### 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 1. 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 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 *also* 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..... Reminder: Please see page 1 for confidentiality of this item. Laboratories and associated support areas used for research animals that are subject to local, state, and federal government policies and regulations concerning humane care and use of animals. Examples include procedure rooms, holding rooms, recovery rooms, animal production colonies, and storage areas. Space for housing research animals and associated maintenance areas that are subject to local, state, and federal government policies and regulations concerning humane care and use of animals. Examples include animal quarters, cage washing rooms, feed storage areas, isolation rooms, and exercise rooms. j. Research space that is used for clinical trials.....

Ωι	uestion 2:	Amount of research spa	re .	
Ų	LOSCIOII EI	Amount of research spa		
2.	of research	space on pages 2–3) for ea	h net assignable square feet was used for research ch of the fields of science and engineering (S&E) ields of S&E. You may provide estimates if you	below? Please include any
	support are		epartmental and central facilities, such as laborate state, and federal government policies and regula	
	of space us the space in	sed for research for each fiel n one field and half in the o	fields or used for other purposes in addition to red below. For example, if two fields shared the spather. Or, if an area was used for research one-four te-fourth of the space as research space.	ace equally, report half of
	See pages	27–28 for crosswalk of NSF	F fields of S&E and NCES CIP codes.	
	of S&E ude research	animal space.)		Net assignable square feet of research space at end of FY 2011
. A	gricultural	sciences and natural res	sources sciences	
	Animal se Fishing a	nral economics ciences nd fisheries sciences ence and technology	Natural resources conservation and research (includes environmental science) Natural resources economics Plant sciences Soil sciences Wildlife and wildlands science	Check this box if no research space in this field at the end of FY 2011
. B	iological an	d biomedical sciences		
	Anatomic Animal b Biochemic Biology Biomathe Biophysic Biotechno Botany Cell biolo Cellular b Ecology Evolution Genetics Human n	cal sciences viology istry matics ematics cs ology ogy oiology utrition	Immunology Microbiological sciences Molecular biology Molecular medicine Neurobiology Neurosciences Pathology Pharmacology Physiology Physiology Plant biology Population biology Toxicology Zoology Biological and biomedical sciences, other	Check this box if no research space in this field at the end of FY 2011
. С	Compute Compute Compute telecom	nd information sciences r science r software and media application r systems networking and nmunications ton science	ons	Check this box if no research space in this field at the end of FY 2011

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

the end of FY 2011  Group 2: Astronomy, astrophysics, chemistry, materials sciences, and physics  Check this box if no research space in this field the end of FY 2011  h. Psychology  Applied Psychology Clinical psychology Counseling psychology Counseling psychology Anthropology Anthropology Anthropology Archeology Criminalistics Anthropology Archeology Criminalistics National security studies Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no Check	Field of S&E (Include research animal space.)		Net assignable square feet of research space at end of FY 2011
Check this box if no research space in this field the end of FY 2011  Group 2: Astronomy, astrophysics, chemistry, materials sciences, and physics  Check this box if no research space in this field the end of FY 2011  h. Psychology  Applied Psychology  Clinical psychology  Counseling psychology  Counseling psychology  Anthropology  Archeology  Archeology  Archeology  Archeology  Archeology  Criminal sicience  Criminal science  Criminal science  Criminal science  Criminal science  Political science and government  Criminal science  Criminal science  Political science and government  Criminal science  Criminal science  Political science and government  Criminal science  Criminal science  Criminal science  Political science and government  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011	g. Physical sciences		
Check this box if no research space in this field the end of FY 2011  h. Psychology  Applied Psychology Clinical psychology Counseling psychology Psychology, other  Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  i. Social sciences  Anthropology Archeology Criminalistics Criminal justice Criminal justice Criminal justice Police science Criminal science Criminal science Criminal science Criminal science Criminal science Urban affairs Forensic science and technology Economics Urban affairs Forensic science and technology Social sciences, other  J. Other field of S&E Use this category when multidisciplinary, interdisciplinary, or other aspects make classification  NASF	<b>Group 1:</b> Atmospheric, earth, and geo	logical sciences; meteorology; and oceanography	Check this box if no research space in this field at
Applied Psychology Clinical psychology Counseling psychology Counseling psychology Counseling psychology Counseling psychology Counseling psychology Check this box if no research space in this field the end of FY 2011  i. Social sciences  Anthropology Archeology Criminalistics Criminal justice Criminal justice Criminal science Criminal science Criminology Demography Economics Forensic science and technology Counseling psychology Psychology, other Check this box if no research space in this field the end of FY 2011  Check this box if no research space in this field the end of FY 2011  The end of FY 2011  Check this box if no research space in this field the end of FY 2011  The e	Group 2: Astronomy, astrophysics, chemis	stry, materials sciences, and physics	Check this box if no research space in this field at
Anthropology Archeology International relations Criminalistics National security studies Criminal justice Police science Criminal science Political science and government Criminology Population studies Demography Sociology Economics Forensic science and technology  Other field of S&E  Use this category when multidisciplinary, interdisciplinary, or other aspects make classification  NASF  NASF  Check this box if no research space in this field the end of FY 2011  research space in this field the end of FY 2011  NASF	Applied Psychology Clinical psychology		Check this box if no research space in this field at
Use this category when multidisciplinary, interdisciplinary, or other aspects make classificationNASF	Anthropology Archeology Criminalistics Criminal justice Criminal science Criminology Demography Economics	International relations National security studies Police science Political science and government Population studies Sociology Urban affairs	Check this box if no research space in this field at
research and research space.  Check this box if no research space in this field the end of FY 2011	Use this category when multidisciplinary, i under one primary S&E field impossibl research and research space.	e. Please see pages 2–3 for the definition of S&E	Check this box if no research space in this field at

