

National Science Foundation National Institutes of Health



FY 2007 Survey of Science and Engineering Research Facilities

Part 1: Research Space

Your participation in this survey is voluntary. However, your institution's response is important. The information from this survey on individual institutions can be used by your institution and other institutions for decision- and policy-making. The data also describe science and engineering research facilities at the national, regional, and state levels.

Based on pretests, responding to this survey (Part 1 and Part 2 combined) typically requires 41 hours for academic institutions or 7 hours for biomedical institutions, depending on how data are maintained at your institution. If you wish to comment on the burden of completing this survey, contact Suzanne H. Plimpton, Reports Clearance Officer, NSF, via e-mail at splimpto@nsf.gov or call 1-703-292-7556. Or, you may write to the Office of Management and Budget, Paperwork Reduction Project (OMB Number 3145-0101), Washington, DC 20503.

If you have a question, please contact *[name]* via e-mail at *[email address]* or call *[toll-free number]*. The survey director at the National Science Foundation is Dr. Leslie Christovich.

Please complete and submit this survey on the web (according to the instructions on page 1) or return it by mail to:

ATTN: NSF Facilities Survey [Contractor name and address]

Thank you for your participation.

General information

This questionnaire is available on the World Wide Web. Go to *[web address]* to access the web version of the questionnaire. You will need to click on "Part 1 and Coordinator Tools" and then enter the Part 1 Coordinator ID and password. These are provided on the label on the front cover of this paper questionnaire.

Please report information for the **institution** named on the label on the front cover.

If you do not have exact figures for any part of this questionnaire, please provide estimates.

Most FY 2007 Research Facilities Survey data will be identified for individual institutions. Identifying individual institutional data is standard policy for NSF's research and development surveys, and will permit you to compare your institution's data with other institutions' data. Responses on two topics will not be publicly available for individual institutions because of their sensitive nature. These confidential data are: all responses concerning animal space (Question 1 row i, and questions 3, 7, 8, 10, 12F, 15, 18, 21, and 24) and reports on the condition of research space (Question 6).

Changes from previous survey cycle

• Fields of science and engineering (S&E)

Changes have been made to some field names, the order in which fields are listed in survey questions, and the disciplines included in some fields. For a description of the fields of S&E, see Question 2 on pages 5-7 or the crosswalk of NSF fields of S&E to the National Center for Education Statistics (NCES) 2000 Classification of Instructional Programs (CIP 2000) on pages 29-30.

• Definition of a medical school

The definition of medical school has been expanded to include schools that award the M.D. or D.O. degree.

• Leased space

The question asking for the amount of leased space has been deleted.

Deferred projects

The questions on deferred repairs and renovations and deferred new construction are now limited to projects whose prorated cost is estimated to be \$250,000 or more for at least one field of S&E.

Definition of science and engineering (S&E) research and research space

Please use these definitions when answering all questions in this survey.

Research is all sponsored research and development activities of your institution that are separately budgeted and accounted for. Research can be funded by your own institution, the federal government, a state government, foundations, corporations, or other sources. It does not include departmental research that is not separately budgeted.

Research space is the net assignable square feet of space in buildings within which research activities take place. Research facilities are located within buildings. A **building** is a roofed structure for permanent or temporary shelter of persons, animals, plants, materials, or equipment. Structures should be included if they are (1) attached to a foundation, (2) roofed, (3) serviced by a utility, exclusive of lighting, and (4) a source of significant maintenance and repair activities.

Net assignable square feet (NASF) is the sum of all areas on all floors of a building assigned to, or available to be assigned to, an occupant for a specific use, such as research or instruction. NASF is measured from the inside faces of walls.

Science and engineering (S&E) includes the following fields: agricultural sciences and natural resources sciences, biological and biomedical sciences, computer and information sciences, engineering, health and clinical sciences, mathematics and statistics, physical sciences, psychology, social sciences, and other science and engineering fields. See Question 2 on pages 5-7 for a detailed list of the disciplines included in each of these fields.

Definition of science and engineering (S&E) research and research space (continued)

Research space includes:

- controlled-environment space, such as clean, cold, or white rooms
- technical and laboratory support space, such as equipment areas, preparation areas, darkrooms, carpentry and machine shops, storage areas, etc.
- laboratories, including computer labs, behavior observation rooms, etc.
- core laboratories that serve other laboratories
- laboratories and associated support areas used for research animals, including procedure rooms, bench space, animal production colonies, holding rooms, germ-free rooms, surgical facilities, recovery rooms, etc.
- housing facilities for research animals and associated maintenance areas, including cage rooms, stalls, wards, isolation rooms, exercise rooms, feed storage rooms, cage-washing rooms, holding and storage areas, etc.
- space for clinical trial research
- offices, to the extent that they are used for research activities, including administrative activities for a specific research project
- space with fixed (built-in) equipment such as fume hoods
- space with nonfixed equipment costing \$1 million or more each, such as MRIs
- space that is leased by your institution

Research space does not include:

- space for the fields of law, business administration/management, humanities, history, the arts, or education
- libraries, unless they are dedicated to a specific research project
- animal field buildings sheltering animals that do not directly support research or that are not subject to government regulations concerning humane care and use of laboratory animals
- Federally Funded Research and Development Centers (FFRDCs)
- in-kind space used by your faculty, staff, or other persons but administered by other organizations, such as research facilities at non-university hospitals or Veterans Administration hospitals
- space administered by your institution but leased to another organization
- outdoor areas such as fish ponds or planting fields

Question 1: Types of science and engineering (S&E) research space

1. Please indicate whether or not your institution had each type of S&E research space listed below at the end of your FY 2007. See page 2 for the definition of research space and fields of S&E.

Did your institution have this type of S&E research space at end of FY 2007?

(Mark one "X" for each row.)

