



National Science Foundation
National Institutes of Health



FY 2003 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 because the information from this survey is used to provide a national, quantitative picture of existing science and engineering research facilities at research-performing colleges, universities, and biomedical research organizations.

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

If you have a question about a specific item in the survey, please contact the Facilities Survey Help Desk via e-mail at facilitiesurvey@westat.com or call 1-888-742-3226. If you have a question about the survey in general, please contact Dr. Leslie Christovich via e-mail at lchristo@nsf.gov or call 1-703-292-7782.

Please complete and submit this survey on the web (according to the instructions on page 2) or return it by mail to:

ATTN: NSF Facilities Survey
Westat
1650 Research Blvd.
Rockville, MD 20850

Thank you for your participation.

General Information

This questionnaire is available on the World Wide Web. Go to www.facilitysurvey.org to access the web version of the questionnaire. You will need to click on “Part 1 and Coordinator Tools” and then enter the Part 1 Coordinator ID and password. These are provided on the label on the front of this paper questionnaire.

In 2002, NSF redesigned this survey. The survey mailing includes a brochure that details the changes to the survey.

In response to interest by participating institutions, most FY 2003 Facilities Survey data will be identified for individual institutions. Identifying individual institutional data is standard policy for NSF’s research and development surveys, and will permit you to compare your institution’s data with other institutions’ data. Responses about three topics will not be publicly available for individual institutions because institutions have indicated the sensitive nature of the questions. These confidential data are: all responses concerning animal space, reports on the condition of space (Question 6), and reports on indirect costs (Question 11).

Definition of science and engineering research space

Research space is defined as the space used for the sponsored research and development activities of your institution that are separately budgeted and accounted for. These research and development activities can be funded by your own institution, the federal government, a state government, foundations, corporations, or other sources. Exclude research space used for departmental research that is not separately budgeted. The box below provides examples of the types of space that should and should not be included in this definition.

Research space includes:

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

Research space does not include:

- space used for the fields of law, business administration/management (except economics), humanities, history, the arts, or education (except educational psychology)
- space that is designated as a Federally Funded Research and Development Center (FFRDC)
- in-kind space used by your faculty, staff, or other persons but administered by other organizations, such as research space at non-university hospitals or Veterans Administration hospitals
- space administered by your institution but leased to another organization
- 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
- rooms providing office support space (such as for a copying machine or mail room) or other support space (such as a kitchen or hallway), even if the rooms are part of a dedicated research suite

Question 1: Types of research space

1. Please indicate whether or not your institution had each type of research space listed below at the end of your FY 2003.

**Did your institution have this
type of research space
at end of FY 2003?**

(Mark one "X" for each row)

Types of research space

	Yes	No	Uncertain
a. Laboratories, wet or dry, including computer laboratories, behavior observation laboratories, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Laboratory support space, including autoclave rooms, darkrooms, equipment areas, storage areas for research equipment and supplies for research, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Instructional laboratories that are <i>also</i> used for research.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Core laboratories that serve other laboratories	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Leased space that is used for research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Offices, to the extent they are used for research activities.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Space used for research containing nonfixed equipment costing \$1 million or more each, such as MRIs.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Research space in a medical school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. 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: procedure rooms, holding rooms, recovery rooms, animal production colonies, storage areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. 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: animal quarters, cage washing rooms, feed storage areas, isolation rooms, exercise rooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 2: Amount of research space

The following **research space definitions** are needed for Question 2.

Net assignable square feet (NASF) is the sum of all areas (in square feet) 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.

Research space is equivalent to functional category 2 (Research) for facilities inventory systems based on NCES, NACUBO, or WICHE classifications. For classifications, please refer to the Postsecondary Education Facilities Inventory and Classification Manual, U.S. Department of Education, Office of Educational Research and Improvement, NCES 92-165; the 1988 NACUBO Taxonomy of Functions; or the 1972 WICHE Program Classification Structure.

Four general categories of research space are used in Question 2.

Laboratories	Areas with special-purpose equipment or configurations designed to meet the research needs of a particular discipline or a closely related group of disciplines
	Laboratories may involve work with electronics and large instruments with few piped services, or they may be equipped with a full range of piped services such as hot and cold water, gas lines, and compressed air. Laboratories may utilize benches, sinks, and fume hoods. Other types of laboratory space include core laboratories, computer laboratories, behavior observation laboratories, animal procedure rooms, etc.
Laboratory support space	Areas necessary to support research laboratories, such as autoclave rooms, darkrooms, equipment areas, and storage areas for research equipment and supplies
Offices	Offices of faculty, staff, and other persons, to the extent that they are used for research, including administrative activities for a specific research project
Other research space	All other space used for research

2. At the end of your FY 2003, how much space (NASF, or net assignable square feet) was used for research for each of the categories of space below? First, please report the NASF used for research animals. Second, please report the NASF used for research for each field of science and engineering (including the animal space you already reported). You may provide estimates if you do not have exact figures.

If research space was shared among fields or used for other purposes in addition to research, report the portion of space used for research by 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.

For animal space, include all departmental and central facilities that are subject to local, state, and federal government policies and regulations concerning humane care and use of laboratory animals.

Net assignable square feet for research animals at end of FY 2003

	Animal laboratories and laboratory support	Animal housing and housing support only	Total
Animal space			
All space for research animals regardless of S&E field.....	_____ NASF	_____ NASF	_____ NASF

**Net assignable square feet for categories of
research space at end of FY 2003**

(Also include animal space reported above)

Field of S&E (See p. 23 for definitions)	Laboratories	Laboratory support space	Offices	Other research space	Total
a. Agricultural sciences.....	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
b. Biological sciences..	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
c. Computer sciences...	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
d. Earth, atmospheric, and ocean sciences...	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
e. Engineering	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
f. Mathematical sciences.....	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
g. Medical sciences.....	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
h. Physical sciences	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
i. Psychology	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
j. Social sciences.....	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF
k. Other sciences..... (Please describe)	_____ NASF	_____ NASF	_____ NASF	_____ NASF	_____ NASF

Question 3: Research space in medical school

3. *If your institution has a medical school*, how much of your institution's research space (NASF) reported in Question 2 is located in that medical school?

