

Survey of Federal Funds for Research and Development

Version for Non-DOD agencies

Plea	ise enter	the nam	e of your	agency	below.

Contact information

If you have a question about the survey in general, please contact Mr. Ron 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, 2003, and 2004? (*Report dollars in thousands; if none, enter "0."*)

Please report actual outlays for FY 2003. For FY 2004 and 2005, 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 costs of predesign studies (e.g., those undertaken before commitment to a specific research facility).

FY 2003 is the fiscal year period October 1, 2002 through September 30, 2003. Similar time periods are used for FY 2004 and FY 2005.

Outlays for research and development activities at your agency

	FY 2003 (actual)	FY 2004 (preliminary)	FY 2005 (preliminary)
Research and Development	,000	\$,000	\$\$,000
R&D Plant	,000	\$\$	\$,000
Total	\$,000	\$,000	\$,000

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

2. What were your agency's *obligations* for 1) basic research, 2) applied research, 3) development, and 4) R&D plant for fiscal years 2003, 2004, and 2005? (*Report dollars in thousands; if none, enter "0."*)

Please report actual obligations for FY 2003. For FY 2004 and 2005, please provide your best estimate of what these obligations will be.

Definitions for Question 2

New definitions:

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.

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.

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.

Previously defined terms:

R&D plant (See Question 1.)

Obligations for research and development activities at your agency

		(A) FY 2003 (actual)	(B) FY 2004 (preliminary)	(C) FY 2005 (preliminary)
a.	Basic research	\$,000	,000	\$,000
b.	Applied research	\$,000	\$,000	\$,000
	Total research	\$,000	\$,000	,000
c.	Development	,000	,000	\$,000
	Total research and development	\$	\$,000	\$ \$
d.	R&D Plant	\$,000	\$,000	\$,000
	Total	\$\$,000	\$,000	\$,000

3. What were your agency's FY 2003 *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 2003 research activities at your agency (actual)

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	Biological (excluding environmental)	\$,000	\$,000	,000	
	Environmental biology	,000	\$,000	,000	
	Agricultural science	\$\$	\$,000	,000	
	Medical sciences	\$\$	\$,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	\$,,000	
	Oceanography	,000	\$\$,000	
	Environmental sciences, not elsewhere classified	\$,000	\$,000	\$,000	

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

Field of science and (See Attachment 1	nd engineering for classification of fields.)	Basic research FY 2003	Applied research FY 2003	Total research FY 2003	
Mathematics and Computer					
Sciences	Mathematics	,000	,000	,000	
	Computer sciences	,000	,000	,000	
	Mathematics and computer sciences, not				
	elsewhere classified	\$,000	\$\$,000	,000	
Engineering	Aeronautical	,000	,000	,000	
	Astronautical	,000	,000	,000	
	Chemical	,000	,000	,000	
	Civil	,000	,000	,000	
	Electrical	\$\$,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 2004 *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 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	,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	,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 2005 *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 2005 research activities at your agency (preliminary estimates)

Field of science and engineering (See Attachment 1 for classification of fields.)	Basic research FY 2005	Applied research FY 2005	Total research FY 2005
Life sciences	,000	,000	,000
Psychology	,000	\$\$,000
Physical sciences	,000	\$\$,000
Environmental sciences	,000	\$\$,000
Mathematics and computer sciences	,000	\$\$,000
Engineering	,000	\$\$,000
Social sciences	,000	\$\$,000
Other sciences, not elsewhere classified	,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 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.)

Basic research (See Question 2.)

Applied research (See Question 2.)

Development (See Question 2.)