Types of S&E research space	Yes	No	Uncertain
a. Laboratories, wet or dry, including computer laboratories, behavior observation laboratories, etc			
 b. Laboratory support space, including autoclave rooms, darkrooms, equipment areas, storage areas for research equipment and supplies, etc 			
c.Instructional laboratories that are <i>also</i> used for research			
d.Core laboratories that serve other laboratories			
e.Leased space that is used for research			
f.Offices, to the extent they are used for research			
g. Space used for research containing nonfixed equipment costing \$1 million or more each, such as MRIs			
h. Research space in a medical school that awards the M.D. or D.O. degree			
i. Research animal space			
Laboratories and associated support areas used for research animals that are subject to local, state, and federal governm policies and regulations concerning humane care and use of animals. Examples include procedure rooms, holding room recovery rooms, animal production colonies, and storage ar	ent f 1s,		
Space for housing research animals and associated mainten areas that are subject to local, state, and federal governmen policies and regulations concerning humane care and use of animals. Examples include animal quarters, cage washing rooms, feed storage areas, isolation rooms, and exercise roo	t f		
j. Research space that is used for clinical trials			

Question 2: Amount of research space

2. At the end of your FY 2007, how much net assignable square feet was used for research (based on the definition of research space on page 2) for each of the fields of science and engineering (S&E) below? Please include any research animal space in the relevant fields of S&E. You may provide estimates if you do not have exact figures.

Research space is equivalent to functional category 2 (Research) for facilities inventory systems based on the U.S. Department of Education classification (FICM classification), the Western Interstate Commission for Higher Education (WICHE classification), and the National Association of College and University Business Officers (NACUBO classification).

Research animal space includes all departmental and central facilities, such as laboratories, housing, and associated support areas, that are subject to local, state, and federal government policies and regulations concerning humane care and use of laboratory animals.

If research space was shared among fields or used for other purposes in addition to research, report the portion of space used for research for each field below. For example, if two fields shared the space equally, report half of the space in one field and half in the other. Or, if an area was used for research one-fourth of the time and for other purposes the rest of the time, report one-fourth of the space as research space.

See pages 29-30 for crosswalk of NSF fields of S&E and NCES CIP codes.

Field of S&E (Include researc	h animal space.)		Net assignable square feet of research space at end of FY 2007
A. Agricultur	al sciences and natural	resources sciences	
Animal sci Fishing an	al economics iences d fisheries sciences nce and technology	Natural resources conservation and research (includes environmental science) Natural resources economics Plant sciences Soil sciences Wildlife and wildlands science	NASF Check this box if no research space in this field at the end of FY 2007
B. Biological	and biomedical science	S	
Anatomica Animal bio Biochemis Bioinforma Biology Biomathen Biophysics Biotechnol Botany Cell biolog Cellular bi Ecology Evolution	blogy stry atics natics s logy gy	Genetics Human nutrition Immunology Microbiological sciences Molecular biology Pathology Pharmacology Pharmacology Physiology Plant biology Population biology Toxicology Zoology Biological and biomedical sciences, other	NASF
Computer Computer Computer	software and media application systems networking and nunications		NASF Check this box if no research space in this field at the end of FY 2007

Field of S&E

(Include research animal space.)

Net assignable square feet of research space at end of FY 2007

D. Engineering

Aeronautical engineering Aerospace engineering Agricultural engineering Architectural engineering Astronautical engineering Bioengineering Biological engineering Ceramic sciences and engineering Chemical engineering Civil engineering Computer engineering, general Construction engineering Electrical, electronics and communications engineering Engineering mechanics Engineering physics Engineering science Environmental engineering Environmental health engineering Forest engineering	Geophysical engineering Industrial engineering Manufacturing engineering Materials engineering Materials science Mechanical engineering Medical engineering Metallurgical engineering Mining and mineral engineering Naval architecture Nuclear engineering Ocean engineering Operations research Petroleum engineering Plastics engineering Surveying engineering Surveying engineering Systems engineering Textile sciences and engineering Engineering, other	NASF
Forest engineering Geological engineering	Engineering, other	

e. Health and clinical sciences

Allied health diagnostic intervention and
Allied health diagnostic, intervention, and
treatment
Clinical laboratory science
Communication disorders sciences
Dentistry
Informatics
Kinesiology and exercise science
Medical clinical sciences
Medical illustration
Medical laboratory science
Medicine
Nursing

Optometry Oral sciences Osteopathic medicine Osteopathy Pharmaceutical sciences Pharmacy Podiatric medicine Podiatry Public health Rehabilitation and therapeutic subfields Veterinary biomedical sciences Veterinary medicine

f. Mathematics and statistics

Applied mathematics	NASF
Mathematics	
Statistics	Check this box if no
Mathematics and statistics, other	research space in this field at
	the end of FY 2007

___ NASF

Check this box if no

the end of FY 2007

research space in this field at

	ld of S&E clude research animal space.)		Net assignable square fo of research space at en of FY 2007
g.	Physical sciences		
	Group 1: Atmospheric, earth, and geo	ological sciences; meteorology; and	NASF
	oceanography		Check this box if no research space in this field at the end of FY 2007
	Group 2: Astronomy, astrophysics, cl	hemistry, and physics	NASF
			Check this box if no research space in this field at the end of FY 2007
h.	Psychology		
	Clinical child psychology Clinical psychology	Health psychology Industrial and organizational psychology	NASF
	Cognitive psychology Community psychology Comparative psychology Counseling psychology	Personality psychology Physiological psychology Psychobiology Psycholinguistics	Check this box if no research space in this field at the end of FY 2007
	Developmental and child psychology Educational psychology Environmental psychology Experimental psychology	Psychometrics Psychopharmacology Quantitative psychology School psychology	
	Family psychology Forensic psychology Geropsychology	Social psychology Psychology, other	
i.	Social sciences		
	Anthropology Archeology	Geography and cartography International relations and affairs	NASF
	Criminalistics Criminal justice	Police science Political science and government	Check this box if no research space in this field at
	Criminal science	Population studies	the end of FY 2007
	Criminology Demography	Sociology Urban affairs	
	Economics	Social sciences, other	
	Forensic science and technology		
j.	Other sciences		
	Use this category when multidisciplinary, classification under one primary field impo		NASF
	(Please describe.)		Check this box if no research space in this field at the end of FY 2007

Question 3: Research animal space

3. At the end of your FY 2007, how much of the research NASF reported in Question 2 was used for research animals?

Research animal space includes all departmental and central facilities, such as laboratories, housing, and associated support areas, that are subject to local, state, and federal government policies and regulations concerning humane care and use of laboratory animals.

