

National Science Foundation

FY 2023 Survey of Science and Engineering Research Facilities

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.

Responding to this survey typically requires 19 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.

Expiration date: TBD

If you have a question, please contact Kumar DeSilva via e-mail at <u>facilitiessurvey@westat.com</u> or call 1-888-811-1838. The survey director at the National Science Foundation's National Center for Science and Engineering Statistics is Mr. Michael Gibbons.

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

ATTN: NSF Facilities Survey Westat 1600 Research Boulevard Rockville, MD 20850

Thank you for your participation.

General information

This questionnaire is available electronically. Go to <u>www.facilitiessurvey.org</u> to access the survey. You will need to enter your institution's ID and password.

Please report information for the **institution** named on the web survey questionnaire.

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 10F) and on the condition of S&E space (Question 7) 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. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data.

identifiable form to anyone other than agency employees or authorized persons. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data.
Changes from previous survey cycle
No changes have been made to the survey questionnaire since the previous cycle.

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 research and experimental development (R&D) activities of your institution that are separately accounted for. These R&D activities comprise creative and systematic work undertaken in order to increase the stock of knowledge—including knowledge of humankind, culture and society—and to devise new applications of available knowledge. This research can be funded by your own institution, the federal government, a state government, foundations, corporations, or other sources.

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, animal sciences, plant sciences, veterinary sciences, and related fields; biological and biomedical sciences; computer and information sciences; engineering; geosciences, atmospheric sciences, and ocean sciences; health sciences; mathematics and statistics; natural resources and conservation; physical sciences; psychology; social sciences; and other science and engineering fields. See Question 2 on pages 5–8 for a list of the major disciplines included in each of these fields.

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

Research space includes:

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

Research space does not include:

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

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

1. Please indicate whether or not your institution had each type of S&E research space listed below at the end of your FY 2023. 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 2023? (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

Question 2: Amount of research space

2. At the end of your FY 2023, how much net assignable square feet was used for research (based on the definition of research space on pages 2-3) for each of the fields of science and engineering (S&E) below? Please include any research animal space in the relevant fields of S&E. You may provide estimates if you do not have exact figures.

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

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

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

Field of S&E (Broad-level disciplines for each field of S&E are listed below. Click on the S&E Field List tab on the web survey to see more detailed examples.) (Include research animal space.)

Net assignable square feet of research space at end of FY 2023

a. Agricultural sciences, animal sciences, plant sciences, veterinary sciences, and related fields Agricultural and domestic animal services International agriculture NASF Agricultural and food products processing Plant pathology and phytopathology, Agricultural business and management agricultural Check this box if no Agricultural mechanization Plant sciences research space in this field at Agricultural production operations Soil sciences the end of FY 2023 Agriculture, veterinary preparatory Veterinary biomedical and clinical programs sciences Animal sciences Veterinary medicine Agricultural sciences, animal sciences, Applied horticulture and horticultural plant sciences, veterinary sciences, and business services related fields, other Food science and technology b. Biological and biomedical sciences Anatomical sciences Microbiological sciences **NASF** Molecular biology Animal biology **Biochemistry** Molecular medicine Check this box if no **Bioinformatics** Neurobiology research space in this field at Neurosciences **Biomathematics** the end of FY 2023 **Biophysics** Nutrition sciences Biotechnology Pathology Pharmacology Botany Cell biology Physiology Cellular biology Plant biology Computational biology Plant pathology and phytopathology, Ecology biological sciences Epidemiology Population biology **Evolution** Systematics Foods, nutrition, and wellness studies Toxicology Genetics Zoology Immunology Biological and biomedical sciences, other

