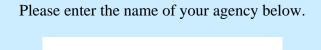


Survey of Federal Funds for Research and Development

Version for DOD

Please note: The Federal Funds Survey is a web-only survey (multiple screens). There is no paper questionnaire to collect data from respondents. However, NSF prepared this replica questionnaire to provide users with the text of the survey questions, response categories and instructions that are included in the Web version of this survey.



Contact information

If you have a question about the survey in general, please contact Mr. Ronald Meeks via e-mail at rmeeks@nsf.gov or call 703-292-7787. If you have a question about a specific item in the survey, please contact Mr. Michael Rossi of ORC Macro via e-mail at mrossi@qrc.com or call him at 301-657-3077, extension 178.

Thank you for your participation.

1. What were your agency's outlays for 1) research and development, and 2) R&D plant for fiscal years 2002, 2002, and 2002? (*Report dollars in thousands; if none, enter "0."*)

Please report actual outlays for FY 2002. For FY 2003 and 2004, please provide your best estimate of what these outlays will be.

Definitions for Question 1

Outlays represent the amounts for checks issued and cash payments made during a given period, regardless of when the funds were appropriated.

Research and development (R&D) activities comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.

Includes:

--Administrative expenses for R&D.

Excludes:

- --Physical assets for R&D such as R&D equipment and facilities.
- --Exclude routine product testing, quality control, mapping, collection of general-purpose statistics, experimental production, routine monitoring and evaluation of an operational program, and the training of scientific and technical personnel.

R&D plant (R&D facilities and fixed equipment, such as reactors, wind tunnels, and particle accelerators) includes acquisitions 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 this category are expendable or movable equipment (e.g., spectrometers, microscopes) and office furniture and equipment. Also excluded are the cots of predesign studies (e.g., those undertaken before commitment to a specific research facility).

FY 2002 is the fiscal year period October 1, 2001 through September 30, 2002. Similar time periods are used for FY 2003 and FY 2004.

Outlays for research and development activities at your agency

	FY 2002 (actual)	FY 2003 (preliminary)	FY 2004 (preliminary)
Research and Development	\$,000	\$,000	\$,000
R&D Plant	\$\$	\$\$	\$\$,000
Total	,000	,000	\$,000

NOTE: Shaded totals are automatically summed in the web version of this survey.

Definitions for Question 2

New definitions:

Research activities include 1) basic research, and 2) applied research:

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.

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 or when future payment of money is required.

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. Development includes both advanced technology development and major systems development.

Advanced technology development represents DoD research category 6.3A and includes all advanced technology development of subsystems/components and includes concept/technology demonstrations of new system concepts. Projects in this category have a direct relevance to identified military needs. These funds are used to demonstrate the general military utility or cost reduction potential of technology when applied to different types of military equipment or techniques. It also includes evaluation and synthetic environment and proof-of-principle demonstrations in field exercises to evaluate system upgrades or provide new operational capabilities. (This category is Budget Activity 3 of the DoD Financial Management Regulation (FMR).)

Major systems development represents DoD research categories 6.3B through 6.6 (demonstration and validation, engineering and manufacturing development, management and support, and operational system development) and Budget Activities 4 through 7 of the DoD Financial Management Regulation (FMR).

Previously defined terms:

R&D plant (See Ouestion 1.)

2. What were your agency's *obligations* for a) basic research, b) applied research, c) advanced technology development, d) major systems development, and e) R&D plant for fiscal years 2002, 2003, and 2004? (*Report dollars in thousands; if none, enter "0."*)

Please report actual obligations for FY 2002. For FY 2003 and 2004, please provide your best estimate of what these obligations will be.

Definitions for Question 2 See page 3.

Obligations for research and development activities at your agency

		(A) FY 2002 (actual)	(B) FY 2003 (preliminary)	(C) FY 2004 (preliminary)
a.	Basic research	\$,000	,000	\$,000
b.	Applied research	\$,000	\$,000	\$,000
	Total research	\$,000	\$,000	\$,000
c.	Advanced technology development	\$,000	\$,000	\$,000
d.	Major systems development	\$\$,000	,000	\$\$,000
	Total development Total research	\$,000	\$,000	,000
	and development	,000	,000	\$,000
e.	R&D Plant	\$\$,000	,000	\$,000
	Total	,000	\$,000	,000

3. What were your agency's FY 2002 *obligations* for 1) basic research and 2) applied research for each of the fields of science and engineering listed below? (*Report dollars in thousands; if none, enter "0."*)

Definitions for Question 3

Previously defined terms:

Obligations (See Question 2.)

Basic research (See Question 2.)

Applied research (See Question 2.)

Obligations for FY 2002 research activities at your agency (actual)

Field of science a (See Attachment	and engineering 1 for classification of fields.)	Basic research FY 2002	Applied research FY 2002	Total research FY 2002	
Life Sciences	Biological (excluding environmental)	\$,000	,000	,000	
	Environmental biology	,000	\$,000	,000	
	Agricultural science	\$,000	\$,000	,000	
	Medical sciences	,000	\$,000	,000	
	Life science, not elsewhere classified	\$,000	,000	,000	
Psychology	Biological aspects	,000	\$,000	,000	
	Social aspects	,000	\$,000	,000	
	Psychological sciences, not elsewhere classified	\$,000	\$,000	\$,000	
Physical Sciences	Astronomy	\$,000	\$,,000	\$,000	
	Chemistry	,000	\$\$	\$,,000	
	Physics	,000	\$,000	\$,000	
	Physical sciences, not elsewhere classified	\$,000	,000	,000	
Environmental Sciences	Atmospheric sciences	\$,000	\$,000	\$,000	
	Geological sciences	\$\$	\$,000	\$,,000	
	Oceanography	\$\$,000	\$,000	\$,,000	
	Environmental sciences, not elsewhere classified	\$\$,000	\$,000	\$,000	

Obligations for FY 2002 research activities at your agency (actual)

Field of science and (See Attachment 1	nd engineering for classification of fields.)	Basic research FY 2002	Applied research FY 2002	Total research FY 2002	
Mathematics and Computer					
Sciences	Mathematics	,000	,000	,000	
	Computer sciences	,000	\$\$,000	
	Mathematics and computer sciences, not				
	elsewhere classified	,000	\$,000	,000	
Engineering	Aeronautical	,000	\$\$,000	
	Astronautical	,000	,000	,000	
	Chemical	,000	\$,000	,000	
	Civil	,000	\$\$,000	
	Electrical	,000	\$,000	,000	
	Mechanical	,000	,000	,000	
	Metallurgical and materials	\$,000	\$,000	,000	
	Engineering, not elsewhere classified	\$,000	\$,000	,000	
Social Sciences	Anthropology	,000	,000	,000	
	Economics	,000	\$,000	,000	
	Political science	,000	\$,000	,000	
	Sociology	,000	\$,000	,000	
	Social sciences, not elsewhere classified	\$\$,000	\$,000	,000	
Other Sciences, no	t elsewhere classified	\$,000	\$,000	,000	
	Total for all fields	,000	\$,000	\$,000	

NOTE: The totals for all fields for 1) basic research, and 2) applied research, should match the amounts reported for Question 2 in Rows a and b, Column A.

4. What were your agency's FY 2003 *obligations* for 1) basic research and 2) applied research for each of the fields of science listed below? (*Report dollars in thousands; if none, enter "0."*)

Definitions for Question 4

Previously defined terms:

Obligations (See Question 2.)

Basic research (See Question 2.)

Applied research (See Question 2.)

Obligations for FY 2003 research activities at your agency (preliminary estimates)

Field of science and engineering (See Attachment 1 for classification of fields.)	Basic research FY 2003	Applied research FY 2003	Total research FY 2003	
Life sciences	,000	,000	,000	
Psychology	,000	\$\$,000	
Physical sciences	,000	\$\$,000	
Environmental sciences	,000	\$\$,000	
Mathematics and computer sciences	,000	,000	\$,000	
Engineering	,000	\$\$,000	
Social sciences	,000	\$\$	\$,000	
Other sciences, not elsewhere classified	\$,000	\$,000	,000	
Total	,000	\$,000	,000	

NOTE: The totals for all fields for 1) basic research, and 2) applied research, should match the amounts reported for Question 2 in Rows a and b, Column B.

5. What were your agency's FY 2004 *obligations* for 1) basic research and 2) applied research for each of the fields of science and engineering listed below? (*Report dollars in thousands; if none, enter "0."*)

Definitions for Question 5

Previously defined terms:

Obligations (See Question 2.)

Basic research (See Question 2.)

Applied research (See Question 2.)

Obligations for FY 2004 research activities at your agency (preliminary estimates)

Field of science and engineering (See Attachment 1 for classification of fields.)	Basic research FY 2004	Applied research FY 2004	Total research FY 2004
Life sciences	\$,000	,000	,000
Psychology	\$\$	\$\$,000
Physical sciences	\$\$	\$\$,000
Environmental sciences	\$\$	\$\$,000
Mathematics and computer sciences	\$,000	\$,000	,000
Engineering	\$\$	\$\$,000
Social sciences	\$\$	\$\$,000
Other sciences, not elsewhere classified	\$\$	\$\$,000
Total	\$,000	,000	,000

NOTE: The totals for all fields for 1) basic research, and 2) applied research, should match the amounts reported for Question 2 in Rows a and b, Column C.

