National Science Foundation

FY 2011 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 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 [Contractor email box] or call 1-888-XXX-XXXX. 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 Contractor Address

Thank you for your participation.

General information

This questionnaire is available on the World Wide Web. Go to www.facilitiessurvey.org to access the web version of the questionnaire. You will need to click on "Part 1" 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.

Confidentiality

Information provided on research animal space (Questions 1 row i, 3, and 9f) and on the condition of S&E space (Question 6) will not be publicly available for individual institutions. In accordance with the National Science Foundation Act of 1950, as amended, and other applicable federal laws, your responses will not be disclosed in identifiable form to anyone other than agency employees or authorized persons.

Changes from previous survey cycle

• Fields of science and engineering (S&E)

Changes have been made to the lists of disciplines included in some fields of S&E to be consistent with the 2010 Classification of Instructional Programs (CIP 2010). 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) 2010 Classification of Instructional Programs (CIP 2010) on pages 27–28.

Research Animal Space

Seven questions on research animal space from the last survey cycle have been deleted (question numbers shown below refer to those appearing in the FY 2009 survey):

- Condition of research animal space (Question 7)
- Biosafety level of research animal facilities (Question 8)
- Research animal facilities: repairs and renovations (Question 10)
- Research animal facilities: planned repairs and renovations (Question 15)
- Research animal facilities: planned new construction (Question 18)
- Research animal facilities: deferred repairs and renovations (Question 21)
- Research animal facilities: deferred new construction (Question 24)

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.

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			
 Please indicate whether or not your institution had each type of S&E research space listed below at the end of your FY 2011. See pages 2–3 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 2011?			
		(Mark one "	X" for each r	ow.)	
Types of S&E	research space	Yes	No	Uncertain	
	s, wet or dry, including computer , behavior observation laboratories, etc				
darkrooms,	support space, including autoclave rooms, equipment areas, storage areas for research and supplies, etc				
c. Instructiona	l laboratories that are <i>also</i> used for research				
d. Core labora	tories that serve other laboratories				
e. Leased space	e that is used for research				
f. Offices, to t	he extent they are used for research				
	for research containing nonfixed equipment nillion or more each, such as MRIs				
	ace in a medical school that awards the M.D. ree				
	imal space				
Laboratorie animals tha policies and animals. Ex	ease see page 1 for confidentiality of this item. s and associated support areas used for research t are subject to local, state, and federal government regulations concerning humane care and use of amples include procedure rooms, holding rooms, oms, animal production colonies, and storage areas.				
areas that an policies and animals. Ex	ousing research animals and associated maintenance re subject to local, state, and federal government regulations concerning humane care and use of amples include animal quarters, cage washing storage areas, isolation rooms, and exercise rooms.				
j. Research sp	ace that is used for clinical trials				

2. At the end of your FY 2011, how much net assignable square feet was used for research (based on the definition of research space on pages 2–3) 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 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 27–28 for crosswalk of NSF fields of S&E and NCES CIP codes.

ld of S&E clude research animal space.)		Net assignable square feet o research space at end of FY 2011
Agricultural sciences and natural resourc	es sciences	
Agricultural economics Animal sciences Fishing and fisheries sciences Food science and technology Forestry	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 a the end of FY 2011
Biological and biomedical sciences Anatomical sciences	Immunology	NASF
Animal biology Biochemistry Bioinformatics Biology Biomathematics Biophysics Biotechnology Botany Cell biology Cellular biology Ecology Evolution Genetics Human nutrition	Microbiological sciences Molecular biology Molecular medicine Neurobiology Neurosciences Pathology Pharmacology Pharmacology Physiology Plant biology Population biology Toxicology Zoology Biological and biomedical sciences, other	Check this box if no research space in this field a the end of FY 2011
Computer and information sciences		
Computer science		NASF
Computer software and media applications		
Computer systems networking and		Check this box if no
telecommunications		research space in this field a
Information science		the end of FY 2011

Field of S&E

(Include research animal space.)