Research animal portion of the space included in Question 2 (*If none, enter "0."*)......NASF

Question 4: Clinical trial research space

4. At the end of your FY 2007, how much of the research NASF reported in Question 2 was used for clinical trials?

Clinical trial portion of the space included in Question 2 (*If none, enter "0."*)......NASF

Question 5: Research space in medical school

5. *If your institution had a medical school,* how much of the research NASF reported in Question 2 was located in the medical school at the end of your FY 2007?

Medical school is a school that awards the M.D. or D.O. degree.

If your institution did *not* have a medical school, check this box and go to Question 6......

Medical school portion of the space included in Question 2 (*If none, enter "0."*).....NASF

Question 6: Condition of research space

6. At the end of your FY 2007, what percentage of the research NASF reported in Question 2 fell into each of the four condition categories below? Include research animal space.

Superior condition	Suitable for the most scientifically competitive research in this field over the next 2 years (your FY 2008 and FY 2009)
Satisfactory condition	Suitable for continued use over the next 2 years (your FY 2008 and FY 2009) for most levels of research in this field, but may require minor repairs or renovation
Requires renovation	Will no longer be suitable for current research without undergoing major renovation within the next 2 years (your FY 2008 and FY 2009)
Requires replacement	Should stop using space for current research within the next 2 years (your FY 2008 and FY 2009)

For Field of S&E definitions, see Question 2 on pages 5-7.

			Percent of n	et assignable	square feet	
	Mark "X" if no research	(The p	percentages sho	ould sum to 10	0 within each ro	ow.)
Field of S&E (Include research animal space.)	space in this field	Superior condition	Satisfactory condition	Requires renovation	Requires replacement	Total
(include research animal space.)	uns pietu	condition	conuntion	Tenovation	replacement	TOLAI
a. Agricultural sciences and natura resources sciences		%	%	%	%	100%
b. Biological and biomedical scien	nces	%	%	%	%	100%
c. Computer and information scien	nces	%	%	%	%	100%
d. Engineering		%	%	%	%	100%
e. Health and clinical sciences		%	%	%	%	100%
f. Mathematics and statistics		%	%	%	%	100%
g. Physical sciences						
Group 1: Atmospheric, earth, geological sciences; meteor and oceanography	ology;	%	%	%	%	100%
Group 2: Astronomy, astroph chemistry, and physics	5	%	%	%	%	100%
h. Psychology		%	%	%	%	100%
i. Social sciences		%	%	%	%	100%
j. Other sciences		%	%	%	%	100%

Question 7: Condition of research animal space

7. At the end of your FY 2007, what percentage of the research animal space reported in Question 3 fell into each of the four condition categories below?

Research animal space includes all departmental and central facilities, such as laboratories, housing, and associated support areas, that are subject to local, state, and federal government policies and regulations concerning humane care and use of laboratory animals.

Superior condition	Suitable for the most scientifically competitive research in this field over the next 2 years (your FY 2008 and FY 2009)
Satisfactory condition	Suitable for continued use over the next 2 years (your FY 2008 and FY 2009) for most levels of research in this field, but may require minor repairs or renovation
Requires renovation	Will no longer be suitable for current research without undergoing major renovation within the next 2 years (your FY 2008 and FY 2009)
Requires replacement	Should stop using space for current research within the next 2 years (your FY 2008 and FY 2009)

Percent of net assignable square feet

Mark "X" no researc	•	(The percentages	should sum to 100	0.)	
animal space	Superior condition	Satisfactory condition	Requires renovation	Requires replacement	Total
All space for research animals				•	
regardless of S&E field	%	%	%	%	100%

Question 8: Biosafety level of research animal facilities

8. For each type of animal listed below, please indicate which types of biosafety level (BL) facilities were available at your institution at the end of your FY 2007.

Biosafety Levels (BL)

All research animal facilities are BL-1 or higher, depending on the type of research performed.

- **BL-1** Involves working with defined and characterized strains of viable microorganisms not known to cause disease in healthy adult humans
- **BL-2** Involves working with the broad spectrum of indigenous moderate-risk agents present in the community and associated with human disease of varying severity
- **BL-3** Involves working with indigenous or exotic agents with a potential for respiratory transmission, and which may cause serious and potentially lethal infection
- **BL-4** Involves working with dangerous and exotic agents that pose a high individual risk of life-threatening disease, that may be transmitted via the aerosol route, and for which there is no available vaccine or therapy

Mark "X" if no facilities for this

time of animal

If your institution did *not* have research animal facilities, check this box and go to Question 9.....

	type of unimul	(Check	k un that ap	ply for each	10w.)
Туре о	of animal	BL-1	BL-2	BL-3	BL-4
Non-m	ammals				
a.	Fish/Aquatic species				
b.	Birds				
с.	Amphibians				
d.	Reptiles				
e.	Insects				
f.	Other non-mammals (Please specify.)				
Mamm	nals				
g.	Rats, guinea pigs, or other rodents				
h.	Cats, dogs, or rabbits				
i.	Pigs, sheep, cattle, or goats				
j.	Non-human primates				
k.	Other mammals (<i>Please specify</i> .)				