Definitions for Question 6

New definitions:

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.

Federal 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 represent 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 so 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 equipment, essentially of an "off-the-shelf" nature, that are procured for use in intramural R&D. For example, the purchase from an extramural source of an operational launch vehicle (i.e., one that has gone beyond the development or prototype stage) that is used for intramural performance of R&D is reported as a part of the cost of intramural R&D.

Industrial firms are organizations that may legally distribute net earnings to individuals or other organizations.

Universities and colleges are institutions engaged primarily in providing resident and/or accredited instruction for at least a 2-year program above the secondary school level. Included are colleges of liberal arts; schools of arts and sciences; professional schools, as in engineering and medicine, including affiliated hospitals and associated research institutes; and agricultural experiment stations.

State and local governments include 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 survey.) 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 under this sector and no other.

Nonprofit institutions - Nonprofit institutions are 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.

(continued)

Definitions for Question 6 *(continued)*

Federally funded research and development centers (FFRDCs) are 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 college, or another nonprofit institution. See Question 9 for listings of FFRDCs by category.

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

- 1) 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 of 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.
- 6) Most or all of its facilities are owned by, or are funded under contract with, the Federal Government, and
- 7) It has an average annual budget (operating and capital equipment) of at least \$500,000.

Foreign performers include foreign citizens, foreign organizations, foreign universities and colleges, and foreign governments, as well as international organizations (such as the North Atlantic Treaty Organization (NATO), United Nations Educational, Scientific, and Cultural Organization (UNESCO), and World Health Organization (WHO)) performing R&D work abroad financed by the your agency. Please *exclude* the following:

- --U.S. agencies, U.S. organizations, and U.S. citizens performing R&D abroad for your agency,
- --foreign scientists performing in the United States
- -- "offshore" payments

Please note that as of FY 1996, the definition of foreign performer for this survey no longer includes U.S. citizens performing R&D abroad under special foreign currency funds.

Previously defined terms:

Obligations (See Question 2.) Development (See Question 2.)

Basic research (See Question 2.) Advanced technology development (See Question 2.)

Applied research (See Question 2.) Major systems development (See Question 2.)

6. What were your agency's FY 2002 *obligations* for 1) basic research, 2) applied research, and 3) development for each of the types of research performers listed below? (*Report dollars in thousands; if none, enter "0."*)

Note: Even if all work is performed extramurally, costs associated with the planning and administration of such programs by Federal personnel must be reported under Federal intramural costs.

Definitions for Question 6 See pages 9-10.

Obligations for FY 2002 research and development activities at your agency (actual)

Type of research and development performer	(A) Basic research FY 2002	(B) Applied research FY 2002	(C) Advanced technology development FY 2002	(D) Major systems development FY 2002	(E) Total research and development FY 2002
a. Federal intramural (agencies of the Federal government)	\$,000	\$,000	\$,000	\$,000	\$,000
Portion of Federal intramural for personnel costs	\$,000	\$,000	\$,000	\$,000	\$,000
b. Industrial firms (excluding federally funded research and development centers— FRDCs)	\$\$,000	\$\$,000	\$,000	\$\$,000	\$,000
c. FFRDCs administered by industrial firms (See Question 9, Section A.)	\$,000	\$,000	\$,000	\$,000	\$,000
d. Universities and colleges (excluding FFRDCs)	\$,000	\$,000	\$,000	\$,000	\$,000
e. FFRDCs administered by universities and colleges (See Question 9, Section B.)	\$,000	\$,000	\$,000	\$,000	\$,000
f. Nonprofit institutions (excluding FFRDCs)	\$,000	\$,000	\$,000	\$,000	,000
g. FFRDCs administered by nonprofit institutions (See Question 9,	\$,000	\$,000	\$,000	\$,000	\$,000
Section C.) h. State and local governments	\$,000	\$,000	\$,000	\$,000	\$,000

Obligations for FY 2002 research and development activities at your agency (actual)

	(A)	(B)	(C) Advanced	(D)	(E) Total research
Type of research and development performer	Basic research FY 2002	Applied research FY 2002	technology development FY 2002	Major systems development FY 2002	and development FY 2002
All domestic performers	\$,000	\$,000	,000	\$,000	\$,000
i. Foreign	\$,000	,000	\$,000	\$,000	,000
Total all performers	\$,000	\$,000	\$,000	\$,000	\$,000

NOTE: Totals for all performers in Columns A, B, C, and D should equal amounts reported for Question 2, Rows a, b, c, and d for Column A.

7. What is your best estimate of your agency's FY 2003 *obligations* for 1) basic research, 2) applied research, and 3) development for each of the types of research performers listed below? (*Report dollars in thousands; if none, enter "0."*)

Note: Even if all work is performed extramurally, costs associated with the planning and administration of such programs by Federal personnel must be reported under Federal intramural costs.

Definitions for Question 7

Previously defined terms:

Obligations (See Question 2.)

Basic research (See Question 2.)

Applied research (See Question 2.)

Development (See Question 2.)

Performer (See Question 6.)

Federal intramural (See Question 6.)

Industrial firms (See Question 6.)

State and local governments (See Question 6.)

Nonprofit institutions (See Question 6.)

Federally funded research and development centers (FFRDCs) (See Question 6 for definitions.

See Question 9 for a list of FFRDCs.)

Obligations for FY 2003 research and development activities at your agency (actual)

	Type of research and	(A) Basic research	(B) Applied research	(C) Advanced technology development	(D) Major systems development	(E) Total research and development
a. 1	development performer Federal intramural (agencies of the Federal government)	FY 2003 \$,000	FY 2003 \$,000	FY 2003 \$,000	FY 2003 \$,000	FY 2003 \$,000
	Portion of Federal intramural for personnel costs	\$\$,000	\$,000	\$,000	\$,000	\$,000
1	Industrial firms (excluding federally funded research and development centers— FRDCs)	\$,000	\$\$,000	\$,000	\$,000	\$,000
1	FFRDCs administered by industrial firms					
	(See Question 9, Section A.)	\$,000	\$,000	\$\$,000	\$,000	,000
(Universities and colleges (excluding FFRDCs)	\$,000	\$,000	\$,000	\$,000	\$,000
l	FFRDCs administered by universities and colleges					
	(See Question 9, Section B.)	\$,000	\$\$,000	\$,000	\$,000	,000
	Nonprofit institutions (excluding FFRDCs)	\$,000	\$\$,000	,000	\$,000	\$,000

Obligations for FY 2003 research and development activities at your agency (actual)

g.	Type of research and development performer FFRDCs administered by nonprofit institutions	(A) Basic research FY 2003	(B) Applied research FY 2003	(C) Advanced technology development FY 2003	(D) Major systems development FY 2003	(E) Total research and development FY 2003
	(See Question 9, Section C.)	\$,000	,000	,000	\$,000	,000
h.	State and local governments	\$\$,000	\$\$,000	\$,000	\$,000	,000
i.	All domestic performers	\$,000 \$,000	\$,000 \$,000	\$,000	\$,000	\$,000
	Total all performers	\$\$,000	\$,000	\$,000	\$,000	\$,000

NOTE: Totals for all performers in Columns A, B, C, and D should equal amounts reported for Question 2, Rows a, b, c, and d for Column B.

8. What is your best estimate of your agency's FY 2004 *obligations* for 1) basic research, 2) applied research, and 3) development for each of the types of research performers listed below? (*Report dollars in thousands; if none, enter "0."*)

Note: Even if all work is performed extramurally, costs associated with the planning and administration of such programs by Federal personnel must be reported under Federal intramural costs.

Definitions for Question 8				
Previously defined terms:				
Obligations (See Question 2.)	Industrial firms (See Question 6.)			
Basic research (See Question 2.)	Universities and colleges (See Question 6.)			
Applied research (See Question 2.)	Nonprofit institutions (See Question 6.)			
Development (See Question 2.)	State and local governments (See Question 6.)			
Performer (See Question 6.)	FFRDCs (See Question 6. Also, see Question			
Federal intramural (See Question 6.)	9 for a list of FFRDCs.)			