If your institution does *not* have a medical school,
check this box and skip to Question 4.....

Net assignable space for research (including animal space)
at medical school (*If none, enter "0"*) _____ NASF

Question 4: Leased research space

4. How much of your science and engineering research space (NASF) reported in Question 2 is leased?
Please estimate if you do not have exact figures.

Net assignable space (including animal space) leased
for research (*If none, enter "0"*) _____ NASF

Question 5: Biosafety level of animal facilities

5. For each of the five types of animals listed below, please indicate which types of biosafety level (BL) facilities were available at your institution at the end of your FY 2003.

Biosafety Levels (BL)

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

Biosafety levels at end of FY 2003 (Check all that apply for each row)

Type of animal	BL-1	BL-2	BL-3	BL-4	No facilities
Non-mammals					
a. Fish/aquatic species.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Other non-mammals (Please specify below).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mammals					
c. Rodents.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Non-human primates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Other mammals (Please specify below).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: For additional information, see the report Biosafety in Microbiological and Biomedical Laboratories, 4th Edition, 1999, U.S. Department of Health and Human Services.

Question 6: Condition of research facilities

6. Please estimate the percentage of research space that falls into each of the four condition categories below. Please base these ratings on the space used for your current research program commitments, including current faculty and staff, and faculty and staff to whom offers have been made. Include all current commitments whether or not research has actually begun. The percentages should sum to 100 within each row (e.g., "all space for research animals.")

Superior condition	Suitable for the most scientifically competitive research in this field over the next 2 years
Satisfactory condition	Suitable for continued use over the next 2 years 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
Requires replacement	Should stop using space for current research use within the next 2 years

Animal space	<i>Mark "X" if no research space in this field</i>	Percent of net assignable square feet				Total
		Superior condition	Satisfactory condition	Requires renovation	Requires replacement	
All space for research animals regardless of S&E field	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
Field of S&E (Also include all animal space reported above)						
a. Agricultural sciences	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
b. Biological sciences	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
c. Computer sciences.....	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
d. Earth, atmospheric, and ocean sciences	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
e. Engineering	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
f. Mathematical sciences.....	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
g. Medical sciences.....	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
h. Physical sciences	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
i. Psychology	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
j. Social sciences.....	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%
k. Other sciences.....	<input type="checkbox"/>	___ %	___ %	___ %	___ %	100%

Question 7: Repairs and renovations started in FY 2002 or FY 2003

7. Please provide the total estimated completion costs of repair or renovation projects of research facilities that started during your FY 2002 or FY 2003. Include only projects whose prorated cost in a given field is estimated to be over \$250,000. For **multi-year projects**, report the entire completion cost even if some of the work will occur in future years.

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

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

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

If research space will be shared: For repaired or renovated research space that will be shared by two or more fields, estimate the portion of the cost for each field. If space will be used for other purposes in addition to science and engineering research, estimate the costs for the research portion of the space. Report projects with shared costs only if costs are prorated at more than \$250,000 for the field. For example, if a \$600,000 project included \$400,000 for mathematics space and \$200,000 for physics space, the \$200,000 portion would not be reported. Similarly, if a \$300,000 project involved space used for research only one-fourth of the time, this project of \$75,000 for the research portion would not be included.

If your institution does **not** have any fields with projects exceeding \$250,000, check this box and skip to Question 9.....

Animal space

All space for research animals regardless of S&E field.....

Total completion costs for projects started in FY 2002 or FY 2003

Field of S&E (Also include costs for animal space reported above)

a. Agricultural sciences	\$ _____
b. Biological sciences.....	\$ _____
c. Computer sciences	\$ _____
d. Earth, atmospheric, and ocean sciences	\$ _____
e. Engineering	\$ _____
f. Mathematical sciences	\$ _____
g. Medical sciences	\$ _____
h. Physical sciences.....	\$ _____
i. Psychology	\$ _____
j. Social sciences	\$ _____
k. Other sciences	\$ _____

Question 8: For medical schools only: repairs and renovations in FY 2002 or FY 2003

8. *If your institution has a medical school*, how much of your institution's total completion costs for repairs and renovations to research space as reported in Question 7 is located in that medical school?

If your institution does *not* have a medical school, check this box and skip to Question 9.....

Completion costs for repairs and renovations to the medical school's research space (*If none, enter "0"*)..... \$_____

Question 9: New construction started in FY 2002 or FY 2003

9. Please provide the total number of new construction projects that include facilities for science and engineering research at your institution that started during your FY 2002 or FY 2003. Only include those projects that have total completion costs estimated to be over \$250,000 for any field of science.

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

New construction refers to construction of a new building, additions to an existing building, and the building out of shell space.

Shell space is unfinished space that intentionally is left for completion at a later time.

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 space will be shared: Report projects with shared costs only if costs are prorated at more than \$250,000 for any one field. For example, if a \$400,000 project included equal space for two fields, this project of \$200,000 for each field would not be included. Or, if a \$300,000 project involved space used for research only one-fourth of the time, this project of \$75,000 for the research portion would not be included.

