8	29,365.3	30,922.3	33,527.5	38,470.6	44,713.7	48,006.7	52,568.5	54,071.8
Department of Agriculture Agricultural Cooperative	1,322.5	1,298.8	1,220.0	1,290.1	1,333.9	1,488.1	1,611.5	1,803.7	1,810.4	1,922.3	1,778.7
Service Agricultural Marketing	3.7	na	na	na	na	na	na	na	na	na	na
Service Agricultural Research	4.2	4.2	4.2	4.2	4.0	4.0	4.3	4.1	4.4	4.6	4.6
Service	624.4	628.6	621.2	625.7	689.7	778.1	805.1	904.9	964.4	973.0	977.9
Cooperative State Research, Ed., and Extension Research Service	429.0	417.7	362.4	433.5	386.4	462.5	535.0	615.1	546.7	648.1	492.8
Economic Research Service Food Safety Inspection	55.2	53.8	53.0	53.0	71.5	62.5	64.2	65.6	67.0	68.7	76.7
Service Foreign Agricultural	.0	.0	.0	.0	.1	.3	2.0	2.2	.0	.0	.0
Service Forest Service	1.1 189.8	.9 187.7	1.3 172.3	1.4 165.9	1.4 172.3	1.4 169.4	1.4 191.8	1.4 203.8	1.4 217.6	1.6 217.6	1.6 216.7
Grain Inspection Packers											
and Stockyards Administration Human Nutrition	1.8	.3	.5	.6	.5	2.7	.7	.0	.0	.0	.0
Information Service National Agricultural	7.0	na	na	na	na	na	na	na	na	na	na
Statistics Service	3.9	4.0	3.8	3.4	3.3	3.6	3.9	4.2	4.6	4.8	4.9
Rural Business-Cooperative Service	2.4	1.6	1.4	2.5	4.4	3.5	3.1	2.4	4.2	4.0	3.5
Department of Commerce Bureau of the Census Economic Development	718.3 2.8	892.3 2.9	850.6 2.5	808.1 3.4	807.0 5.2	848.0 5.9	895.9 4.3	828.3 7.9	994.5 6.0	1,022.0 4.6	1,004.4 4.2
Administration National Institute of	.6	.5	.6	.6	.6	.6	.6	.6	.5	.6	.6
Standards and Technology National Oceanic	207.3	372.1	354.8	331.5	305.4	309.0	308.6	336.8	354.6	388.8	325.9
and Atmospheric Administration National Telecommunications	502.7	510.4	480.8	468.8	492.1	528.8	578.5	478.9	629.3	622.7	667.1
and Information Administration Office of the Secretary	4.8	6.4	11.9	3.8	3.8 .0	3.8 .0	4.0 .0	4.2	4.1 .0	5.4 .0	6.7 .0
Department of Defense Defense Agencies Department of the Air Force Air Force, Materials	4,240.6 1,726.6 814.3	4,198.4 1,632.0 834.5	3,995.5 1,549.3 882.3	3,809.8 1,397.5 816.6	3,969.9 1,593.0 736.9	4,142.3 1,655.9 764.8	4,920.4 1,899.3 1,096.5	6,806.2 2,504.3 2,190.9	6,265.4 2,653.5 1,357.4	6,513.8 2,740.0 1,504.7	5,890.2 2,043.1 1,812.7
Command Air Force, Space Command Department of the Army Department of the Navy	na na 852.6 847.1	na na 852.1 880.0	na na 670.4 893.5	na na 710.0 885.7	na na 817.8 822.2	na na 848.4 873.2	na na 970.9 953.7	na na 1,088.0 1,023.0	1,332.3 25.1 1,111.5 1,142.9	1,448.2 56.5 1,068.9 1,200.2	1,538.6 274.1 1,026.1 1,008.3
Department of Education	136.8	138.4	135.5	138.1	148.7	148.6	163.5	183.2	183.6	200.5	219.6

TABLE C-98a. Federal obligations for research, by agency: FYs 1994-2004 (Dollars in millions)  $\,$ 

Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
									_	2003	2004
Department of Energy	3,282.5	3,459.9	3,362.2	3,567.7	3,787.5	3,919.8	4,100.9	4,593.2	5,062.5	5,320.9	5,519.1
Department of Health and Human Services Administration for Children	9,736.4	10,076.0	10,545.9	11,228.1	12,018.5	13,714.6	17,913.1	20,648.7	23,230.9	26,318.0	27,907.4
and Families Administration on Aging	10.4 3.5	11.2 3.0	12.6 .2	17.4 .2	23.5 2.4	24.9 2.4	27.3 2.8	28.4 3.7	23.3 3.7	23.8 .0	24.3 .0
Agency for Healthcare Research and Quality Agency for Toxic Substances	142.0	124.0	116.0	134.1	138.8	171.3	186.8	248.1	274.8	279.4	256.7
and Disease Registry	na	na	na	na	na	na	14.7	13.1	12.4	.0	.0
Centers for Disease Control and Prevention Centers for Medicare and	206.8	317.4	296.7	323.0	343.6	433.3	505.0	544.0	521.0	564.0	531.0
Medicaid Services <sup>1</sup>	80.0	74.5	52.7	43.6	51.2	49.7	61.5	138.0	117.0	74.2	63.4
Food and Drug Administration Health Resources and	169.4	170.5	170.8	158.6	142.9	130.8	144.2	151.6	136.3	139.8	134.9
Services Administration	10.6	12.2	11.1	13.1	12.9	12.8	35.6	16.1	17.3	17.3	15.3
National Institutes of Health <sup>2</sup>	9,079.7	9,333.6	9,876.9	10,519.7	11,289.2	12,875.5	16,918.3	19,480.7	22,110.1	25,203.6	26,865.8
Office of the Secretary Office of the Assistant	11.7	9.1	9.0	18.4	13.9	13.9	16.7	24.9	14.9	16.0	16.0
Secretary, Planning and Evaluation Social Security	na	na	9.0	18.4	13.9	13.9	16.7	24.9	14.9	16.0	16.0
Administration	22.2	20.4	na	na	na						
Department of Homeland Security Transportation Security	na	na	na	na	na	na	na	na	na	74.7	142.5
Administration United States Coast Guard	na na	na na	na na	na na	na na	na na	na na	na na	na na	68.0 6.7	136.0 6.5
Department of Housing and Urban Development	13.7	14.2	11.2	11.3	9.2	19.1	15.5	17.9	16.2	17.5	17.8
Department of the Interior Bureau of Mines Bureau of Reclamation Geological Survey Minerals Management Service National Biological Service National Park Service <sup>3</sup>	650.2 95.4 5.5 355.4 20.6 149.0 24.2	532.4 .0 6.0 347.9 20.0 138.8 19.7	542.1 na 4.9 495.1 21.9 na 20.2	552.7 na 5.4 500.7 20.6 na 26.0	502.9 na 6.6 437.2 29.3 na 29.7	610.0 na 7.7 550.2 28.8 na 23.4	548.5 na 7.4 477.1 29.2 na 34.7	572.8 na 7.3 531.1 24.5 na 10.0	557.4 na 3.6 504.9 31.2 na 17.6	525.4 na 3.6 495.0 26.8 na .0	500.1 na 2.8 470.8 26.5 na .0

TABLE C-98a. Federal obligations for research, by agency: FYs 1994-2004 (Dollars in millions)  $\,$ 

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ected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimir	nary
3 ,									_	2003	2004
Department of Justice Bureau of Prisons	25.9 2.1	25.8 3.2	32.0 3.1	32.5 1.9	42.0 4.3	54.0 7.4	49.6 3.4	61.8 8.5	49.2 3.6	51.7 3.7	46.9 3.9
Drug Enforcement Administration Immigration and	.1	.0	*	*	.0	.0	.0	.0	.0	.0	.0
Naturalization Service Office of Justice Programs	.4 23.3	.4 22.2	.2 28.7	.4 30.2	.0 37.7	.0 46.6	.0 46.1	.0 53.3	.0 45.5	na 48.0	na 43.0
Department of Labor Bureau of Labor Statistics	19.6 7.1	29.9 14.8	26.7 13.3	21.7 12.6	22.1 12.4	27.7 12.4	46.1 12.3	57.1 21.5	45.5 20.7	49.0 22.4	28.8 22.3
Employment and Training Administration	3.1	4.2	2.6	1.5	2.2	8.8	25.0	25.0	17.8	19.9	.0
Occupational Safety and Health Administration Office of the Secretary	3.3 3.1	4.4 2.9	6.6 1.8	5.5 .1	4.6 .1	3.8 .2	5.8 .3	5.7 1.5	3.8 .3	3.9 .8	4.0 .3
Pension and Welfare Benefits Administration Pension Benefit Guaranty	2.7	3.6	2.3	2.0	2.7	2.5	2.7	3.3	2.7	2.0	2.1
Corporation	.3	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Department of State	.4	.5	.9	1.0	.9	1.5	1.5	2.2	2.3	1.9	1.9
Department of Transportation Coast Guard Federal Aviation	273.4 5.6	370.7 4.9	375.2 5.0	381.2 5.7	401.0 5.1	476.7 5.1	344.4 5.0	445.7 5.9	530.9 6.4	429.5 na	420.6 na
Administration Federal Highway	79.5	83.3	130.6	159.4	151.6	142.3	164.4	186.1	244.8	129.5	100.0
Administration Federal Motor Carrier	134.2	203.1	173.9	149.2	169.6	247.8	92.9	158.3	138.6	202.1	222.0
Safety Administration Federal Railroad Administration	na 16.1	na 22.5	na 21.3	na 18.2	na 21.2	na 20.3	2.8 24.2	8.0 23.8	.2 29.7	3.0 29.3	5.3 27.0
Federal Transit		22.0	20	10.2	22	20.0	22	20.0	27.7	27.0	27.10
Administration Maritime Administration National Highway Traffic	7.8 1.7	10.9 2.5	5.6 .0	6.0 .0	7.4 .0	4.8 .0	.0 .0	.0 .0	.6 .0	.0 .0	.0 .0
Safety Administration Office of the Secretary Research and Special	25.3 .6	39.7 .6	33.2 .0	36.4 .0	41.6 .0	50.4 .0	50.6 .0	58.3 .0	59.6 .0	58.2 .0	59.9 .0
Programs Administration Transportation Security	2.6	3.2	5.6	6.3	4.6	6.0	4.5	5.2	3.7	7.5	6.3
Administration	na	47.2	na	na							
Department of the Treasury Bureau of Engraving and	9.2	48.9	50.5	50.9	52.6	50.7	51.2	63.2	61.8	69.7	69.8
Printing Internal Revenue Service Office of Thrift	1.6 6.1	1.3 45.8	1.6 47.5	1.6 47.9	2.7 47.9	2.0 48.0	2.7 47.4	4.7 56.6	5.3 55.5	6.5 62.1	6.5 62.1
Supervision United States Customs	.5	.6	.5	.6	.7	.1	.1	.1	.1	.2	.2
Service United States Secret	.5	.7	.5	.4	.8	.0	.0	1.0	*	na	na
Service  Department of Veterans	.5	.5	.5	.4	.5	.5	1.0	.7	.8	1.0	1.0
Affairs	223.5	218.8	235.3	231.0	269.1	332.3	334.6	338.1	314.3	338.0	363.7

TABLE C-98a. Federal obligations for research, by agency: FYs 1994-2004 (Dollars in millions)

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1994	1995	1996	1997	1998	1999	2000	2001	2002	Pielliii	nary
								_	2003	2004
1.4	1.4									
1.4	1.4	na	na	na	na	na	na	na	na	na
216.2	272.7	205 N	176.7	172 0	163.8	180 2	230.2	247.6	240.0	252.9
210.2	212.1	203.0	170.7	172.7	103.0	107.2	237.2	247.0	240.7	232.7
.9	.9	.9	.9	.7	.8	.6	.7	.7	.7	.3
na	na	na	na	na	na	.1	*	.3	.2	.1
.1	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0
402.3	401.6	380.8	409.1	477.2	457.0	410.7	350.7	323.7	456.0	458.6
1.7	2.3	2.8	3.1	3.0	4.5	2.8	2.7	4 4	6.3	2.8
.7	.6			1.1			.7			1.7
1.9	2.1	2.2	.5	.5	.5	.6	2.0	1.7	1.8	.8
3,840.6	4,046.1	3,878.0	4,184.9	4,413.7	4,357.9	3,964.0	4,471.8	4,838.5	5,332.8	5,487.0
.3	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
2 040 4	2 1 / 0 2	2 100 2	2 240 5	2 200 2	2 506 0	2 725 5	2 042 5	2 260 0	2 102 6	3,689.9
										75.1
										115.0
124.2	124.0	127.0	130.0	120.0	70.0	70.0	70.0	100.0	107.0	113.0
na	na	11.5	13.6	17.4	53.3	28.8	28.9	22.8	85.7	76.4
										.0
1.3	1.1	.7	1.2	1.2	.0	.0	.0	.0	.0	.0
6	2	1	າ	2	1	na	na	na	na	na
.0	.3	.1	.∠	.3	.1	110	11a	11a	110	Ha
9.4	12.2	3.2	5.7	7.2	9 7	0	0	0	0	.0
	na .1 402.3 1.7 .7 1.9 3,840.6 .3 2,040.4 90.7 124.2 na 25.9	216.2 272.7 .9 .9 na na .1 .0 402.3 401.6  1.7 2.3 .7 .6 1.9 2.1  3,840.6 4,046.1 .3 .1  2,040.4 2,149.3 90.7 88.2 124.2 124.0 na na 25.9 26.4 1.3 1.1 .6 .3	216.2 272.7 205.0  .9 .9 .9  na na na .1 .0 .0  402.3 401.6 380.8  1.7 2.3 2.8 .7 .6 .5 1.9 2.1 2.2  3,840.6 4,046.1 3,878.0 .3 .1 .1  2,040.4 2,149.3 2,188.3 90.7 88.2 70.9 124.2 124.0 127.0  na na 11.5 25.9 26.4 4.2 1.3 1.1 .7  .6 .3 .1	216.2       272.7       205.0       176.7         .9       .9       .9       .9         na       na       na       na         .1       .0       .0       .1         402.3       401.6       380.8       409.1         1.7       2.3       2.8       3.1         .7       .6       .5       .7         1.9       2.1       2.2       .5         3,840.6       4,046.1       3,878.0       4,184.9         .3       .1       .1       .1         2,040.4       2,149.3       2,188.3       2,248.5         90.7       88.2       70.9       62.1         124.2       124.0       127.0       130.0         na       na       11.5       13.6         25.9       26.4       4.2       4.0         1.3       1.1       .7       1.2         .6       .3       .1       .2	216.2       272.7       205.0       176.7       172.9         .9       .9       .9       .9       .7         na       na       na       na       na         .1       .0       .0       .1       .0         402.3       401.6       380.8       409.1       477.2         1.7       2.3       2.8       3.1       3.0         .7       .6       .5       .7       1.1         1.9       2.1       2.2       .5       .5         3,840.6       4,046.1       3,878.0       4,184.9       4,413.7         .3       .1       .1       .1       .1         2,040.4       2,149.3       2,188.3       2,248.5       2,289.3         90.7       88.2       70.9       62.1       51.7         124.2       124.0       127.0       130.0       120.0         na       na       11.5       13.6       17.4         25.9       26.4       4.2       4.0       .8         1.3       1.1       .7       1.2       1.2         .6       .3       .1       .7       1.2       .3	216.2       272.7       205.0       176.7       172.9       163.8         .9       .9       .9       .9       .7       .8         na       na       na       na       na       na         .1       .0       .0       .1       .0       .0         402.3       401.6       380.8       409.1       477.2       457.0         1.7       2.3       2.8       3.1       3.0       4.5         .7       .6       .5       .7       1.1       1.3         1.9       2.1       2.2       .5       .5       .5         3,840.6       4,046.1       3,878.0       4,184.9       4,413.7       4,357.9         .3       .1       .1       .1       .1       .1         2,040.4       2,149.3       2,188.3       2,248.5       2,289.3       2,506.0         90.7       88.2       70.9       62.1       51.7       49.0         124.2       124.0       127.0       130.0       120.0       90.0         na       na       na       11.5       13.6       17.4       53.3         25.9       26.4       4.2       4.0       <	216.2       272.7       205.0       176.7       172.9       163.8       189.2         .9       .9       .9       .9       .7       .8       .6         na       na       na       na       na       na       .1         .1       .0       .0       .1       .0       .0       .0         402.3       401.6       380.8       409.1       477.2       457.0       410.7         1.7       2.3       2.8       3.1       3.0       4.5       2.8         .7       .6       .5       .7       1.1       1.3       .7         1.9       2.1       2.2       .5       .5       .5       .6         3,840.6       4,046.1       3,878.0       4,184.9       4,413.7       4,357.9       3,964.0         .3       .1       .1       .1       .1       .1       .1       .1         2,040.4       2,149.3       2,188.3       2,248.5       2,289.3       2,506.0       2,725.5         90.7       88.2       70.9       62.1       51.7       49.0       53.0         124.2       124.0       127.0       130.0       120.0       90.0	216.2         272.7         205.0         176.7         172.9         163.8         189.2         239.2           .9         .9         .9         .7         .8         .6         .7           na         na         na         na         na         na         .1         *           .1         .0         .0         .1         .0         .0         .0         .1           402.3         401.6         380.8         409.1         477.2         457.0         410.7         350.7           1.7         2.3         2.8         3.1         3.0         4.5         2.8         2.7           .7         .6         .5         .7         1.1         1.3         .7         .7           1.9         2.1         2.2         .5         .5         .5         .6         2.0           3,840.6         4,046.1         3,878.0         4,184.9         4,413.7         4,357.9         3,964.0         4,471.8           .3         .1         .1         .1         .1         .1         .1         .1         .1           2,040.4         2,149.3         2,188.3         2,248.5         2,289.3         2,506.0	216.2         272.7         205.0         176.7         172.9         163.8         189.2         239.2         247.6           .9         .9         .9         .7         .8         .6         .7         .7           na         na         na         na         na         .1         .*         .3           .1         .0         .0         .1         .0         .0         .0         .1         .0           402.3         401.6         380.8         409.1         477.2         457.0         410.7         350.7         323.7           1.7         2.3         2.8         3.1         3.0         4.5         2.8         2.7         4.4         4.7         .6         .5         .7         1.1         1.3         .7         .7         1.8         1.9         2.1         2.2         .5         .5         .5         .6         2.0         1.7           3,840.6         4,046.1         3,878.0         4,184.9         4,413.7         4,357.9         3,964.0         4,471.8         4,838.5           .3         .1         .1         .1         .1         .1         .1         .1         .1         .1	1.4         1.4         na         n

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

As of July 1, 2001, the Health Care Financing Administration became the Centers for Medicare and Medicaid Services.
Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research.

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only;
 data for the NPS cultural resources program were not available for this survey cycle.
 Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-99. Federal obligations for basic research, by agency: FYs 1983-93 (Dollars in millions)

Page 1 of 2

Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies Departments	6,260.1	7,067.4	7,818.7	8,153.1	8,942.4	9,473.6	10,602.0	11,285.6	12,170.8	12,489.9	13,399.1
Department of Agriculture Agricultural Marketing	362.0	392.6	445.4	432.9	445.5	480.6	484.9	519.2	557.6	595.2	615.9
Service	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
Agricultural Research Service Cooperative State	215.3	240.6	250.2	247.7	253.4	271.1	282.7	294.0	309.7	326.1	341.0
Research, Ed., and Extension Service	98.8	99.6	141.5	131.7	132.8	145.8	142.6	153.7	170.4	189.6	192.5
Economic Research Service Forest Service National Agricultural	3.9 38.8	4.4 41.2	4.6 44.1	4.5 42.2	6.3 49.4	6.7 51.6	6.9 50.0	7.1 60.3	7.6 66.6	8.2 68.9	10.6 69.4
Statistics Service Office of International Cooperation and	2.5	2.7	2.8	2.6	1.1	1.2	1.0	.9	1.1	1.2	1.3
Development	2.3	3.6	1.5	3.7	1.9	3.6	1.7	2.6	2.2	1.2	1.2
Office of Transportation	.5	.6	.6	.5	.5	.5	na	na	na	na	na
Department of Commerce Bureau of the Census Economic Development	19.2 .3	20.6 .4	23.2 .4	26.5 .5	25.8 .7	30.9 1.3	29.1 1.2	31.4 2.8	34.3 2.4	34.5 .9	37.2 .4
Administration National Institute of	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Standards and Technology National Oceanic and Atmospheric	18.4	20.2	22.1	25.7	25.1	26.3	27.9	28.6	31.9	33.6	36.5
Administration Office of the Secretary	.0,	.0 .0	.0 .8	.0 .3	.0 .0	3.2 .0	.0 .0	.0 .0	.0 .0	.0 .0	.3 .0
Department of Defense Defense Agencies Department of the Air Force Department of the Army Department of the Navy	785.6 107.7 164.2 208.3 305.4	847.9 117.6 192.4 222.1 315.8	861.4 79.2 198.3 240.8 343.1	923.9 121.7 216.5 248.5 337.3	907.6 114.8 221.6 217.0 354.3	876.9 173.0 196.4 165.7 341.8	947.9 203.9 202.8 187.2 354.0	947.6 200.5 197.0 185.1 365.0	994.2 208.3 209.2 188.6 388.0	1,098.9 294.4 205.8 204.9 393.8	1,268.2 411.8 218.7 215.7 422.0
Department of Education	14.2	12.2	14.6	4.5	3.1	4.4	4.4	4.9	8.6	7.5	5.3
Department of Energy	767.7	830.4	942.6	959.7	1,068.5	1,184.8	1,410.9	1,504.8	1,686.5	1,736.4	1,754.8
Department of Health and Human Services Alcohol, Drug Abuse,	2,475.4	2,814.5	3,232.5	3,338.8	3,827.9	4,081.4	4,388.0	4,649.0	5,050.1	5,058.7	5,696.7
and Mental Health Administration	145.0	170.8	196.8	203.4	232.2	265.8	308.0	386.2	459.1	na	na
Health Resources and Services Administration National Institutes of	.8	.8	.9	1.0	1.3	1.1	1.2	1.2	1.5	1.3	1.1
Health	2,313.0	2,624.8	3,018.0	3,118.6	3,575.5	3,795.1	4,053.3	4,261.7	4,589.5	5,057.4	5,695.6
Office of the Assistant Secretary for Health	16.6	18.1	16.9	15.8	18.9	19.4	25.6	.0	.0	.0	.0
Department of the Interior Bureau of Land Management	103.0 .0	125.9 .0	138.3 .0	133.0 .0	134.9 .0	126.5 .0	188.9 .0	205.4 .0	229.3 1.1	230.9 .6	230.3 .6
Bureau of Mines Bureau of Reclamation	23.5 .1	40.5 .1	49.9 .3	44.9 .1	45.6 .1	32.1 .1	43.9	40.6 .1	42.8 .1	43.7 .0	44.6 .0
Geological Survey	64.7	78.9	80.5	83.4	84.9	89.5	140.2	159.1	179.1	180.1	178.0
National Park Service Office of the Secretary Office of Water Research	.0 7.4	.0 .1	.0 1.9	.0 1.0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.6 .0
and Technology United States Fish and	.5	.4	na	na	na	na	na	na	na	na	na
Wildlife Service	6.9	5.9	5.7	3.6	4.3	4.8	4.8	5.6	6.2	6.4	6.4
Department of Justice Office of Justice Programs	3.6 3.6	4.7 4.7	4.2 4.2	5.3 5.3	8.1 8.1	7.6 7.6	6.8 6.8	8.8 8.8	6.4 6.4	5.3 5.3	5.0 5.0

TABLE C-99. Federal obligations for basic research, by agency: FYs 1983-93 (Dollars in millions)

Page 2 of 2

Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Labor	5.3	5.0	3.3	0.9	1.4	0.4	0.3	0.3	0.3	0.2	5.6
Bureau of Labor Statistics	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.4
Employment and Training Administration Pension Benefit Guaranty	5.3	5.0	3.3	.9	1.4	.4	.3	.3	.3	.2	.2
Corporation	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.0
Department of State	.0	.0	.0	.0	2.6	3.1	3.4	3.5	4.6	4.9	4.8
Department of Transportation	.9	3.5	1.1	.6	.2	.0	.0	.0	.0	1.2	1.7
Coast Guard Federal Highway	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Administration	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	1.7
Maritime Administration	.5	3.5	1.1	.6	.2	.0	.0	.0	.0	.0	.0
Department of the Treasury Bureau of Engraving and	3.5	4.0	4.8	5.1	4.7	4.8	3.4	3.4	3.6	3.6	6.5
Printing	.6	.8	.3	.4	.1	.1	.5	.0	.0	.0	.0
Internal Revenue Service United States Secret	2.9	3.2	4.4	4.5	4.4	4.7	2.9	3.4	3.6	3.6	6.5
Service	.0	.0	.0	.2	.2	.1	.0	.0	.0	.0	.0
Department of Veterans											
Affairs	14.1	15.8	15.4	14.8	17.2	17.3	16.6	16.2	16.1	15.7	13.3
Other agencies											
Agency for International											
Development	4.1	3.0	1.7	4.3	2.8	3.0	3.1	5.0	5.7	5.8	8.4
Environmental Protection	22.2	20.7	20.7	20.5	21.1	27.0	F0.7	70 /	01.0	110.4	00.1
Agency	22.2 1.2	29.6	38.6 1.5	38.5	31.1 .0	27.2	50.7	73.6	91.2	110.4	89.1
Federal Trade Commission General Services	1.2	1.3	1.5	1.6	.0	.0	.0	.0	.0	.0	.0
Administration	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	0
Library of Congress	.0	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0
, ,											
National Aeronautics and	/17.0	7545	750.0	01/7	1 010 7	1 110 7	1 417 4	1 (2/ 0	1 705 /	1 700 0	1 000 1
Space Administration National Archives and Records	617.0	754.5	750.9	916.7	1,013.7	1,112.7	1,417.4	1,636.9	1,705.6	1,738.2	1,800.1
Administration	.0	.0	.1	.0	.5	.2	.1	.2	.4	.5	.2
National Science Foundation	na	na	1,261.8	1,275.2	1,371.2	1,433.2	1,562.6	1,586.3	1,676.2	1,741.5	1,743.8
Smithsonian Institution	56.0	63.6	71.1	63.3	71.5	75.1	80.2	84.0	98.0	98.0	102.0
Tennessee Valley Authority	5.6	5.1	5.5	7.3	3.9	3.2	2.9	4.7	1.9	2.1	9.9

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-99a. Federal obligations for basic research, by agency: FYs 1994-2004 (Dollars in millions)

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Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	ninary
,									-	2003	2004
All agencies	13,523.5	13,877.0	14,464.0	14,941.9	15,613.0	17,443.7	19,569.8	21,958.1	23,668.3	25,599.9	26,643.1
Departments Department of Agriculture	606.3	595.0	550.0	590.1	603.8	743.3	807.9	903.1	930.1	979.3	916.8
Agricultural Research Service Cooperative State	366.5	369.0	364.6	364.4	401.7	461.7	477.7	546.9	582.9	588.1	591.0
Research, Ed., and Extension Service Economic Research Service	194.7 9.9	186.0 5.4	148.7 5.3	189.9 5.3	163.5 7.2	189.6 6.2	229.9 6.4	249.9 6.6	234.4 6.7	278.1 6.9	212.3 7.7
Food Safety Inspection Service	.0	.0	.0	.0	.1	.1	.4	.3	.0	.0	.0
Foreign Agricultural Service Forest Service Grain Inspection Packers	.7 33.3	.5 32.9	.9 29.3	.9 28.4	.9 29.3	.9 80.8	.8 91.4	.8 97.2	.8 103.7	.9 103.7	.9 103.3
and Stockyards Administration National Agricultural	.0	.0	.0	.0	.0	2.7	.0	.0	.0	.0	.0
Statistics Service	1.3	1.3	1.2	1.1	1.1	1.2	1.3	1.4	1.5	1.6	1.6
Department of Commerce Bureau of the Census Economic Development	40.1 .3	39.3 .3	37.5 .9	39.2 1.1	39.6 .6	49.1 2.0	46.4 1.8	64.9 3.3	72.5 2.8	78.5 2.1	99.4 1.9
Administration	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.3
National Institute of Standards and Technology National Oceanic	39.8	38.9	36.7	38.2	38.6	42.0	40.3	53.5	56.1	63.3	83.3
and Atmospheric Administration	.0	.0	.0	.0	.4	5.1	4.3	8.2	13.6	12.8	13.9
Department of Defense Defense Agencies Department of the Air Force	1,200.7 344.9 242.4	1,248.3 413.3 206.8	1,137.9 338.2 227.9	1,022.9 309.2 188.1	1,030.8 334.3 185.6	1,040.2 311.9 191.4	1,230.1 417.1 253.4	2,009.3 870.9 536.2	1,812.5 899.2 299.0	1,890.7 916.2 360.8	1,622.5 243.3 591.8
Air Force, Materials Command Air Force, Space Command Department of the Army Department of the Navy	na na 213.3 400.1	na na 218.8 409.4	na na 195.1 376.7	na na 178.3 347.2	na na 182.0 329.0	na na 181.1 355.8	na na 205.3 354.3	na na 208.4 393.9	276.0 23.0 224.6 389.7	315.4 45.4 220.6 393.2	317.7 274.1 334.0 453.5
Department of Education	5.5	5.5	3.5	3.0	2.1	2.0	2.1	2.3	5.3	5.5	6.4
Department of Energy	1,603.2	1,634.4	1,929.7	1,970.9	2,028.8	2,131.8	2,175.8	2,295.5	2,477.8	2,590.5	2,610.2
Department of Health and Human Services	5,884.0	6,061.1	6,504.6	6,851.8	7,355.4	8,632.5	10,055.4	11,592.3	12,860.8	14,152.9	14,818.9
Agency for Healthcare Research and Quality	.8	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
Health Resources and Services Administration	.8	1.0	1.0	1.1	1.1	1.2	1.2	2.2	2.1	2.1	2.1
National Institutes of Health <sup>1</sup> Office of the Secretary Office of the Assistant	5,882.4 .0	6,060.0 .0	6,503.6 .0	6,850.7 .0	7,354.3 .0	8,631.3 .0	10,054.1 .0	11,590.2 .0	12,843.8 14.9	14,134.8 16.0	14,800.8 16.0
Secretary, Planning and Evaluation	na	na	.0	.0	.0	.0	.0	.0	14.9	16.0	16.0
Department of Homeland Security Transportation Security	na	27.2	54.4								
Administration	na	27.2	54.4								