Obligations for FY 2004 research and development activities at your agency (actual)

developm	esearch and ent performer	(A) Basic research FY 2004	(B) Applied research FY 2004	(C) Advanced technology development FY 2004	(D) Major systems development FY 2004	(E) Total research and development FY 2004
a. Federal in (agencies governme	of the Federal	\$,000	\$,000	\$,000	\$,000	\$,000
intram	n of Federal aural for anel costs	\$,000	\$,000	\$,000	\$,000	\$,000
funded re	firms g federally search and tent centers—	\$,000	\$\$,000	\$,000	\$\$,000	\$,000
by industry (See Que	stion 9,	\$,000	\$.000	\$.000	\$.000	\$.000
Section A d. Universit colleges (FFRDCs)	ies and excluding	\$,000	\$,000	\$,000	\$\$,000	\$,000
e. FFRDCs by univer colleges	administered sities and					
(See Ques Section B		\$,000	\$\$,000	\$,000	\$,000	,000

Obligations for FY 2004 research and development activities at your agency (actual)

		(A)	(B)	(C) Advanced	(D)	(E) Total research
	Type of research and development performer	Basic research FY 2004	Applied research FY 2004	technology development FY 2004	Major systems development FY 2004	and development FY 2004
f.	Nonprofit institutions (excluding FFRDCs)	\$,000	\$,000	,000,	\$,000	,000
g.	FFRDCs administered by nonprofit institutions					
	(See Question 9, Section C.)	\$,000	\$\$,000,	\$\$	\$,000
h.	State and local governments	\$,000	\$,000	\$\$,000	\$,000	,000
	All domestic performers	\$,,000	\$,000	,000	\$,000	\$,000
i.	Foreign	\$,000	\$,000	\$,000	\$,000	,000
	Total all performers	\$\$,000	\$,000	,000	\$,000	\$,000

NOTE: Totals for all performers in Columns A, B, C, and D should equal amounts reported for Question 2, Rows a, b, c, and d for Column C.

9. What were your agency's FY 2002 *obligations* for 1) research and development, and 2) R&D plant for each of the federally funded research and development centers (FFRDCs) listed below? (*Report dollars in thousands; if none, enter "0."*)

Please report your agency's obligations for each FFRDC even if another agency sponsors that FFRDC.

Definitions for Question 9

Previously defined terms:

Obligations (See Question 2.)

Research and development (See Question 1.)

R&D plant (See Question 1.)

FFRDC (See Question 6.)

Obligations for FY 2002 research activities at your agency

Name of FFRDC Section A: Administered by industrial firms	(A) Research and development FY 2002	(B) R&D plant FY 2002
Idaho National Engineering & Environmental Laboratory (Bechtel BSX Technologies Idaho, LLC), Idaho Falls, ID	,000	\$,000
Science and Technology Policy Institute, The (RAND Corporation), Washington, DC	\$,000	\$,000
Sandia National Laboratories (Scandia Corporation which is a subsidiary of Lockheed Martin Corp.), Albuquerque, NM	\$,,000	\$,000
Savannah River Technology Center (Westinghouse Savannah River Co.), Aiken, SC	\$,000	\$\$,000
All industrial-administered FFRDCs	,000	,000

NOTE: The Section A subtotal for Column A should equal the amount reported for Question 6 in Row c, Column E. The Column B subtotal should equal the amount reported for Question 11, Row c, Column A.

Section B: Administered by universities and colleges (including university consortia)	\$,000	\$,000
Ames Laboratory (Iowa State University of Science and Technology) Ames, IA	\$,000	\$,000
Argonne National Laboratory (University of Chicago), Argonne, IL	\$,000	\$\$,000
Ernest Orlando Lawrence Berkeley National Laboratory (University of California), Berkeley, CA	\$,000	\$\$,000
Fermi National Accelerator Laboratory (Universities Research Association, Inc.), Batavia, IL	\$,000	\$\$,000
Jet Propulsion Laboratory (California Institute of Technology), Pasadena, CA	\$,000	\$,000

Obligations for FY 2002 research activities at your agency

	(A) Research an	d	(B)
Name of FFRDC	developmen FY 2002	t	R&D plant FY 2002
Lawrence Livermore National Laboratory (University of California), Livermore, CA	\$,	,000 \$,,000
Lincoln Laboratory (Massachusetts Institute of Technology), Lexington, MA Los Alamos National Laboratory (University of California), Los Alamos, NM	\$,	,000 \$,000
Los Alamos National Laboratory (University of California), Los Alamos, NM	\$,	,000 \$,000
National Astronomy & Ionosphere Center (Cornell University), Arecibo, PR	\$,	,000 \$.000,
National Center for Atmospheric Research (University Corporation for Atmospheric Research), Boulder, CO	\$,	,000 \$,000
National Optical Astronomy Observatories (Association of Universities for Research in Astronomy, Inc.), Tucson, AZ	\$,	,000 \$,000
National Radio Astronomy Observatory (Associated Universities, Inc.), Green Bank, WV	\$,	,000 \$,000
Oak Ridge Institute for Science & Education (Oak Ridge Associated Universities, Inc.), Oak Ridge, TN	\$,	,000 \$,000
Princeton Plasma Physics Laboratory (Princeton University), Princeton, NJ	\$,	,000 \$,000
Software Engineering Institute (Carnegie Mellon University), Pittsburgh, PA	\$,	,000 \$,000
Stanford Linear Accelerator Center (Leland Stanford, Jr. University), Stanford, CA	\$,	,000 \$,000
Thomas Jefferson National Accelerator Facility (Southwestern Universities Research Association, Inc.), Newport News, VA	\$,	,000 \$,000
Total university and college-administered FFRDCs	\$,	,000 \$,000
NOTE: The Section B subtotal for Column A should Row e, Column E. The Section B subtotal for Colum Question 11, Row e, Column A.			
Section C: Administered by nonprofit institutions (other than universities and colleges)	\$,	,000 \$,000
Aerospace Federally funded Research & Development Center (The Aerospace Corp.) El Segundo, CA	\$,	,000 \$,000
Arroyo Center (RAND Corporation), Santa Monica, CA	\$,	\$,000	,000
Brookhaven National Laboratory (Brookhaven Science Associates, Inc.), Upton, Long Island, NY	\$,	,000 \$,000

Obligations for FY 2002 research activities at your agency

	(A) Research and		(B)	
Name of FFRDC		opment 2002		D plant Y 2002
C3I Federally Funded Research & Development Center (MITRE Corp.): Bedford, MA Laboratory	\$,000	\$,000
C3I Federally Funded Research & Development Center (MITRE Corp.): McLean, VA Laboratory	\$,000	\$,000
Center for Advanced Aviation System Development (MITRE Corp.), McLean, VA	\$,000	\$,000
Center for Naval Analyses (The CNA Corporation), Alexandria, VA	\$,000	\$,000
Center for Nuclear Waste Regulatory Analyses (Southwest Research Institute), San Antonio, TX	\$,000	\$,000
Inst for Defense Analyses Communications & Computing FFRDC (Institute for Defense Analyses), Alexandria, VA	\$,000	\$,000
Institute for Defense Analyses Studies & Analyses FFRDC (Institute for Defense Analyses), Alexandria, VA	\$,000	\$,000
Internal Revenue Service (IRS) FFRDC (MITRE Corp.), Lanham, MD	\$,000	\$,000
National Defense Research Institute (RAND Corporation), Santa Monica, CA	\$,000	\$,000
National Renewable Energy Laboratory (Midwest Research Institute), Golden, CO	\$,000	\$,000
Oak Ridge National Laboratory (UT-Battelle, LLC), Oak Ridge, TN	\$,000	\$,000
Pacific Northwest National Laboratory (Battelle Memorial Institute), Richland, WA	\$,000	\$,000
Project Air Force (RAND Corporation), Santa Monica, CA	\$,000	\$,000
Science and Technology Policy Institute, The (RAND Corporation), Washington, DC	\$,000	\$,000
Total nonprofit-administered FFRDCs	\$,000	\$,000

NOTE: The Section C subtotal for Column A should equal the amount reported for Question 6 in Row g, Column E. The Section C subtotal for Column B should equal the amount reported for Question 11, Row g, Column A.

10. For each country in which your agency had foreign performers, what were your agency's FY 2002 *obligations* for 1) basic research, and 2) all research and development? (*Report dollars in thousands; if none, enter "0."*)

Definitions for Question 10

Previously defined terms:

Foreign performers include foreign citizens, foreign organizations, foreign universities and colleges, and foreign governments, as well as international organizations (such as the North Atlantic Treaty Organization (NATO), United Nations Educational, Scientific, and Cultural Organization (UNESCO), and World Health Organization (WHO)) performing R&D work abroad financed by the your agency. Please *exclude* the following:

- --U.S. agencies, U.S. organizations, and U.S. citizens performing R&D abroad for your agency,
- --foreign scientists performing in the United States
- -- "offshore" payments

Please note that as of FY 1996, the definition of foreign performer for this survey no longer includes U.S. citizens performing R&D abroad under special foreign currency funds.

Obligations (See Question 2.)

Basic research (See Question 2.)