d. Engineering Aeronautical engineering Forest engineering NASF Geological engineering Aerospace engineering Agricultural engineering Geophysical engineering Check this box if no Architectural engineering Industrial engineering research space in this field at Astronautical engineering Manufacturing engineering the end of FY 2011 Automation engineering Marine engineering **Biochemical engineering** Materials engineering Bioengineering Mechanical engineering Biological engineering Mechatronics Biomedical engineering Medical engineering **Biosystems engineering** Metallurgical engineering Mining and mineral engineering Ceramic sciences and engineering Chemical engineering Naval architecture Civil engineering Nuclear engineering Computer engineering, general Ocean engineering Construction engineering Operations research Electrical, electronics and Paper science and engineering communications engineering Petroleum engineering Electromechanical engineering Plastics engineering Engineering chemistry Polymer engineering **Engineering mechanics** Robotics Surveying engineering Engineering physics Engineering science Systems engineering Environmental engineering Textile sciences and engineering Environmental health engineering Engineering, other e. Health and clinical sciences Allied health diagnostic, intervention, Optometry NASF and treatment Oral sciences Clinical laboratory science/research Osteopathic medicine Check this box if no Clinical nursing Osteopathy research space in this field at Communication disorders sciences Pharmaceutical sciences the end of FY 2011 Dentistry Pharmacy Informatics Podiatric medicine Kinesiology and exercise science Podiatry Medical clinical sciences Public health Medical illustration Registered nursing Medical laboratory science/research Rehabilitation and therapeutic subfields Veterinary biomedical sciences Medicine Nursing research 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 2011

nclude research animal space.)		Net assignable square feet of research space at end of FY 2011
Physical sciences Group 1: Atmospheric, earth, and	geological sciences; meteorology; and oceanography	NASF Check this box if no research space in this field at the end of FY 2011
Group 2: Astronomy, astrophysics, ch	emistry, materials sciences, and physics	NASF Check this box if no research space in this field at the end of FY 2011
Psychology Applied Psychology Clinical psychology Counseling psychology	Research and experimental psychology Psychology, other	NASF Check this box if no research space in this field at the end of FY 2011
Social sciences Anthropology Archeology Criminalistics Criminal justice Criminal science Criminology Demography Economics Forensic science and technology	Geography and cartography International relations National security studies Police science Political science and government Population studies Sociology Urban affairs Social sciences, other	NASF Check this box if no research space in this field at the end of FY 2011
under one primary S&E field impos research and research space.	ry, interdisciplinary, or other aspects make classification ssible. Please see pages 2–3 for the definition of S&E	Check this box if no research space in this field at the end of FY 2011

Question 3:	Research animal space				
Reminder:	Please see page 1 for confidentiality of this item.				
3. At the end animals?	of your FY 2011, how much of the research NASF reported in Question 2 was used for research				
support ar	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 <i>(If none, enter "0.")</i> NASF				
Question 4:	Clinical trial research space				
4. At the end	of your FY 2011, 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 (<i>If none, enter "0."</i>)				
Question 5:	Research space in medical school				
	stitution had a medical school, how much of the research NASF reported in Question 2 was located in al school at the end of your FY 2011?				
Medical s	chool is a school that awards the M.D. or D.O. degree.				
	If your institution did <i>not</i> have a medical school, check this box and go to Question 6				
	Medical school portion of the space included in Question 2 (<i>If none, enter "0."</i>) NASF				

Question 6: Condition of research space

Reminder: Please see page 1 for confidentiality of this item.

6. At the end of your FY 2011, 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 2012 and FY 2013)
Satisfactory condition	Suitable for continued use over the next 2 years (your FY 2012 and FY 2013) 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 2012 and FY 2013)
Requires replacement	Should stop using space for current research within the next 2 years (your FY 2012 and FY 2013)

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

	Mark "X" if no research	(The percentages should sum to 100 within each row.)			ow.)	
Field of S&E (Include research animal space.)	space in this field	Superior condition	Satisfactory condition	Requires renovation	Requires replacement	Total
a. Agricultural sciences and natural resources sciences		%	%	%	%	100%
b. Biological and biomedical sciences		%	%	%	%	100%
c. Computer and information sciences		%	%	%	%	100%
d. Engineering		%	%	%	%	100%
e. Health and clinical sciences		%	%	%	%	100%
f. Mathematics and statistics		%	%	%	%	100%
g. Physical sciences						
Group 1: Atmospheric, earth, and geological sciences; meteorology; and oceanography		%	%	%	%	100%
Group 2: Astronomy, astrophysics, chemistry, materials sciences, and						
physics		%	%	%	%	100%
h. Psychology		%	%	%	%	100%
i. Social sciences		%	%	%	%	100%
j. Other field of S&E		%	%	%	%	100%

Percent of net assignable square feet

Question 7: Repairs and renovations started in FY 2010 and FY 2011

7. Please provide the completion costs for repair and renovation of S&E research facilities that started during your FY 2010 or FY 2011. 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.