TABLE C-99a. Federal obligations for basic research, by agency: FYs 1994-2004 (Dollars in millions)

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Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
										2003	2004
Department of the Interior Bureau of Mines Geological Survey National Biological Service National Park Service <sup>2</sup>	83.2 25.4 43.5 13.7	55.2 .0 41.6 13.0 .5	56.0 na 55.5 na .5	56.4 na 55.9 na .5	48.7 na 48.2 na .5	59.1 na 58.6 na .5	51.8 na 51.3 na .5	61.8 na 60.2 na 1.6	45.8 na 40.8 na 5.0	40.9 na 40.9 na .0	38.2 na 38.2 na .0
Department of Justice Office of Justice Programs	5.9 5.9	8.1 8.1	12.6 12.6	12.4 12.4	16.0 16.0	17.8 17.8	21.7 21.7	25.0 25.0	25.4 25.4	35.0 35.0	33.0 33.0
Department of Labor Bureau of Labor Statistics Employment and Training	5.8 5.6	13.3 13.3	11.5 11.5	11.3 11.3	11.1 11.1	11.1 11.1	11.0 11.0	38.4 13.4	30.2 12.4	33.5 13.6	14.0 14.0
Administration	.2	.0	.0	.0	.0	.0	.0	25.0	17.8	19.9	.0
Department of State	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Department of Transportation Federal Highway	3.0	46.9	38.4	37.5	35.0	60.7	16.2	23.0	36.3	20.3	36.2
Administration Office of the Secretary Transportation Security	3.0 .0	46.9 .0	38.4 .0	37.5 .0	35.0 .0	60.7 .0	16.2 .0	23.0 .0	17.4 .0	20.3	36.2 .0
Administration	na	na	na	na	na	na	na	na	18.9	na	na
Department of the Treasury Bureau of Engraving and Printing	*	*	*	*	*	*	*	*	.7 .7	.2	.2 .2
Department of Veterans Affairs	14.4	12.4	12.5	13.6	120.0	148.4	149.2	142.1	141.7	152.4	164.0
Other agencies Agency for International Development	1.8	2.3	2.0	.1	1.8	.1	.1	.1	.1	.1	.1
Environmental Protection Agency Library of Congress	101.4 .4	70.3 .5	51.7 .5	51.1 .0	57.4 .0	57.0 .0	58.6 .0	74.5 .0	63.8 .0	101.1 .0	89.5 .0
National Aeronautics and Space Administration <sup>3</sup>	1,963.9	1,978.2	1,980.9	2,094.8	2,023.8	2,040.9	2,305.4	1,765.2	1,984.7	2,177.9	2,538.4
National Archives and Records Administration	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
National Science Foundation Smithsonian Institution Tennessee Valley Authority	1,870.7 124.2 8.9	1,973.3 124.0 9.0	2,007.4 127.0 .3	2,056.7 130.0 .0	2,118.7 120.0 *	2,359.5 90.0 .0	2,540.0 98.0 .0	2,862.6 98.0 .0	3,074.5 106.0 .0	3,204.9 109.0 .0	3,485.9 115.0 .0

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research.
 Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS cultural resources program were not available for this survey cycle.
 Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.

na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-100. Federal obligations for applied research, by agency: FYs 1983-93 (Dollars in millions)

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Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies Departments	7,993.4	7,911.4	8,314.7	8,349.1	8,998.1	9,176.5	10,163.5	10,336.8	11,797.6	12,000.7	13,491.4
Department of Agriculture Agricultural Cooperative	455.5	442.2	465.6	463.5	473.4	504.6	517.3	542.1	617.9	665.8	635.8
Service Agricultural Marketing	2.1	2.2	2.9	2.6	2.7	2.7	2.8	2.7	2.8	3.4	2.9
Service Agricultural Research	1.1	1.2	1.3	1.3	1.2	1.3	1.3	1.7	3.7	4.1	4.1
Service	202.6	183.7	191.8	188.3	201.1	208.2	209.4	218.2	241.1	257.1	233.3
Animal and Plant Health Inspection Service Cooperative State Research, Ed., and	.0	.0	.0	4.2	4.9	5.6	7.4	.0	.0	.0	.0
Extension Service	133.5	136.2	142.8	137.4	138.0	152.6	164.7	170.5	206.4	228.6	226.2
Economic Research Service Forest Service Grain Inspection Packers and Stockyards	34.9 65.1	39.3 63.9	41.7 65.7	40.1 67.5	38.5 73.5	41.4 79.9	42.6 77.5	43.5 93.5	46.8 103.6	50.6 106.9	48.3 107.8
Administration	.0	.0	.8	.6	.7	.6	.8	.2	.7	1.5	1.8
Human Nutrition Information Service National Agricultural	8.2	6.0	6.7	12.8	6.8	8.2	8.4	9.0	9.9	10.7	8.4
Statistics Service Office of International Cooperation and	5.1	5.5	5.6	5.4	2.3	2.4	1.9	1.9	2.2	2.4	2.6
Development Office of Transportation	2.5 .3	3.9 .3	5.8 .5	2.9 .4	3.3 .4	1.2 .4	.6 na	.9 na	.7 na	.4 na	.4 na
Department of Commerce Bureau of the Census Economic Development	265.6 1.9	276.1 2.0	301.0 2.1	312.9 2.1	312.8 2.1	311.5 2.4	321.9 1.8	345.6 2.1	415.4 2.3	561.4 2.4	544.9 2.9
Administration National Institute of	4.8	5.1	2.0	2.3	5.0	4.2	1.0	1.2	1.4	.5	.0
Standards and Technology National Oceanic	63.1	63.5	64.5	63.5	64.3	72.6	77.6	83.2	92.5	115.8	136.4
and Atmospheric Administration National Telecommunications	188.9	197.7	224.4	237.5	234.4	225.0	234.6	252.4	315.6	438.7	401.4
and Information Administration Office of the Secretary	6.9 .0	7.7	7.9 .1	7.6 .0	7.0	7.3 .0	6.9 .0	6.8	3.6 .0	4.0 .0	4.2
Department of Defense Defense Agencies Department of the Air Force Department of the Army Department of the Navy	2,437.0 905.9 524.2 485.3 521.6	2,200.7 716.6 547.7 486.7 449.6	2,306.9 737.7 538.4 582.6 448.2	2,303.3 735.0 542.5 578.8 447.1	2,440.0 751.3 563.2 692.9 432.5	2,362.2 791.5 576.7 588.0 406.0	2,708.2 1,038.1 604.6 636.3 429.2	2,581.6 964.6 579.3 595.2 442.6	2,723.8 944.7 621.2 671.9 486.0	2,974.5 1,162.9 584.7 727.8 499.0	3,515.2 1,469.2 669.1 802.8 574.1
Department of Education	61.9	68.7	77.3	91.3	103.8	106.6	117.5	125.3	123.1	119.5	128.3
Department of Energy	1,193.4	1,194.5	1,198.4	1,080.7	1,029.4	1,050.6	1,020.8	1,065.7	1,587.2	1,676.1	1,685.4

TABLE C-100. Federal obligations for applied research, by agency: FYs 1983-93 (Dollars in millions)

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Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Health and											
Human Services Administration for Children	1,545.4	1,651.5	1,795.8	1,850.8	2,194.0	2,415.6	2,700.4	2,818.1	3,112.4	2,886.8	3,495.9
and Families Administration on Aging	na na	na na	na na	na na	na na	na na	na na	na na	13.5 2.9	34.3 2.5	18.5 2.7
Agency for Healthcare	IId	IId	IId	IId	IId	IId	IId				
Research and Quality Alcohol, Drug Abuse, and Mental Health	na	na	na	na	na	na	na	44.2	93.0	97.8	105.6
Administration	155.4	165.2	179.7	191.5	241.1	286.6	384.7	415.0	463.9	na	na
Centers for Disease											
Control and Prevention Centers for Medicare and	78.2	46.3	47.6	52.2	66.2	88.7	117.8	95.6	113.4	146.9	162.5
Medicaid Services Food and Drug	30.2	33.1	33.5	29.0	27.3	28.2	49.1	49.1	69.1	75.5	68.2
Administration Health Resources and	74.2	77.8	82.1	79.4	85.0	91.0	99.0	99.0	125.0	135.7	154.5
Services Administration	10.2	15.4	17.3	11.2	8.0	9.0	9.3	10.7	9.5	8.8	8.5
Human Development Service	6.9	4.5	5.8	6.8	9.4	7.1	8.5	7.7	na	na	na
National Institutes of Health	1,165.2	1,285.6	1,410.1	1,469.0	1,739.1	1,885.6	2,008.5	2,074.1	2,193.5	2,341.3	2,942.9
Office of the Assistant Secretary for Health	.0	.0	.0	.0	.0	.0	.0	5.8	9.6	6.0	.0
Office of the Secretary	14.4	10.0	9.4	6.1	8.2	4.7	7.8	5.0	8.8	5.0	8.0
Social Security Administration	10.8	13.5	10.4	5.6	9.8	14.7	15.8	11.8	10.2	33.0	24.5
Department of Housing and Urban Development	11.3	6.3	6.5	5.3	5.5	6.3	6.1	6.6	9.4	8.8	8.1
Department of the Interior	254.7	254.3	231.0	234.9	247.3	266.0	253.0	269.8	324.1	339.7	349.8
Bureau of Land Management	2.0	1.8	2.8	2.1	2.1	2.2	2.0	2.1	4.8	5.3	7.4
Bureau of Mines Bureau of Reclamation	55.9 8.7	56.7 8.8	36.7 10.9	36.6 9.6	39.6 10.1	54.1 3.6	49.3 3.5	49.3 5.2	56.2 7.7	59.2 10.7	60.4 7.4
Geological Survey	89.9	125.1	130.0	127.8	131.7	135.8	126.8	134.2	159.3	164.3	165.9
Minerals Management Service	1.5	1.5	1.4	1.1	1.0	1.2	2.2	1.9	2.7	3.8	5.8
National Park Service	13.7	14.0	15.0	17.3	18.5	19.4	19.4	20.1	27.5	31.1	37.5
Office of the Secretary Office of Surface Mining	.0	.0	.0	.0	.0	.1	.0	.0	.1	.2	.2
Reclam and Enforcement Office of Water Research	1.5	.8	2.0	2.3	1.0	1.0	.7	.7	1.0	.3	.5
and Technology United States Fish and	.8	3.2	na	na	na	na	na	na	na	na	na
Wildlife Service	80.6	42.3	32.2	38.1	43.3	48.7	49.1	56.4	64.8	64.8	64.8
Department of Justice	17.1	13.2	15.1	17.0	11.8	9.8	10.7	11.1	14.7	15.0	20.5
Bureau of Prisons Drug Enforcement	1.3	1.2	1.1	2.7	2.2	2.1	2.1	1.8	1.9	2.5	2.5
Administration Immigration and	.9	.7	.5	.8	.7	.6	.5	.4	.9	.1	*
Naturalization Service Office of Justice Programs Office of Legal Policy	.3 14.4 .2	.3 11.0 .0	.2 13.0 .3	.2 13.2 .2	.2 8.6 .1	.3 6.8 .0	.1 8.0 .0	.4 8.5 .0	.4 11.5 .0	.4 12.0 .0	.4 17.6 .0

TABLE C-100. Federal obligations for applied research, by agency: FYs 1983-93 (Dollars in millions)

Page 3 of 4

Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Labor	12.7	11.2	9.1	8.7	19.0	26.4	21.8	21.3	24.0	23.6	13.4
Bureau of Labor Statistics	.7	.5	.6	.6	6.5	7.0	7.0	7.3	7.5	7.6	1.5
Employment Standards Administration	1.4	.9	*	.0	1.0	.1	.1	.1	.0	.0	.0
Employment and Training Administration	2.6	1.0	.3	2.6	4.0	6.5	5.7	5.7	6.3	5.4	3.3
Labor-Management Relations and Cooperative Programs	na	.3	.3	.2	.3	.4	.3	na	na	na	na
Labor-Management Services	Ha	.5	.5	.2	.5	.7	.5	Ha	Ha	Ha	na
Administration	.9	na									
Occupational Safety and											
Health Administration	5.3	5.1	4.5	3.6	4.1	4.2	4.5	2.5	2.6	3.1	2.5
Office of the Secretary Pension and Welfare	1.5	1.9	1.7	1.3	1.8	5.2	2.5	3.3	4.7	4.1	2.9
Benefits Administration	na	1.2	1.6	.3	1.0	2.7	1.4	2.1	2.5	2.6	2.6
Pension Benefit Guaranty											
Corporation	.3	.3	.2	.1	.3	.3	.3	.3	.4	.8	.7
Department of State	1.5	1.6	1.5	1.5	.3	1.0	1.3	1.2	1.3	.7	.5
Department of Transportation	71.7	74.2	70.2	67.6	68.6	91.2	120.5	119.2	114.6	155.7	224.4
Coast Guard	.8	7.2	5.4	3.5	3.7	5.4	4.6	5.1	6.4	5.0	8.2
Federal Aviation Administration	12.5	15.0	17.3	14.0	11.1	13.3	23.6	26.1	24.0	30.1	59.8
Federal Highway Administration	7.3	6.1	6.3	14.7	20.7	43.7	56.6	57.6	46.1	72.0	90.1
Federal Railroad											
Administration Federal Transit	2.8	12.3	11.4	12.5	10.4	8.2	7.5	8.5	13.2	18.9	20.9
Administration	18.3	1.0	.5	.0	.0	.0	.0	.0	.0	.0	10.9
Maritime Administration National Highway Traffic	5.7	5.1	7.0	6.2	3.1	.5	.0	.9	1.7	1.8	1.7
Safety Administration	21.4	24.7	20.9	16.1	18.9	19.1	26.2	16.9	21.4	25.8	31.6
Office of the Secretary Research and Special	.3	.9	.9	.4	.4	.7	1.3	1.7	.6	.7	.6
Programs Administration	2.6	1.8	.5	.3	.2	.4	.7	2.4	1.4	1.4	.5
Department of the Treasury Bureau of Engraving and	6.7	6.6	13.6	12.7	12.7	11.1	13.0	15.3	20.6	17.2	4.6
Printing	1.4	1.4	3.1	2.7	2.7	1.1	.9	1.4	2.7	1.8	3.2
Internal Revenue Service United States Customs	5.0	4.9	10.2	9.5	9.7	9.0	11.3	13.1	13.9	13.9	.0
Service United States Secret	.0	.1	.1	.2	.2	.7	.4	.4	.5	.2	.1
Service	.3	.1	.2	.2	.1	.3	.4	.5	.4	.5	.6
Department of Veterans Affairs	132.0	156.1	193.7	155.1	173.1	178.8	197.1	199.4	177.7	185.2	194.1

TABLE C-100. Federal obligations for applied research, by agency: FYs 1983-93 (Dollars in millions)

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Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Other agencies											
Advisory Commission on											
Intergovernmental Relations	2.1	2.1	2.4	2.1	1.9	1.8	1.1	1.5	1.7	1.7	2.1
Agency for International											
Development	152.6	164.0	158.1	180.7	151.2	132.1	216.0	300.2	351.7	294.2	350.8
Appalachian Regional	_		_	_		_	_		_		_
Commission	.2	.4	.2	.2	.1	.2	.8	.4	.7	1.9	.9
Consumer Product Safety							_				
Commission	.3	1.1	1.4	1.1	.6	.1	.5	.4	.9	.8	.8
Environmental Protection	150.4	1400	17/0	170.0	24/ 1	240.7	222 (	241 /	2/1.0	202.0	272.4
Agency	152.4	142.3	176.0	179.3	246.1	240.7	222.6	241.6	261.9	293.9	272.4
Federal Communications	1.3	.9	1.2	.9	1.0	1.2	1.1	1.3	1.4	1.6	1.6
Commission	1.3	.9	1.2	.9	1.0	1.2	1.1	1.3	1.4	1.0	1.0
Federal Emergency Management											
Agency	3.3	6.1	2.9	.0	.0	.0	.0	.0	.0	.0	.0
Federal Trade Commission	.2	.2	.3	.3	.5	.4	.4	.5	1.0	1.3	.9
General Services											
Administration	.2	.4	.3	.9	1.6	2.3	.5	.7	.0	.0	.0
Library of Congress	1.0	1.5	1.5	1.1	1.1	1.2	1.2	1.2	1.3	1.4	1.4
National Aeronautics and											
Space Administration	927.8	954.7	1,032.7	1,152.3	1,255.5	1,218.9	1,461.4	1,423.8	1,665.6	1,491.1	1,748.6
National Archives and Records											
Administration	na	na	.1	.0	.3	.3	.1	.1	.3	.1	.1
National Science Foundation	62.9	70.5	83.8	78.1	99.3	99.6	107.8	103.3	109.0	126.9	138.1
Nuclear Regulatory Commission	207.3	190.7	150.0	123.8	122.5	108.5	114.8	108.8	108.8	119.0	119.8
Office of Thrift Supervision	3.0	2.6	2.8	3.3	3.4	3.4	4.1	4.1	.0	.0	.0
Tennessee Valley Authority	6.7	9.2	8.9	10.5	13.8	15.3	11.7	17.0	16.9	22.2	18.1
United States Arms Control											
and Disarmament Agency	.8	1.2	1.1	.9	.4	.8	1.2	.2	.4	2.1	1.5
United States Information											
Agency	*	1.4	.1	1.6	.0	.1	.0	.5	.1	.0	1.1
United States International											
Trade Commission	4.7	5.0	5.8	6.9	7.2	8.1	8.7	9.1	9.9	12.3	12.2

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-100a. Federal obligations for applied research, by agency: FYs 1994-2004 (Dollars in millions)

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Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
<b>U</b>									-	2003	2004
All agencies Departments	13,887.7	14,557.4	13,795.7	14,423.4	15,309.3	16,083.9	18,900.8	22,755.6	24,338.4	26,968.6	27,428.7
Department of Agriculture	716.2	703.8	670.0	700.0	730.1	744.8	803.5	900.6	880.3	943.0	861.9
Agricultural Cooperative Service	3.7	na									
Agricultural Marketing Service	4.2	4.2	4.2	4.2	4.0	4.0	4.3	4.1	4.4	4.6	4.6
Agricultural Research Service	257.9	259.6	256.6	261.3	288.0	316.4	327.3	358.0	381.5	384.9	386.9
Cooperative State Research, Ed., and Extension Service Economic Research Service Food Safety Inspection Service	234.3 45.3	231.7 48.4 .0	213.7 47.7	243.6 47.7	223.0 64.4	272.9 56.2	305.2 57.7 1.6	365.2 59.1 1.8	312.3 60.3	369.9 61.8	280.5 69.0
Foreign Agricultural											
Service Forest Service	.4 156.5	.4 154.8	.4 143.0	.5 137.4	.5 143.0	.6 88.7	.6 100.4	.6 106.7	.6 113.9	.7 113.9	.7 113.4
Grain Inspection Packers and Stockyards Administration Human Nutrition Information Service National Agricultural Statistics Service Rural Business-Cooperative Service  Department of Commerce Bureau of the Census Economic Development	1.8 7.0 2.6 2.4 678.2 2.5	.3 na 2.7 1.6 853.1 2.6	.5 na 2.5 1.4 813.1 1.6	.6 na 2.3 2.5 768.8 2.4	.5 na 2.2 4.4 767.4 4.6	.0 na 2.4 3.5 798.9 3.8	.7 na 2.6 3.1 849.6 2.5	.0 na 2.8 2.4 763.4 4.7	.0 na 3.1 4.2 921.9 3.2	.0 na 3.2 4.0 943.5 2.4	.0 na 3.3 3.5 905.0 2.2
Administration National Institute of	.6	.5	.6	.6	.6	.6	.6	.6	.4	.3	.3
Standards and Technology National Oceanic and Atmospheric Administration National Telecommunications	167.5 502.7	333.1 510.4	318.2 480.8	293.3 468.8	266.7 491.7	266.9 523.7	268.3 574.1	283.3 470.8	298.6 615.7	325.5 609.9	242.7 653.2
and Information Administration Office of the Secretary	4.8	6.4	11.9	3.8 .0	3.8 .0	3.8 .0	4.0 .0	4.2	4.1 .0	5.4 .0	6.7 .0
Department of Defense Defense Agencies Department of the Air Force Air Force, Materials	3,040.0 1,381.7 571.9	2,950.1 1,218.6 627.7	2,857.6 1,211.1 654.4	2,786.9 1,088.2 628.5	2,939.1 1,258.7 551.3	3,102.1 1,343.9 573.4	3,690.2 1,482.2 843.1	4,796.9 1,633.4 1,654.8	4,452.8 1,754.2 1,058.4	4,623.1 1,823.8 1,144.0	4,267.6 1,799.8 1,220.9
Command Air Force, Space Command Department of the Army Department of the Navy	na na 639.3 447.0	na na 633.3 470.5	na na 475.3 516.8	na na 531.7 538.5	na na 635.9 493.2	na na 667.3 517.5	na na 765.6 599.3	na na 879.7 629.0	1,056.3 2.1 886.9 753.3	1,132.8 11.1 848.3 807.0	1,220.9 * 692.1 554.8
Department of Education	131.2	132.8	132.1	135.0	146.7	146.6	161.5	180.9	178.3	195.0	213.2
Department of Energy	1,679.2	1,825.6	1,432.5	1,596.8	1,758.7	1,788.0	1,925.0	2,297.6	2,584.6	2,730.5	2,908.8

TABLE C-100a. Federal obligations for applied research, by agency: FYs 1994-2004 (Dollars in millions)

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ected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
									-	2003	2004
Department of Health and Human Services Administration for Children	3,852.5	4,014.9	4,041.3	4,376.3	4,663.1	5,082.1	7,857.7	9,056.3	10,370.1	12,165.1	13,088.5
and Families Administration on Aging	10.4 3.5	11.2 3.0	12.6 .2	17.4 .2	23.5 2.4	24.9 2.4	27.3 2.8	28.4 3.7	23.3 3.7	23.8 .0	24.3 .0
Agency for Healthcare Research and Quality Agency for Toxic Substances	141.2	124.0	116.0	134.1	138.8	171.3	186.7	248.1	274.8	279.4	256.7
and Disease Registry	na	na	na	na	na	na	14.7	13.1	12.4	.0	.0
Centers for Disease Control and Prevention Centers for Medicare and	206.8	317.4	296.7	323.0	343.6	433.3	505.0	544.0	521.0	564.0	531.0
Medicaid Services 1	80.0	74.5	52.7	43.6	51.2	49.7	61.5	138.0	117.0	74.2	63.4
Food and Drug Administration Health Resources and	169.4	170.5	170.8	158.6	142.9	130.8	144.2	151.6	136.3	139.8	134.9
Services Administration National Institutes of	9.8	11.2	10.1	12.1	11.9	11.6	34.5	13.9	15.2	15.2	13.2
Health <sup>2</sup>	3,197.4	3,273.6	3,373.3	3,669.0	3,934.9	4,244.2	6,864.2	7,890.5	9,266.3	11,068.7	12,065.0
Office of the Secretary Office of the Assistant	11.7	9.1	9.0	18.4	13.9	13.9	16.7	24.9	.0	.0	.0
Secretary, Planning and Evaluation Social Security	na	na	9.0	18.4	13.9	13.9	16.7	24.9	.0	.0	.0
Administration	22.2	20.4	na	na	na	na	na	na	na	na	na
Department of Homeland Security Transportation Security	na	na	na	na	na	na	na	na	na	47.5	88.1
Administration United States Coast Guard	na na	na na	na na	na na	na na	na na	na na	na na	na na	40.8 6.7	81.6 6.5
Department of Housing and Urban Development	13.7	14.2	11.2	11.3	9.2	19.1	15.5	17.9	16.2	17.5	17.8
Department of the Interior Bureau of Mines Bureau of Reclamation Geological Survey Minerals Management Service National Biological Service National Park Service <sup>3</sup>	566.9 70.0 5.5 311.9 20.6 135.4 23.6	477.3 .0 6.0 306.2 20.0 125.8 19.2	486.0 na 4.9 439.5 21.9 na 19.7	496.2 na 5.4 444.8 20.6 na 25.5	454.1 na 6.6 389.0 29.3 na 29.2	550.9 na 7.7 491.5 28.8 na 22.9	496.6 na 7.4 425.8 29.2 na 34.2	511.0 na 7.3 470.9 24.5 na 8.3	511.6 na 3.6 464.1 31.2 na 12.6	484.5 na 3.6 454.1 26.8 na .0	461.9 na 2.8 432.6 26.5 na .0
Department of Justice Bureau of Prisons Drug Enforcement	20.0 2.1	17.7 3.2	19.5 3.1	20.1 1.9	26.0 4.3	36.2 7.4	27.8 3.4	36.8 8.5	23.8 3.6	16.7 3.7	13.9 3.9
Administration Immigration and	.1	.0	*	*	.0	.0	.0	.0	.0	.0	.0
Naturalization Service Office of Justice Programs	.4 17.4	.4 14.1	.2 16.1	.4 17.8	.0 21.7	.0 28.8	.0 24.4	.0 28.3	.0 20.1	na 13.0	na 10.0
Department of Labor Bureau of Labor Statistics Employment and Training	13.7 1.5	16.6 1.5	15.2 1.8	10.4 1.3	11.0 1.3	16.6 1.3	35.1 1.3	18.7 8.1	15.3 8.3	15.5 8.8	14.8 8.3
Administration Occupational Safety and	2.9	4.2	2.6	1.5	2.2	8.8	25.0	.0	.0	.0	.0
Health Administration Office of the Secretary Pension and Welfare	3.3 3.1	4.4 2.9	6.6 1.8	5.5 .1	4.6 .1	3.8 .2	5.8 .3	5.7 1.5	3.8	3.9 .8	4.0
Benefits Administration Pension Benefit Guaranty	2.7	3.6	2.3	2.0	2.7	2.5	2.7	3.3	2.7	2.0	2.1
Corporation	.3	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Department of State	.4	.5	.9	1.0	.9	1.5	1.5	2.2	2.3	1.9	1.9

TABLE C-100a. Federal obligations for applied research, by agency: FYs 1994-2004 (Dollars in millions)

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Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
3 ,									_	2003	2004
Department of Transportation Coast Guard	270.4 5.6	323.9 4.9	336.7 5.0	343.7 5.7	366.1 5.1	416.0 5.1	328.2 5.0	422.7 5.9	494.6 6.4	409.2 na	384.4 na
Federal Aviation Administration Federal Highway	79.5	83.3	130.6	159.4	151.6	142.3	164.4	186.1	244.8	129.5	100.0
Administration Federal Motor Carrier	131.2	156.3	135.4	111.6	134.6	187.2	76.7	135.3	121.1	181.7	185.8
Safety Administration Federal Railroad	na	na	na	na	na	na	2.8	8.0	.2	3.0	5.3
Administration	16.1	22.5	21.3	18.2	21.2	20.3	24.2	23.8	29.7	29.3	27.0
Federal Transit Administration	7.8	10.9	5.6	6.0	7.4	4.8	.0	.0	.6	.0	.0
Maritime Administration National Highway Traffic	1.7	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
Safety Administration Office of the Secretary Research and Special	25.3 .6	39.7 .6	33.2 .0	36.4 .0	41.6 .0	50.4 .0	50.6 .0	58.3 .0	59.6 .0	58.2 .0	59.9 .0
Programs Administration Transportation Security	2.6	3.2	5.6	6.3	4.6	6.0	4.5	5.2	3.7	7.5	6.3
Administration	na	28.3	na	na							
Department of the Treasury Bureau of Engraving and	9.2	48.9	50.4	50.8	52.5	50.7	51.2	63.2	61.1	69.5	69.5
Printing Internal Revenue Service Office of Thrift	1.6 6.1	1.3 45.8	1.5 47.5	1.6 47.9	2.6 47.9	2.0 48.0	2.6 47.4	4.7 56.6	4.6 55.5	6.3 62.1	6.3 62.1
Supervision United States Customs	.5	.6	.5	.6	.7	.1	.1	.1	.1	.2	.2
Service United States Secret	.5	.7	.5	.4	.8	.0	.0	1.0	*	na	na
Service	.5	.5	.5	.4	.5	.5	1.0	.7	.8	1.0	1.0
Department of Veterans Affairs	209.1	206.4	222.8	217.4	149.1	183.8	185.4	196.1	172.6	185.6	199.7
Other agencies Advisory Commission on											
Intergovernmental Relations Agency for International	1.4	1.4	na								
Development Appalachian Regional	214.4	270.4	203.0	176.5	171.1	163.7	189.2	239.1	247.5	240.8	252.8
Commission Broadcasting Board of	.9	.9	.9	.9	.7	.8	.6	.7	.7	.7	.3
Governors Consumer Product Safety	na	na	na	na	na	na	.1	*	.3	.2	.1
Commission Environmental Protection	.1	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0
Agency	301.0	331.3	329.1	358.0	419.8	400.0	352.1	276.2	259.9	354.9	369.1
Federal Communications Commission	1.7	2.3	2.8	3.1	3.0	4.5	2.8	2.7	4.4	6.3	2.8
Federal Trade Commission Library of Congress	.7 1.5	.6 1.6	.5 1.6	.7 .5	1.1 .5	1.3 .5	.7 .6	.7 2.0	1.8 1.7	1.6 1.8	1.7
National Aeronautics and Space Administration <sup>4</sup>	1,876.7	2,067.9	1,897.1	2,090.1	2,389.9	2,317.0	1,658.5	2,706.6	2,853.8	3,155.0	2,948.6
National Archives and Records Administration	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
National Science Foundation Nuclear Regulatory Commission	169.7 90.7	176.0 88.2	181.0 70.9	191.8 62.1	170.7 51.7	146.5 49.0	185.5 53.0	180.9 53.0	185.5 74.3	198.7 75.0	204.0 75.1
Social Security Administration Tennessee Valley Authority	na 17.0	na 17.4	11.5 3.9	13.6 4.0	17.4 .8	53.3 .0	28.8 .0	28.9 .0	22.8 .0	85.7 .0	76.4 .0

TABLE C-100a. Federal obligations for applied research, by agency: FYs 1994-2004 (Dollars in millions)

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Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimin	nary
,									_	2003	2004
United States Arms Control and Disarmament Agency United States Information	1.3	1.1	0.7	1.2	1.2	.0	.0	.0	.0	.0	.0
Agency	.6	.3	.1	.2	.3	0.1	na	na	na	na	na
United States International Trade Commission	9.4	12.2	3.2	5.7	7.2	9.7	.0	.0	.0	.0	.0

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B.