Biosafety levels at end of FY 2007

(Check all that apply for each you)

Note: For additional information on biosafety levels, see the report Biosafety in Microbiological and Biomedical Laboratories, 4th Edition, 1999.

U.S. Department of Health and Human Services.

Question 9: Repairs and renovations started in FY 2006 and FY 2007

9. Please provide the completion costs for repair and renovation of S&E research facilities that started during your FY 2006 or FY 2007. Include research animal space in the relevant fields of S&E. Include only projects whose prorated cost was estimated to be \$250,000 or more for at least one field of S&E listed below. For **multi-year projects**, report the entire completion cost even if some work will occur in future years.

Start date is the date on which the physical work of the repairs or renovations actually began.

Repairs and renovations are activities such as fixing up facilities in deteriorated condition, capital improvements on facilities, conversion of facilities, and the building out of shell space. Include any repairs or renovations to existing space that are performed in combination with new construction projects. *Do not* report building additions since they are reported in this survey under new construction.

Completion costs include planning, site preparation, construction, fixed equipment, nonfixed equipment that costs \$1 million or more, and building infrastructure such as plumbing, lighting, air exchange, and safety systems either in the building or within 5 feet of the building foundation.

If research facilities are shared by two or more fields, allocate the appropriate share of the costs to each field in order to determine which fields to report. For example, if a field will have one-fourth of the costs for a \$300,000 project, do **not** report that field's share, which is \$75,000. If a \$400,000 project will have two fields with the same costs, do **not** report either field's portion, which is \$200,000 each.

If research facilities are also used for nonresearch activities, report the S&E research portion of the costs for the fields listed below if the research portion is \$250,000 or more. For example, if a facility is used for S&E research one-fourth of the time and for instruction the rest of the time, report one-fourth of the completion costs for S&E research facilities.

If your institution had no repair or renovation projects, check this box and go to Question 12.....

For Field of S&E definitions, see Question 2 on pages 5-7.

Field of S&E (Include costs for research animal space.)	Completion costs for projects started in FY 2006 or FY 2007
a. Agricultural sciences and natural resources sciences.	\$
b. Biological and biomedical sciences	\$
c. Computer and information sciences	\$
d. Engineering	\$
e. Health and clinical sciences	\$
f. Mathematics and statistics	\$
g. Physical sciences	
Group 1: Atmospheric, earth, and geological sciences; meteorology; and oceanography	\$
Group 2: Astronomy, astrophysics, chemistry, and physics	\$
h. Psychology	\$
i. Social sciences	\$
j. Other sciences (Please describe.)	\$

Question 10: For research animal facilities only: repairs and renovations in FY 2006 and FY 2007

10. How much of the completion costs for repair and renovation of research facilities as reported in Question 9 was for research animal facilities?

Research animal portion of the costs included in Question 9 (*If none, enter "0."*).....\$

Question 11: For medical schools only: repairs and renovations in FY 2006 and FY 2007

11. *If your institution had a medical school,* how much of the completion costs for repair and renovation of research facilities as reported in Question 9 was located in the medical school?

Medical school is a school that awards the M.D. or D.O. degree.

If your institution did *not* have a medical school, check this box and go to Question 12.....

Medical school portion of the costs included in Question 9 (*If none, enter "0."*)......

Question 12: New construction started in FY 2006 and FY 2007

12. Please provide the total number of new construction projects that included S&E research facilities that started during your FY 2006 or FY 2007. Include only projects whose prorated cost was estimated to be \$250,000 or more for at least one field of S&E. Include research animal space in the relevant fields of S&E.

New construction is the construction of a new building or additions to an existing building.

Research facilities are defined on page 2 of the survey questionnaire.

Start date is the date on which the physical work of the construction actually began.

Completion costs include planning, site preparation, construction, fixed equipment, nonfixed equipment that costs \$1 million or more, and building infrastructure such as plumbing, lighting, air exchange, and safety systems either in the building or within 5 feet of the building foundation.

If facilities are shared for research and nonresearch activities, report only projects with completion costs of \$250,000 or more for at least one field of S&E research. For example, if a \$300,000 project involves space used for research only one-fourth of the time, this project of \$75,000 for the research facilities should not be reported.

If facilities are shared by two or more fields of S&E, report the new construction project only if at least one field of S&E research has completion costs of \$250,000 or more. For example, if two fields share the costs equally for a research project costing \$400,000, neither field's share of \$200,000 meets the cost minimum.

If your institution had no new construction
projects, check this box and go to Question 13

If your institution had one or more new construction projects,	
enter the number of projects here and fill out a separate	
Individual Project Form for each one	_projects

	Please make additional copies of this form as needed. Individual Project Form for Question 12 Page 1 of 4
	Please complete this form for each new construction project that started during your FY 2006 or FY 2007. Include only projects that will cost \$250,000 or more for at least one of the S&E fields. Consider the start date to be the date on which the physical work of the new construction began.
12A.	What is the name of this project?
12B.	During which of your fiscal years did the physical work of new construction begin for this project?
	FY 2007
12C.	When this project is completed, what is (a) the entire project's (research and nonresearch) gross square feet; (b) the entire project's net assignable square feet; and (c) the S&E research facilities portion in net assignable square feet?
	For multi-year projects, report the space expected when the project is completed.
	a. Gross square feet (GSF) for entire project (research and nonresearch)
	Gross square feet (GSF) is the floor area of a structure within the outside faces of the exterior walls.
	b. Net assignable square feet (NASF) for entire project (research and nonresearch) NASF
	Net assignable square feet (NASF) is the sum of all areas on all floors of a building assigned to, or available to be assigned to, an occupant for a specific use, such as research or instruction. NASF is measured from the inside faces of walls.
	NOTE: If the entire project is S&E research, the answers for row b and row c will be the same.
	c. Net assignable square feet for S&E research facilities portion (defined on page 2 of the survey questionnaire)NASF
	Research facilities are defined on page 2 of the survey questionnaire, including examples of what areas to include and exclude.
	<i>If the research facilities are also used for nonresearch activities,</i> adjust the amount of space based on the amount of time the area is used for S&E research. For example, if an area is used for S&E research one-fourth of the time and for instruction the rest of the time, report one-fourth of the space as S&E research facilities.