estion 3:	Research animal space
Reminder:	Please see page 1 for confidentiality of this item.
At the end animals?	d of your FY 2011, how much of the research NASF reported in Question 2 was used for research
support a	a animal space includes all departmental and central facilities, such as laboratories, housing, and associated reas, that are subject to local, state, and federal government policies and regulations concerning humane care f laboratory animals.
	Research animal portion of the space included in Question 2 (If none, enter "0.")
estion 4:	Clinical trial research space
At the end	d 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> )
estion 5:	Research space in medical school
	estitution had a medical school, how much of the research NASF reported in Question 2 was located in cal school at the end of your FY 2011?
Medical s	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 6
	Medical school portion of the space included in Question 2 ( <i>If none, enter "0."</i> )
	Reminder: At the end animals?  Research support at and use of the end of the

Question 6: Condition of r	research space
	or confidentiality of this item.  , what percentage of the research NASF reported in Question 2 fell into each of the elow? 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)

	Percent of net assignable square feet					
	Mark "X" if no research	(The pe	ercentages sho	uld 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
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%

### 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.

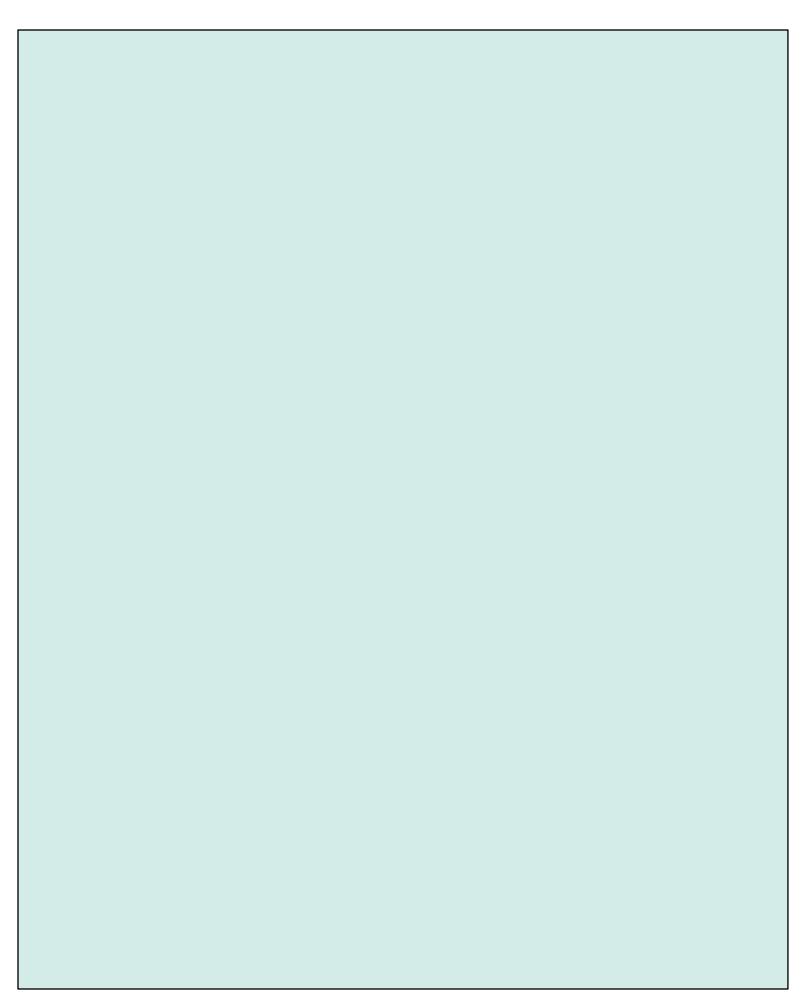
**Completion costs** include planning, site preparation, construction, fixed equipment, nonfixed equipment that costs \$1 million or more, and building infrastructure such as plumbing, lighting, air exchange, and safety systems either in the building or within 5 feet of the building foundation.