As of July 1, 2001, the Health Care Financing Administration became the Centers for Medicare and Medicaid Services . Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research. Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only; data for the NPS

cultural resources program were not available for this survey cycle.

4 Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-101. Federal obligations for development, by agency: FYs 1983-93 (Dollars in millions)

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Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All agencies Departments	24,458.0	27,246.1	32,226.1	34,910.2	37,313.2	38,119.3	40,641.0	41,937.1	37,326.8	41,102.0	40,423.5
Department of Agriculture Agricultural Marketing	30.0	31.3	32.0	32.1	29.0	31.4	36.1	47.1	61.2	66.1	76.1
Service Agricultural Research	.3	.3	.3	.3	.3	.3	.3	.4	.5	.6	.6
Service Animal and Plant Health	25.5	27.0	27.7	27.4	24.0	26.3	31.4	33.3	40.2	43.9	52.8
Inspection Service	.0	.0	.0	.0	.0	.0	.0	8.0	15.7	16.7	17.1
Forest Service Grain Inspection Packers and Stockyards	3.8	3.3	3.3	3.6	3.8	4.0	3.9	4.8	4.5	4.9	5.5
Administration Office of International Cooperation and	.0	.0	.2	.3	.5	.4	.3	.4	.1	.0	.0
Development Office of Transportation	.4 .1	.7 .1	.4 .2	.3 .1	.3 .1	.2 .1	.1 na	.2 na	.2 na	.0 na	.0 na
Department of Commerce Bureau of the Census Economic Development	50.2 2.1	61.5 2.1	74.6 2.4	59.7 2.1	63.7 1.9	46.6 1.9	46.9 2.0	61.2 2.0	39.9 1.9	55.3 2.0	74.2 2.1
Administration  National Institute of	.0	.0	11.0	8.0	.0	.0	.0	.0	.0	.0	.0
Standards and Technology National Oceanic and Atmospheric	13.6	11.8	14.0	11.6	9.3	9.1	10.0	10.5	15.6	29.6	34.3
Administration  National Telecommunications and Information	33.1	46.6	45.4	37.2	51.7	34.8	34.1	47.7	22.4	23.7	37.8
Administration Office of the Secretary	1.4	.9 .1	1.2 .6	.8 .0	.8 .0	.8 .0	.9 .0	.9 .0	.0 .0	.0 .0	.0 .0
Department of Defense Defense Agencies Department of the Air Force Department of the Army Department of the Navy Operational Test and	19,770.1 1,038.7 10,124.2 3,304.5 5,241.2	22,324.3 557.3 11,351.5 3,516.8 6,840.2	26,623.2 1,964.8 12,524.3 3,747.4 8,336.1	29,710.7 3,910.7 12,834.8 3,982.1 8,865.9	31,884.0 4,353.5 14,562.9 4,109.6 8,721.1	32,009.7 4,868.4 14,094.2 4,052.3 8,766.2	33,920.8 5,616.8 14,430.0 4,835.9 8,882.9	33,738.9 5,780.2 14,055.1 4,903.8 8,778.6	28,416.9 5,919.4 10,107.1 5,221.0 6,932.0	32,056.1 6,114.4 12,636.6 5,921.5 7,138.0	31,065.7 5,766.0 11,747.5 5,190.5 8,106.8
Evaluation, Director Test and Evaluation, Deputy Under Secretary	na	na	na	.0	8.4	68.2	14.4	32.6	13.6	12.4	12.3
of Defense	61.6	58.6	50.6	117.1	128.5	160.3	140.7	188.7	223.7	233.2	242.5
Department of Education	35.6	34.8	33.0	25.5	25.6	29.7	37.2	39.7	39.4	41.5	44.1
Department of Energy	2,575.6	2,648.7	2,825.0	2,648.0	2,659.4	2,801.0	2,760.9	3,060.1	2,709.5	2,759.7	2,821.9

TABLE C-101. Federal obligations for development, by agency: FYs 1983-93 (Dollars in millions)

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Department of Health and Human Services   331.7   364.7   422.7   468.0   584.3   661.1   814.4   938.5   1,593.5   1,042.3	9.2
Administration for Children and Families na	1.4 18.2 9.2
Administration on Aging Agency for Healthcare Research and Quality na	18.2 9.2
Research and Quality Alcohol, Drug Abuse, and Mental Health Administration         na         na         na         na         na         5.5         8.1         8.5           Health Resources and Services Administration         2.3         2.3         1.5         .0 </td <td></td>	
Administration         1.8         1.2         1.1         1.2         2.2         2.4         3.0         41.5         537.6         na           Health Resources and Services Administration         2.3         2.3         1.5         .0	
Services Administration         2.3         2.3         1.5         .0 <th< td=""><td>na</td></th<>	na
Human Development Service National Institutes of Health         16.6         13.8         18.5         47.8         43.6         46.8         93.2         87.7         na         na           National Institutes of Health         311.0         347.0         399.6         417.5         536.2         610.2         716.5         800.7         912.5         1,010.5           Office of the Assistant Secretary Grid Health         .0         .0         1.7         1.5         2.3         1.6         1.7         1.1         .4         .7           Office of the Secretary Social Security Administration         .0         .4         .2         .0         <	.0
Health         311.0         347.0         399.6         417.5         536.2         610.2         716.5         800.7         912.5         1,010.5           Office of the Assistant Secretary for Health         .0         .0         1.7         1.5         2.3         1.6         1.7         1.1         .4         .7           Office of the Secretary Office of the Secretary Social Security Administration         .0         .4         .2         .0 <td>na</td>	na
Secretary for Health       .0       .0       1.7       1.5       2.3       1.6       1.7       1.1       .4       .7         Office of the Secretary       .0       .4       .2       .0	1,126.6
Administration .0 .0 .0 .0 .0 .0 .0 .0 .0 .1 1.7 .0  Department of Housing and	1.2 .0
	.0
	15.5
Department of the Interior     24.8     30.7     22.4     17.3     21.7     24.3     27.1     33.3     39.5     38.6       Bureau of Land Management     1.9     2.0     1.6     1.3     1.6     1.5     1.0     .7     2.8     .4       Bureau of Mines     9.2     11.6     3.3     2.8     3.6     5.2     5.4     9.4     7.1     4.2       Bureau of Reclamation     1.2     1.4     2.0     .5     .5     .7     .6     .5     .9     2.5       Geological Survey     2.3     4.9     4.4     7.4     10.3     10.9     12.9     15.1     18.2     16.9	39.0 .9 6.9 2.8 12.8
Office of the Secretary .0 .0 .0 .0 .0 .3 .4 .2 .5 .7 Office of Water Research	.2
and Technology 1.0 .0 na	na
Wildlife Service 9.2 10.8 11.1 5.3 5.7 5.7 6.7 7.4 10.0 13.9	15.3
Department of Justice 10.7 6.6 16.7 14.1 22.5 25.7 20.6 20.6 27.8 27.7 Bureau of Prisons .4 .4 .4 .3 4.9 3.9 3.0 2.7 3.3 3.4 Drug Enforcement	23.3 3.6
Administration 1.6 1.2 1.1 1.7 1.5 1.9 2.2 2.0 1.8 1.3 Federal Bureau of	.8
Investigation 2.5 1.0 9.5 7.2 8.0 12.7 7.7 8.2 10.8 10.9 Immigration and	11.3
Naturalization Service         .3         .3         .2         .2         .2         .0         .0         .0         .0         .0           Office of Justice Programs         5.8         3.8         5.5         4.7         7.9         7.1         7.8         7.7         11.9         12.1           Office of Legal Policy         .1         .0         .0         .0         .0         .0         .0         .0         .0         .0	.0 7.5 .0
Department of Labor 1.9 .0 .9 .9 1.2 8.9 13.3 51.4 19.7 27.9	36.1
Employment and Training       Administration       1.1       .0       .0       .0       .3       8.0       9.7       47.4       15.5       26.1         Office of the Secretary       .0       .0       .9       .9       .9       3.6       3.8       4.0       1.7	
Pension Benefit Guaranty Corporation .8 .0 .0 .0 .0 .0 .0 .2 .2 .1	32.5 3.0

TABLE C-101. Federal obligations for development, by agency: FYs 1983-93 (Dollars in millions)

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Selected agency	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Department of Transportation Coast Guard	275.1 18.4	370.6 12.2	357.6 13.6	317.3 13.4	256.2 13.3	213.4 15.7	182.9 13.3	247.4 15.2	265.3 19.2	288.1 15.0	319.3 24.7
Federal Aviation Administration	113.7	251.2	269.0	246.6	156.2	147.3	123.2	189.9	196.2	206.1	189.1
Federal Highway Administration	43.1	40.3	42.6	30.8	56.0	30.4	34.4	33.8	40.8	57.0	83.1
Federal Railroad Administration Federal Transit	13.7	6.9	3.6	2.9	.8	1.8	1.5	1.7	2.7	3.9	4.3
Administration	38.6	19.1	9.7	8.2	12.6	2.3	1.4	1.6	1.7	1.7	13.3
Maritime Administration National Highway Traffic	8.8	1.3	5.9	2.6	2.5	.0	.0	.0	.0	.0	.0
Safety Administration Office of the Secretary Research and Special	30.6 4.6	32.2 4.0	7.2 3.9	6.3 4.7	9.0 4.1	9.2 5.0	3.5 4.2	.0 5.1	.0 3.7	.0 3.4	.0 3.9
Programs Administration	3.6	3.5	2.2	1.7	1.8	1.7	1.3	.0	1.0	1.1	.8
Department of the Treasury Bureau of Engraving and	5.4	3.3	6.0	6.3	9.5	10.2	9.3	6.9	6.7	3.8	5.5
Printing Financial Crimes	1.9	1.3	1.6	1.1	1.7	.8	.3	.7	.8	.2	.0
Enforcement Network Internal Revenue Service United States Customs	.0 .1	.0 .2	.0 1.3	.0 .2	.0 .4	.0 .7	.0 .3	.0 .3	2.3 .4	1.2 .4	1.5 .0
Service	3.3	1.7	2.1	4.6	6.8	8.5	6.4	5.8	3.2	2.0	3.9
United States Mint United States Secret	.0	.0	.6	.3	.2	.1	2.0	.1	.1	.0	.1
Service	*	.1	.5	*	.3	.0	.2	.0	.0	.0	.0
Department of Veterans Affairs	15.3	18.4	17.5	16.3	19.2	19.2	21.0	22.1	22.8	23.0	28.7
Other agencies Agency for International Development Appalachian Regional	70.6	70.3	60.5	66.2	63.5	69.3	60.0	29.3	20.4	65.9	23.0
Commission Consumer Product Safety	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
Commission Environmental Protection	.2	.2	1.0	.9	1.6	.9	.8	.7	.4	.3	.4
Agency Federal Emergency Management	66.1	89.2	105.8	99.5	71.0	79.5	107.0	104.5	79.5	79.6	133.7
Agency	.0	5.4	1.2	.0	.0	.0	.0	.0	.0	.0	.0
General Services Administration Library of Congress	.3 6.0	2.0 5.4	.0 5.0	.3 5.0	.0 5.0	.0 5.5	.0 6.4	.0 7.0	.0 7.3	.0 8.5	.0 8.7
National Aeronautics and Space Administration National Archives and Records	1,116.8	1,112.7	1,543.6	1,350.8	1,517.8	1,998.8	2,514.7	3,472.6	3,909.1	4,428.3	4,471.1
Administration Tennessee Valley Authority	na 50.7	na 53.8	.3 65.1	1.0 59.8	.4 60.2	.2 68.8	.1 48.0	.1 43.2	.1 49.5	.1 72.9	* 80.6
United States Arms Control and Disarmament Agency	.1	.2	.0	.1	3.2	2.6	1.6	.0	.0	.0	.0
United States Information Agency	.0	.0	.0	.4	3.5	.3	.1	.0	.0	.0	.0

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).

TABLE C-101a. Federal obligations for development, by agency: FYs 1994-2004 (Dollars in millions)  $\,$ 

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Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
										2003	2004
All agencies Departments	39,824.2	39,752.4	39,393.3	40,461.5	41,178.5	41,813.1	34,392.7	35,219.5	37,846.3	43,187.3	46,982.9
Department of Agriculture	77.4	81.4	80.3	98.5	107.1	126.1	135.4	155.3	161.3	139.3	139.9
Agricultural Marketing Service Agricultural Research	.6	.6	.6	.6	.7	.7	.8	.7	.8	.8	.8
Service Animal and Plant Health	54.3	54.7	54.0	61.9	68.2	77.0	79.6	89.5	95.4	96.2	96.7
Inspection Service	19.2	19.1	18.0	19.8	20.5	20.4	20.6	25.4	23.7	na	na
Food Safety Inspection Service Foreign Agricultural	.0	.0	*	*	.1	.4	.3	.4	.0	.0	.0
Service Forest Service Grain Inspection Packers	.0 3.3	.0 5.8	.0 5.6	.0 13.9	.0 15.5	.0 27.6	.0 31.2	.0 33.2	.0 35.4	.0 35.4	.0 35.3
and Stockyards Administration	.0	1.2	2.0	2.2	2.2	.0	2.9	6.1	6.0	6.8	7.1
Department of Commerce Bureau of the Census National Institute of	107.8 2.0	243.7 1.9	216.9 3.8	195.1 1.7	141.6 3.4	142.2 9.1	140.7 8.7	169.6 16.1	156.9 22.7	135.4 11.7	48.4 9.3
Standards and Technology National Oceanic and Atmospheric	45.9	191.2	161.6	128.9	89.0	93.3	95.6	85.2	96.7	98.9	19.3
Administration  Administration  National Telecommunications  and Information	59.9	50.6	47.7	40.5	27.4	18.4	18.7	22.1	22.0	21.0	19.8
Administration	.0	.0	3.8	24.0	21.8	21.4	17.7	46.2	15.5	3.8	.0
Department of Defense Defense Agencies Department of the Air Force Air Force, Materials	30,312.6 5,553.1 11,713.1	29,597.9 5,731.2 10,963.4	30,539.9 6,184.4 12,159.8	30,978.4 6,106.3 13,135.0	31,316.3 6,387.8 13,102.2	31,503.6 5,800.0 13,257.6	28,246.7 5,291.5 9,958.5	28,616.4 6,871.8 7,801.8	31,291.8 9,422.2 5,526.9	35,986.4 10,368.9 6,608.3	39,891.4 11,256.1 7,133.6
Command Air Force, Space Command Department of the Army Department of the Navy	na na 4,721.5 8,081.9	na na 4,567.2 8,083.3	na na 4,203.2 7,712.9	na na 4,111.1 7,329.8	na na 4,219.9 7,334.1	na na 4,190.5 7,953.5	na na 4,352.8 8,354.0	na na 5,135.7 8,576.6	3,313.6 2,213.3 5,965.1 10,144.1	4,192.7 2,415.6 6,159.7 12,621.9	4,713.8 2,419.8 7,952.2 13,268.5
Operational Test and Evaluation, Director Test and Evaluation, Deputy Under Secretary	11.2	21.7	21.9	26.6	30.3	44.7	32.9	205.3	233.5	227.7	281.0
of Defense	231.8	231.0	257.7	269.7	242.0	257.3	257.0	25.3	.0	.0	.0
Department of Education	39.9	39.3	38.2	43.2	55.7	75.1	83.8	94.4	102.1	102.4	77.7
Department of Energy	2,765.5	2,685.0	1,982.8	2,035.8	2,086.3	2,089.9	1,962.2	2,074.9	1,981.7	2,233.1	2,172.4

TABLE C-101a. Federal obligations for development, by agency: FYs 1994-2004 (Dollars in millions)

Page 2 of 3

Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelimir	nary
3 ,									_	2003	2004
Department of Health and Human Services	1,285.1	1,379.3	1,405.2	1,557.2	1,883.2	2,200.1	512.8	693.3	780.7	778.2	950.0
Administration for Children and Families	.9	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
Administration on Aging	15.6	17.7	3.5	4.3	8.0	16.1	.0	.0	.0	.0	.0
Agency for Healthcare Research and Quality	12.4	11.3	9.2	9.9	7.7	10.9	11.9	21.6	23.9	24.3	22.3
Health Resources and Services Administration	5.8	1.0	.0	.0	.0	.0	.0	34.9	36.8	27.7	5.6
National Institutes of Health <sup>1</sup>	1,249.6	1,348.2	1,374.1	1,473.3	1,591.0	1,879.9	.0	.0	.0	.0	.0
Office of the Assistant Secretary for Health Office of the Secretary	.8 .0	.3 .0	na 1.7	na .6	na 3.1	na 3.8	na 3.1	na 2.5	na 2.5	na 2.3	na 5.3
Office of Public Health and Science Substance Abuse and	na	na	1.7	.6	3.1	3.8	3.1	2.5	2.5	2.3	5.3
Mental Health Services Administration <sup>2</sup>	na	na	16.7	69.1	273.4	289.3	497.8	634.3	717.6	723.9	916.8
Department of Homeland Security Animal and Plant Health	na	na	na	na	na	na	na	na	na	67.8	60.8
Inspection Service Transportation Security	na	na	na	na	na	na	na	na	na	29.0	25.4
Administration	na	na	na	na	na	na	na	na	na	17.0	18.5
United States Coast Guard United States Customs	na	na	na	na	na	na	na	na	na	16.6	16.9
Service	na	na	na	na	na	na	na	na	na	5.2	.0
Department of Housing and Urban Development	25.9	27.7	22.0	22.2	18.8	37.9	30.1	34.9	29.1	29.5	29.9
Department of the Interior Bureau of Mines Bureau of Reclamation Geological Survey National Biological Service National Park Service <sup>3</sup> Office of the Secretary	43.9 12.5 1.8 15.7 13.8 .0	29.2 .0 2.0 14.1 13.0 .0	25.5 na 1.6 23.8 na .0	27.2 na 1.7 25.5 na .0	29.1 na 2.2 26.9 na .0	31.5 na 2.6 28.9 na .0	31.4 na 2.5 29.0 na .0	46.9 na 2.4 41.5 na 2.9	75.4 na 6.8 60.1 na 8.6	66.8 na 6.7 60.1 na .0	55.7 na 5.2 50.5 na .0
Department of Justice Bureau of Prisons	19.2 3.3	32.1 2.5	45.2 2.2	52.3 2.7	58.6 3.8	64.6 3.5	30.9 4.3	41.6 5.6	50.0 5.1	64.0 5.3	62.4 5.3
Drug Enforcement Administration	.8	.4	1.2	*	.0	.0	.0	.0	.0	.0	.0
Federal Bureau of Investigation Immigration and	7.0	10.9	33.5	35.5	35.8	36.3	10.0	19.0	33.6	42.7	34.1
Naturalization Service	.0	.0	.0	.0	.0	.2	.6	.9	.0	na	na
Office of Justice Programs	8.1	18.3	8.5	14.0	19.0	24.5	16.1	16.0	11.4	16.0	23.0
Department of Labor Employment and Training	40.1	25.5	25.8	13.3	5.7	26.4	37.5	40.3	120.9	121.6	1.6
Administration Office of the Secretary Pension Benefit Guaranty	36.9 2.2	21.4 3.4	24.3 .8	12.6 .1	5.0 .1	25.0 .8	35.9 1.0	35.9 3.8	119.3 .9	120.0 .9	.0 .9
Corporation	1.0	.7	.6	.6	.6	.6	.7	.6	.7	.7	.7

TABLE C-101a. Federal obligations for development, by agency: FYs 1994-2004 (Dollars in millions)

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Selected agency	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
									_	2003	2004
Department of Transportation Coast Guard	347.4 16.7	356.2 14.8	177.3 15.0	145.7 17.2	165.1 15.3	190.3 15.2	123.0 15.0	228.7 17.7	284.6 15.6	303.8	242.0
Coast Guard Federal Aviation	10.7	14.8	15.0	17.2	15.3	15.2	15.0	17.7	15.0	na	na
Administration Federal Highway	206.1	205.1	77.7	49.7	76.4	63.0	54.6	100.8	100.3	83.8	75.1
Administration Federal Motor Carrier	101.5	109.4	66.1	61.1	57.7	85.4	33.9	82.5	119.8	179.5	139.8
Safety Administration Federal Railroad	na	na	na	na	na	na	1.1	3.4	3.6	3.2	1.3
Administration	3.4	4.0	5.4	.7	.3	.6	3.1	.3	3.5	4.6	3.2
Federal Transit Administration	12.1	17.9	8.1	11.1	10.2	15.7	8.9	8.0	5.2	4.3	2.6
Office of the Secretary Research and Special	4.9	3.3	2.8	3.5	3.4	9.1	4.0	13.0	18.4	14.1	10.8
Programs Administration Transportation Security	2.7	1.8	2.1	2.4	1.7	1.3	2.3	3.1	6.4	14.2	9.0
Administration	na	na	na	na	na	na	na	na	11.8	na	na
Department of the Treasury Bureau of Engraving and	9.8	12.4	9.5	8.8	12.5	14.0	10.3	4.5	12.6	.9	.9
Printing	.1	.5	.1	.1	.1	.1	.2	*	1.8	.6	.6
Internal Revenue Service United States Customs	5.2	3.9	3.7	3.0	4.1	7.8	7.0	.7	.0	.0	.0
Service	4.0	7.7	5.7	5.8	8.3	5.3	1.8	3.0	10.6	na	na
United States Mint	.5	.3	.0	*	.1	8.	1.3	.8	.3	.3	.3
Department of Veterans Affairs	24.5	19.1	20.8	21.7	8.0	6.8	7.0	6.8	14.5	15.6	16.8
Other agencies Agency for International											
Development Consumer Product Safety	38.1	29.8	18.0	29.7	39.1	39.3	29.5	27.8	22.2	21.2	20.9
Commission Environmental Protection	.2	.4	*	.0	.0	.0	.0	.0	.0	.0	.0
Agency	151.2	149.9	83.5	83.1	94.0	95.8	91.5	99.8	91.5	171.0	148.3
Library of Congress National Aeronautics and	8.1	8.0	8.4	1.9	1.1	1.8	1.9	1.1	1.3	2.5	4.0
Space Administration <sup>4</sup> Tennessee Valley Authority	4,455.7 71.9	4,968.9 66.7	4,692.1 1.9	5,142.4 4.9	5,154.4 1.8	5,167.8 .0	2,917.9 .0	2,883.1 .0	2,669.7 .0	2,948.0 .0	3,059.8 .0

NOTES: Because of rounding, detail may not add to totals. Data for only those agencies and subdivisions that had obligations in the variables represented by this table appear in the table. For additional notes associated with the agencies listed in this table, refer to appendix B. Beginning with Vol. 44 (FYs 1994-96), Department of Defense development obligations are reported in two categories: advanced technology and major systems.

Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research.

Data for FYs 2002-2004 from the Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Obligations for FYs 2002-2004 are for the National Park Service's (NPS) natural resources program only: data for the NPS cultural resources program were not available for this survey cycle.

Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.
na = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year).
R&D = Research and development.

TABLE C-102. Federal obligations for research and development, by performer: FYs 1983-2004 (Dollars in millions)

Fiscal years	Total	Intra- mural <sup>1</sup>	Industry exclud- ing FFRDCs	Industry FFRDCs	Univer- sities and colleges excluding FFRDCs	University FFRDCs	Nonprofit insti- tutions excluding FFRDCs	Nonprofit FFRDCs	State and local govts	Foreign
1983	38,711.5	10,581.9	17,019.7	1,501.2	4,966.4	2,393.9	1,241.6	581.3	186.0	239.5
1984	42,224.9	11,572.3	18,610.4	1,608.4	5,546.9	2,485.8	1,497.3	597.1	130.9	175.8
1985	48,359.6	12,945.4	21,704.9	1,790.8	6,339.7	2,816.4	1,699.2	689.2	129.4	244.5
1986	51,412.4	13,534.9	24,201.2	1,697.0	6,558.8	2,767.7	1,677.0	551.2	128.4	296.3
1987	55,253.7	13,413.1	26,768.2	1,860.0	7,337.3	3,209.6	1,711.4	510.6	148.2	295.3
1988	56,769.4	14,114.6	26,719.2	1,911.3	7,827.7	3,473.9	1,683.2	505.6	142.1	391.8
1989	61,406.5	15,024.6	28,547.9	2,056.3	8,672.0	3,497.1	1,999.9	522.0	167.4	919.4
1990	63,559.5	15,848.9	29,370.0	2,326.8	9,137.5	3,449.8	2,248.2	621.6	213.9	342.6
1991	61,295.2	15,138.2	26,420.6	2,168.3	10,168.5	3,603.8	2,637.4	679.4	215.1	263.9
1992	65,592.6	15,582.8	29,744.8	2,117.0	10,271.2	3,855.5	2,803.6	745.6	184.1	287.9
1993	67,314.0	16,663.3	30,219.0	1,451.3	11,208.4	3,614.2	2,811.9	753.4	320.3	272.2
1994	67,235.4	16,132.1	30,454.9	1,293.5	11,796.9	3,292.9	2,936.9	736.0	325.4	266.8
1995	68,186.8	17,024.8	30,236.1	1,201.8	11,927.5	3,561.6	2,834.1	825.1	316.5	259.2
1996	67,653.0	16,540.4	30,373.8	1,137.0	11,977.8	3,447.1	2,886.8	755.2	246.7	288.3
1997	69,826.8	16,718.2	31,419.3	1,128.2	12,559.0	3,701.0	2,961.6	821.0	261.1	257.5
1998	72,100.7	17,121.5	31,998.6	1,188.9	13,380.7	3,890.2	3,171.3	603.0	447.5	299.1
1999	75,340.6	18,084.7	31,901.7	1,328.0	14,959.1	3,896.4	3,608.7	913.2	357.5	291.4
2000	72,863.3	17,149.8	27,735.1	1,100.9	16,821.0	4,053.2	4,211.2	1,231.5	224.0	336.7
2001	79,933.2	20,219.8	27,006.2	1,186.6	19,587.9	4,617.7	5,138.8	1,269.1	450.6	456.5
2002	85,853.0	21,044.8	29,538.2	1,351.1	21,290.1	4,641.2	5,739.1	1,404.8	452.2	391.6
2003 (Preliminary)	95,755.8	23,243.9	34,052.1	1,583.1	23,471.1	4,852.3	6,266.9	1,406.4	528.6	351.4
2004 (Preliminary)	101,054.7	24,164.1	37,671.0	1,521.0	23,833.1	5,067.9	6,579.0	1,430.8	474.4	313.5

<sup>1</sup> Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTES: Because of rounding, detail may not add to totals. Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

TABLE C-103. Federal obligations for research, by performer: FYs 1983-2004 (Dollars in millions)

Fiscal years	Total	Intra- mural <sup>1</sup>	Industry exclud- ing FFRDCs	FFRDCs admin by industry	Univer- sities and colleges excluding FFRDCs	Univer- sity FFRDCs	Nonprofit insti- tutions excluding FFRDCs	Nonprofit FFRDCs	State and local govts	Foreign
1983	14,253.5	4,710.3	2,114.2	522.6	4,467.9	1,250.1	836.9	85.2	136.7	129.6
1984	14,978.8	4,764.7	2,137.4	496.5	5,029.7	1,335.9	922.6	87.3	88.2	116.5
1985	16,133.4	5,056.1	2,074.4	485.9	5,726.3	1,421.3	1,045.1	97.0	89.5	137.9
1986	16,502.2	5,160.3	2,280.5	482.1	5,883.4	1,291.7	1,062.9	87.9	91.0	162.4
1987	17,940.5	5,437.7	2,448.6	433.5	6,640.2	1,471.0	1,207.5	89.8	90.2	121.9
1988	18,650.1	5,338.4	2,642.5	455.2	7,022.9	1,564.8	1,300.0	82.9	103.1	140.4
1989	20,765.5	5,897.0	2,875.0	604.3	7,793.1	1,703.4	1,519.8	109.5	121.2	142.1
1990	21,622.4	5,809.8	3,191.6	614.3	8,136.5	1,791.5	1,660.0	137.6	126.4	154.5
1991	23,968.4	6,454.4	3,406.5	709.6	8,867.5	2,160.9	1,925.9	170.9	129.3	143.4
1992	24,490.6	6,523.3	3,451.2	684.9	9,060.7	2,351.8	2,049.6	139.9	109.3	120.0
1993	26,890.5	7,451.8	3,923.8	799.3	9,892.3	2,299.4	2,041.3	173.4	211.8	97.4
1994	27,411.2	7,481.1	4,063.9	737.2	10,291.7	2,181.1	2,102.1	178.4	230.8	144.8
1995	28,434.4	7,684.5	4,698.7	811.6	10,353.8	2,233.6	2,078.7	207.2	221.4	144.8
1996	28,259.8	7,513.2	4,269.1	696.2	10,706.6	2,385.0	2,178.9	195.5	187.4	127.8
1997	29,365.3	7,666.9	4,392.1	759.6	11,173.2	2,598.9	2,294.9	217.5	144.0	118.2
1998	30,922.3	7,969.1	4,632.7	844.1	11,739.0	2,743.0	2,425.2	214.5	240.1	114.5
1999	33,527.5	8,685.8	4,579.8	879.3	13,203.8	2,554.1	2,806.7	469.5	232.4	116.1
2000	38,470.6	9,449.6	4,800.7	700.3	16,021.8	2,773.2	3,714.5	696.1	162.5	152.0
2001	44,713.7	11,130.9	5,262.3	822.3	18,657.1	3,096.3	4,577.9	739.4	308.7	118.9
2002	48,006.7	11,857.4	5,786.8	937.3	20,285.4	3,219.4	4,723.0	749.6	275.5	172.3
2003 (Preliminary)	52,568.5	12,618.0	6,549.4	1,052.5	22,379.8	3,409.2	5,230.7	780.1	340.6	208.1
2004 (Preliminary)	54,071.8	13,427.3	6,398.0	1,071.9	22,933.6	3,469.2	5,468.5	797.4	306.5	199.4

<sup>1</sup> Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

 $\label{eq:FRDCs} \textit{FFRDCs} = \textit{Federally funded research and development centers}. \\ \textit{R\&D} = \textit{Research and development}.$ 

NOTES: Because of rounding, detail may not add to totals. Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant. Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research.