If your institution has no new construction projects meeting the criteria above, check this box and skip to Question 10

If your institution has one or more new construction projects meeting the criteria above, 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 2

Please complete this form for **each** new construction project that started during your FY 2002 or FY 2003, **and** has project completion costs estimated to be over \$250,000 for any one field of science. 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. When this project is complete, what do you estimate the **entire project's** completion costs and total gross square feet will be (including both research and nonresearch space)? Report completion costs for all years of the project. These costs include planning, site preparation, construction, fixed equipment, nonfixed equipment costing \$1 million or more each, and building infrastructure such as plumbing, lighting, air exchange, and safety systems either in the building or within 5 feet of the building foundation.

Gross square feet is based on the floor area of a structure within the **outside** faces of the exterior walls.

Entire project	Research and nonresearch space
Completion costs.....	\$ _____
Gross square feet.....	_____ GSF

Please make additional copies of this form as needed.

Individual Project Form for Question 9

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9C. Please estimate this project's completion costs and the amount of **space (NASF) for research** for each field below. Report only the fields whose prorated cost is estimated to be over \$250,000. In the line for animal space, include only projects costing over \$250,000 for the work on animal space.

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 space will be shared among fields or used for other purposes in addition to research:

Report the portion of cost and space used for research by each field below. For example, if two fields will share the space equally, report half of the costs and 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 costs and space as research space.

Project started in FY 2002 and FY 2003

	Estimated project completion costs for research space	Estimated net assignable research space
Animal space		
All space for research animals regardless of S&E field	\$ _____	_____ NASF
Field of S&E (Also include animal space reported above)		
a. Agricultural sciences	\$ _____	_____ NASF
b. Biological sciences	\$ _____	_____ NASF
c. Computer sciences	\$ _____	_____ NASF
d. Earth, atmospheric, and ocean sciences	\$ _____	_____ NASF
e. Engineering.....	\$ _____	_____ NASF
f. Mathematical sciences	\$ _____	_____ NASF
g. Medical sciences	\$ _____	_____ NASF
h. Physical sciences	\$ _____	_____ NASF
i. Psychology	\$ _____	_____ NASF
j. Social sciences	\$ _____	_____ NASF
k. Other sciences.....	\$ _____	_____ NASF

9D. **If your institution has a medical school**, please estimate the portion of the costs and the amount of space (NASF) for research reported in Question 9C that is located in the medical school.

If your institution does **not** have a medical school, check this box and skip to Question 10.....

	Estimated completion costs for research space	Estimated net assignable research space
Medical school portion of this project included in Question 9C (If none, enter "0")	\$ _____	_____ NASF

Question 10: Sources of project funding

10. Please provide the total estimated completion costs by source of funding for repair or renovation and new construction projects for science and engineering research facilities that cost over \$250,000, **and** started during your FY 2002 or FY 2003. Total costs reported in column A should match costs for research space reported in Question 7 on page 9. Total costs reported in column B should match the costs for research space reported on the Individual Project Form(s) for new construction projects.

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

Repairs and renovations refer to activities such as fixing up facilities in deteriorated condition, capital improvements on facilities, and conversion of facilities.

New construction refers to the construction of new buildings, additions to existing buildings, and the building out of shell space. Shell space is unfinished space that intentionally is left for completion at a later time.

Source of funding	Total completion costs for projects started in FY 2002 or FY 2003 (for projects over \$250,000)	
	(A)	(B)
	Repairs and renovations	New construction
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: Amount of indirect costs from federal grants/contracts

11. Question 10, Row c, lists two amounts for “institutional funds and other sources” for 1) repairs and renovations and 2) new construction. What is the total amount of indirect costs recovered from **federal** grants and/or contracts that you included in the total of these two amounts?

If “institutional funds and other sources” are **not** a source of funds for either repair/renovation or new construction projects, please check here and skip to Question 12.

If you are not able to identify these amounts, please check here and skip to Question 12.

Amount of indirect costs recovered from **federal** grants/contracts (If none, enter “0”)..... \$ _____

Question 12: Planned repairs and renovations in FY 2004 and FY 2005

12. Please estimate the completion costs for repair and renovation projects of science and engineering research facilities that are funded and scheduled to start in your FY 2004 or FY 2005 **and** will cost over \$250,000 for each field of science 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 on the repairs or renovations is scheduled to begin.

Repairs and renovations refer to activities such as fixing up facilities in deteriorated condition, capital improvements on facilities, and conversion of facilities. Do not report building additions and the building out of shell space as renovations 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 space will be shared: For repaired or renovated research space that will be shared by two or more fields, estimate the portion of the cost for each field. If space will be used for other purposes in addition to science and engineering research, estimate the costs for the research portion of the space. Report projects with shared costs only if costs are prorated at more than \$250,000 for any one field. For example, if a \$600,000 project included \$400,000 for mathematics space and \$200,000 for physics space, the \$200,000 portion would not be reported. Or, if a \$300,000 project will involve space used for research only one-fourth of the time, this project of \$75,000 for the research portion would not be included.

If your institution does **not** have any fields with planned repairs or renovations exceeding \$250,000, check this box and skip to Question 14.

Total completion costs for planned repair/renovation projects to start in FY 2004 and FY 2005

Animal space

All space for research animals
regardless of S&E field..... \$ _____

Field of S&E (Also include costs for animal space reported above)

a. Agricultural sciences \$ _____

b. Biological sciences \$ _____

c. Computer sciences \$ _____

d. Earth, atmospheric, and ocean sciences..... \$ _____

e. Engineering..... \$ _____

f. Mathematical sciences \$ _____

g. Medical sciences..... \$ _____

h. Physical sciences \$ _____

i. Psychology..... \$ _____

j. Social sciences..... \$ _____

k. Other sciences..... \$ _____

Question 13: For medical schools only: planned repairs and renovations in FY 2004 and FY 2005

13. *If your institution has a medical school*, how much of your institution's completion costs for planned repairs and renovations to research space as reported in Question 12 is located in that medical school?