ter and information sciences ter and information technology nistration and management ter science ter software and media applications ter systems analysis ering nutical engineering face engineering futural engineering autical engineering autical engineering autical engineering fineering dical engineering cal engineering mineering unications engineering ter engineering cal engineering	Computer systems networking and telecommunications Data processing Information science, studies Computer and information sciences, other Environmental health engineering Forest engineering Industrial engineering Manufacturing engineering Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology Naval architecture	NASF Check this box if no research space in this field at the end of FY 2023 NASF Check this box if no research space in this field at the end of FY 2023			
nistration and management atter science atter software and media applications atter systems analysis ering autical engineering dical engineering cal engineering unications engineering atter engineering cal engineering	telecommunications Data processing Information science, studies Computer and information sciences, other Environmental health engineering Forest engineering Industrial engineering Manufacturing engineering Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	Check this box if no research space in this field at the end of FY 2023 NASF Check this box if no research space in this field at			
atter science atter software and media applications atter systems analysis ering autical engineering autical engineering autical engineering autical engineering autical engineering autical engineering ation engineering dical engineering cal engineering unications engineering atter engineering cal engineering auter engineering cal engineering	Data processing Information science, studies Computer and information sciences, other Environmental health engineering Forest engineering Industrial engineering Manufacturing engineering Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	research space in this field at the end of FY 2023 NASF Check this box if no research space in this field at			
ter software and media applications ter systems analysis ering autical engineering latural engineering autical engineering autical engineering dical engineering dical engineering cal engineering maineering cal engineering	Environmental health engineering Forest engineering Industrial engineering Manufacturing engineering Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	research space in this field at the end of FY 2023 NASF Check this box if no research space in this field at			
atter systems analysis ering autical engineering autical engineering autical engineering autical engineering ation engineering dical engineering cal engineering magineering unications engineering atter engineering cal engineering	Environmental health engineering Forest engineering Industrial engineering Manufacturing engineering Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	NASF Check this box if no research space in this field at			
autical engineering lace engineering lutural engineering autical engineering ation engineering gineering dical engineering cal engineering maineering unications engineering ter engineering cal engineering	Forest engineering Industrial engineering Manufacturing engineering Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	Check this box if no research space in this field at			
acce engineering Iltural engineering autical engineering ation engineering gineering dical engineering cal engineering ngineering unications engineering atter engineering cal engineering	Forest engineering Industrial engineering Manufacturing engineering Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	Check this box if no research space in this field at			
Itural engineering autical engineering ation engineering gineering dical engineering cal engineering ngineering unications engineering atter engineering cal engineering	Industrial engineering Manufacturing engineering Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	research space in this field at			
autical engineering ation engineering gineering dical engineering cal engineering ngineering unications engineering atter engineering cal engineering	Manufacturing engineering Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	research space in this field at			
ation engineering ineering dical engineering cal engineering ngineering unications engineering atter engineering cal engineering cal engineering	Marine engineering Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	*			
tineering dical engineering cal engineering ngineering unications engineering tter engineering cal engineering	Materials engineering Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	<u>*</u>			
dical engineering cal engineering ngineering unications engineering uter engineering cal engineering	Mechanical engineering Mechatronics Medical engineering Metallurgical engineering Nanotechnology	ano ena er i i i 2025			
cal engineering ngineering unications engineering uter engineering cal engineering	Mechatronics Medical engineering Metallurgical engineering Nanotechnology				
ngineering unications engineering uter engineering cal engineering	Medical engineering Metallurgical engineering Nanotechnology				
unications engineering iter engineering cal engineering	Metallurgical engineering Nanotechnology				
iter engineering cal engineering	Nanotechnology				
cal engineering	~·				
	Naval architecture				
nia anginagring	Travar architecture				
inc engineering	Nuclear engineering				
systems engineering	Ocean engineering				
ering chemistry	Operations research				
ering design	Paper science				
ering mechanics	Petroleum engineering				
ering physics	Robotics				
ering science	Space engineering				
	Engineering, other				
Geosciences, atmospheric sciences, and ocean sciences					
pheric sciences		NASF			
ical oceanography	Oceanography, chemical and physical				
ciences	Physical geography	Check this box if no			
gical sciences	Geosciences, atmospheric sciences, and	research space in this field at			
sciences	ocean sciences, other	the end of FY 2023			
rology		the end of 1 1 2025			
	pering science nmental engineering	sering science nmental engineering Engineering, other Ences, atmospheric sciences, and ocean sciences pheric sciences cical oceanography Sciences Cical oceanography Sciences Cical sciences Cical sciences Cical sciences Cical sciences Cical sciences Cical oceanography Sciences Cical science			