Research and development (See Question 1.)

	gn performer Write names of countries below:	(A) Basic research	(B) Total research and development (including basic research)
Continent/Area	countries below:	FY 2002	FY 2002
Africa		\$,000	\$\$,000
		\$\$,000	\$\$
Asia		\$,000	\$,000
		\$,000	\$,000
Europe		\$,000	\$,000
		\$,000	\$,000
		\$,000	\$,000
		\$,000	\$,000
North America		\$,000	\$,000
		\$,000	\$,000

Foreig Continent/Area	Foreign performer Write names of countries below:		(B) Total research and development (including basic research) FY 2002	
		\$\$	\$\$,000	
		\$\$	\$,000	
South America		\$\$	\$,000	
		\$\$	\$,000	
		\$\$,000	
Oceania (Pacific Islands,				
Australia, etc.)		\$,000	\$,000	
		\$\$	\$,000	
		\$,000	\$,000	
Other, including international				
organizations		\$\$	\$,000	
	Total for all areas and organizations	,000	\$,000	

NOTE: The total for all areas and organizations in Column A should equal the amount reported for Question 6 in Row i, Column A. The total for all areas and organizations in Column B should equal the total amount for Question 6 in Row i, Column E.

11. What were your agency's *obligations* for R&D plant for the types of performers listed below for 1) FY 2002, 2) FY 2003, and FY 2004? (*Report dollars in thousands; if none, enter "0."*)

Please report actual obligations for FY 2002. For FY 2003 and 2004, please provide your best estimate of what these obligations will be.

Definitions for Question 11				
Previously defined terms:				
Obligations (See Question 2.)	Universities and colleges (See Question 6.)			
R&D plant (See Question 1.)	Nonprofit institutions (See Question 6.)			
Performer (See Question 6.)	State and local governments (See Question 6.)			
Federal intramural (See Question 6.)	FFRDCs (See Question 6.)			
<i>Industrial firms</i> (See Question 6.)	Foreign (See Question 6.)			

Obligations by your agency for R&D plant

	Type of research performer	(A) R&D plant FY 2002 (actual)	(B) R&D plant FY 2003 (preliminary)	(C) R&D plant FY 2004 (preliminary)
a.	Federal intramural (agencies of the Federal government)	\$,000	\$\$,000	\$,000
	Portion of Federal intramural for personnel costs	\$,000	\$,,000	\$,000
b.	Industrial firms (excluding FFRDCs)	,000	\$\$,000	\$,000
c.	FFRDCs administered by industrial firms	\$\$,000	,000	\$\$
d.	Universities and colleges (excluding FFRDCs)	\$,000	\$,000	\$\$
e.	FFRDCs administered by universities and colleges	\$,000	\$,000	\$,000
f.	Nonprofit institutions (excluding FFRDCs)	\$,000	\$,000	\$,000
g.	FFRDCs administered by nonprofit institutions	\$,000	\$,000	\$,000
h.	State and local governments	,000	\$\$	\$\$,000
	All domestic performers	,000	,000	,000
i.	Foreign	,000	\$\$,000	\$,000
	Total all performers NOTE: These amounts should equal R&D plant amounts for question 2.)	,000	,000	\$,000

NOTE: Amounts reported in Column A for Rows c, e, and g should equal the amounts reported for Question 9, Column B subtotals for Sections A, B, and C.

Note: If the amount you reported above for row e differs from the amount reported to us for the Federal Science and Engineering Support Survey for FY 2002, please explain below.

Part A1

12. What were your agency's FY 2002 *obligations* for research (basic and applied) for each state and for each of the 8 types of performers listed below? (*Report dollars in thousands; if none, enter "0."*)

Definitions for Question 12

Previously defined terms:

Obligations (See Question 2.) Industrial firms (See Question 6.)

Research (See Question 2.) Universities and colleges (See Question 6.)

Development (See Question 2.) Nonprofit institutions (See Question 6.)

Performer (See Question 6.) State and local governments (See Question 6.)

Federal intramural (See Question 6.) FFRDCs (See Question 6.)

Obligations for research (basic and applied) for FY 2002

	(A)		(B)		(C) FFRDCs		(D) Universities and	
State	Federal intramural		Industrial firms (excluding FFRDCs)		administered by industrial firms		colleges (excluding FFRDCs)	
Alabama	\$,000	\$,000	\$,000	\$,000
Alaska	\$,000	\$,000,	\$,000,	\$,000
Arizona	\$,000	\$,000	\$,000	\$,000
Arkansas	\$,000	\$,000,	\$,000	\$,000
California	\$,000	\$,000	\$,000	\$,000
Colorado	\$,000	\$,000	\$,000	\$,000
Connecticut	\$,000	\$,000	\$,000,	\$,000
Delaware	\$,000	\$,000	\$,000,	\$,000
Florida	\$,000	\$,000	\$,000,	\$,000
Georgia	\$,000	\$,000	\$,000,	\$,000
Hawaii	\$,000	\$,000,	\$,000,	\$,000
Idaho	\$,000	\$,000,	\$,000,	\$,000
Illinois	\$,000	\$,000,	\$,000,	\$,000
Indiana	\$,000	\$,000,	\$,000,	\$,000
Iowa	\$,000	\$,000,	\$,000,	\$,000
Kansas	\$,000,	\$,000	\$,000,	\$,000

Obligations for research (basic and applied) for FY 2002

	(A)	J	(B)		(C) FFRDCs		(D) Universities	and
a	T 1 1'		ndustrial firm		administered		colleges (excl	uding
State Kentucky	Federal intramus	ral (exc 000 \$_	cluding FFRI	000 \$	industrial fir	,000	FFRDCs	,000
·			,					
Louisiana	\$,0	000 \$_	,,	000 \$,000	\$	_ ,000
Maine	\$,0	000 \$_	,	000 \$,000	\$,000
Maryland	\$,0	000 \$_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	000 \$,000	\$,000
Massachusetts	\$\$,0	000 \$_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	000 \$,000	\$,000
Michigan	\$,0	000 \$_	,,,	000 \$,000	\$,000
Minnesota	\$,0	000 \$_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$ 000		,000	\$,000
Mississippi	\$,0	000 \$_	,	000 \$,000	\$,000
Missouri	\$,0	000 \$_	,(000 \$,000	\$,000
Montana	\$,0	000 \$_	,,	\$ 000		,000	\$,000
Nebraska	\$,0	000 \$_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$ 000		,000	\$,000
Nevada	\$,0	000 \$_	,,	000 \$,000	\$,000
New Hampshire	\$,0	000 \$_	,	000 \$,000	\$,000
New Jersey	\$,0	000 \$_	,	000 \$,000	\$,000
New York	\$,0	000 \$_	,	000 \$,000	\$,000
North Carolina	\$,0	000 \$_	,	000 \$,000	\$,000
North Dakota	\$,0	000 \$_	,,	000 \$,000	\$,000
Ohio	\$,0	000 \$_	,(000 \$,000	\$,000
Oklahoma	\$,0	000 \$_	,,	000 \$,000	\$,000
Oregon	\$,0	000 \$_	,,	000 \$,000	\$,000
Pennsylvania	\$,0	000 \$_	,	000 \$,000	\$,000
Rhode Island	\$,0	000 \$_	,	000 \$,000	\$,000
South Carolina	\$,0	000 \$_	,,,	000 \$,000	\$,000
South Dakota	\$,0	000 \$_	,,,	000 \$,000	\$,000
Tennessee	\$,0	000 \$_	,,,	000 \$,000	\$,000

Obligations for research (basic and applied) for FY 2002

	(A)	(B)	(C) FFRDCs	(D) Universities and	
State	Federal intramural	Industrial firms (excluding FFRDCs)	administered by industrial firms	colleges (excluding FFRDCs)	
Texas	,000	\$\$	\$\$,000	\$\$,000	
Utah	\$,000	\$\$,000	\$,000	\$,,000	
Vermont	,000	\$\$,000	\$\$,000	
Virginia	,000	,000	\$\$,000	,000	
Washington	\$,000	\$\$,000	\$,000	\$,,000	
West Virginia	\$,000	\$\$	\$\$,000	
Wisconsin	\$,000	\$\$	\$\$,000	
Wyoming	,000	\$\$,000	\$\$,000	
District of Columbia	\$,000	\$,,000	\$,000	\$,000	
Puerto Rico	,000	\$\$	\$\$,000	
Other outlying areas (other U.S. territories and possessions)	\$,000	\$,000	\$,000	\$,000	
Offices abroad (administered by					
the U.S. government)	\$,000	\$,000	\$,000	\$,,000	
Total	,000	,000	,000	,000	

(Columns E through H continued below.)