TABLE C-104. Federal obligations for basic research, by performer: FYs 1983-2004 (Dollars in millions)

Fiscal years	Total	Intra- mural <sup>1</sup>	Industry exclud- ing FFRDCs	FFRDCs admin by industry	Univer- sities and colleges excluding FFRDCs	Univer- sity FFRDCs	Nonprofit insti- tutions excluding FFRDCs	Nonprofit FFRDCs	State and local govts	Foreign
1983	6,260.1	1,689.8	292.9	83.0	3,112.3	604.0	409.6	8.0	32.1	28.5
1984	7,067.4	1,861.1	377.9	91.1	3,530.8	668.9	473.6	8.2	28.1	27.7
1985	7,818.7	1,923.4	380.1	122.6	4,038.7	724.2	555.8	12.4	30.5	30.9
1986	8,153.1	2,018.9	511.6	117.6	4,132.1	724.1	572.1	13.0	30.9	32.7
1987	8,942.4	2,046.2	467.0	119.9	4,665.6	906.7	657.7	13.3	37.5	28.5
1988	9,473.6	2,050.3	596.9	133.0	4,868.3	989.8	728.6	17.7	42.7	46.3
1989	10,602.0	2,313.4	773.2	223.9	5,221.4	1,098.1	838.9	42.2	43.6	47.4
1990	11,285.6	2,294.6	887.5	246.8	5,548.2	1,227.3	924.1	59.2	50.4	47.6
1991	12,170.8	2,391.6	949.9	264.0	6,064.5	1,306.2	1,015.5	80.8	49.1	49.1
1992	12,489.9	2,337.6	920.3	247.2	6,331.8	1,394.1	1,097.2	65.5	42.4	53.8
1993	13,399.1	2,661.8	896.3	243.6	6,833.7	1,402.7	1,164.9	71.3	71.7	53.3
1994	13,523.5	2,497.8	1,109.6	237.6	6,992.3	1,336.0	1,132.9	74.4	75.2	67.6
1995	13,877.0	2,693.5	1,214.2	239.8	6,943.9	1,438.8	1,148.3	75.2	78.7	44.6
1996	14,464.0	2,676.7	1,108.8	272.8	7,443.5	1,521.0	1,234.6	76.1	80.2	50.5
1997	14,941.9	2,688.3	1,166.7	294.7	7,695.8	1,600.0	1,289.6	88.4	68.4	49.9
1998	15,613.0	2,918.5	1,119.4	326.4	7,951.7	1,642.3	1,397.6	121.8	84.9	50.4
1999	17,443.7	3,255.2	1,082.8	313.4	9,107.1	1,565.5	1,650.0	354.9	61.4	53.4
2000	19,569.8	3,621.8	1,356.5	171.3	10,056.7	1,674.0	1,985.3	521.6	75.7	106.9
2001	21,958.1	4,193.8	917.1	175.1	11,792.2	1,762.1	2,441.7	540.5	71.6	64.0
2002	23,668.3	4,460.0	1,231.9	239.6	12,668.2	1,805.2	2,531.7	563.4	71.5	96.8
2003 (Preliminary)	25,599.9	4,880.5	1,434.6	269.5	13,568.1	1,911.3	2,729.1	594.7	91.5	120.5
2004 (Preliminary)	26,643.1	5,354.9	1,648.0	278.2	13,723.5	1,989.0	2,852.7	594.1	93.0	109.9

<sup>1</sup> Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers.

NOTES: Because of rounding, detail may not add to totals. Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research.

TABLE C-105. Federal obligations for applied research, by performer: FYs 1983-2004 (Dollars in millions)

Fiscal years	Total	Intra- mural <sup>1</sup>	Industry exclud- ing FFRDCs	Industry FFRDCs	Univer- sities and colleges excluding FFRDCs	Univer- sity FFRDCs	Nonprofit insti- tutions excluding FFRDCs	Nonprofit FFRDCs	State and local govts	Foreign
1983	7,993.4	3,020.4	1,821.3	439.7	1,355.6	646.1	427.3	77.1	104.7	101.1
1984	7,911.4	2,903.6	1,759.5	405.4	1,498.9	667.0	449.0	79.1	60.0	88.8
1985	8,314.7	3,132.7	1,694.3	363.3	1,687.6	697.1	489.3	84.6	58.9	107.0
1986	8,349.1	3,141.5	1,768.8	364.5	1,751.4	567.6	490.8	74.9	60.0	129.7
1987	8,998.1	3,391.5	1,981.6	313.6	1,974.6	564.3	549.8	76.5	52.7	93.4
1988	9,176.5	3,288.1	2,045.6	322.2	2,154.6	575.0	571.3	65.2	60.4	94.1
1989	10,163.5	3,583.5	2,101.8	380.5	2,571.8	605.4	681.0	67.3	77.6	94.6
1990	10,336.8	3,515.2	2,304.2	367.5	2,588.4	564.3	735.9	78.4	76.1	106.9
1991	11,797.6	4,062.8	2,456.6	445.6	2,803.0	854.7	910.4	90.1	80.2	94.3
1992	12,000.7	4,185.7	2,530.9	437.6	2,728.9	957.6	952.5	74.5	66.9	66.2
1993	13,491.4	4,790.0	3,027.5	555.6	3,058.6	896.8	876.4	102.2	140.1	44.1
1994	13,887.7	4,983.3	2,954.4	499.6	3,299.4	845.1	969.2	104.0	155.5	77.2
1995	14,557.4	4,991.0	3,484.5	571.8	3,409.9	794.8	930.4	132.0	142.7	100.3
1996	13,795.7	4,836.5	3,160.3	423.4	3,263.1	864.0	944.3	119.4	107.3	77.4
1997	14,423.4	4,978.6	3,225.5	464.9	3,477.4	998.8	1,005.3	129.2	75.5	68.2
1998	15,309.3	5,050.6	3,513.3	517.7	3,787.3	1,100.7	1,027.7	92.6	155.2	64.1
1999	16,083.9	5,430.6	3,497.0	565.8	4,096.7	988.6	1,156.7	114.6	171.0	62.8
2000	18,900.8	5,827.8	3,444.2	528.9	5,965.1	1,099.2	1,729.2	174.5	86.9	45.1
2001	22,755.6	6,937.2	4,345.2	647.2	6,864.9	1,334.2	2,136.2	198.9	237.1	54.9
2002	24,338.4	7,397.4	4,554.9	697.7	7,617.2	1,414.1	2,191.3	186.2	204.0	75.6
2003 (Preliminary)	26,968.6	7,737.4	5,114.8	783.0	8,811.6	1,497.9	2,501.6	185.5	249.1	87.6
2004 (Preliminary)	27,428.7	8,072.4	4,750.0	793.7	9,210.2	1,480.2	2,615.8	203.3	213.5	89.6

<sup>1</sup> Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTES: Because of rounding, detail may not add to totals. Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant. Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research.

TABLE C-106. Federal obligations for development, by performer: FYs 1983-2004 (Dollars in millions)

Fiscal years	Total	Intra- mural <sup>1</sup>	Industry excluding FFRDCs	Industry FFRDCs	Univer- sities and colleges excluding FFRDCs	University FFRDCs	Nonprofit insti- tutions excluding FFRDCs	Nonprofit FFRDCs	State and local govts	Foreign
1983	24,458.0	5,871.7	14,905.5	978.5	498.5	1,143.8	404.7	496.1	49.3	109.9
1984	27,246.1	6,807.6	16,472.9	1,112.0	517.2	1,149.9	574.6	509.8	42.8	59.2
1985	32,226.1	7,889.3	19,630.5	1,304.9	613.5	1,395.1	654.1	592.2	39.9	106.7
1986	34,910.2	8,374.6	21,920.7	1,215.0	675.4	1,476.0	614.1	463.3	37.4	133.9
1987	37,313.2	7,975.3	24,319.6	1,426.4	697.0	1,738.6	503.9	420.8	58.0	173.4
1988	38,119.3	8,776.2	24,076.7	1,456.1	804.8	1,909.1	383.2	422.7	39.0	251.4
1989	40,641.0	9,127.6	25,672.9	1,452.0	878.8	1,793.6	480.0	412.4	46.3	777.3
1990	41,937.1	10,039.1	26,178.4	1,712.5	1,001.0	1,658.3	588.2	484.0	87.5	188.1
1991	37,326.8	8,683.8	23,014.1	1,458.7	1,301.0	1,442.9	711.5	508.5	85.8	120.5
1992	41,102.0	9,059.6	26,293.6	1,432.2	1,210.6	1,503.7	753.9	605.7	74.8	167.9
1993	40,423.5	9,211.6	26,295.2	652.1	1,316.1	1,314.8	770.6	580.0	108.5	174.8
1994	39,824.2	8,650.9	26,390.9	556.3	1,505.2	1,111.8	834.8	557.6	94.7	122.0
1995	39,752.4	9,340.2	25,537.4	390.2	1,573.7	1,328.0	755.4	617.9	95.1	114.4
1996	39,393.3	9,027.2	26,104.7	440.7	1,271.2	1,062.1	707.9	559.7	59.3	160.5
1997	40,461.5	9,051.3	27,027.2	368.6	1,385.7	1,102.1	666.7	603.4	117.1	139.3
1998	41,178.5	9,152.4	27,365.9	344.7	1,641.7	1,147.2	746.0	388.5	207.4	184.6
1999	41,813.1	9,398.9	27,321.8	448.8	1,755.3	1,342.3	802.0	443.7	125.1	175.2
2000	34,392.7	7,700.2	22,934.4	400.6	799.3	1,279.9	496.8	535.4	61.5	184.7
2001	35,219.5	9,088.9	21,744.0	364.3	930.8	1,521.4	560.8	529.7	142.0	337.6
2002	37,846.3	9,187.4	23,751.4	413.7	1,004.7	1,421.8	1,016.1	655.2	176.7	219.2
2003 (Preliminary)	43,187.3	10,625.9	27,502.7	530.5	1,091.4	1,443.1	1,036.2	626.3	188.0	143.3
2004 (Preliminary)	46,982.9	10,736.8	31,273.0	449.1	899.4	1,598.7	1,110.5	633.4	168.0	114.1

<sup>&</sup>lt;sup>1</sup> Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers. R&D = Research and developmnet.

NOTES: Because of rounding, detail may not add to totals. Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant. Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research.

TABLE C-107. Federal obligations for R&D plant, by performer: FYs 1983-2004 (Dollars in millions)

Fiscal year	Total	Intra - mural <sup>1</sup>	Industry excluding FFRDCs	Industry FFRDCs	University and colleges excluding FFRDCs	Univer- sity FFRDCs	Nonprofit insti- tutions exclud- ing FFRDCs	Nonprofit FFRDCs	State and local govts	Foreign
1983 1984 1985 1986 1987	1,297.5 1,787.3 1,820.8 1,538.8 1,846.0	393.9 632.8 625.3 317.1 301.6	259.3 451.5 298.3 409.2 668.1	166.4 196.6 187.8 215.9 212.9	33.6 78.5 140.8 133.2 231.1	353.0 363.2 454.2 420.9 400.5	82.1 55.6 69.9 11.8 20.6	7.9 4.2 9.1 9.6 5.4	0 0 .1 0	1.2 4.9 35.5 21.0 5.8
1988 1989 1990 1991 1992	2,057.1 2,165.1 2,271.7 2,852.8 2,984.6	319.6 329.5 359.0 518.8 506.2	719.5 900.4 882.9 1,003.1 1,014.4	204.3 212.3 231.0 278.7 202.2	245.8 204.9 157.3 253.3 241.5	535.3 489.9 495.8 624.2 579.5	23.7 14.2 113.0 145.4 393.9	6.2 8.4 31.4 19.7 46.3	.3 1.4 .5 .6	2.4 4.2 .9 9.2 0
1993 1994 1995 1996 1997	3,100.7 2,215.4 2,256.1 1,746.1 1,926.7	432.0 392.6 479.8 405.1 608.3	1,048.2 746.8 695.3 465.4 389.8	124.4 119.4 95.1 43.9 60.5	361.4 253.2 327.3 243.1 238.6	619.5 608.8 543.8 497.8 560.7	415.6 20.9 25.6 23.4 16.7	65.5 72.9 62.6 66.1 52.0	.5 .8 .5 1.0	33.5 .2 26.1 .5
1998 1999 2000 2001 2002	1,813.3 2,045.7 4,492.8 4,069.8 4,304.7	448.4 483.3 573.3 520.4 414.8	487.7 544.7 2,814.6 2,179.8 2,524.9	45.6 172.8 27.6 41.8 109.1	139.5 141.2 213.5 284.7 241.1	663.6 615.5 613.8 615.9 583.3	10.9 12.2 55.5 27.9 29.1	12.1 70.7 193.5 357.5 388.8	5.5 5.3 .9 1.4 2.0	0 - .1 40.4 11.7
2003 (preliminary) 2004 (preliminary)	5,252.3 4,165.5	971.6 406.6	2,381.5 2,431.0	144.6 168.3	703.1 265.7	573.9 614.0	139.6 26.8	326.3 241.4	0	11.7 11.7

<sup>1</sup> Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

FFRDCs = Federally funded research and development centers. R&D = Research and development.

NOTES: Because of rounding, detail may not add to totals. Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

TABLE C-108. Federal obligations for research, by detailed field of science and engineering: FYs 1983-93 (Dollars in millions)

Field of science and engineering	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All fields	14,253.5	14,978.8	16,133.4	16,502.2	17,940.5	18,650.1	20,765.5	21,622.4	23,968.4	24,490.6	26,890.5
Life sciences	5,177.9	5,635.9	6,362.5	6,464.3	7,341.4	7,724.5	8,495.1	8,829.8	9,622.0	9,910.5	10,772.1
Biological and agricultural Agricultural	3,064.4 565.2	3,325.0 512.0	3,755.3 609.3	3,861.3 603.8	4,358.5 566.9	4,573.4 590.7	5,020.0 669.0	5,178.4 691.4	5,597.9 680.3	5,633.6 687.5	6,059.3 712.9
Biological (excluding	2 205 5	2 5/2 1	2.005.7	2.002.4	2 502 0	2 / 01 7	2 002 2	41447	4 457 0	4 425 1	4 700 0
environmental) Environmental biology	2,305.5 193.6	2,563.1 250.0	2,885.7 260.3	2,993.4 264.1	3,502.0 289.6	3,681.7 301.0	3,983.2 367.8	4,144.6 342.3	4,457.8 459.7	4,435.1 511.0	4,789.9 556.5
Medical sciences Life sciences, nec	1,927.5 186.1	2,112.8 198.1	2,368.5 238.7	2,360.4 242.6	2,664.8 318.2	2,941.0 210.1	3,222.5 252.6	3,382.4 269.1	3,460.3 563.8	3,909.9 367.0	4,404.4 308.3
Life Sciences, fiec	100.1	170.1	230.7	242.0	310.2	210.1	232.0	207.1	303.0	307.0	
Psychology	240.9	266.7	327.1	334.0	369.5	389.8	421.7	448.6	482.4	298.1	550.7
Biological aspects Social aspects	63.2 104.7	80.8 107.8	91.2 142.9	90.1 143.5	98.3 154.5	105.3 149.4	121.8 149.9	130.6 177.5	140.2 197.5	34.6 100.9	37.2 134.7
Psychological sciences, nec	73.0	78.1	93.1	100.4	116.7	135.2	149.9	140.5	144.8	162.6	378.7
Physical sciences	2,891.4	2,969.0	3,046.0	3,069.1	3,252.6	3,317.3	3,705.2	3,808.7	4,235.3	4,439.2	4,427.0
Astronomy	357.4	382.3	414.7	468.2	522.2	470.8	541.9	597.2 761.7	631.7	739.1	686.3
Chemistry Physics	520.3 1,854.6	606.4 1,836.4	650.4 1.816.0	662.4 1,805.9	680.3 1.853.6	703.1 1,975.3	782.6 2.190.8	2.254.9	828.4 2.460.9	896.2 2,578.2	843.2 2.638.4
Physical sciences, nec	159.2	143.9	164.8	132.6	196.6	168.1	189.9	195.0	314.3	225.7	259.2
Environmental sciences	1,251.2	1,275.9	1,403.7	1,481.7	1,511.6	1,607.0	1,773.2	2,174.1	2,149.8	2,207.6	2,608.5
Atmospheric sciences	460.7	434.1	486.0	521.3	552.9	587.8	588.0	773.4	802.7	767.3	984.1
Geological sciences	333.5	359.0	429.0 398.5	443.9 429.7	441.7	441.6	542.8	661.1	728.7	735.7	797.9 467.4
Oceanography Environmental sciences, nec	343.5 113.5	363.5 119.3	90.2	86.8	427.4 89.5	460.4 117.1	491.9 150.5	520.1 219.5	398.6 219.8	458.9 245.8	359.2
Mathematics and computer											
sciences	419.4	440.3	574.9	615.4	640.6	642.9	735.4	840.7	903.7	1,160.3	1,225.4
Computer sciences Mathematics	214.6 133.5	214.5 151.0	280.3 183.6	302.4 184.5	297.8 204.5	292.7 217.9	364.6 236.1	562.1 241.3	584.9 227.6	771.8 318.7	826.1 290.8
Mathematics and computer	133.3	131.0	103.0	104.3	204.3	217.9	230.1	241.3	221.0	310.7	290.0
sciences, nec	71.4	74.8	111.0	128.5	138.3	132.3	134.8	37.3	91.1	69.9	108.5
Engineering	3,517.0	3,624.1	3,617.6	3,738.9	3,906.3	3,956.4	4,442.2	4,226.6	4,944.5	4,977.0	5,499.4
Aeronautical	820.6	860.4	738.0	775.6	810.4	801.8	986.8	927.1	1,016.2	874.6	1,193.0
Astronautical Chemical	321.5 145.0	396.8 144.5	424.7 254.3	526.9 245.8	624.6 215.8	575.4 258.1	677.4 142.2	580.8 241.9	653.1 304.3	630.4 297.5	494.0 245.5
Civil	188.5	202.8	216.6	202.9	204.4	214.9	229.8	317.7	305.0	330.2	252.0
Electrical	614.9	630.0	626.8	674.4	786.3	731.1	843.1	640.0	729.9	759.0	881.5
Mechanical	266.4	190.5	267.0	236.5	233.5	240.8	257.4	268.3	335.5	337.2	466.9
Metallurgy and materials Engineering, nec	332.5 827.6	341.1 858.0	439.2 651.0	445.0 631.7	362.0 669.3	456.7 677.8	521.0 784.5	554.5 696.3	710.7 889.8	727.2 1,020.8	695.7 1,270.9
Social sciences	435.3	436.3	460.0	415.5	480.0	485.8	551.0	630.0	727.3	689.7	674.9
Anthropology	12.8	18.6	18.0	13.6	15.2	14.3	13.9	14.4	16.0	14.1	13.7
Economics	165.6	147.3	159.7	131.3	148.5	159.5	166.8	197.2	187.4	211.6	204.7
Political science Sociology	11.1 67.8	10.8 70.2	14.6 66.5	11.6 67.0	11.3 74.0	12.2 81.8	13.5 94.1	13.1 116.2	17.0 184.0	22.6 80.7	29.2 76.7
Social sciences, nec	178.0	189.5	201.3	192.0	231.0	218.0	262.8	289.1	322.9	360.8	350.5
Other sciences, nec	320.4	330.5	341.6	383.3	438.3	526.5	641.6	663.7	903.4	808.3	1,132.5

nec = Not elsewhere classified.

NOTES: Because of rounding, detail may not add to totals. Due to reorganization within the Department of Health and Human Services, the Alcohol, Drug Abuse, and Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with National Institutes of Health data beginning with FY 1992. However, research support for some fields (such as psychology) in FY 1992 seems to be underreported.

TABLE C-108a. Federal obligations for research, by detailed field of science and engineering: FYs 1994-2004 (Dollars in millions)

Field of science and engineering	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
										2003	2004
All fields	27,411.2	28,434.4	28,259.8	29,365.3	30,922.3	33,527.5	38,470.6	44,713.7	48,006.7	52,568.5	54,071.8
Life sciences Biological and agricultural Agricultural Biological (excluding	11,284.3 6,103.0 727.2	11,811.0 6,402.5 670.3	12,064.3 6,629.9 616.0	12,661.3 6,544.0 641.3	13,557.6 7,073.8 762.8	15,422.5 8,047.7 849.4	17,964.7 12,375.0 895.0	23,057.3 14,116.4 1,007.7	25,476.8 16,325.1 1,047.6	28,441.9 NA NA	29,340.5 NA NA
environmental) Environmental biology	4,745.8	4,925.4	5,309.9	5,320.2	5,706.6	6,477.6	10,740.0	12,380.0	14,498.5	NA	NA
	629.9	806.9	704.0	582.5	604.5	720.6	740.0	728.8	778.9	NA	NA
Medical sciences	4,862.1	4,972.2	4,973.4	5,532.7	5,996.3	6,801.2	4,463.8	6,585.2	6,427.4	NA	NA
Life sciences, nec	319.3	436.3	461.1	584.6	487.4	573.6	1,125.9	2,355.7	2,724.4	NA	NA
Psychology	548.4	622.6	525.0	545.4	591.0	632.6	1,626.7	741.9	905.9	1,009.4	1,050.4
Biological aspects	48.1	58.8	62.8	57.8	41.6	18.0	8.2	13.6	10.6	NA	NA
Social aspects	116.8	156.3	83.4	96.7	97.5	66.6	56.0	59.8	52.5	NA	NA
Psychological sciences, nec	383.4	407.5	378.8	390.9	451.9	547.9	1,562.5	668.5	842.8	NA	NA
Physical sciences	4,253.5	4,278.3	3,923.0	4,149.2	4,209.7	4,066.2	4,788.0	4,600.8	4,983.2	5,105.3	5,417.0
Astronomy	747.6	764.5	729.0	774.7	732.2	757.9	880.3	759.2	751.5	NA	NA
Chemistry	874.4	863.5	881.1	845.8	819.0	814.9	1,225.6	1,024.9	1,181.7	NA	NA
Physics	2,443.1	2,451.2	1,991.3	2,067.6	2,131.8	2,221.9	2,405.4	2,461.7	2,621.4	NA	NA
Physical sciences, nec	188.3	199.2	321.6	461.0	526.7	271.4	276.7	354.9	428.6	NA	NA
Environmental sciences	2,838.2	2,854.4	3,019.7	3,045.7	3,062.0	3,095.3	3,328.8	3,251.7	3,418.3	3,689.8	3,761.6
Atmospheric sciences	1,095.0	1,135.6	1,085.7	1,164.3	1,174.4	1,176.5	1,104.3	1,113.6	1,163.5	NA	NA
Geological sciences	838.0	848.3	784.3	691.8	603.3	660.2	639.2	673.8	674.9	NA	NA
Oceanography	496.8	407.3	574.3	597.7	559.8	656.6	673.0	681.1	784.6	NA	NA
Environmental sciences, nec	408.5	463.3	575.4	591.8	724.4	602.0	912.2	783.3	795.2	NA	NA
Mathematics and computer sciences Computer sciences Mathematics Mathematics and computer	1,301.6 830.2 342.3	1,579.1 1,013.9 258.6 306.6	1,571.6 1,119.8 254.5	1,671.8 1,264.7 301.6	1,836.8 1,398.7 334.1 104.0	1,980.6 1,516.1 345.3	2,205.6 1,659.6 432.9	2,610.6 2,022.8 396.4 191.4	2,630.7 2,043.2 402.0 185.5	2,738.2 NA NA NA	2,828.8 NA NA NA
sciences, nec Engineering Aeronautical Astronautical Chemical Civil	5,479.4	5,708.4	5,680.9	5,690.3	5,895.4	6,263.4	6,346.4	8,197.0	8,274.9	9,074.0	9,127.1
	1,222.7	1,248.3	1,249.4	1,352.7	1,596.4	1,609.7	1,463.9	2,430.1	2,157.1	NA	NA
	499.1	546.5	526.6	596.3	631.1	620.6	515.0	752.7	760.8	NA	NA
	238.2	246.1	215.1	235.0	190.1	203.2	196.5	199.0	201.6	NA	NA
	277.9	339.4	300.2	275.6	244.1	328.5	239.2	288.4	302.7	NA	NA
Electrical Mechanical Metallurgy and materials Engineering, nec	741.8 378.1 851.4 1,270.2	756.3 412.5 815.3 1,344.0	669.7 294.0 989.0 1,437.0	622.2 254.6 860.7 1,493.2	639.3 249.6 789.1 1,555.6	698.7 240.4 788.0 1,774.3	744.8 289.3 918.1 1,979.6	889.7 319.2 1,080.8 2,237.0	808.7 265.9 1,000.5 2,777.6	NA NA NA	NA NA NA
Social sciences Anthropology Economics Political science Sociology Social sciences, nec	647.4	678.7	654.6	696.3	806.1	854.9	1,050.4	1,008.6	1,038.5	1,176.3	1,202.9
	16.2	21.7	18.3	21.0	18.2	18.3	15.9	15.6	16.4	NA	NA
	193.3	206.5	194.2	205.2	230.5	216.6	249.5	234.1	227.3	NA	NA
	25.4	22.3	16.7	14.1	20.2	20.2	22.6	19.5	18.4	NA	NA
	68.1	47.8	41.2	25.9	100.8	83.8	90.6	95.5	96.1	NA	NA
	344.4	380.3	384.2	430.2	436.4	516.0	671.8	644.0	680.2	NA	NA
Other sciences, nec	1,058.4	901.8	820.7	905.3	963.7	1,212.1	1,160.2	1,245.8	1,278.4	1,333.6	1,343.6

NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year). nec = Not elsewhere classified.

NOTES: Because of rounding, detail may not add to totals. The National Science Foundation has made changes to its field of science and engineering coding system, producing changes to some of the FY 1996 field of science data (such as mechanical engineering).