Field of S&E (Broad-level disciplines for each field of S&E are listed below. Click on the Net assignable square feet *S&E Field List tab on the web survey to see more detailed examples.)* of research space at end of (Include research animal space.) FY 2023 f. Health sciences Advanced, graduate dentistry and oral sciences Medicine **NASF** Allied health and medical assisting services Mental and social health services Allied health diagnostic, intervention, and Nursing administration Check this box if no Nursing research treatment research space in this field at Alternative and complementary medicine and Optometry the end of FY 2023 medical systems Oral sciences Bioethics, medical ethics Osteopathic medicine Clinical laboratory science/research Osteopathy Clinical medicine research Pharmaceutical administration Clinical nursing Pharmaceutical sciences Communication disorders sciences and services Pharmacv Podiatric medicine Dietetics and clinical nutrition services Podiatry Gerontology, health sciences Practical nursing Health and medical administrative services Public health Health, medical preparatory programs Radiological science Kinesiology and exercise science Registered nursing Medical clinical sciences Rehabilitation and therapeutic professions Vocational nursing Medical illustration Health sciences, other Medical informatics Medical laboratory science/research **Mathematics and statistics** Applied mathematics Statistics **NASF** Applied statistics Mathematics and statistics, other **Mathematics** Check this box if no research space in this field at the end of FY 2023 h. Natural resources and conservation Environmental, natural resources Natural resources conservation and **NASF** management and policy research Environmental science or studies Wildlife and wildlands science and Check this box if no Fishing and fisheries sciences and management research space in this field at management Natural resources and conservation, other the end of FY 2023 Forestry **Physical sciences** Astronomy Materials science **NASF** Astrophysics Physics Chemical biology Physical sciences, other Check this box if no Chemistry research space in this field at the end of FY 2023

į.	Psychology		
•	Applied psychology Clinical psychology Counseling psychology	Research and experimental psychology Psychology, other	NASF Check this box if no research space in this field the end of FY 2023
ζ.	Social sciences		
	Anthropology Agricultural economics Archeology Area, ethnic, cultural, gender, and group studies Corrections Criminal justice Criminology Demography Economics Geography and cartography Gerontology, social sciences	International relations Linguistics National security studies Natural resource economics Political science and government Population studies Public policy Rural sociology Sociology Urban studies, affairs Social sciences, other	Check this box if no research space in this field the end of FY 2023
	Other field of S&E		
	the S&E Field List tab in the web survey to see Please see pages 2–3 for the definition of S&E (Please describe.)		Check this box if no research space in this field the end of FY 2023

Q	uestion 3: Research animal space
	Reminder: Please see page 1 for confidentiality of this item.
3.	At the end of your FY 2023, how much of the research NASF reported in Question 2 was used for research animals?
	Research animal space includes all departmental and central facilities, such as laboratories, housing, and associated support areas, that are subject to local, state, and federal government policies and regulations concerning humane care and use of laboratory animals.
	Research animal portion of the space included in Question 2 (If none, enter "0.")
Q	uestion 4: Clinical trial research space
4.	At the end of your FY 2023, how much of the research NASF reported in Question 2 was used for clinical trials?
	Clinical trial portion of the space included in Question 2 (If none, enter "0.")
Q	uestion 5: Research space in medical school
5.	<i>If your institution had a medical school,</i> how much of the research NASF reported in Question 2 was located in the medical school at the end of your FY 2023?
	Medical school is a school that awards the M.D. or D.O. degree.
	If your institution did not have a medical school, check this box and go to Question 6
	Medical school portion of the space included in Question 2 (If none, enter "0.")