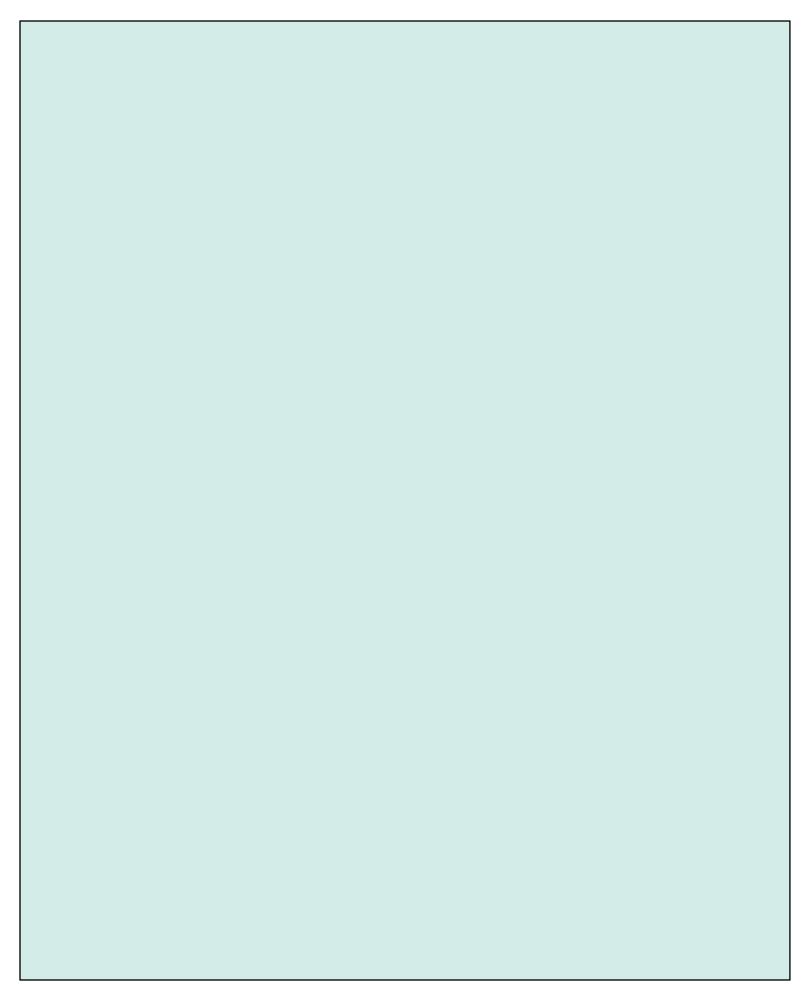
Completion costs include planning, site preparation, construction, fixed equipment, nonfixed equipment that costs \$1 million or more, and building infrastructure such as plumbing, lighting, air exchange, and safety systems either in the building or within 5 feet of the building foundation.

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 9.....

Field of S&E (Include costs for research animal space)	Completion costs for projects started in FY 2010 or FY 2011
a. Agricultural sciences and natural re-	sources sciences\$
b. Biological and biomedical sciences.	\$
c. Computer and information sciences	\$
d. Engineering	\$
	\$
f. Mathematics and statistics	\$
g. Physical sciences	\$
Group 1: Atmospheric, earth, and	
Group 2: Astronomy, astrophysics materials sciences, and physics	, chemistry, \$
h. Psychology	\$
i. Social sciences	\$
j. Other field of S&E (Please describe	.)\$



Question 8:	For medical schools only: repairs and renovations in FY 2010 and FY 2011			
	<i>titution had a medical school,</i> how much of the completion costs for repair and renovation of research s reported in Question 7 was located in the medical school?			
Medical school is a school that awards the M.D. or D.O. degree.				
	If your institution did <i>not</i> have a medical school, check this box and go to Question 9			
	Medical school portion of the costs included in Question 7 (<i>If none, enter "0."</i>)			

Question 9: New construction started in FY 2010 and FY 2011

9. Please provide the total number of new construction projects that included S&E research facilities that started during your FY 2010 or FY 2011. 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 pages 2–3 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 10.....