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.

f 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 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.)	\$



Qu	uestion 8: For medical sch	ools only: repairs and renovations in FY 2010 and FY 2011
8.	. <i>If your institution had a med</i> facilities as reported in Questi	<i>ical school,</i> how much of the completion costs for repair and renovation of research on 7 was located in the medical school?
	<b>Medical school</b> is a school th	at awards the M.D. or D.O. degree.
	If yo chec	our institution did <i>not</i> have a medical school, ek this box and go to Question 9
	Medical school por included in Questic	tion of the costs on 7 (If none, enter "0.")\$

Qu	estion 9:	New construction started in FY 2010 and FY 2011	
9.	your FY 20	ide the total number of new construction projects that included S&E research facilities that started during 10 or FY 2011. Include only projects whose prorated cost was estimated to be \$250,000 or more for at eld of S&E. Include research animal space in the relevant fields of S&E.	
	New constr	ruction is the construction of a new building or additions to an existing building.	
	Research fa	acilities are defined on pages 2–3 of the survey questionnaire.	
	Start date i	is the date on which the physical work of the construction actually began.	
	\$1 million o	n costs include planning, site preparation, construction, fixed equipment, nonfixed equipment that costs or more, and building infrastructure such as plumbing, lighting, air exchange, and safety systems either in g or within 5 feet of the building foundation.	
	\$250,000 or	are shared for research and nonresearch activities, report only projects with completion costs of r more for at least one field of S&E research. For example, if a \$300,000 project involves space used for ly one-fourth of the time, this project of \$75,000 for the research facilities should not be reported.	
	of S&E rese	are shared by two or more fields of S&E, report the new construction project only if at least one field earch has completion costs of \$250,000 or more. For example, if two fields share the costs equally for a oject 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	
	e	f your institution had one or more new construction projects, enter the number of projects here and fill out a separate ndividual Project Form for each one projects	
	1	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?
	FY 2011
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 <i>S&amp;E research facilities</i> 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.
	If the research facilities are also used for nonresearch activities, 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 <b>S&amp;E</b> 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.

	Researc	h 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

Individual Project Form for Question 9 Page 4 of 4				
	Reminder: Please see page 1 for confidentiality of this item.			
9F.	F. How much of the completion costs and NASF reported in Question 9E are for <b>research animal space</b> ?			animal
	Research animal space includes all departmental ar associated support areas, that are subject to local, s concerning humane care and use of laboratory anim	tate, and federal g		
		Completion costs	Net assignable square feet	•
	Research animal portion included in Question 9E (If none, enter "0.")\$			NASF
9G.	If your institution has a medical school, how much Question 9E are for research facilities located in the		n costs and NAS	F reported in
	Medical school is a school that awards the M.D. or D	O.O. degree.		
	If your institution does <b>not</b> have a school, check this box and go to 0			
	Medical school portion included	Completion costs	Net assignable square feet	<b>:</b>
	in Question 9E (If none, enter "0.")\$			NASF

# Question 10: Sources of project funding

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** (1) (2) For repairs and For new construction renovations reported in reported in Question 9E **Source of funding** Question 7 (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.

Completion costs for

If yo	our institution does <b>not</b> have planned repair or renovation	
proje	ects, check this box and go to Question 13	

	eld of S&E nclude costs for research animal space.)	planned repa	air/renovation to start in or FY 2013
a.	Agricultural sciences and natural resources sciences	\$	
b.	Biological and biomedical sciences	\$	
c.	Computer and information sciences	\$	
d.	Engineering	\$	
	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
12. <i>If your institution has a medical school</i> , how much of the completion costs for planned repair and renovation of research facilities as reported in Question 11 will be located in the medical school?
<b>Medical school</b> 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
Medical school portion of the costs included in Question 11 ( <i>If none, enter "0."</i> )\$

#### 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 <i>not</i> 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

14. <i>If your institution has a medical school</i> , how much of the completion costs and NASF for the planned new construction of research facilities as reported in Question 13 will be located in the medical school?	
<b>Medical school</b> 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 Net assignable costs square feet	
Medical school portion included in Question 13 (If none, enter "0.")\$	F

### 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 <i>not</i> have deferred projects	
for repair or renovation, check this box and go to Question 17	