Question 6: Shared research space

6. For each field of S&E below, please indicate whether any of the space in Question 2 was (1) shared with any other field(s); and (2) used for purposes other than research (e.g., instruction) at the end of your FY 2023.

In Question 2, the instructions indicate, "If research space was shared among fields or used for other purposes in addition to research, report the portion of space used for research for each field." If you prorated the NASF in Question 2 according to these instructions, you should answer "yes" in column 1 and/or column 2 in the field(s) below that were prorated due to shared space.

For Field of S&E definitions, see Question 2 on pages 5–8.

	d of S&E lude research animal space.)	Mark "X" if no research space in this field	(1) Was th Question 2 s any other	shared with	Question 2 us	he space in ed for purposes 1 research?
			Yes	No	Yes	No
a.	Agricultural sciences, animal sciences plant sciences, veterinary sciences, an related fields	ıd				
b.	Biological and biomedical sciences					
c.	Computer and information sciences					
d.	Engineering					
e.	Geosciences, atmospheric sciences, ar ocean sciences					
f.	Health sciences					
g.	Mathematics and statistics					
h.	Natural resources and conservation					
i.	Physical sciences					
j.	Psychology					
k.	Social sciences					
1.	Other field of S&E					

Question 7: Condition of research space

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

7. At the end of your FY 2023, what percentage of the research NASF reported in Question 2 fell into each of the four condition categories below? Include research animal space.

Superior condition Suitable for the most scientifically competitive research in this field over the

next 2 years (your FY 2024 and FY 2025)

Satisfactory condition Suitable for continued use over the next 2 years (your FY 2024 and FY 2025)

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 2024 and FY 2025)

Requires replacement Should stop using space for current research within the next 2 years (your

FY 2024 and FY 2025)

For Field of S&E definitions, see Question 2 on pages 5–8.

Percent of net assignable square feet

			I CI CCIII OI IIC	t assignable	square rect	
	Mark "X" if no research	" I I he nercentages should sum to I IIII within each				ow.)
ld of S&E clude research animal space.)	space in this field	Superior condition	Satisfactory condition	Requires renovation	Requires replacement	Total
plant sciences, veterinary sciences, an	ıd 🖂	%	%	%	<u>%</u>	100%
Biological and biomedical sciences						100%
Computer and information sciences		%	%	%	0/0	100%
Engineering		%		%		100%
-		%				100%
Health sciences						100%
Mathematics and statistics		%		%		100%
Natural resources and conservation		%	%	%		100%
Physical sciences		%	%	%		100%
Psychology				%		100%
Social sciences			%	%		100%
Other field of S&E		%	%	%		100%
	Agricultural sciences, animal sciences plant sciences, veterinary sciences, an related fields	no research ld of S&E space in this	Id of S&E Superior condition Agricultural sciences, animal sciences, plant sciences, veterinary sciences, and related fields	Mark "X" if no research space in this stude research animal space.) Agricultural sciences, animal sciences, plant sciences, veterinary sciences, and related fields	Mark "X" if no research space in this stude research animal space.) Agricultural sciences, animal sciences, plant sciences, veterinary sciences, and related fields	no research space in this spac

Question 8: Repairs and renovations started in FY 2022 and FY 2023

8. Please provide the completion costs for repair and renovation of S&E research facilities that started during your FY 2022 or FY 2023. 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.

projects, check this box and go to Question 10.....