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 9 Page 1 of 4
	Please complete this form for each new construction project that started during your FY 2010 or FY 2011. 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.
9A.	What is the name of this project?
9B.	During which of your fiscal years did the physical work of new construction begin for this project?
9C.	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 pages 2–3 of the survey questionnaire)
	Research facilities are defined on pages 2–3 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 9 Page 2 of 4

9D. 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 pages 2–3 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 9 Page 3 of 4

9E. 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		
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, materials sciences, and physics	\$	NASF	
h. Psychology	\$	NASF	
i. Social sciences	\$	NASF	
j. Other field of S&E (Please describe.)	\$	NASF	

Please make additional copies of this form as needed.							
Individual Project Form for Question 9 Page 4 of 4							
	Reminder: Please see page 1 for confidentiality of this item.						
9F.	How much of the completion costs and NASF reported in Question 9E are for research animal space ?						
	Research animal space includes all departmental an associated support areas, that are subject to local, st concerning humane care and use of laboratory anima	ate, and federal g					
	Research animal portion included	Completion costs	Net assignable square feet				
	in Question 9E (If none, enter "0.")\$_		NASF				
9G.	<i>If your institution has a medical school,</i> how much Question 9E are for research facilities located in the provident of the second sec	•	n 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 a school, check this box and go to Q						
	Medical school portion included	Completion costs	Net assignable square feet				
	in Question 9E (If none, enter "0.")\$		NASF				

10. 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 2010 or FY 2011 as reported in Question 7 and Question 9E.

Total costs reported in column 1 should match the sum of the costs for repair and renovation of research facilities reported in Question 7 on page 10.

Total costs reported in column 2 should match the sum of the costs for new construction as reported in Question 9E on all Individual Project Form(s).

	Completion costs		
Source of funding	(1) For repairs and renovations reported in Question 7	(2) For new construction reported in Question 9E (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 11: Planned repairs and renovations to start in FY 2012 and FY 2013

11. 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 2012 or FY 2013. 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 13.....

Field of S&E (Include costs for research animal space.)	Completion costs for planned repair/renovation projects to start in FY 2012 or FY 2013
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,	
materials sciences, and physics	\$
h. Psychology	\$
i. Social sciences	\$
j. Other field of S&E (Please describe.)	\$

Question 12:	For medical schools only: planned repairs and renovations in FY 2012 and FY 2013
	<i>tution has a medical school</i> , how much of the completion costs for planned repair and renovation of ilities as reported in Question 11 will be located in the medical school?
Medical sch	ool 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 13
	Iedical school portion of the costs icluded in Question 11 (If none, enter "0.")

Question 13: Planned new construction to start in FY 2012 and FY 2013

13. 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 2012 or FY 2013. 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 15.....

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

Planned new construction scheduled to start in FY 2012 or FY 2013

Field of S&E (Include costs for 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, materials sciences, and physics\$			NASF
h. Psychology\$			NASF
i. Social sciences\$			NASF
j. Other field of S&E (Please describe.)\$			NASF

Question 14:	For medical schools only: planned new construction in F	FY 2012 and FY 2	013	
• •	<i>ution has a medical school</i> , how much of the completion co of research facilities as reported in Question 13 will be locat		*	
Medical scho	bol 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 15			
		Completion costs	Net assignable square feet	
Me	edical school portion included			
in	Question 13 (If none, enter "0.")\$	6	NASF	

Question 15: Deferred repairs and renovations

15. 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 2012 or FY 2013. 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 2012 or FY 2013. 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 17.....

Estimated costs of deferred

			id renovations
	eld of S&E nclude costs for research animal space.)	For projects included in your institutional plan	For projects not included in your
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,	¢	¢
h	materials sciences, and physics Psychology		ց Տ
11. ;	Social sciences		5 \$
ı. j.	Other field of S&E (<i>Please describe.</i>)		\$

Question 16:	For medical schools only: deferred repairs and renova	tions	
	ution has a medical school , how much of the estimated co ities as reported in Question 15 would be located in the me	-	and renovation of
Medical scho	bol is a school that awards the M.D. or D.O. degree.		
	If your institution does <i>not</i> have a medical scho check this box and go to Question 17		
		For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan
	school portion of the costs in Question 15 (<i>If none, enter "0."</i>)	\$	\$

17. 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 2012 or FY 2013. 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 2012 or FY 2013. 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 19.....

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, materials sciences, and physics 		\$
		\$
h. Psychology i. Social sciences		ም ድ
j. Other field of S&E (<i>Please describe.</i>)		\$\$

Que	stion 18:	For medical schools only: deferred new construction	on	
		<i>tution has a medical school</i> , how much of the estimated reported in Question 17 would be located in the medical		onstruction of research
	Medical sch	nool 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 19		
			For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan
		<pre>ledical school portion of the costs cluded in Question 17 (If none, enter "0.")</pre>	\$	\$
Que	stion 19:	Comments		
19.	Please add a	ny comments for Part 1 below.		

This page is intentionally blank.