(Part A1 continued)

Obligations for research (basic and applied) for FY 2002

	(I FFR		(F)			(G)	(H)
	adminis		Nonpr	ofit	FF	RDCs		
State	universi		institut			istered by		and local
	coll		(excluding I		•	tinstitutions		nments
Alabama	\$,000	\$,000	\$,000	\$,000
Alaska	\$,000	\$,000	\$,000	\$,000
Arizona	\$,000	\$,000	\$,000	\$,000
Arkansas	\$,000	\$,000	\$,000	\$,000
California	\$,000	\$,000	\$,000	\$,000
Colorado	\$,000	\$,000	\$,000	\$,000
Connecticut	\$,000	\$,000	\$,000	\$,000
Delaware	\$,000	\$,000	\$,000	\$,000
Florida	\$,000	\$,000	\$,000	\$,000
Georgia	\$,000	\$,000	\$,000	\$,000
Hawaii	\$,000	\$,000	\$,000	\$,000
Idaho	\$,000	\$,000	\$,000	\$,000
Illinois	\$,000	\$,000	\$,000	\$,000
Indiana	\$,000	\$,000	\$,000	\$,000
Iowa	\$,000	\$,000	\$,000	\$,000
Kansas	\$,000	\$,000	\$,000	\$,000
Kentucky	\$,000	\$,000	\$,000	\$,000
Louisiana	\$,000	\$,000	\$,000	\$,000
Maine	\$,000	\$,000	\$,000	\$,000
Maryland	\$,000	\$,000	\$,000	\$,000
Massachusetts	\$,000	\$,000	\$,000	\$,000
Michigan	\$,000	\$,000	\$,000	\$,000

Obligations for research (basic and applied) for FY 2002

	(E) FFRDC:	2	(F)		(G)		(H)	
State	administere universities	d by	Nonprofi institution		FFRDCs administered		State and lo	ocal
State	colleges		(excluding FFI		nonprofit instit		governme	
Minnesota	\$,000	\$,000	\$,000	\$,000
Mississippi	\$,000,	\$,000	\$,000	\$,000
Missouri	\$,000,	\$,000,	\$,000	\$,000
Montana	\$,000,	\$,000	\$,000	\$,000
Nebraska	\$,000,	\$,000,	\$,000,	\$,000
Nevada	\$,000,	\$,000	\$,000	\$,000
New Hampshire	\$,000,	\$,000	\$,000	\$,000
New Jersey	\$,000,	\$,000	\$,000	\$,000
New York	\$,000,	\$,000	\$,000	\$,000
North Carolina	\$,000,	\$,000	\$,000	\$,000
North Dakota	\$,000,	\$,000	\$,000	\$,000
Ohio	\$,000,	\$,000	\$,000	\$,000
Oklahoma	\$,000,	\$,000	\$,000	\$,000
Oregon	\$,000,	\$,000	\$,000	\$,000
Pennsylvania	\$,000,	\$,000	\$,000	\$,000
Rhode Island	\$,000,	\$,000	\$,000	\$,000
South Carolina	\$,000,	\$,000	\$,000,	\$,000
South Dakota	\$,000,	\$,000	\$,000,	\$,000
Tennessee	\$,000,	\$,000	\$,000,	\$,000
Texas	\$,000,	\$,000	\$,000,	\$,000
Utah	\$,000,	\$,000	\$,000,	\$,000
Vermont	\$,000,	\$,000	\$,000	\$,000
Virginia	\$,000,	\$,000	\$,000	\$,000
Washington	\$,000,	\$,000	\$,000	\$,000

Obligations for research (basic and applied) for FY 2002

	(E) FFRDCs	(F)	(G)	(H)
State	administered by universities and colleges	Nonprofit institutions (excluding FFRDCs)	FFRDCs administered by nonprofit institutions	State and local governments
West Virginia	,000	\$\$,000	,000	\$,000
Wisconsin	,000	\$\$	\$\$,000
Wyoming	,000	\$\$,000	,000
District of Columbia	,000	\$\$	\$\$,000
Puerto Rico	,000	\$\$	\$,000	,000
Other outlying areas (other U.S.				
territories and possessions)	\$,,000	\$,,000	\$\$	\$,,000
Offices abroad (administered by the U.S. government)	\$,000	,000	,000	\$,000
Total	,000	,000	,000	,000

NOTE: Totals for each column should equal the sum of the two amounts reported for Question 6 in Columns A and B.

Part A2

13. What were your agency's FY 2002 *obligations* for development (both advanced technology development and major systems development) for each state and for each of the 8 types of performers listed below? (*Report dollars in thousands; if none, enter "0."*)

Definitions for Question 13						
Previously defined terms:						
Obligations (See Question 2.)	Industrial firms (See Question 6.)					
Development (See Question 2.)	Universities and colleges (See Question 6.)					
Performer (See Question 6.)	Nonprofit institutions (See Question 6.)					
Federal intramural (See Question 6.)	State and local governments (See Question 6.)					
	FFRDCs (See Question 6.)					

Obligations for development for FY 2002

	(A)	(B)	(C) FFRDCs	(D) Universities and
State	Federal intramural	Industrial firms (excluding FFRDCs)	administered by industrial firms	colleges (excluding FFRDCs)
Alabama	\$,000	\$,000	\$,000	\$,000
Alaska	\$,000	\$,000	\$,000	\$\$
Arizona	\$,000	\$\$,000	\$\$	\$,000
Arkansas	\$,000	\$\$,000	\$,000
California	\$,000	\$\$,000	,000	\$,000
Colorado	\$,000	\$\$	\$\$	\$,000
Connecticut	\$,000	\$\$,000	\$,000
Delaware	\$,000	\$\$,000	,000	\$,000
Florida	\$,000	\$\$	\$\$	\$,000
Georgia	\$,000	\$\$	\$\$	\$,000
Hawaii	\$,000	\$,000	,000	\$,000
Idaho	\$,000	\$\$,000	,000	\$,000
Illinois	\$,000	\$\$	\$\$	\$,000
Indiana	\$,000	\$\$,000	,000	\$,000
Iowa	\$,000	\$,000	,000	\$,000
Kansas	\$,000	\$,000	\$,000	\$,000

Obligations for development for FY 2002

	(A))	(B)			C) .DCs		D) sities and
State	Federal int	tramural	Industrial (excluding F		adminis	tered by al firms	colleges	(excluding DCs)
Kentucky		,000	\$,000	\$,000	\$,000
Louisiana	\$,000	\$,000	\$,000	\$,000
Maine	\$,000	\$,000	\$,000	\$,000
Maryland	\$,000	\$,000	\$,000	\$,000
Massachusetts	\$,000	\$,000	\$,000	\$,000
Michigan	\$,000	\$,000	\$,000	\$,000
Minnesota	\$,000	\$,000	\$,000	\$,000
Mississippi	\$,000	\$,000	\$,000	\$,000
Missouri	\$,000	\$,000	\$,000	\$,000
Montana	\$,000	\$,000	\$,000	\$,000
Nebraska	\$,000	\$,000	\$,000	\$,000
Nevada	\$,000	\$,000	\$,000	\$,000
New Hampshire	\$,000	\$,000	\$,000	\$,000
New Jersey	\$,000	\$,000	\$,000	\$,000
New York	\$,000	\$,000	\$,000	\$,000
North Carolina	\$,000	\$,000	\$,000	\$,000
North Dakota	\$,000	\$,000	\$,000	\$,000
Ohio	\$,000	\$,000	\$,000	\$,000
Oklahoma	\$,000	\$,000	\$,000	\$,000
Oregon	\$,000	\$,000	\$,000	\$,000
Pennsylvania	\$,000	\$,000	\$,000	\$,000
Rhode Island	\$,000	\$,000	\$,000	\$,000
South Carolina	\$,000	\$,000	\$,000	\$,000
South Dakota	\$,000	\$,000	\$,000	\$,000
Tennessee	\$,000	\$,000	\$,000	\$,000

Obligations for development for FY 2002

	(A)		(B)		(C) FFRDCs	,	(D) Universities	e and
State	Federal intran	nural	Industrial fi (excluding FF)		administered industrial fi	d by	colleges (exc	luding
Texas	\$,000	\$,000	\$,000	\$,000
Utah	\$,000	\$,000,	\$,000	\$,000
Vermont	\$,000	\$,000	\$,000	\$,000
Virginia	\$,000	\$,000,	\$,000	\$	_,000
Washington	\$,000	\$,000,	\$,000	\$,000
West Virginia	\$,000	\$,000,	\$,000	\$,000
Wisconsin	\$,000	\$,000,	\$,000	\$,000
Wyoming	\$,000	\$,000,	\$,000	\$,000
District of Columbia	\$,000	\$,000	\$,000	\$	_ ,000
Puerto Rico	\$,000	\$,000,	\$,000	\$,000
Other outlying areas (other U.S. territories and possessions)	\$,000	\$	_,000	\$,000,	\$	_ ,000,
Offices abroad (administered by								
the U.S. government)	\$,000	\$,000	\$,000	\$,000
Total	\$,000	\$,000	\$,000	\$,000

(Columns E through H continued below.)