If your institution does *not* have a medical school, check this box and skip to Question 14.....

Completion costs for planned repair and renovation projects for the medical school's research space (*If none*, enter "0")..... \$ _____

Question 14: Planned new construction in FY 2004 and FY 2005

14. Please estimate the completion costs and space (NASF) for planned new construction of science and engineering research facilities that are funded and scheduled to start in your FY 2004 or FY 2005 **and** will cost over \$250,000 for each field of science reported. 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 refers to construction of a new building, additions to an existing building, and the building out of shell space. Shell space is unfinished space that intentionally is left for completion at a later time.

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 space will be shared: For new research space that will be shared by two or more fields, estimate the portion of the cost and space for each field. If space will be used for other purposes in addition to science and engineering research, estimate the costs and space for the research portion of the space. Report projects with shared costs only if costs are prorated at more than \$250,000 for any one field. For example, if a \$600,000 project included \$400,000 for mathematics space and \$200,000 for physics space, the \$200,000 portion would not be reported. Or, if a \$300,000 project will involve space used for research only one-fourth of the time, this project of \$75,000 for the research portion would not be included.

If your institution has **not** funded and scheduled any new construction projects meeting these conditions, check this box and skip to Question 16.....

Planned new construction for research space scheduled to start in FY 2004 or FY 2005

Animal space	Estimated cost	Estimated net assignable space
All space for research animals regardless of S&E field.....	\$ _____	_____ NASF
Field of S&E (Also include costs and animal space reported above)		
a. Agricultural sciences	\$ _____	_____ NASF
b. Biological sciences	\$ _____	_____ NASF
c. Computer sciences.....	\$ _____	_____ NASF
d. Earth, atmospheric, and ocean sciences.....	\$ _____	_____ NASF
e. Engineering.....	\$ _____	_____ NASF
f. Mathematical sciences.....	\$ _____	_____ NASF
g. Medical sciences.....	\$ _____	_____ NASF
h. Physical sciences	\$ _____	_____ NASF
i. Psychology	\$ _____	_____ NASF
j. Social sciences.....	\$ _____	_____ NASF
k. Other sciences.....	\$ _____	_____ NASF

Question 15: For medical schools only: planned new construction in FY 2004 and FY 2005

15. *If your institution has a medical school*, how much of the estimated completion costs and estimated space (NASF) for the planned new construction of research space as reported in Question 14 is located in that medical school?

If your institution does *not* have a medical school, check this box and skip to Question 16.....

Planned new construction for your medical school's research space as included in Question 14

	Estimated cost	Estimated net assignable space
Medical school research space (If none, enter "0").....	\$ _____	_____ NASF

Question 16: Deferred repairs and renovations

16. Please provide the estimated costs of any *deferred projects* for repair/renovation of science and engineering research facilities that are needed for current research program commitments, but are not yet funded **and** not yet scheduled for FY 2004 or FY 2005. Please estimate costs separately for projects included in your approved institutional plan and projects not included in this institutional 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 2004 or FY 2005. Do not include projects planned for developing new programs or expanding your current programs.

Repairs and renovations refer to activities such as fixing up facilities in deteriorated condition, capital improvements on facilities, and conversion of facilities. Do not report building additions and the building out of shell space as renovations since they are reported under deferred new construction in Question 18.

If research space will be shared: For repaired or renovated space that will be shared by two or more fields, estimate the portion of the cost for each field. If space will be used for other purposes in addition to science and engineering research, estimate the costs for the research portion of the space.

If your institution does **not** have any deferred projects for repairs or renovations of research facilities, check this box and skip to Question 18.....

Estimated costs of deferred repairs and renovations

	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan
Animal space		
All space for research animals regardless of S&E field	\$ _____	\$ _____
Field of S&E (Also include costs for animal space reported above)		
a. Agricultural sciences	\$ _____	\$ _____
b. Biological sciences	\$ _____	\$ _____
c. Computer sciences	\$ _____	\$ _____
d. Earth, atmospheric, and ocean sciences	\$ _____	\$ _____
e. Engineering	\$ _____	\$ _____
f. Mathematical sciences	\$ _____	\$ _____
g. Medical sciences	\$ _____	\$ _____
h. Physical sciences	\$ _____	\$ _____
i. Psychology	\$ _____	\$ _____
j. Social sciences	\$ _____	\$ _____
k. Other sciences	\$ _____	\$ _____

Question 17: For medical schools only: deferred repairs and renovations

17. *If your institution has a medical school*, how much of the estimated costs for deferred repairs and renovations as reported in Question 16 is located in that medical school?

If your institution does *not* have a medical school, check this box and skip to Question 18.....

Estimated costs for your medical school's deferred repairs and renovations as included in Question 16

	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan
Medical school research space (If none, enter "0").....	\$ _____	\$ _____

Question 18: Deferred new construction

18. Please provide the estimated costs of any deferred projects for **new construction** of science and engineering research facilities that are needed for current program commitments, but are not yet funded **and** not yet scheduled for FY 2004 or FY 2005. Please estimate costs separately for projects included in your institutional plan and projects not included in this institutional 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 2004 or FY 2005. Do not include projects planned for developing new programs or expanding your current programs.

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

If research space will be shared: For new space that will be shared by two or more fields, estimate the portion of the cost for each field. If space will be used for other purposes in addition to science and engineering research, estimate the costs for the research portion of the space.