6. What were 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 6
See pages 8-9.

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

	Type of research and development performer	(A) Basic research FY 2003	(B) Applied research FY 2003	(C) Development FY 2003	(D) Total research and development FY 2003
a.	Federal intramural (agencies of the Federal government)	\$,000	\$,000	\$,000	,000
	Portion of Federal intramural for personnel costs	\$,000	\$,,000	\$,000	,000
b.	Industrial firms (excluding federally funded research and development centers–FRDCs)	\$,000	\$,000	\$,000	\$,000
c.	FFRDCs administered by industrial firms (See Question 9, Section A.)	\$,000	,000	\$,000	\$,000
d.	Universities and colleges (excluding FFRDCs)	\$,000	\$,000	\$,000	,000
e.	FFRDCs administered by universities and colleges (See Question 9, Section B.)	\$,000	\$,000	\$,000	,000
f.	Nonprofit institutions (excluding FFRDCs)	\$,000	\$,000	\$,,000	,000
g.	FFRDCs administered by nonprofit institutions (See Question 9, Section C.)	\$,000	\$\$,000	\$,000	\$,000
h.	State and local governments	\$\$,000	,000	\$,000	\$,000
	All domestic performers	\$\$,000	,000	,000	\$,000
i.	Foreign	\$\$,000	,000	\$\$	\$,000
	Total all performers	,000	,000	,000	,000

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

7. 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 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 2004 research and development activities at your agency (preliminary estimates)

	(premimary estimates)								
	Type of research and development performer	(A) Basic res FY 20	earch	(B) Applied res FY 200		(C) Developm FY 200		Total reso and develo FY 200	pment
a.	Federal intramural (agencies of the Federal government)	\$,000	\$,000,	\$,000	\$,000
	Portion of Federal intramural for personnel costs	\$,000	\$,000,	\$,000,	\$,000
b.	Industrial firms (excluding federally funded research and development centers–FFRDCs)	\$,000,	\$,000	\$	_,000	\$,000
c.	FFRDCs administered by industrial firms	\$,000	\$,000,	\$,000,	\$,000
d.	Universities and colleges (excluding FFRDCs)	\$,000	\$,000	\$,000,	\$,000
e.	FFRDCs administered by universities and colleges	\$,000	\$,000	\$,000,	\$,000
f.	Nonprofit institutions (excluding FFRDCs)	\$,000	\$,000,	\$,000	\$,000
g.	FFRDCs administered by nonprofit institutions	\$,000	\$	_,000	\$,000	\$,000
h.	State and local governments	\$,000	\$,000,	\$,000	\$,000
	All domestic performers	\$,000,	\$,000	\$,000	\$,000
i.	Foreign	\$,000	\$	_,000	\$,000	\$,000
	Total all performers	\$,000	\$,000	\$,000	\$,000

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

8. What is your best estimate of your agency's FY 2005 *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 2005 research and development activities at your agency (preliminary estimates)

Type of research and development performer	(A) Basic research FY 2005	(B) Applied research FY 2005	(C) Development FY 2005	(D) Total research and development FY 2005
a. Federal intramural (agencies of the Federal government)	,000	\$,000	,000	,000
Portion of Federal intramura for personnel costs	,000,	\$,000	,000	\$,000
b. Industrial firms (excluding federally funded research and development centers–FRDCs)	\$,000	\$,000	\$,000	,000
 c. FFRDCs administered by industrial firms 	,000	\$,000	,000	\$,000
d. Universities and colleges (excluding FFRDCs)	,000	\$,000	,000	\$,000
e. FFRDCs administered by universities and colleges	,000	\$,000	,000	\$,000
f. Nonprofit institutions (excluding FFRDCs)	\$,000	\$,000	,000	,000
g. FFRDCs administered by nonprofit institutions	\$,000	\$,000	\$,000	,000
h. State and local governments	\$,000	\$\$,000	\$,000	,000
All domestic performer	,000	,000	,000	,000
i. Foreign	\$,000	,000,	\$,000	,000
Total all performers	,000	,000	,000	,000

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

9. What were your agency's FY 2003 *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.)	

	at your agency			
	(A) Research and	(B)		
Name of FFRDC	development FY 2003	R&D plant FY 2003		
Section A: Administered by industrial firms				
Idaho National Engineering & Environmental Laboratory (Bechtel BSX Technologies Idaho, LLC), Idaho Falls, ID	\$,000	\$,000		
National Cancer Institute at Frederick (Science Applications International Corp.; Charles River Laboratories, Inc.; Data Management Services, Inc.; Wilson Information Services,				
Inc.), Frederick, MD	\$,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 D. The Column B subtotal should equal the amount reported for Question 11, Row c, Column A.