If your institution had no repair or renovation

For Field of

S&	&E definitions, see Question 2 on pages 5–8.	
	eld of S&E aclude costs for research animal space.)	Completion costs fo projects started in FY 2022 or FY 2023
a.	Agricultural sciences, animal sciences, plant sciences, veterinary sciences, and related fields	\$
b.	Biological and biomedical sciences	\$
c.	Computer and information sciences	\$
d.	Engineering	\$
e.	Geosciences, atmospheric sciences, and ocean sciences	\$
f.	Health sciences	\$
g.	Mathematics and statistics	\$
h.	Natural resources and conservation	\$
i.	Physical sciences	\$
j.	Psychology	\$
	Social sciences	
1.	Other field of S&E (Please describe.)	\$

 INFORMATION	ONLY - DO NOT USE TO RI	EPORT

Q	uestion 9: For medical schools only: repairs and renovations in FY 2022 and FY 2023
9.	<i>If your institution had a medical school,</i> how much of the completion costs for repair and renovation of research facilities as reported in Question 8 was located in the medical school?
	Medical school is a school that awards the M.D. or D.O. degree.
	If your institution did <i>not</i> have a medical school, check this box and go to Question 10
	Medical school portion of the costs included in Question 8 (If none, enter "0.")\$

Question 10: New construction started in FY 2022 and FY 2023

10.	Please provide the total number of new construction projects that included S&E research facilities that started during
	your FY 2022 or FY 2023. Include only projects whose prorated cost was estimated to be \$250,000 or more for at
	least one field of S&E. Include research animal space in the relevant fields of S&E.

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

Research facilities are defined on pages 2–3 of the survey questionnaire.

Project start date is defined as the first placement of permanent construction of a building or addition on site, such as the pouring of a slab or footing, the installation of piles, the construction of columns, or any work beyond the stage of excavation. When determining project start date, please exclude planning, demolition, or other site preparation work.

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. Include such costs whether they occur before or after the project start date.

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

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

projects, check this box and go to Question 11	
If your institution had one or more new construction projects, enter the number of projects here and fill out a separate	
Individual Project Form for each one	projects

Please make additional copies of this form as needed.

Individual Project Form for Question 10 Page 1 of 4

	Please complete this form for each new construction project that started during your FY 2022 or FY 2023. Include only projects that will cost \$250,000 or more for at least one of the S&E fields.
10A.	What is the name of this project?
10B.	During which of your fiscal years did the physical work of new construction begin for this project?
	Project start date is defined as the first placement of permanent construction of a building or addition on site, such as the pouring of a slab or footing, the installation of piles, the construction of columns, or any work beyond the stage of excavation. When determining project start date, please exclude planning, demolition, or other site preparation work.
	FY 2022 FY 2023
10C.	When this project is completed, what are (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)
	Net assignable square feet (NASF) is the sum of all areas on all floors of a building assigned to, or available to be assigned to, an occupant for a specific use, such as research or instruction. NASF is measured from the inside faces of walls.
	NOTE: If the entire project is S&E research, the answers for row b and row c will be the same.
	c. Net assignable square feet for S&E research facilities portion (defined on pages 2–3 of the survey questionnaire)
	Research facilities are defined on pages 2–3 of the survey questionnaire, including examples of what areas to include and exclude.
	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.
	If you have any questions about which projects to report or how to fill out the Individual Project Form, please contact the Facilities Survey Help Desk.

Please make additional copies of this form as needed.

