

Survey of Federal Funds for Research and Development

12/04/2003

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.

Plea	ase	enter	the	name	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 2001, 2002, and 2003? (Report dollars in thousands; if none, enter "0.")

Please report actual outlays for FY 2001. For FY 2002 and 2003, 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 2001 is the fiscal year period October 1, 2000 through September 30, 2001. Similar time periods are used for FY 2002 and FY 2003.

Outlays for research and development activities at your agency

	FY 2001 (actual)	FY 2002 (preliminary)	FY 2003 (preliminary)
Research and Development	,000	,000	,000
R&D Plant	,000	,000	,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 2001, 2002, and 2003? (Report dollars in thousands; if none, enter "0.")

Please report actual obligations for FY 2001. For FY 2002 and 2003, 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 2001 (actual)		(B) FY 2002 (preliminar	·y)	(C) FY 2003 (prelimina	
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	\$,000	\$,000	\$,000
	Total research						
	and development	\$,000	\$,000	\$,000
e.	R&D Plant	\$,000,	\$,000	\$,000
	Total	\$,000	\$,000	\$,000

3. What were your agency's FY 2001 *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 2001 research activities at your agency (actual)

Field of science a (See Attachment	and engineering 1 for classification of fields.)	ic research FY 2001	Applied research FY 2001		Total research FY 2001	
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
	Oceanography	\$,000	\$,000	\$,000
	Environmental sciences, not elsewhere classified	\$,000	\$,000	\$,000

Obligations for FY 2001 research activities at your agency (actual)

Field of science an (See Attachment 1	nd engineering for classification of fields.)	Basic research FY 2001	Applied research FY 2001	Total research FY 2001	
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	,000	
	Astronautical	,000	,000	,000	
	Chemical	,000	,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	,000	,000	
	Sociology	,000	\$,000	,000	
	Social sciences, not elsewhere classified	\$,000	\$,000	,000	
Other Sciences, no	t 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 2 in Rows a and b, Column A.

4. What were your agency's FY 2002 *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 2002 research activities at your agency (preliminary estimates)

Field of science and engineering (See Attachment 1 for classification of fields.)	Basic research FY 2002	Applied research FY 2002	Total research FY 2002
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 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 5

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	,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 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 2001 *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 2001 research and development activities at your agency (actual)

Type of research development per a. Federal intramur	and Basic former FY	research 7 2001	(B Appl resea FY 2	ied rch	Adva techno develo FY 2	nced ology pment	(D Major s develor FY 2	ystems oment	(E) Total res and develop FY 20	search l ment
(agencies of the government)		,000	\$,000	\$,000	\$,000	\$,000
Portion of Fe intramural for personnel co	ſ	,000	\$,000	\$,000	\$,000	\$,000
b. Industrial firms (excluding feder funded research development cer FRDCs)	and	,000	\$,000	\$,000	\$,000	\$,000
c. FFRDCs admini by industrial firm (See Question 9, Section A.)	ns	,000	\$,000,	\$,000,	\$,000	\$,000
d. Universities and colleges (exclude FFRDCs)	ing \$,000	\$,000	\$,000	\$,000,	\$,000
e. FFRDCs admini by universities a colleges (See Question 9, Section B.)	nd	,000	\$,000	\$,000	\$,000	\$,000
f. Nonprofit institu (excluding FFRI		,000	\$,000	\$,000	\$,000	\$,000
g. FFRDCs admini by nonprofit institutions (See Question 9, Section C.)		,000	\$,000	\$.000,	\$.000,	\$,000
h. State and local governments	\$,000	\$,000	\$,000	\$,000	\$,000

Obligations for FY 2001 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 2001	Applied research FY 2001	technology development FY 2001	Major systems development FY 2001	and development FY 2001
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 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 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 2002 research and development activities at your agency (actual)

	Type of research and	(A) Basic research	(B) Applic		Adv: techi	C) anced iology opment	(D) Major sys developn		(E) Total resear and developme	
	development performer	FY 2001	FY 20			2001	FY 200		FY 2001	III
a.	Federal intramural (agencies of the Federal									
	government)	,000	\$,000	\$,000	\$,000	\$,0	000
	Portion of Federal intramural for									
	personnel costs	,000	\$,000	\$,000	\$,000	\$,0	000
b.	Industrial firms (excluding federally funded research and development centers—									
	FRDCs)	,000	\$,000	\$,000	\$,000	\$,0	000
c.	FFRDCs administered by industrial firms									
	(See Question 9, Section A.)	\$,000	\$,000	\$,000	\$,000	\$,0	000
d.	Universities and									
	colleges (excluding FFRDCs)	,000	\$,000	\$,000	\$,000	\$,0	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