Please make additional copies of this form as needed. Individual Project Form for Question 12 Page 2 of 4

12D. When this project is completed, what are the completion costs for (a) the entire project (research and nonresearch), and (b) the S&E research facilities portion of the project? *For multi-year projects*, report the costs expected when the project is completed.

Completion costs include planning, site preparation, construction, fixed equipment, nonfixed equipment that costs \$1 million or more, and building infrastructure such as plumbing, lighting, air exchange, and safety systems either in the building or within 5 feet of the building foundation.

- a. Completion costs for the GSF of the entire project (research and nonresearch).....\$
- b. Completion costs for the S&E research facilities portion (defined on page 2 of the survey questionnaire).....\$

If the research facilities are also used for nonresearch activities, adjust the completion costs based on the amount of time the facilities are used for S&E research. For example, if a facility is used for S&E research one-fourth of the time and for instruction the rest of the time, report one-fourth of the completion costs for S&E research facilities.

Please make additional copies of this form as needed. Individual Project Form for Question 12 Page 3 of 4

12E. For the portion of this project used for S&E research facilities, what are (1) the completion costs, and (2) the net assignable square feet, for each field listed below? For multi-year projects, report costs and NASF expected when the project is completed.

Report only fields with costs of \$250,000 or more for research facilities.

If research facilities are shared by two or more fields, allocate the appropriate share of the costs to each field in order to determine which fields to report. For example, if a field will have one-fourth of the costs for a \$300,000 project, do **not** report that field's share, which is \$75,000. If a \$400,000 project will have two fields with the same costs, do **not** report either field's portion, which is \$200,000 each.

If research facilities are also used for nonresearch activities, report the S&E research portion of the cost and net assignable square feet for the fields listed below if the research portion is \$250,000 or more. For example, if a facility will be used for S&E research one-fourth of the time and for instruction the rest of the time, report one-fourth of the completion costs for S&E research facilities.

Research facilities

For Field of S&E definitions, see Question 2 on pages 5-7.

	Research facilities		
Field of S&E (Include research animal space.)	(1) Completion costs	(2) Net assignable square feet	
a. Agricultural sciences and natural resources sciences	\$	NASF	
b. Biological and biomedical sciences	\$	NASF	
c. Computer and information sciences	\$	NASF	
d. Engineering	\$	NASF	
e. Health and clinical sciences	\$	NASF	
f. Mathematics and statistics	\$	NASF	
g. Physical sciences			
Group 1: Atmospheric, earth, and geological sciences; meteorology; and oceanography	\$	NASF	
Group 2: Astronomy, astrophysics, chemistry, and physics	\$	NASF	
h. Psychology	\$	NASF	
i. Social sciences	\$	NASF	
j. Other sciences (Please describe.)	\$	NASF	

Please make additional copies of this form as needed. Individual Project Form for Question 12 Page 4 of 4

12F.	How much of the completion costs and NASF repo space ?	orted in Question 12E	are for research animal
	Research animal space includes all departmenta and associated support areas, that are subject to I regulations concerning humane care and use of la	ocal, state, and feder	
	Possarch animal partian included	Completion costs	Net assignable square feet
	Research animal portion included in Question 12E (<i>If none, enter "0."</i>)	\$	NASF
12G.	<i>If your institution has a medical school,</i> how me Question 12E are for research facilities located in	-	costs and NASF reported in
	Medical school is a school that awards the M.D.	or D.O. degree.	
	If your institution does not have school, check this box and go to		
		Completion costs	Net assignable square feet
	Medical school portion included in Question 12E (<i>If none, enter "0."</i>)	\$	NASF

Question 13: Sources of project funding

13. Please provide the completion costs by source of funding for repair and renovation and new construction of S&E research facilities that started during your FY 2006 or FY 2007 as reported in Question 9 and Question 12E.

Total costs reported in column 1 should match the sum of the costs for repair and renovation of research facilities reported in Question 9 on page 12.

Total costs reported in column 2 should match the sum of the costs for new construction as reported in Question 12E on all Individual Project Form(s).

			Compl	etion costs
			(1)	(2)
			•	For new construction
			renovations	reported in
			reported in	-
So	urce of funding		Question 9	(all project forms)
a.	Federal government	\$_		\$
b.	State or local government	\$_		\$
c.	Institutional funds and other sources Examples: operating funds, endowments, tax-exempt bonds and other debt financing, indirect costs recovered from federal grants/contracts, private donations,			
	other sources	.\$_		\$
	Total	\$_		\$

Question 14: Planned repairs and renovations to start in FY 2008 and FY 2009

14. Please provide the estimated completion costs planned for repair and renovation of S&E research facilities that are funded **and** scheduled to start in your FY 2008 or FY 2009. Include research animal space in the relevant fields of S&E. Include only projects whose prorated cost was estimated to be \$250,000 or more for at least one field of S&E listed below. For **multi-year projects**, report the entire completion cost even if some work will occur in future years.

Start date is the date on which the physical work of the repairs or renovations is scheduled to begin.

Repairs and renovations are activities such as fixing up facilities in deteriorated condition, capital improvements on facilities, conversion of facilities, and the building out of shell space. Include any repairs or renovations to existing space that are performed in combination with new construction projects. *Do not* report building additions since they are reported in this survey under new construction.

Completion costs include planning, site preparation, construction, fixed equipment, nonfixed equipment that costs \$1 million or more, and building infrastructure such as plumbing, lighting, air exchange, and safety systems either in the building or within 5 feet of the building foundation.