Crosswalk of NSF Fields of S&E to the National Center for Education Statistics (NCES) 2010 Classification of Instructional Programs (CIP)

NSF field of S&E	NCES CIP 2010 classification	
Agricultural sciences and natural resources sciences	 01.09 Animal sciences 01.10 Food science and technology 01.11 Plant sciences 01.12 Soil sciences 03.01 Natural resources conservation and research (includes environmental science) 03.03 Fishing and fisheries sciences and management 	03.05 Forestry 03.06 Wildlife and wildlands science and management Also include: 01.0103 Agricultural economics 03.0204 Natural resources economics
Biological and biomedical sciences	 26.01 Biology, general 26.02 Biochemistry, biophysics and molecular biolo 26.03 Botany/plant biology 26.04 Cell/cellular biology and anatomical sciences 26.05 Microbiological sciences and immunology 26.07 Zoology/animal biology 26.08 Genetics 26.09 Physiology, pathology, and related sciences 26.10 Pharmacology and toxicology 	26.11 Biomathematics and bioinformatics
Computer and information sciences	11.01Computer and information sciences, general11.04Information science/studies11.07Computer science	11.08 Computer software and media applications11.09 Computer systems networking and telecommunications
Engineering	14.01Engineering, general14.02Aerospace, aeronautical and astronautical engineering14.03Agricultural engineering14.04Architectural engineering14.05Biomedical/medical engineering14.06Ceramic sciences and engineering14.07Chemical engineering14.08Civil engineering14.09Computer engineering, general14.10Electrical, electronics and communications engineering14.11Engineering mechanics14.12Engineering physics14.13Engineering science14.14Environmental/environmental health engineering14.19Mechanical engineering14.20Metallurgical engineering14.21Mining and mineral engineering14.22Naval architecture and marine engineering	14.23Nuclear engineering14.24Ocean engineering14.25Petroleum engineering14.25Petroleum engineering14.27Systems engineering14.28Textile sciences and engineering14.29Polymer/plastics engineering14.32Polymer/plastics engineering14.33Construction engineering14.34Forest engineering14.35Industrial engineering14.36Manufacturing engineering14.37Operations research14.38Surveying engineering14.39Geological/geophysical engineering14.40Paper science and engineering14.41Electromechanical engineering14.42Mechatronics, robotics, and automation engineering14.43Biochemical engineering14.44Engineering chemistry14.45Biological/biosystems engineering14.49Engineering, other

NSF field of S&E	NCE	S CIP 2010 classification		
Health and	51.02	Communication disorders sciences and services	51.20	Pharmacy, pharmaceutical sciences, and
clinical sciences	51.04	Dentistry	-	administration
chinear sciences	51.05	Advanced/graduate dentistry and oral sciences	51.21	Podiatric medicine/podiatry
	51.09	Allied health diagnostic, intervention, and	51.22	Public health
		treatment professions	51.23	Rehabilitation and therapeutic professions
	51.10	Clinical/medical laboratory science/research and	51.24	Veterinary medicine
		allied professions	51.25	Veterinary biomedical and clinical sciences
	51.12	Medicine	51.27	Medical illustration and informatics
	51.14	Medical clinical sciences/graduate medical studies	51.38	Registered nursing, nursing administration, nursing research, and clinical nursing
	51.16	Nursing		
	51.17	Optometry	Also in	clude:
	51.19	Osteopathic medicine/osteopathy	31.0505	5 Kinesiology and exercise science
Mathematics and	27.01	Mathematics	27.05	Statistics
statistics	27.03	Applied mathematics	27.99	Mathematics and statistics, other
Physical sciences	Group	1		
5	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		
	40.10	Materials sciences		
	40.99	Physical sciences, other		
Psychology	42.01	Psychology, general	42.28	Clinical, counseling and applied psychology
-	42.27	Research and experimental psychology	42.99	Psychology, other
Social sciences	45.01	Social sciences, general	45.11	Sociology
	45.02	Anthropology	45.12	Urban studies/affairs
	45.03	Archeology	45.13	Sociology and anthropology
	45.04	Criminology	45.14	Rural sociology
	45.05	Demography and population studies	45.99	Social sciences, other
	45.06	Economics		
	45.07	Geography and cartography	Also in	
	45.09	International relations and national security	43.0106	
		studies	43.0107	7 Criminal justice/police science
	45.10	Political science and government	43.0111	Criminalistics and criminal science
Other field of S&E	Use thi	s category when multidisciplinary, interdisciplinary	, or other	aspects 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.