TABLE C-109. Federal obligations for basic research, by detailed field of science and engineering: FYs 1983-93 (Dollars in millions)

Field of science and engineering	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All fields	6,260.1	7,067.4	7,818.7	8,153.1	8,942.4	9,473.6	10,602.0	11,285.6	12,170.8	12,489.9	13,399.1
Life sciences	2,891.3	3,287.6	3,786.6	3,858.8	4,361.9	4,501.8	4,915.7	5,177.5	5,433.6	5,841.7	6,288.8
Biological and agricultural Agricultural Biological (excluding	1,928.8 214.2	2,174.7 218.1	2,515.5 283.5	2,543.0 265.7	2,870.4 267.9	2,855.3 293.7	3,102.9 298.4	3,219.0 308.5	3,374.9 319.4	3,517.6 334.2	3,787.8 342.2
environmental) Environmental biology	1,621.9 92.7	1,835.8 120.8	2,106.3 125.7	2,151.5 125.7	2,461.5 141.0	2,414.9 146.8	2,647.2 157.3	2,742.2 168.3	2,868.5 186.9	2,981.8 201.6	3,222.5 223.2
Medical sciences Life sciences, nec	878.9 83.6	1,015.3 97.7	1,145.4 125.7	1,196.6 119.2	1,341.0 150.6	1,573.2 73.2	1,708.4 104.4	1,849.6 108.9	1,857.7 201.0	2,131.0 193.1	2,380.9 120.1
Psychology Biological aspects Social aspects Psychological sciences, nec	92.9 31.4 32.8 28.7	107.9 43.7 33.4 30.8	132.8 48.0 46.9 38.0	133.0 47.0 45.3 40.7	147.1 49.3 45.5 52.3	177.8 52.4 40.9 84.5	187.1 61.0 38.1 88.0	215.1 65.3 60.9 88.8	225.5 68.2 69.2 88.1	122.6 14.3 16.9 91.4	246.8 18.1 16.0 212.7
Physical sciences Astronomy Chemistry Physics	1,587.2 354.5 362.2 855.1	1,728.0 379.6 403.4 921.4	1,815.2 400.7 425.0 959.9	1,914.4 453.1 433.4 1,003.4	2,096.0 504.5 445.1 1,072.3	2,199.6 458.5 470.8 1,205.5	2,506.5 524.6 504.6 1,395.3	2,661.5 579.9 502.1 1,474.3	2,881.5 612.3 538.7 1,644.9	2,951.4 729.7 556.6 1,607.5	2,907.1 663.4 543.7 1.600.6
Physical sciences, nec	15.4	23.6	29.7	24.7	74.2	64.8	81.9	105.1	85.5	57.6	99.4
Environmental sciences Atmospheric sciences Geological sciences	580.1 172.6 178.3	656.7 192.2 198.0	699.7 209.2 250.0	749.1 240.4 265.5	781.0 243.8 266.2	872.7 280.7 267.3	1,016.9 316.4 334.9	1,274.8 443.7 439.7	1,263.5 449.0 499.0	1,303.6 435.2 526.5	1,533.5 635.1 555.3
Oceanography Environmental sciences, nec	195.6 33.5	220.1 46.4	219.3 21.2	224.3 18.9	249.8 21.2	269.4 55.2	293.5 72.1	299.7 91.6	197.5 118.0	210.0 131.9	207.2 135.9
Mathematics and computer											
sciences Computer sciences Mathematics	208.1 90.4 100.9	240.8 104.8 113.9	260.0 116.1 130.3	293.4 131.4 142.4	306.4 128.5 158.4	313.2 125.5 165.4	345.8 159.5 167.8	406.9 225.2 176.3	426.1 223.5 164.4	481.4 247.7 228.2	511.3 284.3 221.8
Mathematics and computer sciences, nec	16.8	22.2	13.6	19.6	19.5	22.4	18.4	5.3	38.2	5.5	5.1
Engineering	689.5 140.7	845.0 225.5	884.2 191.5	968.5	989.5 237.4	1,006.2	1,183.7 327.9	1,101.5	1,233.7	1,249.8	1,207.4
Aeronautical Astronautical	50.4	52.4	41.6	226.3 52.5	48.8	231.0 48.4	58.9	269.6 62.3	256.2 69.7	245.1 94.4	246.2 53.6
Chemical Civil	50.4 32.4	55.5 41.9	74.4 43.6	73.0 45.2	77.5 45.7	88.6 46.1	50.1 51.7	75.8 47.3	101.7 59.3	105.0 53.4	72.8 38.7
Electrical	95.8	130.4	144.9	156.3	175.4	154.0	173.8	146.9	142.5	165.4	203.1
Mechanical Metallurgy and materials	60.7 182.9	64.1 187.3	88.2 211.9	83.6 228.5	87.2 209.8	83.5 230.1	100.8 254.8	91.4 260.2	115.6 294.6	113.9 273.6	142.6 241.3
Engineering, nec	76.2	87.9	88.2	103.2	107.8	124.4	165.7	147.9	194.3	199.2	209.1
Social sciences	137.7	132.6	140.7	113.5	129.5	146.8	154.6	146.0	161.3	139.9	194.1
Anthropology	11.2	16.8	15.8	11.2	12.3	12.1	12.1	12.5	12.7	11.0	10.0
Economics Political science	41.0 4.6	29.7 4.1	34.3 5.8	26.3 4.1	29.0 5.5	34.7 5.1	37.7 5.4	37.1 6.4	37.3 7.1	39.3 6.4	46.0 6.4
Political science Sociology	4.6 32.8	33.9	32.4	30.0	34.3	36.8	38.2	24.2	28.2	10.2	0.4 11.1
Social sciences, nec	48.2	48.1	52.4	41.9	48.4	58.1	61.2	65.8	75.9	72.9	120.6
Other sciences, nec	73.3	68.8	99.4	122.5	130.9	255.5	291.7	302.3	545.6	399.4	510.1

nec = Not elsewhere classified.

NOTES: Because of rounding, detail may not add to totals. Due to reorganization within the Department of Health and Human Services, the Alcohol, Drug Abuse, and Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with National Institutes of Health data beginning with FY 1992. However, research support for some fields (such as psychology) in FY 1992 seems to be underreported.

TABLE C-109a. Federal obligations for basic research, by detailed field of science and engineering: FYs 1994-2004 (Dollars in millions)

Field of science and engineering	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
										2003	2004
All fields	13,523.5	13,877.0	14,464.0	14,941.9	15,613.0	17,443.7	19,569.8	21,958.1	23,668.3	25,599.9	26,643.1
Life sciences Biological and agricultural Agricultural	6,472.1 3,751.9 370.6	6,601.3 3,836.5 367.5	6,879.0 3,922.4 329.5	7,203.8 3,945.1 348.1	7,853.4 4,222.3 372.5	9,197.1 4,941.6 424.5	10,049.0 7,610.4 445.7	12,835.5 8,773.8 511.7	14,024.1 9,244.8 530.6	15,190.1 NA NA	15,428.4 NA NA
Biological (excluding environmental) Environmental biology	3,139.2 242.1	3,248.3 220.6	3,387.2 205.7	3,391.0 206.1	3,653.0 196.8	4,236.9 280.2	6,851.1 313.6	7,952.3 309.8	8,379.7 334.5	NA NA	NA NA
Medical sciences Life sciences, nec	2,610.3 109.9	2,615.9 148.9	2,740.8 215.9	3,035.2 223.4	3,392.4 238.6	3,956.5 299.1	1,923.8 514.7	2,808.6 1,253.1	3,361.0 1,418.3	NA NA	NA NA
Psychology Biological aspects Social aspects Psychological sciences, nec	246.1 24.8 16.3 205.0	278.0 31.4 22.2 224.4	291.5 33.5 10.1 248.0	293.9 30.2 13.0 250.7	312.0 27.3 12.9 271.8	347.3 12.2 9.9 325.1	817.8 5.7 14.3 797.8	292.9 10.4 5.5 277.0	464.6 7.8 4.8 452.0	511.3 NA NA NA	526.3 NA NA NA
Physical sciences Astronomy Chemistry Physics Physical sciences, nec	2,826.9 724.8 540.3 1,502.3 59.6	2,864.8 731.6 559.4 1,507.4 66.4	2,862.6 708.8 550.7 1,545.6 57.4	2,976.4 754.2 517.8 1,561.7 142.6	2,941.4 706.9 517.5 1,579.8 137.1	3,089.8 718.4 554.6 1,693.8 122.9	3,470.6 794.0 765.8 1,764.4 146.4	3,327.1 650.2 736.8 1,762.3 177.9	3,405.9 603.3 748.8 1,861.7 192.0	3,661.8 NA NA NA NA	3,937.1 NA NA NA NA
Environmental sciences Atmospheric sciences Geological sciences Oceanography Environmental sciences, nec	1,516.5 698.3 487.8 190.2 140.2	1,467.5 688.2 451.7 188.2 139.3	1,554.0 671.2 390.0 309.1 183.8	1,543.5 679.5 388.3 303.5 172.1	1,528.7 655.2 391.2 286.0 196.4	1,615.7 671.0 412.1 383.9 148.7	1,838.4 717.0 429.6 364.9 326.9	1,663.0 597.2 400.6 402.4 262.9	1,833.3 684.1 426.0 427.0 296.1	1,964.5 NA NA NA NA	2,093.1 NA NA NA NA
Mathematics and computer sciences Computer sciences Mathematics Mathematics and computer	521.7 262.3 247.7	603.0 317.1 164.0	639.6 376.8 162.6	661.4 389.5 238.2	705.5 419.1 250.7	734.9 438.3 254.0	798.3 463.0 308.6	957.8 585.6 288.4	998.7 636.9 325.6	1,065.7 NA NA	1,123.6 NA NA
sciences, nec Engineering Aeronautical Astronautical Chemical Civil	11.8 1,290.4 275.9 59.8 70.9 38.1	121.9 1,448.9 271.0 66.3 66.7 70.1	1,612.1 261.7 71.8 59.8 52.9	33.6 1,583.0 269.1 69.8 68.1 45.4	35.6 1,594.4 285.2 68.0 52.3 35.9	42.6 1,639.7 331.7 66.2 55.2 68.8	26.6 1,764.2 322.8 88.7 52.6 59.7	83.9 1,911.5 369.7 33.9 60.2 47.9	36.2 1,864.9 330.1 68.1 62.3 46.5	NA 2,053.0 NA NA NA NA	NA 2,334.1 NA NA NA NA
Electrical Mechanical Metallurgy and materials Engineering, nec	205.7 141.6 330.2 168.3	204.6 164.7 368.5 236.9	201.5 113.2 501.8 349.4	172.9 104.9 462.6 390.4	213.9 106.7 478.2 354.3	185.6 99.6 481.2 351.4	177.0 93.4 517.8 452.2	246.9 128.8 591.1 433.1	213.0 89.2 507.8 547.8	NA NA NA	NA NA NA
Social sciences Anthropology Economics Political science Sociology Social sciences, nec	184.0 9.7 38.4 4.8 13.1 118.1	206.7 15.1 44.7 7.1 14.3 125.5	212.5 12.7 39.4 5.7 13.3 141.3	221.0 14.8 46.1 4.9 8.2 147.0	224.8 13.5 41.5 4.6 23.5 141.7	246.5 13.4 45.3 4.8 9.2 173.9	308.0 14.0 51.8 5.1 11.8 225.4	278.4 14.1 42.5 5.9 17.9 198.0	361.7 15.2 45.3 5.7 19.5 276.0	402.2 NA NA NA NA NA	399.3 NA NA NA NA
Other sciences, nec	465.6	406.9	412.8	459.0	452.7	572.5	523.6	691.7	715.2	751.3	801.2

NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year). nec = Not elsewhere classified.

NOTES: Because of rounding, detail may not add to totals. Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research. The National Science Foundation has made changes to its field of science and engineering coding system, producing changes to some of the FY 1996 field of science data (such as mechanical engineering).

TABLE C-110. Federal obligations for applied research, by detailed field of science and engineering: FYs 1983-93 (Dollars in millions)

Field of science and engineering	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
All fields	7,993.4	7,911.4	8,314.7	8,349.1	8,998.1	9,176.5	10,163.5	10,336.8	11,797.6	12,000.7	13,491.4
Life sciences	2,286.6	2,348.3	2,575.9	2,605.5	2,979.5	3,222.7	3,579.4	3,652.3	4,188.4	4,068.8	4,483.3
Biological and agricultural	1,135.6	1,150.3	1,239.8	1,318.4	1,488.1	1,718.0	1,917.2	1,959.4	2,223.0	2,116.0	2,271.5
Agricultural Biological (excluding	351.0	293.8	325.8	338.1	299.1	297.0	370.7	382.9	360.9	353.4	370.8
environmental)	683.7	727.3	779.3	841.9	1,040.5	1,266.8	1,336.0	1,402.5	1,589.3	1,453.2	1,567.4
Environmental biology	101.0	129.2	134.6	138.3	148.6	154.2	210.5	174.0	272.8	309.4	333.3
Medical sciences	1,048.5	1,097.5	1,223.1	1,163.8	1,323.8	1,367.8	1,514.1	1,532.7	1,602.6	1,778.9	2,023.5
Life sciences, nec	102.4	100.4	113.0	123.3	167.6	136.9	148.1	160.2	362.9	173.9	188.2
Psychology	147.9	158.8	194.3	201.0	222.4	212.0	234.5	233.5	256.9	175.6	303.9
Biological aspects	31.8	37.1	43.2	43.1	49.1	52.9	60.8	65.3	72.0	20.3	19.1
Social aspects	71.8	74.3	96.0	98.3	108.9	108.4	111.8	116.5	128.2	84.1	118.7
Psychological sciences, nec	44.3	47.4	55.1	59.7	64.4	50.7	61.9	51.7	56.7	71.2	166.1
Physical sciences	1,304.3	1,241.0	1,230.8	1,154.6	1,156.6	1,117.7	1,198.8	1,147.2	1,353.9	1,487.7	1,519.8
Astronomy	3.0	2.7	14.1	15.1	17.7	12.3	17.3	17.2	19.3	9.4	22.8 299.5
Chemistry Physics	158.1 999.5	203.0 915.0	225.4 856.1	229.0 802.6	235.2 781.4	232.3 769.8	278.0 795.5	259.6 780.6	289.7 816.0	339.6 970.7	299.5 1.037.7
Physical sciences, nec	143.7	120.3	135.2	107.9	122.4	103.3	108.0	89.8	228.9	168.1	159.8
Environmental sciences	671.2	619.2	704.0	732.6	730.6	734.3	756.3	899.3	886.3	904.0	1.075.0
Atmospheric sciences	288.1	242.0	276.8	280.9	309.1	307.1	271.6	329.7	353.7	332.0	349.0
Geological sciences	155.2	161.0	179.0	178.4	175.6	174.3	207.8	221.4	229.7	209.2	242.6
Oceanography	147.9	143.4	179.3	205.4	177.6	190.9	198.4	220.4	201.0	248.9	260.2
Environmental sciences, nec	80.0	72.9	69.0	67.9	68.3	61.9	78.5	127.8	101.7	113.8	223.3
Mathematics and computer											
sciences	211.3	199.5	314.9	322.0	334.3	329.6	389.7	433.9	477.6	678.9	714.1
Computer sciences	124.1 32.6	109.7 37.1	164.2 53.4	171.0 42.1	169.3 46.1	167.2 52.5	205.1 68.3	336.9 65.0	361.4 63.2	524.0 90.5	541.8 68.9
Mathematics Mathematics and computer	32.0	37.1	55.4	42.1	40.1	52.5	08.3	05.0	03.2	90.5	08.9
sciences, nec	54.6	52.7	97.3	108.9	118.9	109.9	116.3	31.9	52.9	64.3	103.4
Engineering	2,827.5	2,779.1	2.733.4	2.770.4	2,916.8	2,950.2	3,258.4	3,125.1	3.710.8	3,727.1	4,292.0
Aeronautical	679.9	634.9	546.5	549.3	573.0	570.8	658.9	657.5	760.0	629.5	946.8
Astronautical	271.1	344.4	383.2	474.4	575.9	526.9	618.5	518.5	583.4	536.0	440.4
Chemical	94.6	88.9	179.9	172.8	138.3	169.5	92.2	166.0	202.6	192.5	172.7
Civil	156.0	161.0	173.0	157.8	158.7	168.7	178.1	270.4	245.7	276.9	213.3
Electrical	519.1	499.7	481.9	518.1	610.9	577.1	669.3	493.1	587.4	593.6	678.4
Mechanical	205.7	126.3	178.8	153.0	146.2	157.2	156.5	176.9	220.0	223.4	324.3
Metallurgy and materials	149.6 751.4	153.7 770.1	227.4 562.8	216.6 528.5	152.2 561.6	226.6 553.3	266.2 618.8	294.3 548.4	416.1 695.4	453.6 821.6	454.3 1,061.7
Engineering, nec	/51.4	770.1	302.8	328.3	0.100	333.3	018.8	548.4	090.4	821.0	1,061.7
Social sciences	297.5	303.8	319.3	302.0	350.5	339.0	396.4	484.0	566.0	549.8	480.8
Anthropology	1.6	1.7	2.1	2.4	2.9	2.2	1.8	1.9	3.3	3.1	3.7
Economics Political science	124.6 6.6	117.6 6.7	125.4 8.9	105.0 7.5	119.6 5.8	124.8 7.1	129.1 8.1	160.1 6.8	150.1 10.0	172.3 16.1	158.7 22.8
Sociology	35.0	36.3	34.0	37.0	39.6	45.0	55.9	92.0	155.7	70.5	22.0 65.6
Social sciences, nec	129.8	141.4	148.9	150.2	182.6	159.9	201.6	223.3	246.9	287.9	229.9
Other sciences, nec	247.1	261.7	242.2	260.9	307.4	271.0	350.0	361.5	357.8	408.8	622.4

nec = Not elsewhere classified.

NOTES: Because of rounding, detail may not add to totals. Due to reorganization within the Department of Health and Human Services, the Alcohol, Drug Abuse, and Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with National Institutes of Health data beginning with FY 1992. However, research support for some fields (such as psychology) in FY 1992 seems to be underreported.

TABLE C-110a. Federal obligations for applied research, by detailed field of science and engineering: FYs 1994-2004 (Dollars in millions)

Field of science and engineering	1994	1995	1996	1997	1998	1999	2000	2001	2002	Prelim	inary
									-	2003	2004
All fields	13,887.7	14,557.4	13,795.7	14,423.4	15,309.3	16,083.9	18,900.8	22,755.6	24,338.4	26,968.6	27,428.7
Life sciences Biological and agricultural Agricultural Releaded (aveluding	4,812.2	5,209.8	5,185.3	5,457.6	5,704.2	6,225.3	7,915.7	10,221.8	11,452.7	13,251.9	13,912.0
	2,351.1	2,566.0	2,707.6	2,598.9	2,851.5	3,106.1	4,764.6	5,342.7	7,080.2	NA	NA
	356.7	302.8	286.5	293.2	390.3	424.9	449.2	496.0	517.1	NA	NA
Biological (excluding environmental) Environmental biology	1,606.6 387.8	1,677.1 586.2	1,922.8 498.3	1,929.2 376.4	2,053.6 407.6	2,240.7 440.4	3,888.9 426.4	4,427.7 419.0	6,118.8 444.4	NA NA	NA NA
Medical sciences	2,251.8	2,356.3	2,232.6	2,497.6	2,603.9	2,844.7	2,540.0	3,776.6	3,066.4	NA	NA
Life sciences, nec	209.3	287.4	245.2	361.1	248.8	274.6	611.2	1,102.6	1,306.0	NA	NA
Psychology	302.2	344.6	233.5	251.5	279.0	285.3	808.9	449.0	441.3	498.1	524.1
Biological aspects	23.3	27.4	29.3	27.6	14.3	5.8	2.5	3.2	2.8	NA	NA
Social aspects	100.5	134.1	73.4	83.7	84.6	56.7	41.7	54.3	47.7	NA	NA
Psychological sciences, nec	178.4	183.1	130.8	140.2	180.1	222.8	764.7	391.5	390.8	NA	NA
Physical sciences Astronomy Chemistry Physics Physical sciences, nec	1,426.5	1,413.5	1,060.4	1,172.8	1,268.3	976.4	1,317.3	1,273.6	1,577.4	1,443.4	1,479.9
	22.8	32.9	20.2	20.6	25.2	39.4	86.3	109.0	148.2	NA	NA
	334.2	304.1	330.4	327.9	301.5	260.3	459.8	288.1	432.9	NA	NA
	940.9	943.8	445.7	505.9	552.0	528.1	641.0	699.5	759.6	NA	NA
	128.7	132.7	264.2	318.4	389.6	148.5	130.3	177.0	236.6	NA	NA
Environmental sciences	1,321.7	1,387.0	1,465.7	1,502.2	1,533.2	1,479.5	1,490.3	1,588.6	1,585.0	1,725.3	1,668.5
Atmospheric sciences	396.7	447.3	414.6	484.8	519.2	505.5	387.3	516.4	479.4	NA	NA
Geological sciences	350.1	396.6	394.3	303.5	212.1	248.1	209.6	273.2	248.9	NA	NA
Oceanography	306.6	219.1	265.2	294.2	273.8	272.7	308.1	278.7	357.6	NA	NA
Environmental sciences, nec	268.3	324.0	391.7	419.7	528.1	453.3	585.3	520.4	499.1	NA	NA
Mathematics and computer sciences Computer sciences Mathematics Mathematics and computer	779.9	976.1	932.0	1,010.5	1,131.4	1,245.7	1,407.3	1,652.8	1,632.0	1,672.5	1,705.2
	567.9	696.8	743.1	875.1	979.6	1,077.8	1,196.6	1,437.2	1,406.3	NA	NA
	94.7	94.6	91.8	63.4	83.3	91.3	124.3	108.0	76.4	NA	NA
sciences, nec  Engineering Aeronautical Astronautical Chemical Civil	117.3 4,189.0 946.8 439.3 167.3 239.8	184.7 4,259.5 977.2 480.2 179.4 269.3	97.1 4,068.9 987.6 454.7 155.4 247.3	71.9 4,107.3 1,083.7 526.5 166.9 230.2	68.4 4,301.0 1,311.2 563.2 137.9 208.3	76.6 4,623.7 1,278.0 554.4 148.0 259.7	86.5 4,582.2 1,141.1 426.3 143.9 179.5	107.6 6,285.5 2,060.3 718.9 138.9 240.5	149.3 6,410.0 1,827.0 692.6 139.2 256.1	7,021.0 NA NA NA NA	NA 6,793.0 NA NA NA NA
Electrical Mechanical Metallurgy and materials Engineering, nec	536.1 236.5 521.2 1,102.0	551.7 247.8 446.9 1,107.1	468.3 180.8 487.2 1,087.6	449.3 149.7 398.1 1,102.8	425.4 142.9 310.9 1,201.3	513.1 140.8 306.9 1,422.9	567.7 195.9 400.3 1,527.4	642.8 190.4 489.7 1,803.9	595.6 176.7 492.8 2,229.9	NA NA NA	NA NA NA NA
Social sciences Anthropology Economics Political science Sociology Social sciences, nec	463.3	472.0	442.1	475.3	581.3	608.3	742.4	730.2	676.9	774.1	803.6
	6.6	6.6	5.6	6.2	4.7	4.9	1.9	1.5	1.2	NA	NA
	154.9	161.8	154.8	159.1	188.9	171.2	197.7	191.5	182.1	NA	NA
	20.6	15.2	10.9	9.2	15.6	15.4	17.5	13.6	12.7	NA	NA
	55.0	33.5	27.9	17.7	77.4	74.7	78.8	77.6	76.6	NA	NA
	226.2	254.9	242.8	283.2	294.8	342.1	446.5	446.0	404.2	NA	NA
Other sciences, nec	592.8	494.9	407.9	446.3	510.9	639.6	636.6	554.1	563.3	582.3	542.4

NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year). nec = Not elsewhere classified.

NOTES: Because of rounding, detail may not add to totals. Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant. Beginning in FY 2000, the National Institutes of Health classified all of its development activities as research. The National Science Foundation has made changes to its field of science and engineering coding system, producing changes to some of the FY 1996 field of science data (such as mechanical engineering).

TABLE C-111. Federal obligations for research and development for selected agencies, by state: FYs 1983-93 (Dollars in millions)

Page 1 of 2

State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total	37,627.8	41,148.5	47,214.8	50,310.2	54,067.4	55,471.0	59,485.0	62,105.2	59,865.4	64,089.7	65,743.8
Alabama	671.7	792.6	896.6	1,188.2	1,346.4	1,363.7	1,646.7	1,805.4	1,863.2	2,151.7	2,149.4
Alaska	40.4	47.7	51.5	49.4	48.8	50.5	71.3	90.7	102.7	93.0	92.7
Arizona	469.3	383.9	458.2	398.1	414.9	369.4	501.2	591.7	516.8	638.2	535.3
Arkansas	31.4	35.0	39.7	40.5	52.3	56.4	57.0	85.7	85.9	68.8	79.2
California	8,194.9	8,995.8	10,771.8	11,512.3	13,672.2	14,895.9	15,919.4	16,249.3	14,488.3	15,999.1	14,883.7
Colorado	436.2	531.6	629.2	1,636.4	1,516.3	1,408.4	1,618.1	1,888.3	2,694.2	1,479.2	1,343.4
Connecticut	743.3	675.9	742.8	577.3	672.2	619.5	596.7	509.8	672.7	578.3	522.2
Delaware	20.4	63.7	34.7	30.2	32.3	36.0	31.9	28.3	41.8	43.1	56.2
District of Columbia	1,196.1	1,796.0	2,077.7	2,324.0	2,209.2	2,925.3	1,914.9	1,593.1	1,943.7	2,185.2	2,488.8
Florida	1,276.0	1,138.1	1,205.2	1,448.0	2,297.3	2,133.4	2,269.8	2,343.4	2,181.1	2,832.3	2,775.3
Georgia	237.2	245.5	291.8	250.5	352.1	350.4	392.5	364.1	466.5	2,512.6	3,035.3
Hawaii	71.4	52.9	58.2	54.7	63.9	82.2	97.4	100.0	112.6	150.7	113.0
Idaho	223.4	195.2	259.7	266.6	232.7	250.1	195.9	326.1	279.1	299.5	303.7
Illinois	567.5	675.6	772.8	745.0	827.3	850.7	909.1	957.2	959.4	921.9	963.8
Indiana	213.6	236.0	227.7	295.1	339.4	312.1	392.5	363.6	378.7	367.0	513.6
lowa	95.2	134.5	150.3	224.3	162.4	197.1	190.9	186.7	209.8	194.7	215.8
Kansas	97.4	101.9	138.1	112.7	94.2	126.7	128.8	116.4	83.6	91.2	87.9
Kentucky	93.1	56.5	69.2	59.1	61.9	68.5	73.0	96.5	122.4	71.7	86.7
Louisiana	186.6	129.7	118.8	92.4	107.4	101.3	179.6	121.2	163.6	169.6	152.6
Maine	29.3	38.1	36.7	35.6	178.6	39.8	67.7	39.7	57.1	60.6	65.2
Maryland	3,412.4	3,917.9	4,371.6	4,512.5	4,036.3	4,355.3	4,849.0	5,332.1	5,570.7	5,779.7	7,238.5
Massachusetts	2,559.3	2,882.6	3,276.7	3,240.3	3,910.8	2,702.0	2,882.5	2,982.8	3,146.4	3,227.9	3,551.7
Michigan	412.5	479.4	502.1	460.5	463.3	417.5	686.2	810.8	772.6	876.3	878.0
Minnesota	448.2	636.8	718.7	515.4	506.6	576.8	597.3	529.8	455.7	456.4	445.5
Mississippi	185.8	145.5	172.4	143.4	184.4	185.1	198.7	471.7	230.6	255.7	259.8
Missouri	576.8	659.5	694.2	677.8	614.7	637.6	1,241.9	1,064.3	587.9	733.5	726.3
Montana	35.0	26.6	26.0	26.4	30.1	35.5	36.2	30.9	45.8	71.5	69.1
Nebraska	42.3	33.0	34.6	41.1	48.9	52.1	51.2	76.4	76.1	71.1	78.5
Nevada	647.1	440.5	490.4	462.6	462.0	443.3	427.5	484.7	496.0	465.8	406.2
New Hampshire	76.8	116.4	130.3	136.0	83.6	60.8	98.0	145.1	196.3	156.1	237.6
New Jersey	1,293.4	1,550.0	1,791.8	1,781.4	1,114.9	1,209.3	1,320.4	1,601.6	1,698.2	1,646.8	1,422.8
New Mexico	1,804.9	2,104.8	2,368.6	2,500.0	1,998.2	2,296.1	2,220.4	2,311.3	2,018.7	2,211.3	2,309.6
New York	2,523.2	2,493.4	3,128.4	3,163.5	2,941.8	2,688.7	2,904.1	2,960.8	3,086.3	3,058.7	2,538.0
North Carolina	312.5	378.3	485.7	497.7	583.8	625.0	562.8	618.6	673.8	700.7	719.1
North Dakota	27.2	37.8	32.7	27.2	29.4	32.5	33.3	53.1	43.7	54.2	50.3
Ohio	1,170.1	1,366.5	1,520.5	1,591.7	1,862.9	1,865.2	1,938.8	2,088.5	1,729.9	1,863.4	1,921.7
Oklahoma	67.9	65.5	81.3	69.8	99.4	103.7	117.6	162.6	131.5	126.1	117.9
Oregon	108.0	137.8	151.6	127.6	133.9	170.3	168.4	175.6	216.5	226.5	229.4
Pennsylvania	1,173.3	1,142.2	1,329.6	1,301.3	1,681.9	1,731.6	1,961.9	2,074.6	2,125.6	1,794.4	2,566.5
Rhode Island	267.5	306.1	334.3	392.7	365.4	335.6	314.1	391.1	433.8	386.3	495.6
South Carolina	104.6	119.8	119.9	122.5	123.7	148.7	222.6	230.9	250.4	172.1	173.2
South Dakota	12.4	14.0	14.4	14.6	12.8	13.1	15.0	15.7	22.5	23.9	26.9
Tennessee	435.5	546.7	556.3	591.3	732.0	567.2	576.0	825.0	732.2	666.0	674.4
Texas	1,412.6	1,473.8	1,664.6	1,912.0	2,261.3	2,514.9	3,189.2	3,496.8	2,321.4	2,873.0	2,546.2
Utah	268.9	232.4	250.9	274.6	427.3	462.0	517.8	437.7	429.1	314.0	298.8
Vermont	23.7	33.8	36.1	41.1	39.6	55.9	60.1	42.5	56.1	51.3	62.1
Virginia	2,286.1	2,247.2	2,472.4	2,810.0	2,292.5	2,729.1	2,778.0	2,733.5	2,909.0	3,231.3	3,402.6
Washington	709.3	881.8	1,036.5	1,153.9	1,878.8	1,765.6	1,766.2	1,567.0	1,241.1	900.5	878.1
West Virginia	82.5	73.3	66.5	88.7	115.8	113.4	104.0	116.6	177.9	166.4	206.2
Wisconsin	142.4	166.0	200.8	181.9	204.8	223.2	263.5	271.7	294.5	307.7	350.8
Wyoming	28.4	34.0	25.1	14.5	23.5	29.0	38.5	57.4	29.8	41.4	48.2