Obligations for FY 2003 research activities

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

Obligations for FY 2003 research activities at your agency

	(A)	at your	(B)
Name of FFRDC	Research a developme FY 2003	ent	R&D plant FY 2003
Jet Propulsion Laboratory (California Institute of Technology), Pasadena, CA	\$,000,	\$\$
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 equal the amount reported for Question 6 in Row e, Column D. The Section B subtotal for Column B should equal the amount reported for 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	\$.000	\$.000
(The Aerospace Corp.) El Segundo, CA	\$,,000	\$,,000

Obligations for FY 2003 research activities at your agency

	(A) Research and	(B)		
Name of FFRDC	development FY 2003	R&D plant FY 2003		
Arroyo Center (RAND Corporation), Santa Monica, CA	\$\$	\$,,000		
Brookhaven National Laboratory (Brookhaven Science Associates, Inc.), Upton, Long Island, NY	\$\$,000	,000		
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	\$\$		
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	\$\$		
Oak Ridge National Laboratory (UT-Battelle, LLC), Oak Ridge, TN	\$,000	\$\$,000		
Pacific Northwest National Laboratory (Battelle Memorial Institute), Richland, WA	\$,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 D. 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 2003 *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.)

Foreign performer		(A)	(B) Total research and development (including basic		
Continent/Area	Write names of countries below:	Basic research FY 2003		arch) 2003	
Africa		\$,000	\$,000	
		\$,000	\$,000	
Asia		\$,000	\$,000	
		\$,000	\$,000	
Europe		\$,000	\$,000	
		\$,000	\$,000	
		\$,000	\$,000	
		\$,000	\$,000	
North America		\$,000	\$,000	
		\$,000	\$,000	
		\$,000	\$,000	
		\$,000	\$,000	
South America		\$,000	\$,000	

Foreign performer Write names of countries below:		(A) Basic research FY 2003	(B) Total research and development (including basic research) FY 2003		
		\$\$	\$,000		
		,000	\$,000		
Oceania (Pacific					
Islands, Australia, etc.)		,000	\$,000		
		,000	\$,000		
		,000	,000		
Other, including international					
organizations		,000	,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 D.

11. What were your agency's *obligations* for R&D plant for the types of performers listed below for 1) FY 2003, 2) FY 2004, and FY 2005? (*Report dollars in thousands; if none, enter "0."*)

Please report actual obligations for FY 2003. For FY 2004 and 2005, 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.)			
Industrial firms (See Question 6.)	Foreign (See Question 6.)			

Obligations by your agency for R&D plant

	Type of research performer	(A) R&D plant FY 2003 (actual)	(B) R&D plant FY 2004 (preliminary)	(C) R&D plant FY 2005 (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	\$\$,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	\$,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 2003, please explain below.

Part A

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, the National Aeronautics and Space Administration (NASA), and the National Science Foundation (NSF)

NOTE: The Department of Defense reports these data separately for 1) research, and 2) development.