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

g.	Type of research and development performer FFRDCs administered by nonprofit institutions	(A) Basic research FY 2001	(B) Applied research FY 2001	(C) Advanced technology development FY 2001	(D) Major systems development FY 2001	(E) Total research and development FY 2001
	(See Question 9, Section C.)	,000	,000	\$,000	\$,000	,000
h.	State and local governments	\$\$,000	,000,	,000	,000	,000
i.	All domestic performers Foreign	\$,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 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 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 2003 research and development activities at your agency (actual)

a	Type of research and development performer Federal intramural	(A) Basic researc FY 2001	eh r	(B) Applied esearch TY 2001	Adv tech devel	(C) vanced nology opment 2001	(D) Major systems development FY 2001	(E) Total research and development FY 2001
u.	(agencies of the Federal government)	\$,00	00 \$,000	\$,000	\$,000	,000
	Portion of Federal intramural for personnel costs	\$,00	00 \$,000	\$,000	\$,000	\$,000
b.	Industrial firms (excluding federally funded research and development centers— FRDCs)	\$,00	00 \$,000,	\$,000	\$,000	\$
c.	FFRDCs administered by industrial firms (See Question 9,	\$,00	00 \$,000	\$,000	\$,000	\$,000
d.	Section A.) Universities and colleges (excluding FFRDCs)	\$,00	00 \$,000	\$,000	\$,000	\$,000
e.	FFRDCs administered by universities and colleges							
	(See Question 9, Section B.)	\$\$	00 \$,000	\$,000	\$,000	,000

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

		(A)	(B)	(C) Advanced	(D)	(E) Total research	
C	Type of research and development performer	Basic research FY 2001	Applied research FY 2001	technology development FY 2001	Major systems development FY 2001	and development FY 2001	
f.	Nonprofit institutions (excluding FFRDCs)	,000	,000	\$,000	\$,000	,000	
g.	FFRDCs administered by nonprofit institutions						
	(See Question 9, Section C.)	\$,000	,000	\$,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 2001 *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.)

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Obligations for FY 2001 research activities at your agency

Name of FFRDC Section A: Administered by industrial firms	(A) Research and development FY 2001	(B) R&D plant FY 2001		
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	\$\$		
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 2001 research activities at your agency

	(A) Research a	(B)						
Name of FFRDC	developme FY 2001		R&D plant FY 2001					
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 E. 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 (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 2001 research activities at your agency

	(A) Research and	(B)		
Name of FFRDC	development FY 2001	R&D plant FY 2001		
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		
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 2001 *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.)

Forei	gn performer	 (A)	(B) Total research and development (including basic		
Continent/Area	Write names of countries below:	research Y 2001		arch) 7 2001	
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	

Foreig Continent/Area	gn performer Write names of countries below:	(A) Basic research FY 2001	(B) Total research and development (including basic research) FY 2001	
		,000	\$,000	
		,000	,000	
South America		,000	\$,000	
		,000	,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 E.

11. What were your agency's *obligations* for R&D plant for the types of performers listed below for 1) FY 2001, 2) FY 2002, and FY 2003? (*Report dollars in thousands; if none, enter "0."*)

Please report actual obligations for FY 2001. For FY 2002 and 2003, 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 2001 (actual)	(B) R&D plant FY 2002 (preliminary)	(C) R&D plant FY 2003 (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,	\$\$	\$\$
c.	FFRDCs administered by industrial firms	\$,000	,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
	All domestic performers	,000	,000	,000
i.	Foreign	,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 2001, please explain below.

Part A1

12. What were your agency's FY 2001 *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 2001

	(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 2001

	(A)		(B)		(C)		(D) Universities and	
G			Industrial firms		FFRDCs administered by		colleges (excluding	
State	Federal intran	nural ,000	(excluding FFI	· ·	industrial f		FFRDO \$	
Kentucky	\$	- 1		- 1		_ ,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 research (basic and applied) for FY 2001

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

(Columns E through H continued below.)

(Part A1 continued)

Obligations for research (basic and applied) for FY 2001

	(E) FFRDCs		(F)		(G)		(H)	
	administere	d by	Nonprofi		FFRDCs			
State	universities colleges		institution (excluding FFI		administered nonprofit instit		State and legovernme	
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 2001

	(E) FFRDCs		(F)		(G)		(H)	
Q. .	administered	•	Nonprofi		FFRDCs		g	
State	universities a colleges		institution (excluding FFF		administered nonprofit instit		State and lo	
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 2001

	(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	\$\$,000
Wyoming	,000	\$\$,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> </u>		
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 2001 *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."*)

Definitio	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 2001

	(A)		(B)		(C) FFRDCs	,	(D) Universitie	e and
State	Federal intra	mural	Industrial fi (excluding FF)		administered industrial fi	d by	colleges (exc FFRDC	cluding
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 development for FY 2001

	(1	A)	(E	3)		C) CDCs		(D)
State	Federal i	ntramural	Industria (excluding		adminis	stered by ial firms	colleges	(excluding RDCs)
Kentucky		,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 2001

	(A)		(B)		(C) FFRDC	a	(E Universi	
State	Federal intra	amural	Industrial (excluding F		administere industrial fi	d by	colleges (e	excluding
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	\$,000	\$,000,	\$,000	\$,000
possessions) 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 2001