(Part A2 continued)

Obligations for development for FY 2002

	(E) FFRDCs	(F)	(G)	(H)
	administered by	Nonprofit	FFRDCs	
State	universities and colleges	institutions (excluding FFRDCs)	administered by nonprofit institutions	State and local governments
Alabama	\$,000	\$,000	\$,000	\$\$,000
Alaska	\$,000	\$,000	\$,000	,000
Arizona	\$,000	\$,000	\$,000	,000
Arkansas	\$,000	\$,000	\$,000	\$,000
California	\$,000	\$,000	\$,000	\$,000
Colorado	\$,000	\$,000	\$,000	,000
Connecticut	\$,000	\$,000	\$,000	\$,000
Delaware	\$,000	\$,000	\$,000	\$,000
Florida	\$,000	\$,000	\$,000	\$,000
Georgia	,000	\$,000	\$,000	\$,000
Hawaii	,000	\$,000	\$,000	\$,000
Idaho	,000	\$,000	\$,000	\$,000
Illinois	,000	\$,000	\$,000	,000
Indiana	\$,000	\$,000	\$\$	\$,000
Iowa	\$,000	\$,000	\$,000	\$,000
Kansas	\$,000	\$,000	\$,000	\$,000
Kentucky	\$,000	\$,000	\$,000	\$,000
Louisiana	,000	\$,,000	\$\$	\$,000
Maine	,000	\$,,000	\$\$	\$,000
Maryland	\$,000	\$,,000	\$\$,000
Massachusetts	\$,000	\$,,000	\$\$,000
Michigan	\$,000	\$,000	\$,000	,000

Obligations for development for FY 2002

	(E) FFRDC:	2	(F)		(G)		(H)	
State	administere universities	d by	Nonprofi institution		FFRDCs administered		State and lo	ocal
State	colleges		(excluding FFI		nonprofit instit		governme	
Minnesota	\$,000	\$,000	\$,000	\$,000
Mississippi	\$,000,	\$,000	\$,000	\$,000
Missouri	\$,000,	\$,000,	\$,000	\$,000
Montana	\$,000,	\$,000	\$,000	\$,000
Nebraska	\$,000,	\$,000,	\$,000,	\$,000
Nevada	\$,000,	\$,000,	\$,000	\$,000
New Hampshire	\$,000,	\$,000	\$,000	\$,000
New Jersey	\$,000,	\$,000	\$,000	\$,000
New York	\$,000,	\$,000	\$,000	\$,000
North Carolina	\$,000,	\$,000	\$,000	\$,000
North Dakota	\$,000,	\$,000	\$,000	\$,000
Ohio	\$,000,	\$,000	\$,000	\$,000
Oklahoma	\$,000,	\$,000	\$,000	\$,000
Oregon	\$,000,	\$,000	\$,000	\$,000
Pennsylvania	\$,000,	\$,000	\$,000	\$,000
Rhode Island	\$,000,	\$,000	\$,000	\$,000
South Carolina	\$,000,	\$,000	\$,000,	\$,000
South Dakota	\$,000,	\$,000	\$,000,	\$,000
Tennessee	\$,000,	\$,000	\$,000,	\$,000
Texas	\$,000,	\$,000	\$,000,	\$,000
Utah	\$,000,	\$,000	\$,000,	\$,000
Vermont	\$,000,	\$,000	\$,000	\$,000
Virginia	\$,000,	\$,000	\$,000	\$,000
Washington	\$,000,	\$,000	\$,000	\$,000

Obligations for development for FY 2002

	(E) FFRDCs	(F)	(G)	(H)
State	administered by universities and colleges	Nonprofit institutions (excluding FFRDCs)	FFRDCs administered by nonprofit institutions	State and local governments
West Virginia	,000	\$,000	,000	\$,000
Wisconsin	,000	\$\$	\$\$,000
Wyoming	,000	\$\$	\$\$,000
District of Columbia	,000	\$\$	\$,000	,000
Puerto Rico	,000	\$\$	\$,000	\$,000
Other outlying areas (other U.S.				
territories and possessions)	\$,000	\$,,000	,000	\$\$,000
Offices abroad (administered by the U.S. government)	\$,000	,000	\$,000	\$,000
Total	,000	,000	,000	,000

NOTE: Totals for each column should equal sum of the two amounts reported for Question 6 in Columns C and D.

Part B

For the following 10 agencies only:

- U.S. Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, the Interior, and Transportation, the Environmental Protection Agency, NASA, and NSF
- 14. What were your agency's FY 2002 *obligations* for R&D plant for each state and for each type of performer listed below? (*Report dollars in thousands; if none, enter "0."*)

Definitions for Question 14					
Previously defined terms:					
R&D plant (See Question 1.)	Federal intramural (See Question 6.)				
Obligations (See Question 2.)	Industrial firms (See Question 6.)				
Basic research (See Question 2.)	Universities and colleges (See Question 6.)				
Applied research (See Question 2.)	Nonprofit institutions (See Question 6.)				
Development (See Question 2.)	State and local governments (See Question 6.)				
Performer (See Question 6.)	FFRDCs(See Question 6.)				

Obligations for R&D plant for FY 2002

	(A)	(B)	(C) FFRDCs	(D) Universities and
State	Federal intramural	Industrial firms (excluding FFRDCs)	administered by industrial firms	colleges (excluding FFRDCs)
Alabama	\$,000	\$,000	,000	\$,000
Alaska	\$,000	\$,000	\$,000	\$\$,000
Arizona	\$\$	\$,000	\$,000	,000
Arkansas	\$,000	\$,000	\$,000	\$,000
California	\$,000	\$,000	\$,000	,000
Colorado	\$,000	\$,000	\$,000	\$,000
Connecticut	\$\$	\$,000	\$,000	,000
Delaware	\$,000	\$,000	\$,000	\$,000
Florida	\$,000	\$,000	\$,000	,000
Georgia	\$,000	\$,000	\$,000	\$,000
Hawaii	\$\$,000	\$,000	\$,000	,000
Idaho	\$,000	\$,000	\$,000	\$,000
Illinois	\$,000	,000	\$,000	,000
Indiana	\$,000	\$,000	\$,000	\$,000

Obligations for R&D plant for FY 2002

	(A)	(B) Industrial firms	(C) FFRDCs administered by	(D) Universities and colleges (excluding
State	Federal intramural	(excluding FFRDCs)	industrial firms	FFRDCs)
Iowa	\$,000	,000	,000	\$\$,000
Kansas	\$,000	\$\$,000	\$,000
Kentucky	\$,000	\$,000	,000	\$,000
Louisiana	\$\$	\$,000	,000	\$,000
Maine	\$\$,000	,000	\$,000
Maryland	\$,000	\$\$,000	\$,000
Massachusetts	\$,000	\$\$,000	,000	\$,000
Michigan	\$,000	\$,000	\$\$	\$,000
Minnesota	\$,000	\$,000	\$\$	\$,000
Mississippi	\$\$	\$\$,000	,000	\$,000
Missouri	\$,000	\$\$,000	\$\$	\$,000
Montana	\$,000	\$\$,000	\$,000
Nebraska	\$\$	\$\$,000	,000	\$,000
Nevada	\$\$	\$\$,000	,000	\$,000
New Hampshire	\$,000	\$\$,000	\$\$	\$,000
New Jersey	\$\$	\$\$,000	,000	\$,000
New York	\$,000	\$,000	\$\$	\$,000
North Carolina	\$,000	\$\$,000	\$\$	\$,000
North Dakota	\$,000	\$\$,000	,000	\$,000
Ohio	\$\$	\$\$,000	,000	\$,000
Oklahoma	\$,000	\$\$,000	\$\$	\$,000
Oregon	\$\$	\$\$	\$\$	\$,000
Pennsylvania	\$,000	\$\$	\$\$	\$,000
Rhode Island	\$\$	\$,000	\$\$	\$,000
South Carolina	\$,000	\$,000	\$\$	\$,000

	(A)	(B)	(C) FFRDCs	(D) Universities and
State	Federal intramural	Industrial firms (excluding FFRDCs)	administered by industrial firms	colleges (excluding FFRDCs)
South Dakota	\$,000	\$,000	\$,000	\$,000
Tennessee	\$,000	\$,000	\$,000	\$,000
Texas	\$,000	\$,000	\$,000	\$,000
Utah	,000	\$\$,000	\$\$	\$,000
Vermont	,000	\$\$,000	\$\$,000
Virginia	,000	\$,000	\$\$,000	\$,000
Washington	,000	\$,000	\$\$,000	\$,000
West Virginia	,000	\$,000	\$\$,000	\$,000
Wisconsin	,000	\$,000	\$\$,000	\$,000
Wyoming	,000	\$\$,000	\$\$	\$,000
District of Columbia	,000	\$\$,000	,000	\$,000
Puerto Rico	\$\$	\$\$	\$\$,000
Other outlying areas (other U.S.				
territories and possessions)	\$,000	,000	\$,000	,000,
Offices abroad (administered by the				
U.S. government)	\$,000	\$\$,000	\$,000	\$,000
Total	,000	,000	,000	,000

(Columns E through H continued below.)