12. What were your agency's FY 2003 *obligations* for research and 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 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 and development for FY 2003

	(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	\$\$	
Alaska	\$,000	\$\$,000	\$,,000	
Arizona	\$,,000	\$\$	\$\$	\$,,000	
Arkansas	\$\$,000	\$\$	\$\$	\$,000	
California	\$,,000	\$\$	\$\$	\$,,000	
Colorado	\$,,000	\$\$	\$\$	\$,,000	
Connecticut	\$\$,000	\$\$	\$\$	\$,000	
Delaware	\$\$,000	\$\$	\$\$	\$,000	
Florida	\$,,000	\$\$	\$\$	\$,,000	
Georgia	\$,,000	\$\$,000	,000	\$,,000	
Hawaii	\$,000	\$\$	\$\$	\$,,000	
Idaho	\$,000	\$\$	\$\$	\$,000	
Illinois	,000	,000	,000	,000	

Obligations for research and development for FY 2003

	(A)		(B)		(C) FFRDCs		(D) Universities and	
State	Federal intra	mural	Industrial fi		administere industrial fi	d by	colleges (e	xcluding
Indiana	\$,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
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

Obligations for research and development for FY 2003

	(A)	(B)	(C) FFRDCs	(D) Universities and
a		Industrial firms	administered by	colleges (excluding
State	Federal intramural	(excluding FFRDCs)	industrial firms	FFRDCs)
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
Wisconsin	\$\$,000	\$,000	\$,000	\$\$
Wyoming	\$\$,000	\$,000	\$,000	\$\$,000
District of		4		
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 A continued)

Obligations for research and development for FY 2003

	(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 research and development for FY 2003

	(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 and development for FY 2003

	(E)	(F)	(G)	(H)
State	FFRDCs 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	\$,,000
Wyoming	,000	\$\$	\$\$,000
District of Columbia	,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

NOTE: Totals for each column should equal amounts reported for Question 6 in Column 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
- 13. What were your agency's FY 2003 *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 13					
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 2003

	(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	
Georgia	\$,000	,000	,000	\$,000	
Hawaii	\$,000	\$\$,000	\$,000	
Idaho	\$,000	,000	,000	\$,000	
Illinois	\$,000	\$\$	\$,000	\$,000	
Indiana	,000	,000	,000	\$,000	

	(A)		(B)	(C FFRI			D) ities and
State	Federal intra	mural	Industria (excluding		administe industria	ered by	colleges ((excluding DCs)
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
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

	(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	
Texas	,000	\$\$,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	\$,000	\$\$,000	
Wisconsin	\$,000	\$\$,000	\$\$,000	
Wyoming	\$\$,000	\$,000	\$\$,000	
District of Columbia	,000	\$\$,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	
Total	,000	,000	,000	,000	

(Columns E through H continued below.)

	(E) FFRDCs	(F)	(G)	(H)
	administered by	Nonprofit	FFRDCs	G
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
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) RDCs	((F)	(G)	(H)
	adminis	stered by		profit	FRDCs	
State		ities and leges		tutions g FFRDCs)	nistered by it institutions	and local rnments
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	,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.

Part C

For the following 6 agencies only:

- U.S. Departments of Agriculture, Defense, Energy, Health and Human Services; NASA, and NSF
- 14. What were 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."*)

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

Definitions for Question 14

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 (actual)

Field of science a (See Attachment	nd engineering I for classification of fields.)	Basic research FY 2003	Applied research FY 2003	Total research FY 2003	
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	,000	
	Physics	,000	,000	\$,000	
	Physical sciences, not elsewhere classified	\$,000	\$,000	,000	
Environmental Sciences	Atmospheric sciences	\$,000	,000	,000	
	Geological sciences	,000	\$,000	,000	