If research facilities are shared by two or more fields, allocate the appropriate share of the costs to each field in order to determine which fields to report. For example, if a field will have one-fourth of the costs for a \$300,000 project, do **not** report that field's share, which is \$75,000. If a \$400,000 project will have two fields with the same costs, do **not** report either field's portion, which is \$200,000 each.

If research facilities will also be used for nonresearch activities, report the S&E research portion of the costs for the fields listed below if the research portion is \$250,000 or more. For example, if a facility will be used for S&E research one-fourth of the time and for instruction the rest of the time, report one-fourth of the completion costs for S&E research facilities.

If your institution does **not** have planned repair or renovation projects, check this box and go to Question 17.....

For Field of S&E definitions, see Question 2 on pages 5-7.

Field of S&E (Include costs for research animal space.)	Completion costs for planned repair/renovation projects to start in FY 2008 or FY 2009
a. Agricultural sciences and natural resources sciences.	\$
b. Biological and biomedical sciences	\$
c. Computer and information sciences	\$
d. Engineering	\$
e. Health and clinical sciences	\$
f. Mathematics and statistics	\$
 g. Physical sciences Group 1: Atmospheric, earth, and geological sciences; meteorology; and oceanography 	\$
Group 2: Astronomy, astrophysics, chemistry, and physics	\$
h. Psychology	\$
i. Social sciences	\$
j. Other sciences (Please describe.)	\$

Question 15: For research animal facilities only: planned repairs and renovations in FY 2008 and FY 2009

15.	How much of the completion costs for planned repair and renovation of research facilities as reported in
	Question 14 will be for research animal facilities?

Research animal portion of the costs included in Question 14 (*If none, enter "0."*).....\$

Question 16: For medical schools only: planned repairs and renovations in FY 2008 and FY 2009

16. *If your institution has a medical school*, how much of the completion costs for planned repair and renovation of research facilities as reported in Question 14 will be located in the medical school?

Medical school is a school that awards the M.D. or D.O. degree.

If your institution does *not* have a medical school, check this box and go to Question 17.....

Medical school portion of the costs included in Question 14 (*If none*, enter "0.").....\$

Question 17: Planned new construction to start in FY 2008 and FY 2009

17. Please provide the estimated completion costs and NASF for planned new construction of S&E research facilities that are funded and scheduled to start in your FY 2008 or FY 2009. Include research animal space in the relevant fields of S&E. Include only projects whose prorated cost was estimated to be \$250,000 or more for at least one field of S&E listed below. For **multi-year projects**, report the entire completion cost even if some work will occur in future years.

Start date is the date on which the physical work of the construction is scheduled to begin.

New construction is the construction of a new building or additions to an existing building.

Completion costs include planning, site preparation, construction, fixed equipment, nonfixed equipment that costs \$1 million or more, and building infrastructure such as plumbing, lighting, air exchange, and safety systems either in the building or within 5 feet of the building foundation.

If research facilities are shared by two or more fields, allocate the appropriate share of the costs to each field in order to determine which fields to report. For example, if a field will have one-fourth of the costs for a \$300,000 project, do **not** report that field's share, which is \$75,000. If a \$400,000 project will have two fields with the same costs, do **not** report either field's portion, which is \$200,000 each.

If research facilities are also used for nonresearch activities, report the S&E research portion of the costs and net assignable square feet for the fields listed below if the research portion is \$250,000 or more. For example, if a facility will be used for S&E research one-fourth of the time and for instruction the rest of the time, report one-fourth of the completion costs for S&E research facilities.

If your institution does *not* have any planned new construction projects, check this box and go to Question 20......

For Field of S&E definitions, see Question 2 on pages 5-7.

Planned new construction scheduled to start in FY 2008 or FY 2009

Field of S&E (Include research animal space.)	Completion costs	Net assignable square feet
a. Agricultural sciences and natural resources sciences	\$	NASF
b. Biological and biomedical sciences	\$	NASF
c. Computer and information sciences	\$	NASF
d. Engineering	\$	NASF
e. Health and clinical sciences	\$	NASF
f. Mathematics and statistics	\$	NASF
g. Physical sciences Group 1: Atmospheric, earth, and geological sciences; meteorology; and oceanography	\$	NASF
Group 2: Astronomy, astrophysics, chemistry, and physics	\$	NASF
h. Psychology	\$	NASF
i. Social sciences	\$	NASF
j. Other sciences (Please describe.)	\$	NASF

Question 18: For research animal facilities only: planned new construction in FY 2008 and FY 2009

18. How much of the completion costs and NASE for the planned new construction of research facilities as reported in Question 17 will be for research animal facilities? Net assignable square feet Research animal portion included in Question 17 (If none, enter "0.")			
costs square feet Research animal portion included		uction of research fac	ilities as reported in
in Question 17 (If none, enter "0.")\$		—	
 19. If your institution has a medical school, how much of the completion costs and NASF for the planned new construction of research facilities as reported in Question 17 will be located in the medical school? Medical school is a school that awards the M.D. or D.O. degree. If your institution does not have a medical school portion included Completion Net assignable square feet Medical school portion included 	Research animal portion included in Question 17 (<i>If none, enter "0."</i>)\$		NASF
Construction of research facilities as reported in Question 17 will be located in the medical school? Medical school is a school that awards the M.D. or D.O. degree. If your institution does <i>not</i> have a medical school, check this box and go to Question 20 Completion Completion Square feet Medical school portion included	Question 19: For medical schools only: planned new con	struction in FY	2008 and FY 2009
If your institution does <i>not</i> have a medical school, check this box and go to Question 20 Completion Net assignable costs Medical school portion included			
school, check this box and go to Question 20 Completion Redical school portion included	Medical school is a school that awards the M.D. or D.O. degree.		
costssquare feetMedical school portion included	-		
Medical school portion included in Question 17 (If none, enter "0.")\$		-	
	in Question 17 (If none, enter "0.")\$		NASF

Question 20: Deferred repairs and renovations

20. Please provide the estimated costs for any **deferred repair and renovation** projects of S&E research facilities that are needed for current research program commitments, but are not yet funded **and** not yet scheduled to start in your FY 2008 or FY 2009. Include research animal space in the relevant fields of S&E. Include only projects whose prorated cost was estimated to be \$250,000 or more for at least one field of S&E listed below. Please estimate costs separately for projects included in your approved institutional plan and projects not included in this plan. Institutional plans usually will include goals, strategies, and budgets for fulfilling your institution's mission during a specific time period.