If your institution does **not** have any deferred construction projects, check this box and skip to Question 20

Estimated costs of deferred new construction

	For projects included in your institutional plan	For projects not included in your institutional plan
Animal space		
All space for research animals regardless of S&E field	\$ _____	\$ _____
Field of S&E (Also include costs for animal space reported above)		
a. Agricultural sciences	\$ _____	\$ _____
b. Biological sciences	\$ _____	\$ _____
c. Computer sciences.....	\$ _____	\$ _____
d. Earth, atmospheric, and ocean sciences	\$ _____	\$ _____
e. Engineering	\$ _____	\$ _____
f. Mathematical sciences.....	\$ _____	\$ _____
g. Medical sciences.....	\$ _____	\$ _____
h. Physical sciences	\$ _____	\$ _____
i. Psychology	\$ _____	\$ _____
j. Social sciences.....	\$ _____	\$ _____
k. Other sciences.....	\$ _____	\$ _____

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

**Classification of NSF Fields of Science and Engineering (S&E)
with a crosswalk to the National Center for Education
Statistics (NCES) classification of instructional programs**

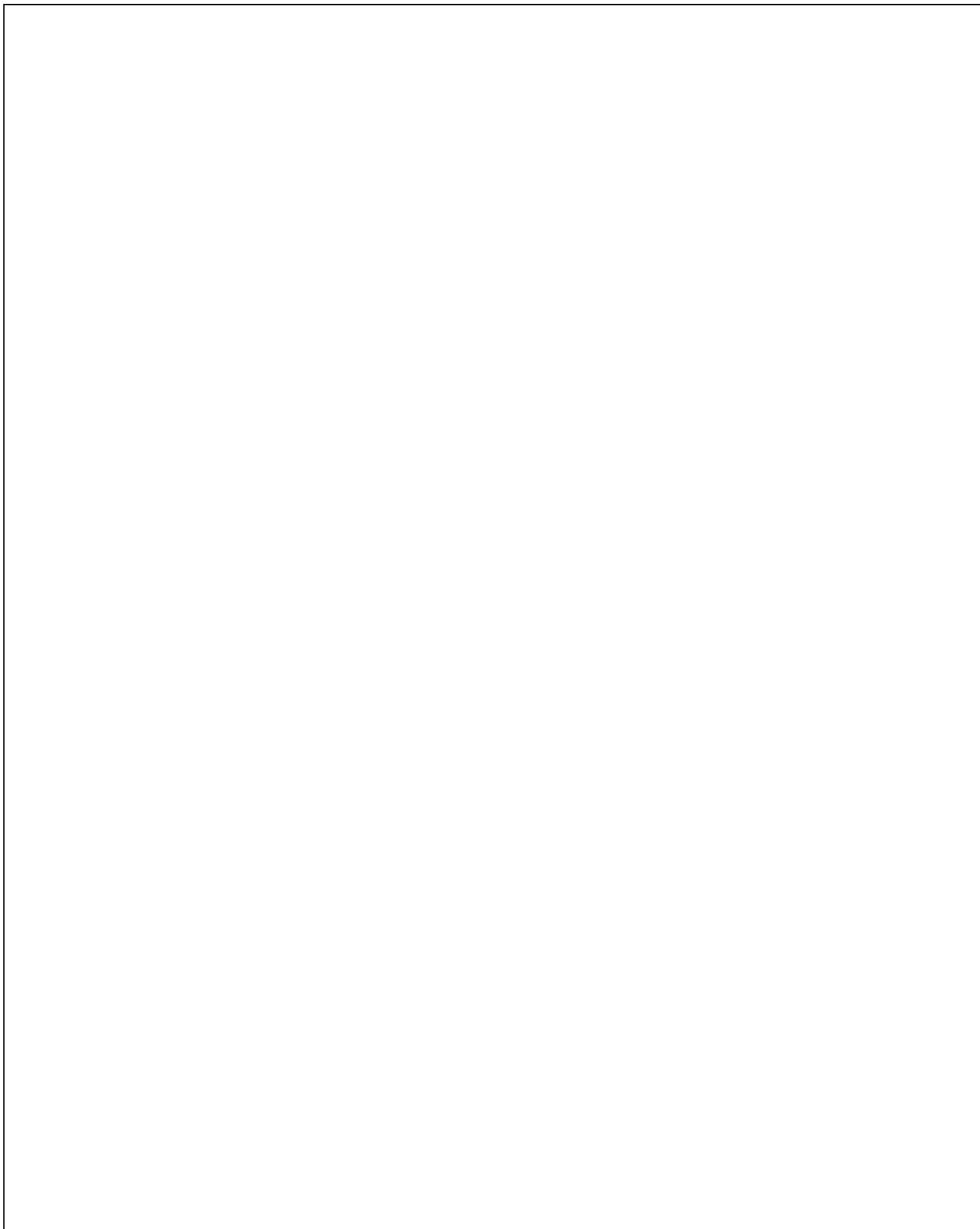
Animal space Use this category for your institution's space for research animals, including all departmental and central facilities that are subject to local, state, and federal government policies and regulations concerning humane care and use of laboratory animals. Please include laboratories, laboratory support, animal housing, and housing support.