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

			(actual)	
Field of science and engineering (See Attachment 1 for classification of fields.)		Basic research FY 2003	Applied research FY 2003	Total research FY 2003
	Oceanography	\$,000	,000	,000
	Environmental sciences, not elsewhere classified	\$,000	\$,000	\$,000
Mathematics and				
Computer Sciences	Mathematics	\$,000	\$,,000	,000
	Computer sciences	\$\$,000	,000	,000
	Mathematics and computer sciences, not elsewhere classified	\$,000	\$,000	,000
Engineering	Aeronautical	,000	\$\$,000	\$,000
	Astronautical	,000	\$,000	,000
	Chemical	,000	\$,000	,000
	Civil	\$,000	\$,000	,000
	Electrical	,000	\$\$,000
	Mechanical	,000, \$	\$\$,000
	Metallurgical and materials	\$,000	,000	,000
	Engineering, not elsewhere classified	\$,000	\$,000	,000
Social Sciences	Anthropology	,000, \$,000	,000
	Economics	,000, \$	\$\$,000
	Political science	,000	\$\$	\$,000
	Sociology	,000, \$	\$\$,000
	Social sciences, not elsewhere classified	\$,000	\$,000	\$,000
Other Sciences, no	et elsewhere classified	\$\$	\$,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

For the following 6 agencies only:

- U.S. Departments of Agriculture, Defense, Energy, Health and Human Services; NASA, and NSF
- 15. 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 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 2004 research activities (preliminary estimates)

Field of science and engineering (See Attachment 1 for classification of fields.)	Basic rese FY 200		Applied res FY 200		Total res FY 20	
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.

Part E

For the following 6 agencies only:

U.S. Departments of Agriculture, Defense, Energy, Health and Human Services; NASA, and NSF

16. What is your best estimate of your agency's FY 2005 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 2005 research activities (preliminary estimates)

Field of science and engineering (See Attachment 1 for classification of fields.)	Basic research FY 2005	Applied research FY 2005	Total research FY 2005
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 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	Life sciences Concerned with the scientific study of living 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

SF field	Examples of disciplines include	ed	
directly or indirectly affect man	n the gross nonbiological properties of the are	•	
Atmospheric sciences	Aeronomy Air pollution Extraterrestrial atmospheres Meteorology Solar Weather modification		
Geological sciences	Engineering geophysics General geology Geodesy and gravity Geomagnetism Hydrology Inorganic geochemistry Isotopic geochemistry Laboratory geophysics	Organic geochemistry Paleomagnetism Physical geography and cartography Seismology Soil sciences Surveying	
Oceanography	Aquatic biology Biological oceanography Chemical oceanography	Geological oceanograph Marine geophysics Physical oceanography	
Environmental sciences not elsewhe classified	re		
development of methods of ope	gical reasoning with the aid of symbols and a tration employing such symbols, and in the casto automated information systems.		
Mathematics	Algebra Analysis Applied mathematics Foundations and logic Geometry Inventory and monitoring	Mathematics, general Numerical analysis Operations research Statistics Topology Trend reporting	
Computer sciences	Design, development, and approximation sciences and system of the control of the	Computer and information sciences (general) Design, development, and application of computer capabilities to data storage and manipulation Information sciences and systems Management information systems Programming languages Systems analysis	

ISF field	Examples of disciplines included	
Ingineering		
Includes studies directed toward devel- usable in engineering practice.	oping engineering principles or toward i	making specific principles
Aeronautical	Aerodynamics	
Astronautical	Aerospace Space technology	
Chemical	Chemical engineering Petroleum Petroleum refining process Polymer/plastics engineering Wood science	
Civil	Architectural Environmental/environmental health engineering Geotechnical Hydraulic	Hydrologic Marine Sanitary and environmental Structural Transportation
Electrical	Communication Computer engineering Electronic Power	
Mechanical	Engineering mechanics Mechanical engineering	
Metallurgy and materials	Ceramic engineering Geological engineering Geophysical engineering Materials engineering Materials research Materials science Metallurgical engineering	Metallurgy Mining and mineral engineering Textile sciences and engineering Welding
Engineering not elsewhere classified	Agricultural Bioengineering Biomedical Engineering, general Engineering design Engineering physics Engineering science	Industrial and management Manufacturing engineering Nuclear Ocean engineering Systems science and theory

NSF field	Examples of disciplines included			
Social sciences Includes studies directed toward an understanding of the behavior of social institutions and groups and of individuals as members of a group.				
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 social 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.