Deferred projects are those that: (1) are not funded, and (2) are not scheduled for FY 2008 or FY 2009. Do not include projects planned for developing new programs or expanding your current programs.

Repairs and renovations are activities such as fixing up facilities in deteriorated condition, capital improvements on facilities, conversion of facilities, and the building out of shell space. Include any repairs or renovations to existing space that are performed in combination with new construction projects. *Do not* report building additions since they are reported in this survey under new construction.

Current research program commitments include current faculty and staff or those to whom offers have been made or grants awarded (whether or not research has actually begun) and programs which have been approved.

If research facilities will be shared by two or more fields, allocate the appropriate share of the costs to each field in order to determine which fields to report. For example, if a field will have one-fourth of the costs for a \$300,000 project, do **not** report that field's share, which is \$75,000. If a \$400,000 project will have two fields with the same costs, do **not** report either field's portion, which is \$200,000 each.

If research facilities will also be used for nonresearch activities, report the S&E research portion of the costs for the fields listed below if the research portion is \$250,000 or more. For example, if a facility will be used for S&E research one-fourth of the time and for instruction the rest of the time, report one-fourth of the completion costs for S&E research facilities.

If your institution does *not* have deferred projects for repair or renovation, check this box and go to Question 23.....

For Field of S&E definitions, see Question 2 on pages 5-7.

Estimated costs of deferred repairs and renovations

Field of S&E (Include costs for research animal space.)	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan
a. Agricultural sciences and national resources sciences	6	\$
b. Biological and biomedical sciences	5	\$
c. Computer and information sciences	5	
d. Engineering	5	\$
e. Health and clinical sciences	5	\$
f. Mathematics and statistics	5	
g. Physical sciences		
Group 1: Atmospheric, earth, and geological sciences; meteorology; and oceanography	<u> </u>	\$
Group 2: Astronomy, astrophysics, chemistry, and physics	6	\$
h. Psychology	5	\$
i. Social sciences	5	
j. Other sciences (Please describe.)	5	\$

Question 21: For research animal facilities only: defe	erred repairs and r	renovations
21. How much of the estimated costs for deferred repair and renovation Question 20 would be for research animal facilities?	of research facilities as re	ported in
	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan
Research animal portion of the costs included in Question 20 (<i>If none, enter "0."</i>)	5	\$
Question 22: For medical schools only: deferred repa	airs and renovation	15
22. <i>If your institution has a medical school</i> , how much of the estimated research facilities as reported in Question 20 would be located in the		and renovation of
Medical school is a school that awards the M.D. or D.O. degree.		
If your institution does <i>not</i> have a medical s check this box and go to Question 23		
Medical school partian of the costs	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan
Medical school portion of the costs included in Question 20 (<i>If none, enter "0."</i>)	5	\$

Question 23: Deferred new construction

23. Please provide the estimated costs for any **deferred new construction** projects of S&E research facilities that are needed for current program commitments, but are not yet funded **and** not yet scheduled to start in your FY 2008 or FY 2009. Include research animal space in the relevant fields of S&E. Include only projects whose prorated cost was estimated to be \$250,000 or more for at least one field of S&E listed below. Please estimate costs separately for projects included in your approved institutional plan and projects not included in this plan. Institutional plans usually will include goals, strategies, and budgets for fulfilling your institution's mission during a specific time period.

Deferred projects are those that: (1) are not funded, and (2) are not scheduled for FY 2008 or FY 2009. Do not include projects planned for developing new programs or expanding your current programs.

New construction is the construction of a new building or additions to an existing building.

Current research program commitments include current faculty and staff or those to whom offers have been made or grants awarded (whether or not research has actually begun) and programs which have been approved.

If research facilities will be shared by two or more fields, allocate the appropriate share of the costs to each field in order to determine which fields to report. For example, if a field will have one-fourth of the costs for a \$300,000 project, do **not** report that field's share, which is \$75,000. If a \$400,000 project will have two fields with the same costs, do **not** report either field's portion, which is \$200,000 each.

If research facilities will also be used for nonresearch activities, report the S&E research portion of the costs for the fields listed below if the research portion is \$250,000 or more. For example, if a facility will be used for S&E research one-fourth of the time and for instruction the rest of the time, report one-fourth of the completion costs for S&E research facilities.

If your institution does *not* have deferred projects for new construction, check this box and go to Question 26.....

For Field of S&E definitions, see Question 2 on pages 5-7.

Estimated costs of deferred new construction

Field of S&E (Include costs for research animal space.)	For projects included in your institutional plan	For projects not included in your institutional plan
a. Agricultural sciences and natural resources sciences	\$	\$
b. Biological and biomedical sciences	\$	\$
c. Computer and information sciences	\$	\$
d. Engineering	\$	\$
e. Health and clinical sciences	\$	
f. Mathematics and statistics	\$	
g. Physical sciences		
Group 1: Atmospheric, earth, and geological sciences; meteorology; and oceanography	\$	\$
Group 2: Astronomy, astrophysics, chemistry, and physics	\$	\$
h. Psychology	\$	\$
i. Social sciences	\$	
j. Other sciences (Please describe.)	\$	