NSF field of S&E	NCES classification and additional examples of disciplines					
Agricultural sciences (except agricultural engineering and agricultural economics)	01.03	Agricultural production	Additional examples: Agricultural chemistry Agronomy Animal science Conservation Fish & wildlife Forestry Horticulture			
	01.0303	Aquaculture				
	01.07	International agriculture				
	02.01	Agricultural sciences				
	02.04	Plant sciences				
	02.05	Soil science				
	03	Renewable natural resources				
04.06	Landscape architecture					
Biological sciences	19.05	Foods & nutrition studies	26.0701	Zoology	51.1313	Medical physiology
	26.01	Biology, general	26.0702	Entomology	51.1314	Medical toxicology
	26.0202	Biochemistry	26.0704	Pathology, human & animal	51.2203	Epidemiology
	26.0203	Biophysics	26.0705	Pharmacology, human & animal	Additional examples: Allergies & immunology Biogeography Biotechnology Pathology Physical anthropology Virology	
	26.03	Botany	26.0706	Physiology, human & animal		
	26.04	Cell & molecular biology	26.0799	Zoology, other		
	26.05	Microbiology/Bacteriology	26.99	Biological/Life sciences, other		
	26.0601	Anatomy	51.1301	Medical anatomy		
	26.0603	Ecology	51.1302	Medical biochemistry		
	26.0609	Nutritional sciences	51.1307	Medical immunology		
	26.0610	Parasitology	51.1308	Medical microbiology		
	26.0612	Toxicology	51.1312	Medical pathology		
	26.0613	Genetics, plant & animal				
	26.0614	Biometrics				
	26.0615	Biostatistics				
	26.0699	Miscellaneous biological specializations, other				
	Computer sciences	11	Computer & information science, general	Additional examples: Design, development, & application of computer capabilities to data storage & manipulation Information sciences		
		52.1201	Management information systems			
	Earth, atmospheric, and ocean sciences (Environmental)	Earth Sciences		Additional examples:		
		15.1102	Surveying	Engineering geophysics		Isotopic
40.06		Geological & related sciences	General geology		Lab geophysics	
40.0703		Earth & planetary sciences	Geodesy & gravity		Organic geochemistry	
45.0702		Cartography	Geomagnetism		Paleomagnetism	
			Hydrology		Paleontology	
			Inorganic		Physical geography	
					Seismology	
Atmospheric		Additional examples:				
40.04		Atmospheric sciences & meteorology	Aeronomy Extraterrestrial atmospheres Solar Weather modification			

NSF field of S&E	NCES classification and additional examples of disciplines		
Earth, atmospheric, and ocean sciences (continued)	Ocean sciences 26.0607 Marine/Aquatic biology 40.0702 Oceanography	Additional examples: Biological Chemical Geological Physical	
	Other earth, atmospheric, & ocean sciences Multidisciplinary projects within earth, atmospheric, & ocean sciences		
Engineering	Aeronautical & astronautical 14.02 Aerospace, aeronautical, & astronautical engineering	Additional examples: Aerodynamics Space technology	
	Bioengineering/Biomedical engineering 14.05 Bioengineering & biomedical engineering		
	Chemical 03.0509 Wood science 14.07 Chemical engineering 14.25 Petroleum engineering 14.32 Polymer/Plastics engineering	Additional examples: Petroleum refining process	
	Civil 04.02 Architecture 14.04 Architectural engineering 14.08 Civil engineering 14.14 Environmental/Environmental health engineering	Additional examples: Geotechnical Hydraulic Hydrologic Sanitary and environmental Structural Transportation	
	Electrical 14.09 Computer engineering 14.10 Electrical, electronics, & communications engineering	Additional examples: Power engineering	
	Mechanical 14.11 Engineering mechanics 14.19 Mechanical engineering		
	Metallurgical & materials 14.06 Ceramic sciences & engineering 14.15 Geological engineering 14.16 Geophysical engineering 14.18 Materials engineering 14.20 Metallurgical engineering 14.21 Mining & mineral engineering	14.28 Textile sciences & engineering 14.31 Materials science 40.0701 Metallurgy Additional examples: Welding	
	Other engineering 14.01 Engineering, general 14.03 Agricultural engineering 14.12 Engineering physics 14.13 Engineering science 14.17 Industrial/Manufacturing engineering 14.22 Naval architecture & marine engineering 14.23 Nuclear engineering	14.24 Ocean engineering 14.27 Systems engineering 14.29 Engineering design 14.30 Engineering/Industrial management 14.99 Engineering, other 30.06 Systems science & theory Additional examples: Marine & ocean engineering systems	
	Mathematical sciences	27.01 Mathematics, general	Additional examples: Algebra Analysis Foundations & logic Geometry Numerical analysis Topology
		27.03 Applied mathematics	
27.0302 Operations research			
27.05 Mathematical statistics			
27.99 Mathematics, other			
30.08 Mathematics/Computer sciences			

NSF field of S&E	NCES classification and additional examples of disciplines			
<p>Medical sciences (exclude all residency programs) Institutions with schools of veterinary medicine should distribute information among the appropriate fields of S&E (e.g., agricultural, medical, and biological) rather than only in medical sciences.</p>	<p>26.0608 Neurosciences 26.0611 Radiation biology/ Radiobiology 30.11 Gerontology 51.02 Communication disorders sciences & services 51.04 Dentistry 51.07 Health & medical administrative services 51.10 Health & medical laboratory technologies 51.1201 Medicine, general 51.1399 Medical basic sciences, other 51.16 Nursing technologies 51.1610 Nursing Psychiatry/Mental Health 51.17 Optometry 51.19 Osteopathic medicine 51.20 Pharmacy 51.21 Podiatry</p>	<p>51.22 Public health 51.2306 Occupational therapy 51.2308 Physical therapy 51.2399 Rehabilitation/ Therapeutic services 51.24 Veterinary medicine 51.99 Health professions & related services, other Additional examples: Anesthesiology Cardiology Colon & rectal surgery Dental/Oral surgery Dermatology Family medicine Gastroenterology General surgery Geriatric medicine Hematology Internal medicine Medical program, other Neonatal-perinatal medicine</p>	<p>Neurological surgery Neurology Nuclear medicine Nuclear radiology Obstetrics and gynecology Oncology Ophthalmology Orthopedics/Orthopedic surgery Otorhinolaryngology Pediatrics Pharmacology Physical and rehabilitative medicine Plastic surgery Preventive medicine Psychiatry Thoracic surgery Urology</p>	
Physical sciences	<p>Astronomy 40.02 Astronomy 40.03 Astrophysics</p>	<p>Additional examples: Gamma-ray Neutrino Optical & radio X-ray</p>		
	<p>Chemistry 40.05 Chemistry Additional examples: Analytical Inorganic</p>	<p>Organic Organo-metallic Pharmaceutical Physical Polymer sciences (except biochemistry—see Biological sciences)</p>		
	<p>Physics 40.08 Physics Additional examples: Acoustics Atomic/Molecular Chemical</p>	<p>Condensed matter Elementary particles Nuclear structure Optics Plasma Theoretical/Mathematical</p>		
	<p>Other physical sciences 40.01 Physical sciences, general 40.0799 Miscellaneous physical sciences, other 40.99 Physical sciences, other</p>	<p>Additional examples: Multidisciplinary projects within physical sciences Other disciplines not listed separately above</p>		
Psychology	<p>42.01 Psychology, general 42.02 Clinical psychology 42.17 School psychology 51.2301 Art therapy</p>	<p>Additional examples: Animal behavior Educational Experimental Human development & personality Social</p>		