Estimated costs of deferred

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

### repairs and renovations For projects For projects *not* included in your included in your Field of S&E institutional plan institutional plan (*Include costs for research animal space.*) 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 16:	For medical schools only: deferred repairs and reno	ovations	
	tution has a medical school, how much of the estimated lities as reported in Question 15 would be located in the		and renovation of
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 17		
		For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan
	school portion of the costs I in Question 15 (If none, enter "0.")	\$	\$
merauce	Tin Question 15 (1) none, ener 0. )		Ψ

#### Question 17: Deferred new construction

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 <i>not</i> 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 <i>not</i> 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	\$	\$
j. Other field of S&E (Please describe.)	\$	\$

Question 18:	For medical schools only: deferred new construction	n	
	itution has a medical school, how much of the estimated reported in Question 17 would be located in the medical		onstruction of research
Medical scl	<b>hool</b> is a school that awards the M.D. or D.O. degree.		
	If your institution does <i>not</i> have a medical so 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
M in	Medical school portion of the costs included in Question 17 (If none, enter "0.")	\$	\$
Question 19:	Comments		
19. Please add a	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) 2010 Classification of Instructional Programs (CIP)

NSF field of S&E	NCE	S CIP 2010 classification		
Agricultural	01.09	Animal sciences	03.05	Forestry
sciences and	01.10	Food science and technology	03.06	Wildlife and wildlands science and management
natural resources	01.11	Plant sciences		
	01.12	Soil sciences	Also in	nclude:
sciences	03.01	Natural resources conservation and research	01.010	3 Agricultural economics
	03.03	(includes environmental science) Fishing and fisheries sciences and management	03.020	4 Natural resources economics
Biological and	26.01	Biology, general	26.11	Biomathematics and bioinformatics
	26.02	Biochemistry, biophysics and molecular biology	26.12	Biotechnology
biomedical	26.03	Botany/plant biology	26.13	Ecology, evolution and population biology
sciences	26.04	Cell/cellular biology and anatomical sciences	26.14	Molecular medicine
	26.05	Microbiological sciences and immunology	26.15	Neurobiology and neurosciences
	26.07	Zoology/animal biology	26.99	Biological and biomedical sciences, other
	26.08	Genetics		J
	26.09	Physiology, pathology, and related sciences	Also in	nclude:
	26.10	Pharmacology and toxicology	19.050	
Computer and	11.01	Computer and information sciences, general	11.08	Computer software and media applications
information	11.04	Information science/studies	11.09	Computer systems networking and
sciences	11.07	Computer science		telecommunications
Engineering	14.01	Engineering, general	14.23	Nuclear engineering
gg	14.02	Aerospace, aeronautical and astronautical	14.24	Ocean engineering
		engineering	14.25	Petroleum engineering
	14.03	Agricultural engineering	14.27	Systems engineering
	14.04	Architectural engineering	14.28	Textile sciences and engineering
	14.05	Biomedical/medical engineering	14.32	Polymer/plastics engineering
	14.06	Ceramic sciences and engineering	14.33	Construction engineering
	14.07	Chemical engineering	14.34	Forest engineering
	14.08	Civil engineering	14.35	Industrial engineering
	14.09	Computer engineering, general	14.36	Manufacturing engineering
	14.10	Electrical, electronics and communications	14.37	Operations research
	1 / 1 1	engineering	14.38	Surveying engineering
	14.11	Engineering mechanics	14.39	Geological/geophysical engineering
	14.12 14.13	Engineering physics Engineering science	14.40	Paper science and engineering
	14.13	Engineering science Environmental/environmental health engineering	14.41	Electromechanical engineering
	14.14	Materials engineering	14.42	Mechatronics, robotics, and automation engineering
	14.19	Mechanical engineering	14.43	Biochemical engineering
	14.20	Metallurgical engineering	14.44	Engineering chemistry
	14.21	Mining and mineral engineering	14.45	Biological/biosystems engineering
	14.22	Naval architecture and marine engineering	14.99	Engineering, other

NSF field of S&E		S CIP 2010 classification		
Health and	51.02 51.04	Communication disorders sciences and services Dentistry	51.20	Pharmacy, pharmaceutical sciences, and administration
clinical sciences	51.04	Advanced/graduate dentistry and oral sciences	51.21	Podiatric medicine/podiatry
	51.09	Allied health diagnostic, intervention, and	51.22	Public health
	51.05	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 inc	clude:
	51.19	Osteopathic medicine/osteopathy	31.0505	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		
	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
		Economics		
	45.07	Geography and cartography	Also inc	
	45.09	International relations and national security	43.0106	
		studies Political science and government	43.0107 43.0111	3 1
	45.10			

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