Individual Project Form for Question 10 Page 2 of 4

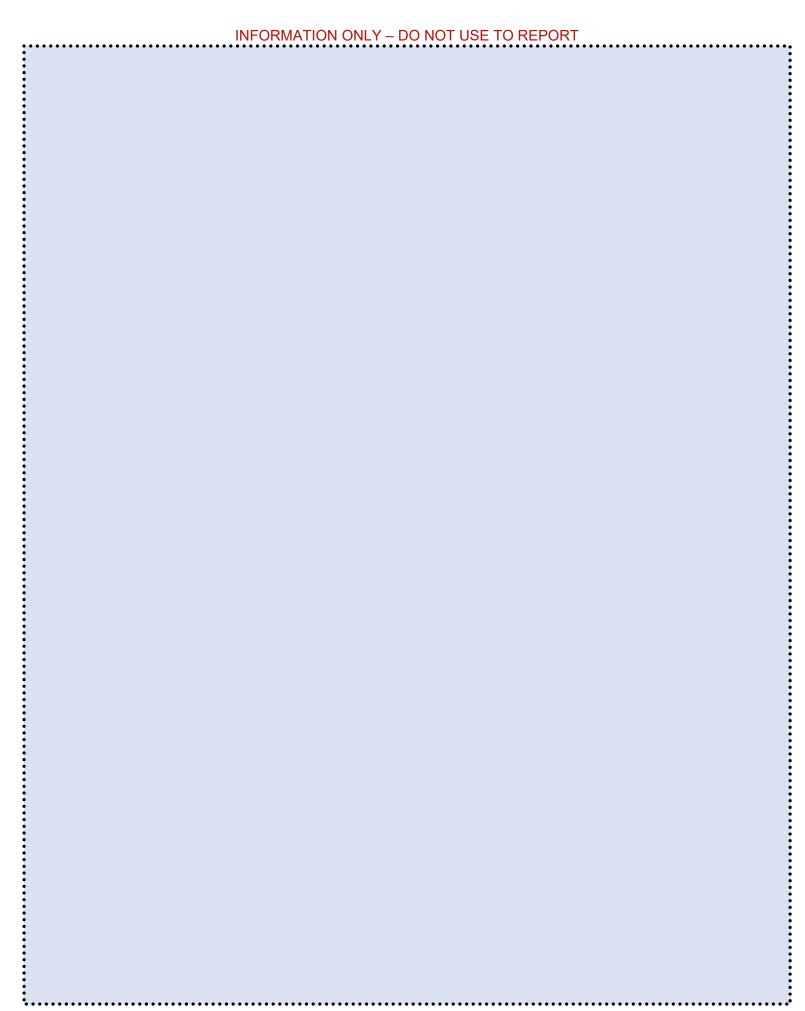
10D. When this project is completed, what are the completion costs for (a) the entire project (research and nonresearch), and (b) the S&E research facilities portion of the project? *For multi-year projects,* report the costs expected when the project is completed.

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. Include such costs whether they occur before or after the project start date in Question 10B.

a.	Completion costs for the GSF of the entire project (research and nonresearch) \$
b.	Completion costs for the S&E research facilities portion
	(defined on pages 2–3 of the survey questionnaire)\$

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

If you have any questions about which projects to report or how to fill out the Individual Project Form, please contact the Facilities Survey Help Desk.



Please make additional copies of this form as needed.

Individual Project Form for Question 10 Page 3 of 4

10E. 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.

Possarch facilities

For Field of S&E definitions, see Question 2 on pages 5–8.

	Researci	n facilities
Field of S&E (Include research animal space.)	(1) Completion costs	(2) Net assignable square feet
a. Agricultural sciences, animal sciences, plant sciences, veterinary sciences, and related fields\$		NASF
b. Biological and biomedical sciences\$		NASF
c. Computer and information sciences\$		NASF
d. Engineering\$		NASF
e. Geosciences, atmospheric sciences, and ocean sciences\$		NASF
f. Health sciences\$		NASF
g. Mathematics and statistics\$;	NASF
h. Natural resources and conservation\$		NASF
i. Physical sciences\$		NASF
j. Psychology\$		NASF
k. Social sciences\$		NASF
I. Other field of S&E (Please describe.)\$		NASF

If you have any questions about which projects to report or how to fill out the Individual Project Form, please contact the Facilities Survey Help Desk.

Please make additional copies of this form as needed.

Individual Project Form for Question 10 Page 4 of 4

	Reminder: Please see page 1 for confidentiality of this item.			
10F.	are for research animal			
	Research animal space includes all departmental an and associated support areas, that are subject to loc regulations concerning humane care and use of labor	al, state, and federa		,
	Research animal portion included	Completion costs	Net assignable square feet	
	in Question 10E (If none, enter "0.")\$		NASF	
10G.	If your institution has a medical school, how much Question 10E are for research facilities located in the		costs and NASF reported in	
	Medical school is a school that awards the M.D. or D	.O. degree.		
	If your institution does not have a school, check this box and go to C			
	Medical school portion included	Completion costs	Net assignable square feet	
	in Question 10E (If none, enter "0.")\$		NASF	

If you have any questions about which projects to report or how to fill out the Individual Project Form, please contact the Facilities Survey Help Desk.