Question 24: For research animal facilities only: deferred new construction			
24. How much of the estimated costs for deferred new construction proje23 would be for research animal facilities?	ects of research facilities as	reported in Question	
Research animal portion of the costs included in Question 23 (<i>If none, enter "0."</i>)	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan \$	
Question 25: For medical schools only: deferred new	construction		
25. <i>If your institution has a medical school</i> , how much of the estimated facilities as reported in Question 23 would be located in the medical		struction of research	
Medical school is a school that awards the M.D. or D.O. degree.			
If your institution does <i>not</i> have a medical s check this box and go to Question 26			
Medical school portion of the costs	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan	
included in Question 23 (If none, enter "0.")	i	\$	
Question 26: Comments			
26. Please add any comments for Part 1 below.			
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Crosswalk of NSF Fields of S&E to the National Center for Education Statistics (NCES) 2000 Classification of Instructional Programs (CIP)

NSF field of S&E	NCE	S CIP 2000 classification		
Agricultural	01.09	Animal sciences		Forestry
sciences and		Food science and technology	03.06	Wildlife and wildlands science and management
natural resources		Plant sciences		
		Soil sciences	Also ir	
sciences	03.01	Natural resources conservation and research	01.010	
		(includes environmental science)	03.020	4 Natural resources economics
	03.03	Fishing and fisheries sciences and management		
Biological and	26.01	Biology, general	26.10	Pharmacology and toxicology
biomedical sciences		Biochemistry, biophysics and molecular biology	26.11	Biomathematics and bioinformatics
Diometrical sciences		Botany/plant biology	26.12	Biotechnology
	26.04		26.13	Ecology, evolution and population biology
	26.05	Microbiological sciences and immunology	26.99	Biological and biomedical sciences, other
	26.07	Zoology/animal biology		
	26.08	Genetics	Also ir	nclude:
	26.09	Physiology, pathology, and related sciences	19.0504 Human nutrition	
	11.01	Computer and information acients and and	11.00	Computer software and mode listing
Computer and		Computer and information sciences, general	11.08	Computer software and media applications
information		Information science/studies	11.09	Computer systems networking and
sciences	11.07	Computer science		telecommunications
Engineering	14.01	Engineering, general	14.20	Metallurgical engineering
8	14.02	Aerospace, aeronautical and astronautical	14.21	Mining and mineral engineering
		engineering	14.22	Naval architecture and marine engineering
	14.03	Agricultural/biological engineering and	14.23	Nuclear engineering
		bioengineering	14.24	Ocean engineering
	14.04	Architectural engineering	14.25	Petroleum engineering
		Biomedical/medical engineering	14.27	Systems engineering
		Ceramic sciences and engineering	14.28	Textile sciences and engineering
		Chemical engineering	14.31	Materials science
	14.08	Civil engineering	14.32	Polymer/plastics engineering
	14.09		14.33	Construction engineering
	14.10		14.34	Forest engineering
	14.10	engineering	14.35	Industrial engineering
	1/1 11	Engineering mechanics	14.35	Manufacturing engineering
		Engineering physics	14.30	Operations research
		Engineering physics		
		Engineering science Environmental/environmental health engineering	14.38 14 39	Surveying engineering Geological/geophysical engineering
		5 5		
	14.18 14.19	Materials engineering Mechanical engineering	14.99	Engineering, other
	F 4 05		E4 4 6	
Health and clinical	51.02	Communication disorders sciences and services	51.19	Osteopathic medicine/osteopathy
sciences	51.04	5	51.20	Pharmacy, pharmaceutical sciences, and
		Advanced/graduate dentistry and oral sciences	-4.54	administration
	51.09	Allied health diagnostic, intervention, and	51.21	Podiatric medicine/podiatry
		treatment professions	51.22	Public health
	51.10	Clinical/medical laboratory science and allied	51.23	Rehabilitation and therapeutic professions
		professions	51.24	Veterinary medicine
		Medicine	51.25	Veterinary biomedical and clinical sciences
	51.14	Medical clinical sciences/graduate medical	51.27	Medical illustration and informatics
		studies		
	51.16	Nursing	Also ir	iclude:
	51.17	-	31.050	5 Kinesiology and exercise science

Mathematics and statistics	27.01 Mathematics27.03 Applied mathematics		tistics thematics and statistics, other
Physical sciences	Group 1		
	 40.04 Atmospheric sciences and meteorology 40.06 Geological and earth sciences/geosciences (includes oceanography) 		
	 Group 2		
	 40.01 Physical sciences, general 40.02 Astronomy and astrophysics 40.05 Chemistry 40.08 Physics 40.99 Physical sciences, other 		
Psychology	 42.01 Psychology, general 42.02 Clinical psychology 42.03 Cognitive psychology and psycholinguistics 42.04 Community psychology 42.05 Comparative psychology 42.06 Counseling psychology 42.07 Developmental and child psychology 42.08 Experimental psychology 42.09 Industrial and organizational psychology 42.10 Personality psychology 42.11 Physiological psychology 42.16 Social psychology 	42.18 Edu 42.19 Psy 42.20 Clin 42.21 Env 42.22 Gen 42.23 Hea 42.24 Psy 42.25 Fan 42.26 For	nool psychology ucational psychology vchometrics and quantitative psychology nical child psychology vironmental psychology ropsychology alth psychology vchopharmacology mily psychology rensic psychology vchology, other
Social sciences	 45.01 Social sciences, general 45.02 Anthropology 45.03 Archeology 45.04 Criminology 45.05 Demography and population studies 45.06 Economics 45.07 Geography and cartography 45.09 International relations and affairs 45.10 Political science and government 	45.12 Urt 45.99 Soc Also includ 43.0106 43.0107	ciology can studies/affairs cial sciences, other le: Forensic science and technology Criminal justice/police science Criminalistics and criminal science
Other sciences	Use this category when multidisciplinary, interdisciplin field impossible.	nry, or other asp	pects make classification under one primary

Thank you. This is the end of Part 1. Part 2, which is bound separately, covers your institution's computing and networking capacity.