TABLE C-111. Federal obligations for research and development for selected agencies, by state: FYs 1983-93 (Dollars in millions)

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State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Outlying areas	32.0	44.9	62.8	36.8	42.9	33.0	45.7	54.9	221.0	246.9	332.7
Offices abroad	51.0	34.6	35.9	59.2	78.2	54.2	43.4	31.7	21.0	24.4	17.8

NOTES: Because of rounding, detail may not add to totals. For each year, the data shown include the obligations of the 10 major R&D-supporting agencies that were required to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year. Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

TABLE C-111a. Federal obligations for research and development for selected agencies, by state: FYs 1994-2002 (Dollars in millions)

Page 1 of 2

State	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	65,820.1	66,700.1	66,292.4	68,510.2	70,710.4	73,798.2	71,261.5	78,078.4	83,978.3
Alabama	1,819.2	1,931.3	2,178.8	2,213.7	2,013.3	1,807.0	1,614.9	2,333.4	2,704.8
Alaska	157.3	96.9	93.3	99.9	107.2	115.0	146.8	212.2	273.8
Arizona	800.2	902.3	706.7	732.1	993.5	1,116.9	1,121.7	1,781.5	2,057.3
Arkansas	88.9	97.7	148.2	95.3	97.4	106.4	116.3	183.9	141.3
California	11,250.6	12,600.2	12,658.1	13,730.9	12,222.6	15,600.1	14,083.0	12,651.1	15,686.1
Colorado	1,356.4	1,049.2	1,277.6	1,340.2	1,336.3	1,438.7	1,369.7	1,340.6	1,609.0
Connecticut	733.5	900.7	798.9	846.5	699.4	655.2	806.2	1,377.4	1,916.9
Delaware	50.4	57.7	64.9	49.0	45.2	52.3	69.9	70.2	78.8
District of Columbia	2,483.6	2,755.4	2,574.1	2,232.3	2,229.8	2,451.6	2,369.5	2,605.9	2,849.5
Florida	2,906.7	2,391.8	2,957.9	3,326.4	2,754.9	2,284.4	2,216.2	2,648.4	2,300.6
Georgia	5,546.4	4,366.0	4,137.8	3,919.9	3,443.9	2,023.2	2,632.2	3,395.9	2,019.2
Hawaii	140.3	139.3	147.6	150.7	164.5	198.8	209.7	293.1	375.2
Idaho	227.8	211.0	244.6	205.7	212.7	200.7	216.9	209.3	230.9
Illinois	1,088.6	1,107.4	1,094.3	1,140.2	1,160.1	1,316.1	1,404.6	1,693.9	1,693.9
Indiana	403.6	426.3	439.8	410.4	377.7	413.9	506.3	534.7	525.7
lowa	223.8	212.1	213.4	228.2	235.8	264.1	267.0	324.3	404.5
Kansas	84.8	120.4	212.0	255.5	154.8	191.6	223.5	306.7	290.5
Kentucky	90.1	73.1	78.6	91.3	216.7	146.8	203.9	271.7	321.3
Louisiana	210.5	170.1	228.7	211.0	223.6	219.2	249.0	275.8	432.0
Maine	82.1	53.1	56.7	68.7	105.7	150.6	249.8	450.7	254.5
Maryland	6,659.5	7,343.7	6,730.7	7,328.8	7,966.8	8,094.4	8,684.8	9,290.4	7,192.2
Massachusetts	3,201.8	3,337.8	3,192.1	3,437.5	3,113.8	3,129.4	4,145.5	4,318.1	4,658.6
Michigan	771.0	683.2	707.9	735.1	755.9	839.8	975.1	1,175.7	1,244.2
Minnesota	475.1	570.2	679.5	609.4	806.1	885.1	781.1	900.9	1,150.8
Mississippi	255.9	209.7	250.6	289.8	280.4	351.6	394.6	402.1	622.7
Missouri	2,272.6	1,606.2	1,267.8	1,130.1	933.7	928.7	890.6	909.4	1,202.7
Montana	57.0	63.8	63.0	79.3	81.1	95.4	95.0	136.8	112.9
Nebraska	86.5	84.7	88.5	83.0	85.0	94.1	98.5	125.2	144.7
Nevada	347.7	368.9	253.2	295.0	294.7	279.1	263.9	295.4	336.0
New Hampshire	218.9	213.2	268.5	278.7	269.5	291.7	356.9	418.6	296.6
New Jersey	1,385.7	1,297.7	1,272.6	1,318.8	1,459.6	2,661.2	1,937.8	1,591.9	2,021.5
New Mexico	1,894.1	1,959.9	1,955.0	1,933.1	1,892.1	2,068.3	2,130.5	2,580.7	2,746.1
New York	2,678.7	2,585.9	2,504.9	2,471.0	2,560.5	2,689.0	2,927.5	3,336.2	3,746.8
North Carolina	734.3	831.6	821.5	900.3	922.7	1,007.5	1,062.5	1,400.9	1,390.4
North Dakota	49.6	47.4	46.2	53.0	52.1	59.9	64.1	77.9	102.1
Ohio	1,736.4	1,810.0	1,681.7	1,879.8	5,563.0	3,687.9	1,799.1	2,327.0	2,103.4
Oklahoma	142.1	158.7	138.3	160.4	176.2	165.8	185.1	225.8	271.6
Oregon	279.2	283.4	308.2	319.6	348.6	408.1	468.2	522.6	502.3
Pennsylvania	1,983.4	2,394.2	1,921.2	1,893.7	1,886.5	1,907.1	2,357.6	2,601.6	3,162.0
Rhode Island	433.8	514.6	583.2	403.8	385.8	391.7	418.0	437.5	501.3
South Carolina	198.5	173.2	186.7	166.6	188.7	215.9	249.0	314.3	371.0
South Dakota	26.5	26.5	35.0	42.0	46.0	39.0	38.8	54.9	58.7
Tennessee	671.3	582.5	558.6	566.2	621.2	684.7	734.4	844.7	961.1
Texas	3,654.3	4,068.9	3,493.5	3,640.2	4,112.5	3,853.3	2,671.8	2,925.4	3,374.4
Utah	324.9	368.8	351.7	319.9	393.4	305.0	286.0	395.1	408.7
Vermont	48.5	53.0	47.1	49.9	57.7	61.7	72.0	112.7	136.4
Virginia	3,726.9	3,392.2	4,576.3	4,849.8	4,671.2	5,750.4	4,848.0	4,809.9	5,756.3
Washington	963.8	1,131.6	1,152.9	1,226.2	1,246.9	1,306.8	1,329.5	1,544.6	1,998.9
West Virginia	212.9	287.9	254.4	193.1	243.3	227.0	235.7	352.8	254.2
Wisconsin	358.3	338.5	331.4	332.2	333.0	377.8	420.8	487.9	594.8
Wyoming	36.8	35.4	37.5	28.4	33.5	35.2	35.1	37.0	39.6

TABLE C-111a. Federal obligations for research and development for selected agencies, by state: FYs 1994-2002 (Dollars in millions)

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State	1994	1995	1996	1997	1998	1999	2000	2001	2002
Outlying areas	166.3	166.5	172.6	93.3	115.7	133.1	117.9	133.3	284.7
Puerto Rico	NA	46.7	51.6	58.9	65.7	72.7	81.0	90.8	135.3
Other areas	NA	119.8	121.0	34.3	50.0	60.4	36.9	42.5	149.4
Offices abroad	23.1	48.0	48.5	54.6	18.2	19.8	109.1	30.3	64.4

NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year).

NOTES: Because of rounding, detail may not add to totals. For each year, the data shown include the obligations of the 10 major R&D-supporting agencies that were required to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year. Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development. Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

TABLE C-112. Federal obligations for R&D plant for selected agencies, by state: FYs 1983-93 (Dollars in millions)

Page 1 of 2

State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total	1,280.9	1,770.6	1,774.7	1,482.5	1,793.8	2,025.1	2,144.3	2,230.1	2,807.0	2,962.9	3,054.5
Alabama	6.0	26.4	41.4	41.2	42.8	51.8	47.2	109.7	165.0	346.1	368.2
Alaska	21.3	.1	12.9	.0	.0	6.4	.0	11.1	.2	.8	1.0
Arizona	5.4	3.6	2.9	1.7	19.6	21.8	18.1	2.5	16.4	7.9	16.9
Arkansas	1.5	.5	.5	.9	.5	.4	3.1	2.2	5.3	4.4	3.3
California	368.4	316.8	404.2	323.5	290.7	429.0	446.7	459.0	377.8	356.1	469.6
Colorado	43.9	52.3	32.4	16.3	12.8	53.5	62.5	32.3	50.7	55.6	30.0
Connecticut	5.5	5.2	8.4	1.2	.4	1.0	1.4	1.8	2.6	2.6	14.4
Delaware	.4	.6	.4	.4	.4	1.3	.2	*	*	.1	2.1
District of Columbia	24.6	62.4	92.5	28.0	24.1	15.4	17.1	7.4	16.3	17.8	13.3
Florida	37.2	91.2	42.8	53.2	64.6	86.0	100.0	68.3	132.1	143.1	73.5
Georgia	2.1	3.8	2.6	15.6	23.1	2.7	10.8	3.6	6.0	6.4	3.5
Hawaii	1.6	.6	.9	.6	.6	6.9	.4	1.4	9.2	6.5	19.3
Idaho	19.7	11.9	8.3	24.7	17.8	39.6	12.0	30.3	46.0	39.6	27.4
Illinois	80.3	81.2	110.1	96.6	94.3	76.7	94.9	116.3	319.7	183.9	201.6
Indiana	1.3	2.8	4.5	.5	5.8	1.9	1.5	1.3	5.0	8.4	22.6
lowa Kansas Kentucky Louisiana Maine	2.7 .2 .4 2.4	3.5 .3 .3 2.6	1.4 2.3 .3 2.0	3.3 41.0 .3 2.2	22.7 49.8 1.7 2.5	3.8 .1 .1 31.9 .3	6.2 1.6 .5 47.2	10.4 3.1 .7 33.6 .7	26.1 5.2 1.6 26.1 .7	5.2 2.5 .0 26.2 1.5	7.9 10.1 .0 29.5 1.0
Maryland	80.8	180.1	145.4	78.6	109.8	79.2	120.1	178.9	235.9	229.7	264.6
Massachusetts	29.4	62.8	66.1	17.7	36.3	94.2	54.7	78.2	32.5	20.2	22.3
Michigan	1.1	6.4	5.1	1.2	1.4	4.4	4.6	6.6	3.0	9.1	21.7
Minnesota	.8	3.1	.8	1.1	.4	.7	1.8	1.1	2.1	2.5	3.0
Mississippi	6.4	13.7	12.6	13.5	39.1	19.1	41.1	47.4	50.8	41.6	42.2
Missouri Montana Nebraska Nevada New Hampshire	6.0 .2 .5 33.0 .7	3.9 .2 .7 108.4 .1	3.7 .2 .4 155.2 .4	4.7 .2 7.3 69.9 .3	4.8 .2 1.4 87.0 .2	2.7 .2 4.1 103.3	3.7 .2 2.8 69.3 .2	1.9 .5 4.1 61.1 .3	6.5 1.6 6.0 57.7 .3	1.7 2.7 5.7 59.7 4.0	1.5 1.6 1.0 50.2
New Jersey	42.0	52.7	40.1	37.6	39.8	52.6	46.8	51.3	30.0	39.0	53.2
New Mexico	191.8	102.3	243.7	192.0	256.6	231.4	239.6	197.9	175.5	164.7	181.4
New York	77.0	175.0	75.3	105.0	113.4	115.3	101.6	100.6	107.2	194.5	177.7
North Carolina	4.1	3.6	10.4	2.2	3.4	.9	4.3	3.4	7.4	6.8	36.6
North Dakota	.9	.9	1.3	8.8	.8	9.2	6.0	7.4	9.0	7.4	5.5
Ohio	7.5	49.6	46.5	19.2	58.1	68.5	69.8	56.3	115.4	122.2	64.1
Oklahoma	1.3	.9	1.7	2.3	.9	10.7	4.5	1.5	3.3	4.1	1.0
Oregon	.2	3.4	1.2	12.0	24.7	8.6	30.1	12.3	3.3	1.8	13.8
Pennsylvania	19.2	20.1	18.7	19.0	41.4	56.3	79.0	36.0	89.5	52.0	95.7
Rhode Island	1.9	.7	31.6	5.5	6.4	2.0	1.6	.8	14.3	1.9	.6
South Carolina	49.6	146.4	7.5	5.7	19.6	8.2	8.9	3.7	31.9	4.1	4.9
South Dakota	.2	.1	.1	*	.1	.6	.3	1.7	2.0	1.5	1.0
Tennessee	27.3	69.9	33.8	30.8	29.3	57.2	58.8	62.4	63.2	48.1	29.5
Texas	4.7	9.6	19.4	79.7	75.1	40.7	97.6	210.6	218.0	465.7	429.1
Utah	.5	2.0	2.4	13.6	14.2	6.8	12.1	2.5	3.5	1.5	3.5
Vermont Virginia Washington West Virginia Wisconsin Wyoming	.0 29.4 12.0 23.3 1.9	.0 52.2 13.6 4.8 10.2	.0 26.7 32.7 11.4 5.6	.0 45.5 26.4 10.2 2.7	1.0 89.4 24.8 16.5 4.0	8.0 105.5 31.2 23.2 2.0	1.4 127.4 35.5 26.7 4.0	.4 128.7 44.2 12.4 4.4	.8 175.5 34.5 89.4 13.0	.0 172.4 54.3 9.7 10.2 1.8	.1 131.0 71.6 8.4 8.0 .6

TABLE C-112. Federal obligations for R&D plant for selected agencies, by state: FYs 1983-93 (Dollars in millions)

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State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Outlying areas	0.2	3.3	1.4	13.9	18.2	46.5	1.5	14.9	11.0	6.9	13.1
Offices abroad	1.7	3.5	2.3	4.5	1.0	.9	16.8	.3	.5	.6	.6

<sup>\* =</sup> Amount greater than 0 but less than 50,000 dollars.

NOTES: Because of rounding, detail may not add to totals. For each year, the data shown include the obligations of the 10 major R&D-supporting agencies that were required to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year. Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

R&D = Research and development.

TABLE C-112a. Federal obligations for R&D plant for selected agencies, by state: FYs 1994-2002 (Dollars in millions)

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tate	1994	1995	1996	1997	1998	1999	2000	2001	2002
otal	2,196.2	2,210.8	1,736.6	1,891.1	1,809.8	2,042.3	4,489.3	4,026.0	4,289.7
Alabama	94.1	44.1	48.9	43.4	38.6	66.6	210.6	202.6	176.1
Alaska	88.0	1.4	.2	3.0	.0	.0	.3	.4	281.4
Arizona	20.8	42.7	3.0	1.9	7.5	1.1	4.1	2.7	6.7
Arkansas	3.9	3.9	12.5	14.1	18.5	3.0	3.2	4.7	13.0
California	209.5	414.0	341.2	418.9	426.4	467.7	503.0	570.3	523.9
Colorado	36.9	31.2	28.4	52.6	63.3	43.2 2.3	34.6 91.0	54.5	118.3
Connecticut Delaware	3.8 1.1	5.2 1.9	3.6 2.0	5.2 2.4	2.6 .8	2.3 1.1	.3	55.6 .1	51.6 1.0
District of Columbia	11.2	3.0	4.6	7.0	.o 13.2	53.7	.s 30.0	26.5	52.8
Florida	101.7	40.6	65.3	66.1	66.4	56.2	238.3	180.0	196.1
Georgia	5.3	12.4	4.6	5.2	3.8	8.5	9.2	20.1	18.0
Hawaii	14.3	.5	1.7	3.0	1.5	9.3	1.8	2.8	6.4
Idaho	12.5	8.9	19.2	26.2	11.5	8.2	27.2	18.4	12.7
Illinois	208.5	190.0	147.3	134.3	152.6	151.5	143.1	167.2	100.7
Indiana	4.1	4.8	15.2	7.9	3.1	6.7	12.2	18.0	11.9
lowa	10.1	15.5	10.1	8.9	7.2	6.2	8.1	16.6	16.3
Kansas	10.6	1.2	1.5	1.4	.6	4.0	3.0	3.0	5.6
Kentucky	3.9	4.7	2.4	.4	.0	.1	2.6	.8	.9
Louisiana	21.0	21.5	26.5	18.6	30.4	28.8	11.7	16.5	35.9
Maine	1.9	.7	.2	.3	1.6	1.5	1.5	7.5	8.1
Maryland	196.2	390.3	240.2	299.6	304.2	302.2	352.4	107.5	210.3
Massachusetts	15.8	23.1	14.1	12.1	10.7	20.3	41.6	58.9	24.2
Michigan	4.5	3.7	6.3	5.0	3.0	5.9	5.9	17.6	5.1
Minnesota	17.2	5.1	6.3	2.6	3.5	7.2	3.7	7.5	8.2
Mississippi	31.9	36.5	32.8	38.8	47.6	26.8	20.7	31.0	43.4
Missouri	4.7	4.6	4.4	5.7	4.0	1.8	3.1	11.4	5.2
Montana	3.6	4.9	5.8	9.6	2.0	1.4	2.4	7.5	8.0
Nebraska	1.0	2.3	1.0	.8	.9	.9 14.7	3.4	12.2	4.8
Nevada Now Hampshire	26.9 .3	38.5 .0	16.1 .6	1.0 2.3	2.9 .3	.5	6.2 4.1	14.6 2.6	16.5 1.3
New Hampshire									
New Jersey New Mexico	45.3 152.6	34.9 133.8	26.7 77.5	29.9 124.8	32.1 113.9	30.8 99.8	46.4 122.2	39.2 159.7	29.2 127.8
New York	186.1	159.1	164.6	152.2	122.1	89.0	113.6	138.2	127.0
North Carolina	40.0	25.7	20.5	27.4	30.4	38.0	7.7	14.3	8.6
North Dakota	5.8	4.9	1.5	3.7	3.2	2.3	1.1	1.5	1.7
Ohio	128.1	147.5	67.5	49.7	91.2	108.1	68.7	84.4	56.3
Oklahoma	1.9	2.8	3.2	6.7	2.6	7.8	3.5	2.7	4.3
Oregon	6.5	5.2	8.1	5.9	3.2	8.9	4.0	16.2	7.3
Pennsylvania	72.2	35.4	51.3	40.8	17.9	28.0	63.3	39.9	34.8
Rhode Island	.6	7.3	3.9	4.6	9.7	15.4	2.9	1.3	18.5
South Carolina	14.7	2.7	2.2	10.3	1.0	18.5	18.2	6.3	6.7
South Dakota	_5.6	4.3	3.0	.4	.6	.2	2.2	.4	3.1
Tennessee	77.4	37.1	22.9	38.7	28.8	135.4	128.9	288.3	333.3
Texas Utah	56.6 6.7	84.2 4.6	56.5 2.6	62.8 2.8	35.8 1.5	44.1 1.2	2,014.2 1.8	1,421.5 3.0	1,399.2 8.4
Vermont	.6	.0	2.2	.5	.1	.5	2.1	.3	.1
Virginia	.0 126.6	.0 81.1	69.7	.5 56.6	53.7	61.3	60.6	.s 114.4	99.9
Washington	71.5	64.3	71.8	64.8	12.1	14.9	12.1	20.5	18.6
West Virginia	4.8	5.4	2.6	2.8	12.1	25.0	18.4	18.6	8.7
	24.6	9.6	3.0	2.0	1.1	3.2	10.5	11.5	23.9
Wisconsin	24.0	7.0	5.0	2.0	1.1	3.2	10.5	11.5	23.7

See explanatory information, if any, and SOURCE at end of table.

TABLE C-112a. Federal obligations for R&D plant for selected agencies, by state: FYs 1994-2002 (Dollars in millions)

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State	1994	1995	1996	1997	1998	1999	2000	2001	2002
Outlying areas	0.5	1.4	8.3	4.3	3.1	7.5	5.6	3.7	4.5
Puerto Rico	NA	.3	.3	.4	2.2	1.3	3.2	1.5	4.5
Other areas	NA	1.1	8.1	3.9	.9	6.2	2.4	2.2	.0
Offices abroad	.7	1.3	.5	.3	3.9	.5	.7	.6	.5

NA = Not available (indicates that the data collected for this table were not recorded at that level in that particular fiscal year). R&D = Research and development.

NOTES: Because of rounding, detail may not add to totals. For each year, the data shown include the obligations of the 10 major R&D-supporting agencies that were required to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year. Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable. Geographic distribution of Department of Defense development funding to industry reflects only the location of prime contractors, not the numerous subcontractors who perform much of the research and development. Beginning in FY 2000, the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: FYs 2002, 2003, and 2004.

# APPENDIX A. AGENCIES INCLUDED IN THE SURVEY OF FEDERAL FUNDS FOR RESEARCH AND DEVELOPMENT, VOLUMES 32–52

Federal funds data, as collected, span three U.S. Government fiscal years: the fiscal year just completed, the current fiscal year, and the President's budget year. Actual data are collected for the year just completed, and estimates are obtained for the current fiscal year and the budget year. The volumes in this report span FY 1982–84 (volume 32) through FY 2002–04 (volume 52). For volume 52, actual data were collected for FY 2002 and estimates were collected for FY 2003 and 2004.

# Symbols and acronyms

- N = The agency did not exist as such; therefore, no data are available.
- O =The agency existed but had no R&D to report.
- T =The agency existed but data were not collected at this level.
- X =The agency existed and data were collected and submitted by the agency.
- Z =The agency existed but was unable to report.
- DT&E = Developmental test and evaluation.

RDT&E = Research and development, testing, and evaluation.

Agency	Vol 32	Vol 33	Vol 34	Vol 35	Vol 36	Vol 37	Vol 38	Vol 39	Vol 40	Vol 41	Vol 42
Department of Agriculture	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	T
Agricultural Cooperative Service	X	X	X	X	X	X	X	X	X	X	X
Agricultural Marketing Service	X	X	X	X	X	X	X	X	X	X	X
Agricultural Research Service	X	X	X	X	X	X	X	X	X	X	X
Agricultural Stabilization and											
Conservation Service	O	O	O	O	O	O	O	O	O	O	O
Animal and Plant Health Inspection											
Service	O	O	O	O	X	X	X	X	X	X	X
Cooperative State Research, Education,											
and Extension Service	X	X	X	X	X	X	X	X	X	X	X
Economic Research Service	X	X	X	X	X	X	X	X	X	X	X
Economics, Statistics, and Cooperative											
Service	N	N	N	N	N	N	N	N	N	N	N
Economic Research Service	N	N	N	N	N	N	N	N	N	N	N
Farmer Cooperative Service	N	N	N	N	N	N	N	N	N	N	N
Statistical Reporting Service	N	N	N	N	N	N	N	N	N	N	N
Economics and Statistics Service	N	N	N	N	N	N	N	N	N	N	N
Food Safety Inspection Service	O	O	O	O	O	O	O	O	O	O	O
Foreign Agricultural Service	N	N	O	O	O	O	O	O	O	O	O
Forest Service	X	X	X	X	X	X	X	X	X	X	X
Grain Inspection Packers and											
Stockyards Administration	O	O	O	X	X	X	X	X	X	X	X
Human Nutrition Information Service	X	X	X	X	X	X	X	X	X	X	X
National Agricultural Statistics Service	X	X	X	X	X	X	X	X	X	X	X
Natural Resources Conservation											
Service	O	O	O	O	O	O	O	O	O	O	O
Office of International Cooperation											
and Development	X	X	X	X	X	X	X	X	X	X	X
Office of Transportation	X	X	X	X	X	X	X	N	N	N	N
Rural Business-Cooperative Service	N	N	N	N	N	N	N	N	N	N	N
Rural Development Service	N	N	N	N	N	N	N	N	N	N	N

8											
Department of Agriculture (continued)											
Science and Education Administration	N	N	N	N	N	N	N	N	N	N	N
Agricultural Research Service	N	N	N	N	N	N	N	N	N	N	N
Cooperative State Research Service	N	N	N	N	N	N	N	N	N	N	N
National Agricultural Library	N	N	N	N	N	N	N	N	N	N	N
<b>Department of Commerce</b>	T	T	T	T	T	T	T	T	T	Т	Т
Bureau of the Census	X	X	X	X	X	X	X	X	X	X	X
Economic Development Administration Environmental Science Services	X	X	X	X	X	X	X	X	X	X	X
Administration	N	N	N	N	N	N	N	N	N	N	N
Maritime Administration	N	N	N	N	N	N	N	N	N	N	N
Minority Business Development											
Agency	O	O	O	O	O	O	O	O	O	О	O
National Fire Prevention and Control	Ü	Ü	Ü	Ü	Ü		Ü	Ü	Ü	Ü	Ü
Administration	N	N	N	N	N	N	N	N	N	N	N
National Institute of Standards and											
Technology	X	X	X	X	X	X	X	X	X	X	X
National Oceanic and Atmospheric											
Administration	X	X	X	X	X	X	X	X	X	X	X
National Technical Information Service	O	O	O	O	O	O	O	O	O	O	O
National Telecommunications and											
Information Administration Office of Productivity, Technology,	X	X	X	X	X	X	X	X	X	X	X
and Innovation	N	N	N	N	N	N	N	N	N	N	N
Office of the Secretary	X	X	X	X	X	X	X	X	X	X	X
Office of Telecommunications	N	N N	N N	N	N	N	N	N	N N	N	N
Patent and Trademark Office	X	O	0	O	O	O	O	0	0	0	0
U.S. Travel and Tourism											
Administration	О	О	О	О	О	О	О	О	О	О	О
<b>Department of Defense</b>	T	T	T	T	T	T	T	T	T	T	T
Defense Agencies	X	X	X	X	X	T	T	T	T	T	T
Ballistic Missile Defense Organization	O	O	O	O	O	O	O	O	X	X	X
Chemical and Biological Defense Defense Advanced Research Projects	N	N	N	N	N	N	N	N	N	N	N
Agency	O	O	O	O	O	O	O	O	X	X	X
Defense Information Systems Agency	O	O	О	O	O	O	O	O	X	X	X
Defense Logistics Agency	O	O	О	O	O	O	О	O	X	X	X
Defense Special Weapons Agency	O	O	O	O	O	O	O	O	X	X	X
Defense Threat Reduction Agency	N	N	N	N	N	N	N	N	N	N	N
Joint Staff	O	O	O	O	O	O	O	O	X	X	X
National Imagery and Mapping Agency	X	O	X	X	O	O	О	O	X	X	X
Special Operations Command	O	X	X	X	O	O	О	O	X	X	X
TRICARE Management Activity	N	N	N	N	N	N	N	N	N	N	N
Uniformed Services University of											
the Health Sciences	O	O	O	O	O	O	O	O	X	X	X
Washington Headquarters Services	X	X	X	X	O	O	О	О	X	X	X
Department of the Air Force	X	X	X	X	X	X	X	X	X	X	X
DT&E Support from Operations and	_						_	_	_		
Maintenance DT&E Support from Procurement	О	О	О	О	О	О	О	О	О	О	О
Appropriations	O	O	O	O	O	О	O	O	O	О	O
Housing for Military Personnel in R&D	O	O	O	O	O	O	O	O	O	O	O
Materials Command	N	N	N	N	N	N	N	N	N	N	T