	(I FFR	E) DCs	(I	F)	(G)		(H)
	adminis	tered by		profit	RDCs	a. .	
State	universi coll		institu (excluding	utions g FFRDCs)	istered by t institutions		and local rnments
Alabama	\$,000	\$,000	\$,000	\$,000
Alaska	\$,000	\$,000	\$,000	\$,000
Arizona	\$,000	\$,000	\$,000	\$,000
Arkansas	\$,000	\$,000	\$,000	\$,000
California	\$,000	\$,000	\$,000	\$,000
Colorado	\$,000	\$,000	\$,000	\$,000
Connecticut	\$,000	\$,000	\$,000	\$,000
Delaware	\$,000	\$,000	\$,000	\$,000
Florida	\$,000	\$,000	\$,000	\$,000
Georgia	\$,000	\$,000	\$,000	\$,000
Hawaii	\$,000	\$,000	\$,000	\$,000
Idaho	\$,000	\$,000	\$,000	\$,000
Illinois	\$,000	\$,000	\$,000	\$,000
Indiana	\$,000	\$,000	\$,000	\$,000
Iowa	\$,000	\$,000	\$,000	\$,000
Kansas	\$,000	\$,000	\$,000	\$,000
Kentucky	\$,000	\$,000	\$,000	\$,000
Louisiana	\$,000	\$,000	\$,000	\$,000
Maine	\$,000	\$,000	\$,000	\$,000
Maryland	\$,000	\$,000	\$,000	\$,000
Massachusetts	\$,000	\$,000	\$,000	\$,000
Michigan	\$,000	\$,000	\$,000	\$,000
Minnesota	\$,000	\$,000	\$,000	\$,000

	(E) FFRDCs	,	(F)		(G)		(H)	
	administered	d by	Nonprofi		FFRDCs		Ctoto and 1	1
State	universities colleges		institution (excluding FFI		administered nonprofit instit		State and logovernme	
Mississippi	\$,000	\$,000,	\$,000,	\$,000
Missouri	\$,000,	\$,000	\$,000	\$,000
Montana	\$,000,	\$,000	\$,000,	\$,000
Nebraska	\$,000,	\$,000	\$,000	\$	_,000
Nevada	\$,000,	\$,000	\$,000,	\$,000
New Hampshire	\$,000,	\$,000	\$,000,	\$,000
New Jersey	\$,000,	\$,000	\$,000,	\$	_,000
New York	\$,000,	\$,000	\$,000,	\$,000
North Carolina	\$,000	\$,000	\$,000,	\$	_,000
North Dakota	\$,000,	\$,000	\$,000,	\$	_,000
Ohio	\$,000,	\$,000	\$,000,	\$	_,000
Oklahoma	\$,000,	\$,000	\$,000,	\$,000
Oregon	\$,000,	\$,000	\$,000,	\$,000
Pennsylvania	\$,000,	\$,000	\$,000,	\$	_,000
Rhode Island	\$,000	\$,000	\$,000,	\$	_,000
South Carolina	\$,000,	\$,000	\$,000,	\$	_,000
South Dakota	\$,000,	\$,000	\$,000,	\$,000
Tennessee	\$,000,	\$,000	\$,000	\$	_,000
Texas	\$,000,	\$,000	\$,000	\$	_,000
Utah	\$,000,	\$,000	\$,000	\$	_,000
Vermont	\$,000,	\$,000	\$,000,	\$,000
Virginia	\$,000,	\$,000	\$,000	\$,000
Washington	\$,000,	\$,000	\$,000,	\$	_,000
West Virginia	\$,000,	\$,000	\$,000	\$,000

	(E) FFRDCs	(F)	(G)	(H)
State	administered by universities and colleges	Nonprofit institutions (excluding FFRDCs)	FFRDCs administered by nonprofit institutions	State and local governments
Wisconsin	,000	\$,000	,000	\$,000
Wyoming	\$,000	\$\$	\$,000	\$\$
District of Columbia	\$,000	\$\$	\$,000	\$,000
Puerto Rico	,000	\$\$,000	,000	\$,000
Other outlying areas (other U.S. territories and possessions)	\$,000	\$\$	\$,000	\$\$
Offices abroad (administered by the U.S. government)	\$,000	\$,,000	\$,000	\$,000
Total	,000	,000	,000	,000

NOTE: Totals for each column should equal amounts reported for Question 11 in Column A.

15. What were your agency's FY 2002 obligations to *universities and colleges* for 1) basic research and 2) applied research for each of the fields of science and engineering listed below? (*Report dollars in thousands; if none, enter "0."*)

NOTE: Please *exclude* obligations to FFRDCs located at universities or colleges.

Definitions for Question 15

Previously defined terms:

Obligations (See Question 2.)

Basic research (See Question 2.)

Applied research (See Question 2.)

Your agency's obligations to universities and colleges for FY 2002 research activities (actual)

Field of science a (See Attachment 1	nd engineering I for classification of fields.)	Basic research FY 2002	Applied research FY 2002	Total research FY 2002
Life Sciences	Biological (excluding environmental)	\$,000	\$,000	,000
	Environmental biology	,000	\$,000	,000
	Agricultural science	,000	\$,000	,000
	Medical sciences	,000	\$,000	,000
	Life science, not elsewhere classified	\$,000	\$\$,000	,000
Psychology	Biological aspects	,000	\$\$,000
	Social aspects	,000	\$\$,000
	Psychological sciences, not elsewhere classified	\$,000	\$,000	,000
Physical Sciences	Astronomy	\$,000	\$,000	\$,000
	Chemistry	,000	\$,000	,000
	Physics	,000	\$,000	,000
	Physical sciences, not elsewhere classified	\$,000	\$,000	\$,,000
Environmental	Atmosphoris salarasa	,000	\$,000	\$,000
Sciences	Atmospheric sciences		\$,000	,000
	Geological sciences	\$,000	\$\$,000	\$,000
	Oceanography	,000	,000	,000

Your agency's obligations to universities and colleges for FY 2002 research activities (actual)

Field of science ar		Basic research	Applied research	Total research
(See Attachment 1	for classification of fields.)	FY 2002	FY 2002	FY 2002
	Environmental sciences, not elsewhere classified	\$,000	\$\$,000
Mathematics and Computer				
Sciences	Mathematics	\$,000	\$\$	\$,000
	Computer sciences	\$,,000	\$\$,000	\$,,000
	Mathematics and			
	computer sciences, not elsewhere classified	\$,000	\$,000	\$,000
Engineering	Aeronautical	\$,000	\$,000	,000
	Astronautical	\$\$	\$\$,000
	Chemical	\$\$	\$,000	,000
	Civil	\$,000	\$,000	,000
	Electrical	\$\$,000	\$,000	,000
	Mechanical	\$\$,000	\$,000	,000
	Metallurgical and materials	\$,000	,000	,000
	Engineering, not elsewhere classified	\$,000	\$,000	,000
Social Sciences	Anthropology	\$,000	\$,000	,000
	Economics	\$,000	\$,000	,000
	Political science	\$\$	\$\$,000
	Sociology	\$\$	\$,000	,000
	Social sciences, not elsewhere classified	\$,000	\$,000	\$,000
Other Sciences, no	t elsewhere classified	\$,000	\$,000	\$,000
	Total for all fields	,000	,000	,000

NOTE: The totals for all fields for 1) basic research, and 2) applied research, should match the amounts reported for Question 6 in Row d, Columns A and B.

Part D

16. What is your best estimate of your agency's FY 2003 *obligations* to universities and colleges for 1) basic research and 2) applied research for each of the fields of science and engineering listed below? (*Report dollars in thousands; if none, enter "0."*)

Definitions for Question 16

Previously defined terms:

Obligations (See Question 2.)

Basic research (See Question 2.)

Applied research (See Question 2.)

Your agency's obligations to universities and colleges for FY 2003 research activities (preliminary estimates)

Field of science and engineering (See Attachment 1 for classification of fields.)	Basic resea FY 2003	_	pplied research FY 2003	research
Life Sciences	\$,000 \$,000	\$,000
Psychology	\$,000 \$,000	\$,000
Physical Sciences	\$,000 \$,000	\$,000
Environmental Sciences	\$,000 \$,000	\$,000
Mathematics and Computer Sciences	\$,000 \$,000	\$,000
Engineering	\$,000 \$,000	\$,000
Social Sciences	\$,000 \$,000	\$,000
Other Sciences, not elsewhere classified	\$,000 \$,000	\$,000
Total all fields	\$,000 \$,000	\$,000

NOTE: Totals for all fields for 1) basic research, and 2) applied research, should equal amounts reported for Question 7, Row d, Columns A and B.

17. What is your best estimate of your agency's FY 2004 *obligations* to universities and colleges for 1) basic research and 2) applied research for each of the fields of science and engineering listed below? (*Report dollars in thousands; if none, enter "0."*)

Definitions for Question 17

Previously defined terms:

Obligations (See Question 2.)

Basic research (See Question 2.)

Applied research (See Question 2.)

Your agency's obligations to universities and colleges for FY 2004 research activities (preliminary estimates)

		(F	/
Field of science and engineering (See Attachment 1 for classification of fields.)	Basic research FY 2004	Applied research FY 2004	Total research FY 2004
Life Sciences	,000	,000	,000
Psychology	,000	,000	\$,000
Physical Sciences	,000	,000	\$,000
Environmental Sciences	\$,000	,000	,000
Mathematics and Computer Sciences	\$,000	,000	\$
Engineering	,000	,000	,000
Social Sciences	,000	,000	,000
Other Sciences, not elsewhere classified	\$,000	,000	\$,000
Total all fields	,000	,000	,000

NOTE: Totals for all fields for 1) basic research, and 2) applied research, should equal amounts reported for Question 8, Row d, Columns A and B.