		(E) RDCs	((F)		(G)		(H)
	admin	istered by		profit		FRDCs		
State		sities and lleges		tutions g FFRDCs)		nistered by it institutions		and local ernments
Alahama	\$,000	\$		\$,000	\$,000
Alabama	a	,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 development for FY 2001

		(E) RDCs	(F)	(G)		(H)
State	admini	stered by	onprofit stitutions	FRDCs nistered by	State	e and local
State		lleges	ling FFRDCs)	fit institutions		rernments
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 2001

	(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	\$,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
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 2001 *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 2001

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

Obligations for R&D plant for FY 2001

	(A)		(B)		(C) FFRDCs		(D) Universities and	
State	Federal intramural		Industrial firms (excluding FFRDCs)		administered by industrial firms		colleges (excluding FFRDCs)	
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) FFRDC	'e	(D Universit	
State	Federal intra	mural	Industrial (excluding F		administere industrial f	ed by	colleges (e	excluding
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	\$,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.)

	(E) FFRDCs	7	(F)		(G)		(H)	
	administere	d by	Nonprofi		FFRDCs		G 11	1
State	universities colleges		institution (excluding FFI		administere nonprofit insti	•	State and I governme	
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 FFRI		(F)		(G))	(I	H)
	administe	ered by	Nonprof		FFRD			
State	universit colle		institution (excluding FF		administe nonprofit in			nd local nments
Mississippi	\$,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
Wyoming	,000	\$,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

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

15. What were your agency's FY 2001 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 2001 research activities (actual)

Field of science a (See Attachment	and engineering 1 for classification of fields.)		c research Y 2001		ed research Y 2001	l research Y 2001
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
Sciences	•	·	,	·	,	
	Geological sciences	\$		\$,000	\$,000
	Oceanography	\$,000	\$,000	\$,000

Your agency's obligations to universities and colleges for FY 2001 research activities (actual)

Field of seignes or	. d	Dania waxaawah	A muliad massauch	Total wassawah
Field of science and (See Attachment 1)	for classification of fields.)	Basic research FY 2001	Applied research FY 2001	Total research FY 2001
(222	Environmental sciences,			
	not elsewhere	\$,000	\$,000	\$,000
	classified	Ψ,,000	Ψ,,000	φ,,σσσ
Mathematics and Computer				
Sciences	Mathematics	\$,000	\$,000	,000
	Computer sciences	,000	\$\$,000
	Mathematics and			
	computer sciences, not elsewhere classified	\$,000	,000	,000
En ain sanin a		\$,000	\$,000	\$.000
Engineering	Aeronautical	\$,000	,000	,000
	Astronautical	,000	,000	,000
	Chemical	,000	\$,000	,000
	Civil	,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
	Sociology	,000	\$\$,000
	Social sciences, not elsewhere classified	,000	,000	,000
Other Sciences, no	t 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.

16. What is your best estimate of 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."*)

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 2002 research activities (preliminary estimates)

Field of science and engineering (See Attachment 1 for classification of fields.)	Basic research FY 2002	P	Applied research FY 2002	Total research FY 2002
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 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 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 2003 research activities (preliminary estimates)

Field of science and engineering (See Attachment 1 for classification of fields.)	Basic resea FY 2003		Applied rese FY 2003		Total resea FY 200	
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 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					

NSF field	Examples of disciplines included	d				
Life sciences, not elsewhere classified	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/therapeut					
Psychology Deals with behavior, mental proce	sses, and individual and group characterist	ics and abilities.				
Biological aspects	Animal behavior Clinical psychology Comparative psychology Ethology Experimental psychology					
Social aspects	Development and personality Educational psychology Industrial and engineering psychology Personnel psychology Social psychology Testing Vocational psychology					
Psychological sciences not elsewhere cl	assified					
Physical sciences Concerned with the understand	ing of the material universe and its phenon	nena)				
Astronomy	Laboratory astrophysics Optical astronomy Radio astronomy	Theoretical astrophysics X-ray, Gamma-ray, neutrino astronomy				
Chemistry	Analytical Inorganic Organic Organo-metallic	Pharmaceutical Physical Polymer sciences (except biochemistry)				
Physics	Acoustics Atomic and molecular Chemical Condensed matter Elementary particles	Nuclear structure Optics Plasma Solid-state Theoretical/mathematical				

SF field	Examples of disciplines include	ed
directly or indirectly affect mar	h 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 elsewher classified	ere	
development of methods of ope	gical reasoning with the aid of symbols and a cration employing such symbols, and in the cast to 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	Computer and information sci Design, development, and app capabilities to data storage a Information sciences and syste Management information syst Programming languages	olication of computer and manipulation mems

ISF field	Examples of disciplines included	
Engineering		
Includes studies directed toward devel usable in engineering practice.	oping engineering principles or toward r	naking 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.