NSF field of S&E	NCES classification and additional examples of disciplines	
Social sciences	Economics	Econometrics
	01.0103 Agricultural economics	Industrial
	45.06 Economics	International
	52.06 Business/Managerial economics	Labor
Additional examples:	Public finance & fiscal policy	
Applied	Quantitative	
Development	Resource	
Political science	Additional examples:	
44.04 Public administration	Comparative government	
44.05 Public policy analysis	Legal systems	
44.99 Public administration & service, other	Political theory	
45.09 International relations & affairs	Regional studies	
45.10 Political science & government		
Sociology	Additional examples:	
45.02 Anthropology (social & cultural only)	Comparative & historical	
45.05 Demography & population studies	Complex organizations	
45.11 Sociology	Cultural & social structure	
	Group interactions	
	Social problems & welfare theory	
Other social sciences	45.07 Geography	
04.03 City/Urban, community, & regional planning	45.12 Urban studies/affairs	
05 Area & ethnic studies	45.99 Social sciences, other	
16.0102 Linguistics	Additional examples:	
43.01 Criminal justice & corrections	History of science	
44.02 Community services	Socioeconomic geography	
45.01 Social sciences, general		
45.03 Archaeology		
Other sciences	Use this category when multidisciplinary, interdisciplinary, or other aspects make classification under one primary field impossible	





National Science Foundation
National Institutes of Health



Part 2: Computing and Networking Capacity (for research and instructional activities)

FY 2003 Survey of Science and Engineering Research Facilities

If you have a question about a specific item in the survey, please contact the Facilities Survey Help Desk via e-mail at facilitiesurvey@westat.com or call 1-888-742-3226. If you have a question about the survey in general, please contact Dr. Leslie Christovich via e-mail at lchristo@nsf.gov or call 1-703-292-7782.

Please complete the questionnaire and submit it according to the arrangements you made with your institutional coordinator named in the label above.

Thank you for your participation.

General Information

This section of the survey addresses computing and networking capacity for research and instructional activities. When providing your responses, please do not include student residence areas.

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

This questionnaire is available on the World Wide Web. Go to www.facilitysurvey.org to access the web version of the questionnaire. You will need to click on "Part 2" and then enter the Part 2 survey ID and password printed on the label on the front of this questionnaire or given to you by your institutional coordinator.

The first four questions ask about the *four components of your computer network*.

Question 1: Commodity (Internet1) connections

1. At the end of your FY 2003, how many of the following types of commodity (Internet1) connections did your institution have for Internet access? How many do you estimate you will have at the end of your FY 2004? Please do **not** report standard modems (57,600 bps or slower), ISDN, or DSL connections. (*Enter numbers; if none, enter "0."*)

If your institution has a fractional circuit, please report on the capacity of the full line.

Speed	Number of external lines	
	At end of FY 2003	Estimated at end of FY 2004
a. T1 or DS1 (1.5 megabits/sec.)....	_____	_____
b. T3 or DS3 (45 megabits/sec.)....	_____	_____
c. OC-3 (155 megabits/sec.).....	_____	_____
d. OC-12 (622 megabits/sec.).....	_____	_____
e. OC-48 (2.4 gigabits/sec.).....	_____	_____
f. Other (<i>Please specify below</i>).....	_____	_____
_____	_____	_____

Question 2: Campus backbone

2. Some institutions have a single campus backbone connecting all of their computers and workstations, while others have multiple segments that may operate at different speeds. At the end of your FY 2003, how many backbone segments operated at each of the speeds listed below? How many do you estimate will be at these speeds at the end of your FY 2004? (*Enter numbers; if none, enter "0."*)

The **backbone** of your institution's network connects the local area networks (LANs) to each other. Some segments of your institution's backbone may operate at different data transmission speeds from others, especially if your institution has multiple campuses.

Speed of connection	Number of backbone segments	
	At end of FY 2003	Estimated at end of FY 2004
a. 10 megabits/sec. or less	_____	_____
b. 100 megabits/sec	_____	_____
c. 1 gigabit or more/sec	_____	_____
d. Other (<i>Please specify below</i>).....	_____	_____
_____	_____	_____

Question 3: Local area networks

3. Your institution may also have local area networks (LANs) connected to each other through your campus backbone(s). At the end of your FY 2003, how many LANs operated at each of the speeds listed below? How many do you estimate will be at these speeds at the end of your FY 2004? (Enter numbers; if none, enter "0.")

A **local area network (LAN)** is a network of interconnected workstations sharing the resources of a single processor or server within a relatively small geographical area. Typically, this might be within a building or a laboratory.