Attachment 1 Classification for NSF fields of science and engineering

NSF field		Examples of disciplines included	
Life sciences Concerned	with the scientific study of living	g organisms and their systems.	
Agricultural	Agriculture, general Agricultural chemistry Agricultural production Agronomy Animal sciences Conservation	Fish and wildlife Food science and technology Forestry Horticulture International agriculture Landscape architecture Plant sciences	Renewable natural resources Soils and soil science Phytopathology Phytoproduction Other agricultural, not elsewhere classified
Biological (excluding environmental)	Allergies and immunology Anatomy Bacteriology Biochemistry Biogeography Biology Biometry and biostatistics Biophysics Biotechnology Botany Cell biology Ecology	Entomology and parasitology Epidemiology Foods and nutrition studies Genetics Medical anatomy Medical biochemistry Medical immunology Medical microbiology Medical pathology Medical physiology Medical toxicology Microbiology	Neuroscience (biological) Nutrition Pathology, human and animal Pharmacology, human and animal Physical anthropology Physiology, human and animal Virology Zoology Other biological, not elsewhere classified
Environmental biology	Ecosystem sciences Evolutionary biology Global warming Limnology Physiological ecology	Population and biotic community ecology Population biology Systematics Other environmental biology, not elsewhere classified	
Medical	Anesthesiology Cardiology Colon and rectal surgery Dental/oral surgery Dentistry Dermatology Family medicine Gastroenterology General surgery Geriatric medicine Hematology Internal medicine Neonatal-perinatal medicine Neurological surgery Neurology Nuclear medicine	Nuclear radiology Nursing psychiatry/mental health Obstetrics and gynecology Oncology Ophthalmology Optometry Orthopedics/orthopedic surgery Osteopathic medicine Otolaryngology Pathology Pediatrics Pharmacology Pharmacy Physical and rehabilitative medicine	Plastic surgery Podiatry Preventive medicine Psychiatry Public health Radiation biology/radiobiology Radiology Surgery Thoracic surgery Urology Veterinary medicine Other medical, not elsewhere classified

Examples of disciplines included	
Administrative services Allied health, other Communication disorders Gerontology Health and medical services Health professions and related services	Medical laboratory sciences and services Midwifery Nursing Nursing technologies Occupational therapy Physical therapy Rehabilitation/therapeutic services
s and individual and group characteristic	s and abilities
Animal behavior Clinical psychology Comparative psychology Ethology Experimental psychology	s and aumities.
Development and personality Educational psychology Industrial and engineering psychology Personnel psychology Social psychology Testing Vocational psychology	
sified	
g of the material universe and its phenome	ena)
Laboratory astrophysics Optical astronomy Radio astronomy	Theoretical astrophysics X-ray, Gamma-ray, neutrino astronomy
Analytical Inorganic Organic Organo-metallic	Pharmaceutical Physical Polymer sciences (except biochemistry)
Acoustics Atomic and molecular Chemical Condensed matter	Nuclear structure Optics Plasma Solid-state
	Administrative services Allied health, other Communication disorders Gerontology Health and medical services Health professions and related services s, and individual and group characteristic Animal behavior Clinical psychology Comparative psychology Ethology Experimental psychology Industrial and engineering psychology Personnel psychology Social psychology Testing Vocational psychology Testing Vocational psychology Testing Vocational psychology Analytical Inorganic Organic Organo-metallic Acoustics Atomic and molecular

	Examples of disciplines include	u
nvironmental sciences (terrestrial and of Includes studies concerned with t	extraterrestrial) he gross nonbiological properties of the are	as of the solar system that
directly or indirectly affect man's	survival and welfare.	
Includes studies pertaining to life	in the sea or other bodies of water, which a	are reported as oceanography
Atmospheric sciences	Aeronomy Air pollution Extraterrestrial atmospheres	
	Meteorology	
	Solar	
	Weather modification	
Geological	Engineering geophysics	Organic geochemistry
sciences	General geology Geodesy and gravity	Paleomagnetism Physical geography and
	Geomagnetism	cartography
	Hydrology	Seismology
	Inorganic geochemistry	Soil sciences
	Isotopic geochemistry Laboratory geophysics	Surveying
Oceanography	Aquatic biology	Geological oceanograph
	Biological oceanography Chemical oceanography	Marine geophysics Physical oceanography
Environmental sciences not elsewhere		r nysicai oceanograpny
classified	;	
lathematics and computer sciences		
<u>-</u>	cal reasoning with the aid of symbols and a	1 14 4
Includes studies that employ logic	car reasoning with the ara or symbols and a	re concerned with the
development of methods of opera	ation employing such symbols, and in the ca	
development of methods of opera		
development of methods of opera	ation employing such symbols, and in the ca	ase of computer sciences, wit
development of methods of opera the application of such methods to	ation employing such symbols, and in the case of automated information systems.	Mathematics, general Numerical analysis
development of methods of opera the application of such methods to	Algebra Analysis Applied mathematics	Mathematics, general Numerical analysis Operations research
development of methods of opera the application of such methods to	Algebra Analysis Applied mathematics Foundations and logic	Mathematics, general Numerical analysis Operations research Statistics
development of methods of opera the application of such methods to	Algebra Analysis Applied mathematics	Mathematics, general Numerical analysis Operations research
development of methods of operathe application of such methods to Mathematics	Algebra Analysis Applied mathematics Foundations and logic Geometry Inventory and monitoring	Mathematics, general Numerical analysis Operations research Statistics Topology Trend reporting
development of methods of opera the application of such methods to	Algebra Analysis Applied mathematics Foundations and logic Geometry	Mathematics, general Numerical analysis Operations research Statistics Topology Trend reporting ences (general)
development of methods of operathe application of such methods to Mathematics Computer	Algebra Analysis Applied mathematics Foundations and logic Geometry Inventory and monitoring Computer and information scie Design, development, and app capabilities to data storage an	Mathematics, general Numerical analysis Operations research Statistics Topology Trend reporting ences (general) lication of computer and manipulation
development of methods of operathe application of such methods to Mathematics Computer	Algebra Analysis Applied mathematics Foundations and logic Geometry Inventory and monitoring Computer and information scie Design, development, and app capabilities to data storage at Information sciences and syste	Mathematics, general Numerical analysis Operations research Statistics Topology Trend reporting ences (general) lication of computer and manipulation ems
development of methods of operathe application of such methods to Mathematics Computer	Algebra Analysis Applied mathematics Foundations and logic Geometry Inventory and monitoring Computer and information scie Design, development, and app capabilities to data storage an	Mathematics, general Numerical analysis Operations research Statistics Topology Trend reporting ences (general) lication of computer and manipulation ems

ngingaring		
ngineering Includes studies directed too	ward developing engineering principles or toward i	noking ensaifie minai-1-
usable in engineering practic		making specific principle
Aeronautical	Aerodynamics	
Astronautical	Aerospace	
Astronauticar	Space technology	
Chemical	Chemical engineering	
	Petroleum	
	Petroleum refining process	
	Polymer/plastics engineering	
	Wood science	
Civil	Architectural	Hydrologic
	Environmental/environmental	Marine
	health engineering	Sanitary and
	Geotechnical	environmental
	Hydraulic	Structural
		Transportation
Electrical	Communication	
	Computer engineering	
	Electronic	
	Power	
Mechanical	Engineering mechanics	
	Mechanical engineering	
N ()		N. 11
Metallurgy and materials	Ceramic engineering	Metallurgy Mining and minoral
	Geological engineering Geophysical engineering	Mining and mineral engineering
	Materials engineering	Textile sciences and
	Materials engineering Materials research	engineering
	Materials science	Welding
	Metallurgical engineering	<i>6</i>
Engineering not elsewhere classis		Industrial and
	Bioengineering	management
	Biomedical	Manufacturing
	Engineering, general	engineering
	Engineering design	Nuclear
	Engineering physics	Ocean engineering
	Engineering science	Systems science and theory

NSF field Examples of disciplines included		
Social sciences Includes studies directed toward an u of individuals as members of a group	understanding of the behavior of social i	institutions and groups and
Anthropology	Applied anthropology Archaeology Cultural and personality Ethnology Social anthropology	
Economics	Econometrics and economic statistics Economic systems and development History of economic thought Industrial, labor, and agricultural economics	International economics Macroeconomics Microeconomics Public finance and fiscal policy Quantitative Resource Theory
Political science	Area or regional studies Comparative government History of political ideas International relations and law National political and legal systems	Political science and government Political theory Public administration
Sociology	Area and ethnic studies City/urban, community, and regional planning Comparative and historical Complex organizations Criminal justice and corrections Criminology Culture and social structure	Demography Group interactions Population studies Social problems and socia welfare Sociological theory Urban studies/affairs
Social sciences not elsewhere classified	Linguistics Research in education Research in history and philosophy of science Research in law, e.g., attempts to assess impact on society of legal systems and practices Socioeconomic geography	

Other sciences not elsewhere classified

Includes studies that are multidisciplinary and interdisciplinary that cannot be classified within one of the fields of science and engineering above.