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Military Construction	X	X	X	X	О	О	О	О	О	О	О
Pay and Allowances of Military											
Personnel in R&D	X	X	X	X	O	O	O	O	O	O	O
RDT&E Appropriation	X	X	X	X	O	O	O	O	O	O	O
Space Command	T	T	T	T	T	T	T	T	T	T	T
Special Foreign Currency Program	O	O	O	O	О	O	O	O	O	О	О
Department of the Army	T	T	T	T	T	T	T	T	T	T	T
Civil Functions	X	X	X	X	X	X	X	X	X	X	X
Housing for Military Personnel in R&D	O	O	O	O	O	O	O	O	O	O	O
Military Construction	X	X	X	X	O	O	O	O	O	O	O
Military Functions	X	X	X	X	X	X	X	X	X	X	X
Pay and Allowances of Military											
Personnel in R&D	X	X	X	X	O	O	O	O	O	O	O
RDT&E Appropriation	X	X	X	X	O	O	O	O	O	O	O
Special Foreign Currency Program	O	X	X	X	O	O	O	O	O	O	O
Support from Procurement											
Appropriations	О	O	О	О	О	О	О	O	О	О	О
Department of the Navy DT&E Support from Operations	X	X	X	X	X	X	X	X	X	X	X
and Maintenance DT&E Support from Procurement	O	O	O	О	O	O	О	O	O	О	O
Appropriations	O	O	O	O	O	O	O	O	O	O	О
Housing for Military Personnel in R&D	0	O	O	o	0	O	0	0	0	O	0
Military Construction	X	X	X	X	O	O	О	O	O	0	O
Pay and Allowances of Military											
Personnel in R&D	X	X	X	X	O	O	O	O	O	O	O
RDT&E Appropriation	X	X	X	X	Ö	Ö	Ö	Ö	Ö	Ō	O
Special Foreign Currency Program	X	X	X	X	O	O	O	O	O	O	O
Defense Civil Preparedness Agency Health Affairs, Assistant Secretary	N	N	N	N	N	N	N	N	N	N	N
of Defense for	N	N	N	N	N	N	N	N	N	X	O
Operational Test and Evaluation,	NT	NT	N	NT	v	v	v	X	v	v	v
Director	N	N	N	N	X	X	X	Λ	X	X	X
Test and Evaluation, Deputy	v	v	v	v	v	v	v	v	v	v	v
Undersecretary of Defense	X	X	X	X	X	X	X	X	X	X	X
Department of Education	X	X	X	X	X	X	X	X	X	X	X
Department of Energy	X	X	X	X	X	X	X	X	X	X	X
Department of Health, Education,											
and Welfare	N	N	N	N	N	N	N	N	N	N	N
Alcohol, Drug Abuse, and Mental											
Health Administration	N	N	N	N	N	N	N	N	N	N	N
Center for Disease Control	N	N	N	N	N	N	N	N	N	N	N
Environmental Health Service	N	N	N	N	N	N	N	N	N	N	N
Food and Drug Administration	N	N	N	N	N	N	N	N	N	N	N
Health Care Financing Administration	N	N	N	N	N	N	N	N	N	N	N
Health Resources Administration	N	N	N	N	N	N	N	N	N	N	N
Health Services Administration Health Services and Mental Health	N	N	N	N	N	N	N	N	N	N	N
Administration	N	N	N	N	N	N	N	N	N	N	N
National Institute of Education	N	N	N	N	N	N	N	N	N	N	N
National Institutes of Health	N	N	N	N	N	N	N	N	N	N	N

Department of Health, Education,											
and Welfare (continued)											
Office of Assistant Secretary for											
Education	N	N	N	N	N	N	N	N	N	N	N
Office of the Assistant Secretary for		3.7									
Health	N	N	N	N	N	N	N	N	N	N	N
Office of Child Development	N	N	N	N	N	N	N	N	N	N	N
Office of Education	N	N	N	N	N	N	N	N	N	N	N
Office of Human Development Services	N	N	N	N	N	N	N	N	N	N	N
Office of International Health	N	N	N	N	N	N	N	N	N	N	N
Office of the Secretary	N	N	N	N	N	N	N	N	N	N	N
Social and Rehabilitation Service	N	N	N	N	N	N	N	N	N	N	N
Social Security Administration	N	N	N	N	N	N	N	N	N	N	N
Department of Health and Human											
Services	T	T	T	T	T	T	T	T	T	T	T
Administration on Aging	N	N	N	N	N	N	N	N	N	X	X
Administration for Children and											
Families	N	N	N	N	N	N	N	N	N	X	X
Agency for Healthcare Research and											
Quality	N	N	N	N	N	N	N	N	X	X	X
Agency for Toxic Substances and											
Disease Registry	N	N	N	N	N	N	N	N	N	N	N
Alcohol, Drug Abuse, and Mental											
Health Administration	X	X	X	X	X	X	X	X	X	X	N
Centers for Disease Control and											
Prevention	X	X	X	X	X	X	X	X	X	X	X
Centers for Medicare and Medicaid	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
Services	N	N	N	N	N	N	N	N	N	N	X
Food and Drug Administration	X	X	X	X	X	X	X	X	X	X	X
Health Care Financing Administration	X	X	X	X	X	X	X	X	X	X	N
Health Resources Administration	N	N	N	N	N	N	N	N	N	N	N
Health Resources and Services											
Administration	X	X	X	X	X	X	X	X	X	X	X
Health Services Administration	N	N	N N	N	N	N	N	N	N	N N	N
Human Development Services	X	X	X	X	X	X	X	X	X	N	N
National Institutes of Health	X	X	X	X	X	X	X	X	X	X	X
Office of the Assistant Secretary	71	21	71	71	71	21	1	71	21	71	21
for Health	X	X	X	X	X	X	X	X	X	X	X
Office of the Secretary	X	X	X	X	X	X	X	X	X	X	X
Office of the Assistant Secretary,	71	21	71	71	71	21	1	71	21	71	21
Planning and Evaluation	N	N	N	N	N	N	N	N	N	N	N
Office of Public Health and Science	N	N	N	N	N	N	N	N	N	N	N
Social Security Administration	X	X	X	X	X	X	X	X	X	X	X
Substance Abuse and Mental Health											
Services Administration	N	N	N	N	N	N	N	N	N	N	N
Department of Homeland Security	N	N	N	N	N	N	N	N	N	N	N
Animal and Plant Health Inspection	14	14	1.4	14	14	11	14	14	14	14	14
Service	N	N	N	N	N	N	N	N	N	N	N
Transportation Security Administration	N	N	N	N	N	N	N	N	N	N	N
U.S. Coast Guard	N	N	N	N	N	N	N	N	N	N	N
U.S. Customs Service	N	N	N	N	N	N	N	N	N	N	N
Department of Housing and Urban											
Development Development	X	X	X	X	X	X	X	X	X	X	X

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Department of the Interior	Т	Т	Т	Т	Т	Т	Т	Т	Т	T	Т
Bonneville Power Administration	N	N	N	N	N	N	N	N	N	N	N
Bureau of Land Management	X	X	X	X	X	X	X	X	X	X	X
Bureau of Mines	X	X	X	X	X	X	X	X	X	X	X
Bureau of Reclamation	X	X	X	X	X	X	X	X	X	X	X
Federal Water Pollution Control											
Administration	N	N	N	N	N	N	N	N	N	N	N
Geological Survey	X	X	X	X	X	X	X	X	X	X	X
Heritage Conservation and Recreation											
Service	N	N	N	N	N	N	N	N	N	N	N
Minerals Management Service	X	X	X	X	X	X	X	X	X	X	X
National Biological Service	N	N	N	N	N	N	N	N	N	N	N
National Park Service	X	X	X	X	X	X	X	X	X	X	X
National Resources Library	N	N	N	N	N	N	N	N	N	N	N
Office of Coal Research	N	N	N	N	N	N	N	N	N	N	N
Office of the Secretary Office of Surface Mining Reclamation	X	X	X	X	X	X	X	X	X	X	X
Office of Surface Mining Reclamation and Enforcement	X	X	X	X	X	X	X	X	X	X	X
Office of Water Research and	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
Technology	X	X	X	N	N	N	N	N	N	N	N
Office of Saline Water	N	N N	N N	N	N	N	N	N	N	N	N
Office of Water Resources Research	N	N	N	N	N	N	N	N	N	N	N
U.S. Fish and Wildlife Service	X	X	X	X	X	X	X	X	X	X	X
Bureau of Commercial Fisheries	N	N	N	N	N	N	N	N	N	N	N
Bureau of Sport Fisheries and Wildlife	N	N	N	N	N	N	N	N	N	N	N
Department of Justice	T	T	T	T	T	T	T	T	T	T	T
Bureau of Prisons	X	X	X	X	X	X	X	X	X	X	X
Drug Enforcement Administration	X	X	X	X	X	X	X	X	X	X	X
Federal Bureau of Investigation	X	X	X	X	X	X	X	X	X	X	X
Immigration and Naturalization Service	X	X	X	X	X	X	X	X	X	X	X
Office of Justice Programs	X	X	X	X	X	X	X	X	X	X	X
Office of Legal Policy	X	X	X	X	X	X	О	О	O	O	О
Department of Labor	T	T	T	T	T	T	T	T	T	T	T
Bureau of Apprenticeship and Training	N	N	N	N	N	N	N	N	N	N	N
Bureau of Employment Security	N	N	N	N	N	N	N	N	N	N	N
Bureau of Labor Statistics	X	X	X	X	X	X	X	X	X	X	X
Employment Standards Administration	X	X	X	X	X	X	X	X	X	О	О
Employment and Training	<b>3</b> 7	v	v	W	v	37	37	W	37	v	v
Administration  Labor-Management Relations and	X	X	X	X	X	X	X	X	X	X	X
Cooperative Programs Labor-Management Services	N	N	X	X	X	X	X	X	N	N	N
Administration	X	X	N	N	N	N	N	N	N	N	N
Occupational Safety and Health Administration	X	X	X	X	X	X	X	X	X	X	X
Office of the Secretary	X	X	X	X	X	X	X	X	X	X	X
Pension Benefit Guaranty Corporation Pension and Welfare Benefits	X	X	X	X	X	X	X	X	X	X	X
Administration	N	N	X	X	X	X	X	X	X	X	X
Wage and Hour Division	O	O	O	O	O	O	0	O	0	O	O
Post Office Department	N	N	N	N	N	N	N	N	N	N	N

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Department of State	X	X	X	X	X	X	X	X	X	X	X
Agency for International Development	N	N	N	N	N	N	N	N	N	N	N
Bureau of Intelligence and Research	O	O	O	O	O	O	O	O	O	O	O
Departmental Funds	O	O	O	O	O	O	O	O	O	O	O
Peace Corps	O	O	O	O	O	O	O	O	O	O	O
Department of Transportation	T	T	T	T	T	T	T	T	T	T	T
Coast Guard	X	X	X	X	X	X	X	X	X	X	X
Federal Aviation Administration	X	X	X	X	X	X	X	X	X	X	X
Federal Highway Administration Federal Motor Carrier Safety	X	X	X	X	X	X	X	X	X	X	X
Administration	N	N	N	N	N	N	N	N	N	N	N
Federal Railroad Administration	X	X	X	X	X	X	X	X	X	X	X
Federal Transit Administration	X	X	X	X	X	X	X	X	X	X	X
Infrastructure Investment	N	N	N	N	N	N	N	N	N	N	N
Maritime Administration	X	X	X	X	X	X	X	O	X	X	X
Materials Transportation Bureau National Highway Traffic Safety	О	О	О	О	О	O	O	О	O	О	O
Administration	X	X	X	X	X	X	X	X	X	X	X
Office of the Secretary	X	X	X	X	X	X	X	X	X	X	X
Research and Special Programs											
Administration	X	X	X	X	X	X	X	X	X	X	X
Transportation Security Administration	N	N	N	N	N	N	N	N	N	N	N
<b>Department of the Treasury</b> Bureau of Alcohol, Tobacco, and	T	T	T	T	T	T	T	T	T	T	T
Firearms	N	N	N	N	N	N	N	N	N	N	N
Bureau of Engraving and Printing Financial Crimes Enforcement	X	X	X	X	X	X	X	X	X	X	X
Network	O	О	0	O	0	O	O	O	O	X	X
Internal Revenue Service	X	X	X	X	X	X	X	X	X	X	X
Office of Thrift Supervision	N	N	N	N	N	N	N	N	O	X	X
U.S. Customs Service	X	X	X	X	X	X	X	X	X	X	X
U.S. Mint	O	0	X	X	X	X	X	X	X	X	X
U.S. Secret Service	X	X	X	X	X	X	X	X	X	X	X
Department of Veterans Affairs	X	X	X	X	X	X	X	X	X	X	X
<b>Other agencies</b>											
ACTION	O	O	O	O	O	O	O	O	O	O	O
Advisory Commission on	37	37	37	37	37	37	37	37	37	37	37
Intergovernmental Relations	X	X X	X	X X	X X	X	X	X X	X X	X	X
Appalachian Regional Commission Atomic Energy Commission	X N	A N	X N	A N	A N	X N	X N	A N	A N	X	X N
Broadcasting Board of Directors	N	N N	N N	N	N N	N	N	N N	N	N N	N
Civil Aeronautics Board	N	N	N	N	N	N	N	N	N	N	N
Civil Service Commission	N	N	N	N	N	N	N	N	N	N	N
Community Services Administration	N	N	N	N	N	N	N	N	N	N	N
Consumer Product Safety Commission	X	X	X	X	X	X	X	X	X	X	X
Energy Research and Development Administration	N	N	N	N	N	N	N	N	N	N	N
Energy Security Trust Fund	N X										
Environmental Protection Agency Federal Communications Commission	X	X X	X	X	X X	X X	X	X X	X X	X	X X
Federal Emergency Management											
Agency	X	X	X	X	O	O	O	O	O	O	O
Defense Civil Preparedness Agency	О	О	О	O	О	O	O	О	O	О	O

Other agencies (continued)											
National Fire Prevention and Control											
Administration	O	O	O	O	O	O	O	O	O	O	O
Federal Energy Administration	N	N	N	N	N	N	N	N	N	N	N
Federal Trade Commission	X	X	X	X	X	X	X	X	X	X	X
Foundation for Educational Assistance	N	N	N	N	N	N	N	N	N	N	N
General Services Administration	X	X	X	X	X	X	X	X	X	X	X
International Development Cooperation											
Agency	T	T	T	T	T	T	T	T	T	T	T
Agency for International Development Institute for Scientific and Technological	X	X	X	X	X	X	X	X	X	X	X
Cooperation	O	O	O	O	O	O	O	O	O	O	O
Interstate Commerce Commission	O	O	O	O	O	O	O	O	O	O	O
Library of Congress	X	X	X	X	X	X	X	X	X	X	X
National Aeronautics and Space											
Administration	X	X	X	X	X	X	X	X	X	X	X
National Archives and Records											
Administration	N	N	N	X	X	X	X	X	X	X	X
National Science Foundation	X	X	X	X	X	X	X	X	X	X	X
Nuclear Regulatory Commission	X	X	X	X	X	X	X	X	X	X	X
Office of Economic Opportunity	N	N	N	N	N	N	N	N	N	N	N
Office of Emergency Preparedness	N	N	N	N	N	N	N	N	N	N	N
Office of Personnel Management	O	O	O	O	O	O	O	O	O	O	O
Office of Science and Technology	N	N	N	N	N	N	N	N	N	N	N
Office of Telecommunications Policy	N	N	N	N	N	N	N	N	N	N	N
Office of Thrift Supervision	X	X	X	X	X	X	X	X	X	N	N
Postal Service	О	O	О	O	O	O	О	O	O	О	О
Small Business Administration	O	O	O	O	O	O	O	O	O	O	O
Smithsonian Institution	X	X	X	X	X	X	X	X	X	X	X
Social Security Administration	N	N	N	N	N	N	N	N	N	N	N
Special Action Office for Drug Abuse											
Prevention	N	N	N	N	N	N	N	N	N	N	N
Tennessee Valley Authority	X	X	X	X	X	X	X	X	X	X	X
U.S. Arms Control and Disarmament											
Agency	X	X	X	X	X	X	X	X	X	X	X
U.S. Commission on Civil Rights	O	O	O	O	O	O	O	O	O	O	O
U.S. Information Agency	X	X	X	X	X	X	X	X	X	X	X
U.S. International Trade Commission	X	X	X	X	X	X	X	X	X	X	X

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Department of Agriculture	Т	Т	Т	Т	T	T	T	Т	Т	T
Agricultural Cooperative Service	X	X	N	N	N	N	N	N	N	N
Agricultural Marketing Service	X	X	X	X	X	X	X	X	X	X
Agricultural Research Service	X	X	X	X	X	X	X	X	X	X
Agricultural Stabilization and										
Conservation Service	O	O	N	N	N	N	N	N	N	N
Animal and Plant Health Inspection										
Service	X	X	X	X	X	X	X	X	X	X
Cooperative State Research, Education,										
and Extension Service	X	X	X	X	X	X	X	X	X	X
Economic Research Service	X	X	X	X	X	X	X	X	X	X
Economics, Statistics, and Cooperative										
Service	N	N	N	N	N	N	N	N	N	N
Economic Research Service	N	N	N	N	N	N	N	N	N	N
Farmer Cooperative Service	N	N	N	N	N	N	N	N	N	N
Statistical Reporting Service	N	N	N	N	N	N	N	N	N	N
Economics and Statistics Service	N	N	N	N	N	N	N	N	N	N
Food Safety Inspection Service	O	O	O	X	X	X	X	X	X	Z
Foreign Agricultural Service	X	X	X	X	X	X	X	X	X	X
Forest Service	X	X	X	X	X	X	X	X	X	X
Grain Inspection Packers and										
Stockyards Administration	X	X	X	X	X	X	X	X	X	X
<b>Human Nutrition Information Service</b>	X	X	N	N	N	N	N	N	N	N
National Agricultural Statistics Service	X	X	X	X	X	X	X	X	X	X
Natural Resources Conservation Service Office of International Cooperation	O	0	О	O	O	O	O	О	O	O
and Development	X	X	N	N	N	N	N	N	N	N
Office of Transportation	N	N	N	N	N	N	N	N	N	N
Rural Business-Cooperative Service	N	X	X	X	X	X	X	X	X	X
Rural Development Service	N	N	N	N	N	N	N	N	N	N
Science and Education Administration	N	N	N	N	N	N	N	N	N	N
Agricultural Research Service	N	N	N	N	N	N	N	N	N	N
Cooperative State Research Service	N	N	N	N	N	N	N	N	N	N
National Agricultural Library	N	N	N	N	N	N	N	N	N	N
<b>Department of Commerce</b>	Т	T	Т	Т	Т	T	T	Т	Т	T
Bureau of the Census	X	X	X	X	X	X	X	X	X	X
Economic Development Administration	X	X	X	X	X	X	X	X	X	X
Environmental Science Services										
Administration	N	N	N	N	N	N	N	N	N	N
Maritime Administration Minority Business Development	N	N	N	N	N	N	N	N	N	N
Agency	O	O	O	O	O	O	O	O	O	O
National Fire Prevention and Control										
Administration	N	N	N	N	N	N	N	N	N	N
National Institute of Standards and	v	v	v	v	v	v	v	v	v	v
Technology National Oceanic and Atmospheric	X	X	X	X	X	X	X	X	X	X
Administration	X	X	X	X	X	X	X	X	X	X
National Technical Information Service	0	0	0	O	0	0	0	0	0	0
National Telecommunications and Information Administration	X	X	X	X	X	X	X	X	X	X
	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
Office of Productivity, Technology, and Innovation	N	N	N	N	N	N	N	N	N	N
Office of the Secretary	X	X	X	X	X	O	O O	N O	O	O
Office of Telecommunications	N	N	N	N	N	N	N	N	N	N

rigency	101 43	101 44	101 45	101 40	101 47	101 40	101 42	101 50	10151	101 52
Department of Commerce (continued)										
Patent and Trademark Office	O	O	O	O	O	O	O	O	O	O
U.S. Travel and Tourism Administration	O	O	O	O	O	O	O	O	O	O
Department of Defense	T	T	T	T	T	T	T	T	T	T
Defense Agencies	T	T	T	T	T	T	T	T	T	T
Ballistic Missile Defense Organization	X	X	X	X	X	X	X	X	X	X
Chemical and Biological Defense	N	N	N	N	N	N	N	X	X	X
Defense Advanced Research Projects										
Agency	X	X	X	X	X	X	X	X	X	X
Defense Information Systems Agency	X	X	X	X	X	X	X	X	X	X
Defense Logistics Agency	X	X	X	X	X	X	X	X	X	X
Defense Special Weapons Agency	X	X	X	X	X	O	O	O	O	O
Defense Threat Reduction Agency	N	N	N	N	N	X	X	X	X	X
Joint Staff	X	X	X	X	X	X	X	X	X	X
National Imagery and Mapping Agency	X	X	X	O	O	О	О	O	O	О
Special Operations Command	X	X	X	X	X	X	X	X	X	X
TRICARE Management Activity	N	N	N	N	N	N	N	X	X	X
Uniformed Services University of the										
Health Sciences	X	X	N	N	N	N	N	N	N	N
Washington Headquarters Services	X	X	X	X	X	X	X	X	X	X
Department of the Air Force	X	X	X	X	X	X	X	X	X	X
DT&E Support from Operations and	0	0	0	0	0	0	0	0	0	0
Maintenance	O	О	О	O	O	О	O	O	O	O
DT&E Support from Procurement	O	O	O	O	O	0	O	O	O	O
Appropriations Housing for Military Personnel in R&D		0	0	0	0	0	0	0	0	0
Materials Command	O T	T	T	T	T	T	T	T	T	X
Materials Command	1	1	1	1	1	1	1	1	1	Λ
Military Construction	O	O	O	O	O	O	O	O	O	O
Pay and Allowances of Military										
Personnel in R&D	O	O	O	O	O	O	O	O	O	O
RDT&E Appropriation	O	O	O	O	O	O	O	O	O	O
Space Command	T	T	T	T	T	T	T	T	T	X
Special Foreign Currency Program	O	O	O	O	O	O	O	O	O	O
Department of the Army	T	T	T	T	T	T	T	T	T	T
Civil Functions	X	X	X	X	X	X	X	X	X	X
Housing for Military Personnel in R&D	O	O	O	O	O	O	O	O	O	O
Military Construction	O	O	O	O	O	O	O	O	O	O
Military Functions	X	X	X	X	X	X	X	X	X	X
Pay and Allowances of Military										
Personnel in R&D	O	O	O	O	O	O	O	O	O	O
RDT&E Appropriation	O	O	O	O	O	O	O	O	O	O
Special Foreign Currency Program	O	O	O	O	O	O	O	O	O	O
Support from Procurement										
Appropriations	O	O	O	О	О	O	O	O	O	О
Department of the Navy	X	X	X	X	X	X	X	X	X	X
DT&E Support from Operations and										
Maintenance	O	O	O	O	O	O	O	O	O	O
DT&E Support from Procurement										
Appropriations	O	O	O	O	O	O	O	O	O	O
Housing for Military Personnel in R&D	O	O	O	O	О	O	O	O	O	O
Military Construction	O	O	О	O	O	O	O	O	O	O
Pay and Allowances of Military										
Personnel in R&D	O	O	O	O	O	O	O	O	O	O
RDT&E Appropriation	O	O	O	O	O	O	O	O	O	O

Agency	Vol 43	Vol 44	Vol 45	Vol 46	Vol 47	Vol 48	Vol 49	Vol 50	Vol 51	Vol 52
Department of Defense (continued)										
Special Foreign Currency Program	О	O	O	O	O	O	O	O	O	O
Defense Civil Preparedness Agency Health Affairs, Assistant Secretary of	N	N	N	N	N	N	N	N	N	N
Defense for Operational Test and Evaluation,	O	O	O	O	O	O	O	O	O	O
Director Test and Evaluation, Deputy	X	X	X	X	X	X	X	X	X	X
Undersecretary of Defense	X	X	X	X	X	X	X	X	X	X
Department of Education	X	X	X	X	X	X	X	X	X	X
Department of Energy	X	X	X	X	X	X	X	X	X	X
Department of Health, Education,										
and Welfare	N	N	N	N	N	N	N	N	N	N
Alcohol, Drug Abuse, and Mental										
Health Administration	N	N	N	N	N	N	N	N	N	N
Center for Disease Control	N	N	N	N	N	N	N	N	N	N
Environmental Health Service	N	N	N	N	N	N	N	N	N	N
Food and Drug Administration	N	N	N	N	N	N	N	N	N	N
Health Care Financing Administration	N	N	N	N	N	N	N	N	N	N
Health Resources Administration	N	N	N	N	N	N	N	N	N	N
Health Services Administration Health Services and Mental Health	N	N	N	N	N	N	N	N	N	N
Administration	N	N	N	N	N	N	N	N	N	N
National Institute of Education	N	N	N	N	N	N	N	N	N	N
National Institutes of Health	N	N	N	N	N	N	N	N	N	N
Office of Assistant Secretary for										
Education	N	N	N	N	N	N	N	N	N	N
Office of the Assistant Secretary for										
Health	N	N	N	N	N	N	N	N	N	N
Office of Child Development	N	N	N	N	N	N	N	N	N	N
Office of Education	N	N	N	N	N	N	N	N	N	N
Office of Human Development Services	N	N	N	N	N	N	N	N	N	N
Office of International Health	N	N	N	N	N	N	N	N	N	N
Office of the Secretary	N	N	N	N	N	N	N	N	N	N
Social and Rehabilitation Service	N	N	N	N	N	N	N	N	N	N
Social Security Administration	N	N	N	N	N	N	N	N	N	N
Department of Health and Human										
Services	T	T	T	T	T	T	T	T	T	T
Administration for Children and										
Families	X	X	X	X	X	X	X	X	X	X
Administration on Aging	X	X	X	X	X	X	X	X	X	X
Agency for Healthcare Research and	X	X	v	X	v	X	X	X	X	X
Quality Agency for Toxic Substances and	Λ	Λ	X	Λ	X	Λ	Λ	Λ	Λ	Λ
Disease Registry	N	N	N	N	N	N	N	X	X	X
	IN	IN	IN	IN	N	IN	IN	Λ	Λ	Λ
Alcohol, Drug Abuse, and Mental Health Administration	N	N	N	N	N	N	N	N	N	N
Centers for Disease Control and										
Prevention	X	X	X	X	X	X	X	X	X	X
Centers for Medicare and Medicaid					-	-		-	-	
Services	X	X	X	X	X	X	X	X	X	X
Food and Drug Administration	X	X	X	X	X	X	X	X	X	X
Health Resources Administration	N	N	N	N	N	N	N	N	N	N

Agency	101 43	101 44	101 45	101 40	101 47	101 40	101 47	101 50	10151	101 32
Department of Health and Human										
Services (continued)										
Health Resources and Services										
Administration	X	X	X	X	X	X	X	X	X	X
Health Services Administration	N	N	N	N	N	N N	N	N	N N	N
Human Development Services National Institutes of Health	N X									
Office of the Assistant Secretary for	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
Health	X	X	X	N	N	N	N	N	N	N
Office of the Secretary	X	X	X	T	T	T	T	T	T	T
Office of the Assistant Secretary,	N	N	N	X	X	X	X	X	X	X
Planning and Evaluation Office of Public Health and Science	N	N	N N	X	X	X	X	X	X	X
Social Security Administration	X	X	X	N N	N	N	N	N	N	N
Substance Abuse and Mental Health	21	21	21	11	-11	11	11	11	11	11
Services Administration	N	N	N	X	X	X	X	X	X	X
Description of the second seco	NT	N	NT	NT	N	N	N.T.	N	NT	v
Department of Homeland Security Animal and Plant Health Inspection	N	N	N	N	N	N	N	N	N	X
Service	N	N	N	N	N	N	N	N	N	X
Transportation Security Administration	N	N	N	N	N	N	N	N	N	X
U.S. Coast Guard	N	N	N	N	N	N	N	N	N	X
U.S. Customs Service	N	N	N	N	N	N	N	N	N	X
Department of Housing and Urban										
Development Development	X	X	X	X	X	X	X	X	X	X
Department of the Interior	T	Т	Т	T	T	Т	T	T	T	T
Bonneville Power Administration	N	N	N	N	N	N	N	N	N	N
Bureau of Land Management	X	O	O	O	O	O	O	O	O	O
Bureau of Mines	X	X	O	N	N	N	N	N	N	N
Bureau of Reclamation	X	X	X	X	X	X	X	X	X	X
Federal Water Pollution Control										
Administration	N	N	N	N	N	N	N	N	N	N
Geological Survey	X	X	X	X	X	X	X	X	X	X
Heritage Conservation and Recreation										
Service	N	N	N	N	N	N	N	N	N	N
Minerals Management Service	X	X	X	X	X	X	X	X	X	X
National Biological Service	X	X	X	N	N	N	N	N	N	N
National Park Service	X	X	X	X	X	X	X	X	X	X
National Resources Library	N	N	N	N	N	N	N	N	N	N
Office of Coal Research	N	N	N	N	N	N	N	N	N	N
Office of the Secretary	X	X	X	O	O	O	O	O	O	O
Office of Surface Mining Reclamation	37	37	0	0	0	0	0	0	0	0
and Enforcement	X	X	О	О	О	O	О	О	O	О
Office of Water Research and										
Technology	N	N	N	N	N	N	N	N	N	N
Office of Saline Water	N	N	N	N	N	N	N	N	N	N
Office of Water Resources Research	N	N	N	N	N	N	N	N	N	N
U.S. Fish and Wildlife Service	X	O	O	O	O	O	O	0	O	0
Bureau of Commercial Fisheries	N	N	N	N	N	N	N	N	N	N
Bureau of Sport Fisheries and Wildlife	N	N	N	N	N	N	N	N	N	N
<b>Department of Justice</b>	T	T	T	T	T	T	T	T	T	T
Bureau of Prisons	X	X	X	X	X	X	X	X	X	X
Drug Enforcement Administration	X	X	X	X	X	0	0	0	O	0
Federal Bureau of Investigation	X	X	X	X	X	X	X	X	X	X
Immigration and Naturalization Service	X	X	X	X	X	X	X	X	X	X
Office of Lard Policy	X O									
Office of Legal Policy	U	U	0	,	J	J	U	U	U	U