Speed of LAN	Number of LANs	
	At end of FY 2003	Estimated at end of FY 2004
a. 10 megabits/sec. or less	_____	_____
b. 100 megabits/sec.....	_____	_____
c. 1 gigabit or more/sec	_____	_____
d. Other (Please specify below) ..	_____	_____

Question 4: Desktop ports

4. At the end of your FY 2003, what percentage of your institution's desktop ports had hardwire connections at each of the speeds listed below? What percentage do you estimate will be at these speeds at the end of your FY 2004? (Enter numbers; if none, enter "0.")

Desktop ports connect individual PCs or workstations to your LAN or backbone. Please report on the ports themselves and not the speed of the workstations connected to them.

Speed of connection	Percentage of desktop ports	
	At end of FY 2003	Estimated at end of FY 2004
a. 10 megabits/sec. or less	_____ %	_____ %
b. 100 megabits/sec	_____ %	_____ %
c. 1 gigabit or more/sec	_____ %	_____ %
d. Other (Please specify below).....	_____ %	_____ %
_____	100%	100%

Question 5: Speed on your network

5. With your current network configuration, what is the *maximum speed* that a desktop computer on your network could connect through the backbone to another user *on your network*? For example, if your backbone speed is 100 megabits, but all desktop ports are at 10 megabits, then your maximum speed would be no greater than 10 megabits for a connection on your network. If some desktop ports are at 10 megabits but others are at 100 megabits, with a backbone speed of 100 megabits, then the maximum speed would be 100 megabits. (Enter number.)

_____ megabits/sec.

Question 6: Speed through a commodity (Internet1) connection

6. Considering only your institution's current network and external connections, what is the *maximum speed* that a desktop computer on your network could connect to another institution *through a commodity (Internet1) connection*? For example, if your backbone speed is 100 megabits, but you have a T1 line for your Internet connection, then your maximum speed would be no greater than 1.5 megabits for an outside connection. (Enter number.)

_____ megabits/sec.

Question 7: Desktop port connections at maximum speed

7. What percentage of your institution's desktop port connections can provide the maximum speed reported in Question 6 for connections through a commodity (Internet1) connection? Please base your answer on the number of ports with such connections, not the number of authorized users. (Enter number.)

_____ %

Question 8: Internet2

8. At the end of your FY 2003, did your institution have an Internet2 connection?

Internet2 is a consortium of universities, industry, and government working to develop and deploy advanced network applications and technology. Members are connected through an advanced backbone network named Abilene. The consortium has regular members, corporate members, and affiliate members. Internet2 connections are also available to collaboration sites who collaborate with Internet2 university members.

(Mark one "X" below.)

Yes, we have an Internet2 connection

No, we do not have an Internet2 connection

Please specify any further explanations below.

Question 9: Information technology activities

9. Are the following included in a central, institution-wide document for planning your institution's information technology activities?

Yes	No	No
Included in a central, institution-wide plan	But other plans include this (departmental, school, etc.)	This is <i>not</i> currently included in any plans

(Mark one "X" for each row.)

- a. Faculty or researcher training in the use of information technology
- b. Strategy for network replacement
- c. Upgrades of personal computers on a regular schedule
- d. Upgrades of *operational* software on a regular schedule
- e. Please list any other important activities included in your planning for information technology.

Question 10: Computation speed

10. For any single application, what do you estimate as the highest computation rate currently available using only the computational capacity physically located within your institution? Include distributed/parallel computing if your institution has this configured to speed processing rates.

MFLOPS (megaflops) is a computing speed of 1 million floating-point operations per second.

GFLOPS (gigaflops) is a computing speed of 1 billion floating-point operations per second.

Computation rate refers to the number of operations a computer (or set of computers) can perform per second while working on a single application.

Estimated highest computation rate available on your campus (Enter one number)..... _____ MFLOPS
or
 _____ GFLOPS

Question 11: High performance computing and grid technology

11. Does your institution currently have the following capabilities?

Yes No Uncertain
(Mark one "X" for each row.)

a. High performance computing on campus

High performance computing could include either a large-capacity mainframe computer or the use of parallel or distributed processing software to spread a single application over multiple computers. In either case the purpose would be to manipulate very large amounts of data in a very short time.....

b. Grid technology

Grid technology is a hardware and software infrastructure that integrates a collection of resources such as high-end computers, instruments, applications, databases, and networks in order to collaborate across geographically distributed sites.....

Question 12: Wireless connections

12. At the end of your FY 2003, what percentage, if any, of your institution's building area was covered by wireless capabilities for computer network access? What percentage do you estimate will have wireless access at the end of your FY 2004? Building area refers to the sum of floor by floor calculations of square footage.

**Wireless connections for
computer network access**

(Mark one "X" for each column.)

	At end of FY 2003	Estimated at end of FY 2004
a. None.....	<input type="checkbox"/>	<input type="checkbox"/>
b. 10 percent or less.....	<input type="checkbox"/>	<input type="checkbox"/>
c. 11 to 20 percent.....	<input type="checkbox"/>	<input type="checkbox"/>
d. 21 to 30 percent.....	<input type="checkbox"/>	<input type="checkbox"/>
e. 31 to 40 percent.....	<input type="checkbox"/>	<input type="checkbox"/>
f. 41 to 50 percent.....	<input type="checkbox"/>	<input type="checkbox"/>
g. 51 to 60 percent.....	<input type="checkbox"/>	<input type="checkbox"/>
h. 61 to 70 percent.....	<input type="checkbox"/>	<input type="checkbox"/>
i. 71 to 80 percent.....	<input type="checkbox"/>	<input type="checkbox"/>
j. 81 to 90 percent.....	<input type="checkbox"/>	<input type="checkbox"/>
k. 91 to 100 percent.....	<input type="checkbox"/>	<input type="checkbox"/>
l. Other (Please specify below).....	<input type="checkbox"/>	<input type="checkbox"/>