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Department of Labor	Т	Т	Т	Т	T	T	Т	T	Т	T
Bureau of Apprenticeship and Training	N	N	N	N	N	N	N	N	N	N
Bureau of Employment Security	N	N	N	N	N	N	N	N	N	N
Bureau of Labor Statistics	X	X	X	X	X	X	X	X	X	X
Employment Standards Administration	O	O	O	O	O	O	O	O	O	O
Employment and Training										
Administration	X	X	X	X	X	X	X	X	X	X
Labor-Management Relations and										
Cooperative Programs	N	N	N	N	N	N	N	N	N	N
Labor-Management Services										
Administration	N	N	N	N	N	N	N	N	N	N
Occupational Safety and Health										
Administration	X	X	X	X	X	X	X	X	X	X
Office of the Secretary	X	X	X	X	X	X	X	X	X	X
Pension Benefit Guaranty Corporation	X	X	X	X	X	X	X	X	X	X
Pension and Welfare Benefits										
Administration	X	X	X	X	X	X	X	X	X	X
Wage and Hour Division	O	О	O	O	O	O	O	O	O	O
Post Office Department	N	N	N	N	N	N	N	N	N	N
Department of State	X	X	X	X	X	X	X	X	X	X
Agency for International Development	N	N	N	N	N	N	N	N	N	N
Bureau of Intelligence and Research	0	O	O	O	O	O	O	O	O	O
Departmental Funds	Ö	Ö	Ö	Ö	Ö	Ö	Ö	Ö	Ö	Ö
Peace Corps	Ö	Ö	Ö	0	O	0	0	O	0	0
•	Т	Т	T	Т	T	Т	т	т	Т	Т
Department of Transportation Federal Aviation Administration			T				T	T		
	X	X X	X	X	X	X	X	X X	X	X X
Federal Highway Administration Federal Motor Carrier Safety	X	Λ	X	X	X	X	X	Λ	X	Λ
Administration	N	X	N	N	N	N	N	X	X	X
Federal Railroad Administration	X	X	X	X	X	X	X	X	X	X
Federal Transit Administration	X	X	X	X	X	X	X	X	X	X
Infrastructure Investment	N	X	N N	N N	N	N	N N	N N	N	N N
initustracture investment				11	11	11			11	
Maritime Administration	X	X	X	O	O	O	O	O	O	O
Materials Transportation Bureau	O	O	O	O	O	O	O	O	O	O
National Highway Traffic Safety										
Administration	X	X	X	X	X	X	X	X	X	X
Office of the Secretary	X	X	X	X	X	X	X	X	X	X
Research and Special Programs										
Administration	X	X	X	X	X	X	X	X	X	X
Transportation Security Administration	N	N	N	N	N	N	N	N	N	X
U.S. Coast Guard	X	X	X	X	X	X	X	X	X	X
<b>Department of the Treasury</b>	T	T	T	T	T	T	T	T	T	T
Bureau of Alcohol, Tobacco, and										
Firearms	N	N	N	N	N	N	N	N	N	N
Bureau of Engraving and Printing	X	X	X	X	X	X	X	X	X	X
Financial Crimes Enforcement		_	_			_		_	_	
Network	X	O	O	O	O	O	O	O	O	O
Internal Revenue Service	X	X	X	X	X	X	X	X	X	X
Office of Thrift Supervision	X	X	X	X	X	X	X	X	X	X
U.S. Customs Service	X	X	X	X	X	X	X	X	X	X
U.S. Mint	X	X	X	X	X	X	X	X	X	X
U.S. Secret Service	X	X	X	X	X	X	X	X	X	X
Department of Veterans Affairs	X	X	X	X	X	X	X	X	X	X

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Smithsonian Institution

Prevention

Agency

Social Security Administration

Tennessee Valley Authority

U.S. Information Agency

Special Action Office for Drug Abuse

U.S. Arms Control and Disarmament

U.S. International Trade Commission

U.S. Commission on Civil Rights

X	X	X	X	N	N	N	
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X	X	X	X	X	N	N	
X	X	X	X	X	O	O	
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# APPENDIX B. NOTES ASSOCIATED WITH AGENCIES Included in the Survey of Federal Funds for Research and Development: Volumes 32–52

Federal funds data, as collected, span three U.S. Government fiscal years: the fiscal year just completed, the current fiscal year, and the President's budget year. Actual data are collected for the year just completed, and estimates are obtained for the current fiscal year and the budget year. The volumes in this report span FY 1982–84 through FY 2002-04. For volume 52, actual data were collected for FY 2002 and estimates were collected for FY 2003 and 2004.

Department o	f Agriculture
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Although the Agricultural Marketing Service was established in April 1972, Congress Agricultural Marketing Service first appropriated funds to this agency in FY 1979. Data reported for the Agricultural

Marketing Service include funds for the Office of Transportation beginning in 1989.

Agricultural Research Service The Human Nutrition Information Service merged with the Agricultural Research

Service on 20 February 1994.

The Agricultural Stabilization and Conservation Service was abolished as of 20 Agricultural Stabilization and Conservation Service

October 1994.

Cooperative State Research, Education,

and Extension Service

The Cooperative State Research Service merged with the Extension Service on 19 October 1994, to become the Cooperative State Research, Education, and Extension

Service.

Economic Research Service Data reported for the Economics, Statistics, and Cooperative Service include

> programs of the Economic Research Service, the Statistical Reporting Service, and the Farmer Cooperative Service for FY 1977–79. Data reported for the Economics and Statistics Service include programs of the Economic Research Service and the

Statistical Reporting Service for FY 1980.

Farmer Cooperative Service Data reported for the Economics, Statistics, and Cooperative Service include

programs of the Economic Research Service, the Statistical Reporting Service, and

the Farmer Cooperative Service for FY 1977–79.

Statistical Reporting Service Data reported for the Economics, Statistics, and Cooperative Service include

programs of the Economic Research Service, the Statistical Reporting Service, and

the Farmer Cooperative Service for FY 1977–79.

Economics, Statistics, and Cooperative

Service

Data reported for the Economics, Statistics, and Cooperative Service include programs of the Economic Research Service, the Statistical Reporting Service, and

the Farmer Cooperative Service for FY 1977–79.

**Economics and Statistics Service** Data reported for the Economics and Statistics Service include programs of the

Economic Research Service and the Statistical Reporting Service for FY 1980.

Foreign Agricultural Service The Office of International Cooperation and Development became part of the Foreign

> Agricultural Service (FAS) in June 1994. Data reported for FAS include funds appropriated to International Cooperation and Development programs within FAS as

of FY 1994.

Grain Inspection Packers and Stockyards

Administration

The Federal Grain Inspection Service was abolished on 20 October 1994, and the Grain Inspection Packers and Stockyards Administration assumed its functions. **Human Nutrition Information Service** 

The Human Nutrition Information Service merged with the Agricultural Research Service on 20 February 1994.

Office of International Cooperation and Development

The Office of International Cooperation and Development became part of the Foreign Agricultural Service (FAS) in June 1994. Data reported for FAS include funds appropriated to International Cooperation and Development programs within FAS as of FY 1994.

Office of Transportation

Data reported for the Agricultural Marketing Service include funds for the Office of Transportation beginning in 1989.

Rural Business-Cooperative Service

This agency's name changed from the Rural Business and Cooperative Development Service to the Rural Business-Cooperative Service on 30 January 1996.

### **Department of Commerce**

Maritime Administration

In 1981 the Maritime Administration moved from the Department of Commerce to the Department of Transportation.

National Fire Prevention and Control Administration Functions for the National Fire Prevention and Control Administration were transferred from the Department of Commerce to the Federal Emergency Management Agency as of 1 April 1979.

## **Department of Defense**

Beginning with volume 40 (FY 1990–92), Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for universities and colleges is performed at off-campus, university-affiliated laboratories that are not involved in teaching.Beginning with volume 44 (FY 1994–96), DoD development obligations are reported in two categories: advanced technology and major systems. Geographic data for these categories are not reported; therefore, geographic tables show only total development.Not all DoD agencies with development obligations are able to categorize them according to the advanced technology and major systems development breakdown. Therefore, in the volume 46 survey cycle, total DoD development does not equal the sum of total DoD advanced technology development and total DoD major systems development.

Defense Agencies

Chemical and Biological Defense

Prior to FY 2000, Chemical and Biological Defense's R&D was reported with the Washington Headquarters Services.

Defense Advanced Research Projects Agency This agency's name changed to the Advanced Research Projects Agency on 13 July 1993, and it was changed back to Defense Advanced Research Projects Agency in February 1996.

Defense Special Weapons Agency

The Defense Nuclear Agency was renamed the Defense Special Weapons Agency in 1996, as a result of a new charter and an expanded mission. The Defense Threat Reduction Agency (DTRA) was established on 1 October 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

Defense Threat Reduction Agency

The Defense Threat Reduction Agency (DTRA) was established on 1 October 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

Joint Staff

The name of this agency changed from Joint Chiefs of Staff to Joint Staff in FY 1986.

National Imagery and Mapping Agency

The Defense Mapping Agency merged with the newly created National Imagery and Mapping Agency on 1 October 1996.

TRICARE Management Activity

TRICARE Management Activity oversees delivery of healthcare to active duty and retired members of the uniformed services and their family members and survivors.

Uniformed Services University of the Health Sciences

Data for the Uniformed Services University of the Health Sciences are included with the Washington Headquarters Services' submission as of volume 45.

Washington Headquarters Services

Data for the Uniformed Services University of the Health Sciences are included with the Washington Headquarters Services' submission as of volume 45. Public Law No. 103-160, Section 1703 makes the Office of the Secretary of Defense responsible for the Chemical and Biological Defense Program (CBDP). Section 1701 requires the creation of CBDP research, development, test, and evaluation program elements established in the FY 1996–97 President's Budget. Data for these new program elements are included in the Federal Funds Survey as of volume 46. Washington Headquarters Services' basic research data were revised in volume 47 to reflect changes that were not incorporated in volume 46. Prior to FY 2000, Chemical and Biological Defense's R&D was reported with the Washington Headquarters Services.

Department of the Army, Civil Functions

Department of the Army, Civil Functions (Corps of Engineers), development activities are appropriated by the Energy and Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown.

Defense Civil Preparedness Agency

Functions for the Defense Civil Preparedness Agency were transferred from the Department of Defense to the Federal Emergency Management Agency on 20 July 1979.

Operational Test and Evaluation, Director

On 7 June 1999 the Secretary of Defense approved the disestablishment of the Office of the Director, Test, Systems Engineering and Evaluation. As a result of the restructure, the Director, Operational Test and Evaluation, has assumed management responsibility for the Central Test and Evaluation Investment Program and the Test and Evaluation Program, excluding the Joint Test and Evaluation Program.

Test and Evaluation, Deputy Undersecretary of Defense

On 7 June 1999 the Secretary of Defense approved the disestablishment of the Office of the Director, Test, Systems Engineering and Evaluation. As a result of the restructure, the Director, Operational Test and Evaluation, has assumed management responsibility for the Central Test and Evaluation Investment Program and the Test and Evaluation Program, excluding the Joint Test and Evaluation Program.

### **Department of Energy**

In 1977 the Energy Research and Development Administration became part of the Department of Energy.In FY 1982 the Bonneville Power Administration became part of the Department of Energy.In January 1996 the Bureau of Mines was abolished, and some of its activities were transferred to the Bureau of Land Management, the Geological Survey, and the Department of Energy.

## **Department of Health and Human Services**

Administration on Aging

In FY 1991 Human Development Services was replaced by the Administration for Children and Families (ACF) and by the Administration on Aging (AoA). Beginning in FY 1992, data shown for the ACF are separate from obligations for the AoA.

Administration for Children and Families

Obligations reported for the Administration for Children and Families may be incomplete for FY 1992 due to unavailability of data. In FY 1991 Human Development Services was replaced by the Administration for Children and Families (ACF) and by the Administration on Aging (AoA). Beginning in FY 1992, data shown for the ACF are separate from obligations for the AoA.

Agency for Health Care Policy and Research

The Agency for Health Care Policy and Research was renamed the Agency for Healthcare Research and Quality as stated in the Healthcare Research and Quality Act of 1999, signed by the President on 6 December 1999.

Agency for Healthcare Research and Quality

In FY 1991 the Agency for Health Care Policy and Research became separate from the Office of the Assistant Secretary for Health. The Agency for Health Care Policy and Research was renamed the Agency for Healthcare Research and Quality as stated in the Healthcare Research and Quality Act of 1999, signed by the President on 6 December 1999.

Agency for Toxic Substances and Disease Registry Prior to FY 2000, data reported for the Environmental Protection Agency include R&D data for the Agency for Toxic Substances and Disease Registry.

Alcohol, Drug Abuse, and Mental Health Administration Due to reorganization within the Department of Health and Human Services, the Alcohol, Drug Abuse, and Mental Health Administration ceased to exist as of October 1992, and its R&D functions are reported with National Institutes of Health data beginning with FY 1992. However, research support for some fields (such as psychology) in FY 1992 seems to be underreported.

Centers for Medicare and Medicaid Services

As of 1 July 2001, the Health Care Financing Administration became the Centers for Medicare and Medicaid Services.

Health Care Financing Administration

As of 1 July 2001, the Health Care Financing Administration became the Centers for Medicare and Medicaid Services.

**Human Development Services** 

In FY 1991 Human Development Services was replaced by the Administration for Children and Families (ACF) and the Administration on Aging (AoA). Beginning in FY 1992, data shown for the ACF are separate from obligations for the AoA.

National Institutes of Health

Due to reorganization within the Department of Health and Human Services, the Alcohol, Drug Abuse, and Mental Health Administration ceased to exist as of October 1992, and its R&D functions are reported with the National Institutes of Health data beginning with FY 1992. However, research support for some fields (such as psychology) in FY 1992 seems to be underreported. Beginning in FY 2000 the National Institutes of Health classified all of its development activities as research.

Office of the Assistant Secretary for Health

In FY 1991 the Agency for Health Care Policy and Research became separate from the Office of the Assistant Secretary for Health. As of FY 1996 the Office of the Assistant Secretary for Health merged with the Office of the Secretary (OS). The merger created a new role for the Assistant Secretary for Health who became head of the Office of Public Health and Science, a new division within OS.

Office of the Secretary

As of FY 1996 the Office of the Assistant Secretary for Health merged with the Office of the Secretary (OS). The merger created a new role for the Assistant Secretary for Health who became head of the Office of Public Health and Science, a new division within OS.

Office of Public Health and Science

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Social Security Administration

As of 31 March 1995 the Social Security Administration became an independent agency; it is no longer part of the Department of Health and Human Services.

Substance Abuse and Mental Health Services Administration Data from the Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

**Department of Homeland Security** 

On 25 November 2002, the President signed the Homeland Security Act of 2002, establishing the Department of Homeland Security.

**Department of the Interior** 

Bonneville Power Administration

In FY 1982 the Bonneville Power Administration became part of the Department of Energy.

Bureau of Land Management

In January 1996 the Bureau of Mines was abolished, and some of its activities were transferred to the Bureau of Land Management, the Geological Survey, and the Department of Energy.

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transferred to the Bureau of Land Management, the Geological Survey, and the

Department of Energy.

Geological Survey As of 1985 the Office of Water Research and Technology has been combined with the

Geological Survey. As of FY 1996 data for the National Biological Service (NBS) are included with the Geological Survey's submission, since NBS's funding comes from the Geological Survey's congressional appropriation. In January 1996 the Bureau of Mines was abolished, and some of its activities were transferred to the Bureau of

Land Management, the Geological Survey, and the Department of Energy.

National Biological Service The name of the National Biological Service (NBS) changed from the National

Biological Survey on 5 January 1995. As of FY 1994, NBS performs all biological research activities formerly funded by the U.S. Fish and Wildlife Service and the National Park Service. As of FY 1996 data for the NBS are included with the Geological Survey's submission, since NBS's funding comes from the Geological

Survey's congressional appropriation.

National Park Service The National Biological Service's (NBS) name changed from the National Biological

Survey on 5 January 1995. As of FY 1994, NBS performs all biological research activities formerly funded by the U.S. Fish and Wildlife Service and the National

Park Service.

Office of the Secretary The Department of Interior's Office of the Secretary has not funded any R&D

activities since FY 1995.

Office of Water Research and Technology As of 1985 the Office of Water Research and Technology has been combined with the

Geological Survey.

U.S. Fish and Wildlife Service The National Biological Service's (NBS) name changed from the National Biological

Survey on 5 January 1995. As of FY 1994, NBS performs all biological research activities formerly funded by the U.S. Fish and Wildlife Service and the National

Park Service.

**Department of Justice** 

Bureau of Prisons The Bureau of Prisons was formerly listed as the Federal Prison System.

Drug Enforcement Administration Large differences exist between the Drug Enforcement Administration's FY 1996 and

1997 R&D funding amounts due to changes in this agency's R&D programs.

Immigration and Naturalization Service FY 1997–99 figures for the Immigration and Naturalization Service are based on the

agency's volume 46 submission.

**Department of Labor** 

Labor-Management Relations and In 1984 Labor-Management Relations and Cooperative Programs replaced the Labor-

Cooperative Programs Management Services Administration.

Labor-Management Services Administration In 1984 Labor-Management Relations and Cooperative Programs replaced the Labor-

Management Services Administration.

**Department of State** Effective 1 April 1999, all functions and authorities of the U.S. Arms Control and

Disarmament Agency were transferred to the Department of State.On 1 October 1999, the U.S. Information Agency was integrated into the Department of State.

Agency for International Development

The Agency for International Development transferred from the Department of State to the International Development Cooperation Agency on 1 October 1979. Increases in outlays and obligations reported by the Department of State during the volume 44 survey cycle reflect reporting of monies received through interagency agreements with the Agency for International Development. The Department of State transfers these outlays and obligations to other R&D performers. Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (FY 2000–02) and AID's Federal funds survey submission to volume 44 (FY 1994–96). More accurate data for AID will be reported in future volumes of this survey.

### **Department of Transportation**

Federal Highway Administration

The Federal Motor Carrier Safety Administration, formerly a part of the Federal Highway Administration, was established within the Department of Transportation on 1 January 2000, as stated in the Motor Carrier Safety Improvement Act of 1999 (Public Law No. 106-159, 113 Stat. 1748, 9 December 1999).

Federal Motor Carrier Safety Administration The Federal Motor Carrier Safety Administration, formerly a part of the Federal Highway Administration, was established within the Department of Transportation on 1 January 2000, as stated in the Motor Carrier Safety Improvement Act of 1999 (Public Law No. 106-159, 113 Stat. 1748, 9 December 1999).

Federal Transit Administration

The name of this agency changed from the Urban Mass Transit Administration to the Federal Transit Administration on 18 December 1991.

Maritime Administration

In 1981 the Maritime Administration moved from the Department of Commerce to the Department of Transportation.Beginning with FY 1996, the Maritime Administration has had no directly appropriated funding for research and development activities.

Transportation Security Administration

On 19 November 2001 the President signed into law the Aviation and Transportation Security Act, which among other things established a new Transportation Security Administration within the Department of Transportation.

# Department of the Treasury

Internal Revenue Service

Due to the reorganization of the Internal Revenue Service and subsequent unavailability of data, FY 1992 figures are taken from estimates made in the volume 41 submission. Large changes in obligations reported by the Internal Revenue Service for volume 44 are due to shifts in research funding.

Office of Thrift Supervision

In 1989 the Office of Thrift Supervision replaced the Federal Home Loan Bank Board. In 1990 the Office of Thrift Supervision became part of the Department of the Treasury.

U.S. Customs Service

FY 1997–99 figures for U.S. Customs Service are estimates based on agency's volume 46 submission.

U.S. Secret Service

The U.S. Secret Service was formerly listed as the Office of Protective Research.

### Other agencies

**Broadcasting Board of Governors** 

The Broadcasting Board of Governors became an independent Federal entity on 1 October 1999, as mandated by the Foreign Affairs Reform and Restructuring Act (Public Law 105-277) signed by the President on 21 October 1998.

Energy Research and Development Administration

The Energy Research and Development Administration was an independent agency until October 1977, when it became part of the Department of Energy.

**Environmental Protection Agency** 

Prior to FY 2000, data reported for the Environmental Protection Agency include R&D data for the Agency for Toxic Substances and Disease Registry.

Federal Emergency Management Agency

Functions for the Defense Civil Preparedness Agency were transferred from the Department of Defense to the Federal Emergency Management Agency on 20 July 1979. Functions for the National Fire Prevention and Control Administration were transferred from the Department of Commerce to the Federal Emergency Management Agency as of 1 April 1979.

National Fire Prevention and Control Administration

Functions for the National Fire Prevention and Control Administration transferred from the Department of Commerce to the Federal Emergency Management Agency as of 1 April 1979.

General Services Administration

As of 1985 the National Archives and Records Administration is separate from the General Services Administration.

International Development Cooperation Agency

The Agency for International Development transferred from the Department of State to the International Development Cooperation Agency on 1 October 1979.

Agency for International Development

Increases in outlays and obligations reported by the Department of State during the volume 44 survey cycle reflect reporting of monies received through interagency agreements with the Agency for International Development. The Department of State transfers these outlays and obligations to other R&D performers. Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (FY 1996–1998) and AID's Federal Funds Survey submission to volume 44 (FY 1994–1996). More accurate data for AID will be reported in future volumes of this survey. The Agency for International Development transferred from the Department of State to the International Development Cooperation Agency on 1 October 1979.

National Aeronautics and Space Administration During the volume 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.Beginning in FY 2000 the National Aeronautics and Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

National Archives and Records Administration As of 1985 the National Archives and Records Administration is separate from the General Services Administration.

National Science Foundation

The National Science Foundation has made changes to its field of science and engineering coding system, producing changes to some of the FY 1996 field of science data (such as mechanical engineering). These changes are reflected in the historical data tables.

Office of Thrift Supervision

In 1989 the Office of Thrift Supervision replaced the Federal Home Loan Bank Board. In 1990 the Office of Thrift Supervision became part of the Department of the Treasury.

Social Security Administration

As of 31 March 1995, the Social Security Administration became an independent agency; it is no longer part of the Department of Health and Human Services.

Tennessee Valley Authority

During the volume 47 survey cycle, the Tennessee Valley Authority (TVA) made adjustments to its 1996, 1997, 1998, and 1999 R&D values to correct reporting errors. In recent years, most of the funds TVA has reported have been those invested by TVA's Office of Power, rather than congressionally appropriated funds. In addition, a substantial amount of congressionally appropriated funds earmarked for environmental compliance and site restoration were erroneously reported as R&D in past years. TVA has determined that these funds do not meet the criteria for classification as R&D spending. Some trend shifts are related to these adjustments, since TVA can only make revisions as far back as 1996.

FY 1994 figures for the U.S. Arms Control and Disarmament Agency are estimates U.S. Arms Control and Disarmament Agency

based on the agency's volume 43 submission. Effective 1 April 1999, all functions and authorities of the U.S. Arms Control and Disarmament Agency were transferred

to the Department of State.

U.S. Information Agency Data reported for the U.S. Information Agency include funds for the former

International Communication Agency for FY 1977-81.On 1 October 1999, the U.S.

Information Agency was integrated into the Department of State.

U.S. International Trade Commission In 2000 the U.S. International Trade Commission no longer classified any of its

activities as R&D.

# APPENDIX C. FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS, BY AGENCY AND TYPE OF ADMINISTRATION

The following is the master list of federally funded research and development centers (FFRDCs). The list is arranged by sponsoring agency and administering organization. Respondents used the FFRDC category to report funds obligated to centers identified on this list. FFRDC administrators are listed in parentheses.

### **Department of Defense**

Office of the Secretary of Defense

Administered by universities and colleges, including university consortia

Software Engineering Institute (Carnegie Mellon University), Pittsburgh PA

Administered by nonprofit institutions other than universities and colleges

Institute for Defense Analyses Studies and Analyses FFRDC (Institute for Defense Analyses), Alexandria VA

National Defense Research Institute (RAND Corp. 1), Santa Monica CA

C3I FFRDC (MITRE Corp.), Bedford MA and McLean VA

National Security Agency

Administered by nonprofit institutions other than universities and colleges

Institute for Defense Analyses Communications and Computing FFRDC (Institute for Defense Analyses), Alexandria VA Department of the Navy

Administered by nonprofit institutions other than universities and colleges

Center for Naval Analyses (The CNA Corporation), Alexandria VA

Department of the Air Force

Administered by universities and colleges including university consortia

Lincoln Laboratory (Massachusetts Institute of Technology), Lexington MA

Administered by nonprofit institutions other than universities and colleges

Aerospace FFRDC (The Aerospace Corp.), El Segundo CA

Project Air Force (RAND Corp.1), Santa Monica CA

Department of the Army

Administered by nonprofit institutions other than universities and colleges

Arroyo Center (RAND Corp.1), Santa Monica CA

### **Department of Energy**

Administered by industrial firms

Idaho National Engineering and Environmental Laboratory (Bechtel BWXT Idaho LLC), Idaho Falls ID

Sandia National Laboratories (Sandia Corp., a subsidiary of Lockheed Martin Corp.), Albuquerque NM

Savannah River Technology Center (Westinghouse Savannah River Co.), Aiken SC

Administered by universities and colleges including university consortia

Ames Laboratory (Iowa State University of Science and Technology), Ames IA

Argonne National Laboratory (University of Chicago), Argonne IL

Ernest Orlando Lawrence Berkeley National Laboratory (University of California), Berkeley CA

Fermi National Accelerator Laboratory (Universities Research Association Inc.), Batavia IL

Lawrence Livermore National Laboratory (University of California), Livermore CA

Los Alamos National Laboratory (University of California), Los Alamos NM

Princeton Plasma Physics Laboratory (Princeton University), Princeton NJ

Stanford Linear Accelerator Center (Leland Stanford, Jr., University), Stanford CA

Thomas Jefferson National Accelerator Facility (Southeastern Universities Research Association Inc.), Newport News VA Administered by nonprofit institutions other than universities and colleges

Brookhaven National Laboratory (Brookhaven Science Associates Inc.), Upton, Long Island, NY

National Renewable Energy Laboratory (Midwest Research Institute), Golden CO

Oak Ridge National Laboratory<sup>2</sup> (UT-Battelle LLC), Oak Ridge TN

Pacific Northwest National Laboratory (Battelle Memorial Institute), Richland WA

<sup>&</sup>lt;sup>1</sup> These portions of RAND Corporation are FFRDCs: National Defense Research Institute (formerly Defense/Office of the Joint Chiefs of Staff), Project Air Force, the Arroyo Center, and the Science and Technology Policy Institute (formerly Critical Technologies Institute). All other agency support to RAND is reported under "other nonprofit institutions excluding FFRDCs."

<sup>&</sup>lt;sup>2</sup>On April 1, 2000, Oak Ridge National Laboratory acquired a new nonprofit administrator (UT-Battelle LLC). The previous administrator was the industrial firm Lockheed Martin Energy Research Corp.

### **Department of Health and Human Services**

National Institutes of Health

Administered by industrial firms

National Cancer Institute at Frederick<sup>3</sup> (Science Applications International Corp.; Charles River Laboratories Inc.; Data Management Services Inc.; Wilson Information Services Inc.), Frederick MD

#### **National Aeronautics and Space Administration**

Administered by universities and colleges including university consortia

Jet Propulsion Laboratory (California Institute of Technology), Pasadena CA

#### National Science Foundation

Administered by universities and colleges including university consortia

National Astronomy and Ionosphere Center (Cornell University), Arecibo PR

National Center for Atmospheric Research (University Corp. for Atmospheric Research), Boulder CO

National Optical Astronomy Observatories (Association of Universities for Research in Astronomy Inc.), Tucson AZ

National Radio Astronomy Observatory (Associated Universities Inc.), Green Bank WV

Administered by nonprofit institutions other than universities and colleges

The Science and Technology Policy Institute (RAND Corp. 1), Washington DC

### **Nuclear Regulatory Commission**

Administered by nonprofit institutions other than universities and colleges

Center for Nuclear Waste Regulatory Analyses (Southwest Research Institute), San Antonio TX

### **Department of Transportation**

Federal Aviation Administration

Administered by nonprofit institutions other than universities and colleges

Center for Advanced Aviation System Development (MITRE Corp.), McLean VA

### **Department of the Treasury**

Internal Revenue Service (IRS)

Administered by nonprofit institutions other than universities and colleges

IRS FFRDC (MITRE Corp.), McLean VA

NOTE: Updates of this list and an annotated list of FFRDCs are available at http://www.nsf.gov/statistics/ffrdc/

<sup>&</sup>lt;sup>3</sup> In 2000 name was changed from NCI Frederick Cancer Research and Development Center. It remains an FFRDC.