Question 11: Sources of project funding

11. 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 2022 or FY 2023 as reported in Question 8 and Question 10E.

Total costs reported in column 1 should match the sum of the costs for repair and renovation of research facilities reported in Question 8 on page 12.

Total costs reported in column 2 should match the sum of the costs for new construction as reported in Question 10E on all Individual Project Form(s).

Completion costs (1) (2) For new construction For repairs and renovations reported in Ouestion 10E reported in Question 8 (all project forms) **Source of funding** 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 12: Planned repairs and renovations to start in FY 2024 and FY 2025

12. 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 2024 or FY 2025. 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 planned repair/renovation

If your institution does not have planned repair or renovation	
projects, check this box and go to Question 14	Ш.

For Field of S&E definitions, see Question 2 on pages 5–8.

projects to start in Field of S&E FY 2024 or FY 2025 (Include costs for research animal space.) a. Agricultural sciences, animal sciences, plant sciences, veterinary sciences, and related fields\$ b. Biological and biomedical sciences\$ c. Computer and information sciences.....\$ d. Engineering.....\$ e. Geosciences, atmospheric sciences, and ocean sciences..... \$ f. Health sciences....\$ g. Mathematics and statistics h. Natural resources and conservation\$ i. Physical sciences....\$ j. Psychology.....\$ k. Social sciences\$

1. Other field of S&E (*Please describe*.)\$

INFORMATION ONLY – DO NOT USE TO REPORT			

INFORMATION ONLY - DO NOT USE TO REPORT Question 13: For medical schools only: planned repairs and renovations in FY2024 and FY2025 13. If your institution has a medical school, how much of the completion costs for planned repair and renovation of research facilities as reported in Question 12 will be located in the medical school? Medical school is a school that awards the M.D. or D.O. degree. If your institution does *not* have a medical school, check this box and go to Question 14..... Medical school portion of the costs included in Question 12 (If none, enter "0.").....\$

Question 14: Planned new construction to start in FY 2024 and FY 2025

14. 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 2024 or FY 2025. 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.

Project start date is defined as the first placement of permanent construction of a building or addition on site, such as the pouring of a slab or footing, the installation of piles, the construction of columns, or any work beyond the stage of excavation. When determining project start date, please exclude planning, demolition, or other site preparation work.

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. Include such costs whether they occur before or after the project start date.

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	\neg
construction projects, check this box and go to Question 16	Ш

For Field of S&E definitions, see Question 2 on pages 5–8.

Planned new construction scheduled to start in FY 2024 or FY 2025

	eld of S&E nclude costs for research animal space.)	Completion costs	Net assignable square feet	e
a.	Agricultural sciences, animal sciences, plant sciences, veterinary sciences, and related fields\$			NASF
b.	Biological and biomedical sciences\$			NASF
c.	Computer and information sciences\$			NASF
d.	Engineering\$			NASF
e.	Geosciences, atmospheric sciences, and ocean sciences\$			NASF
f.	Health sciences\$			NASF
g.	Mathematics and statistics			NASF
h.	Natural resources and conservation\$			NASF
i.	Physical sciences\$			NASF
j.	Psychology\$			NASF
k.	Social sciences			NASF
1.	Other field of S&E (Please describe.)\$			NASF

 INFORMATION ONLY – DO NOT USE TO REPORT		

Question 15: For medical schools only: planned new construction in FY 2024 and FY 2025

edical school is a school that awards the M.	D. or D.O. degree.		
If your institution does school, check this box	s <i>not</i> have a medical and go to Question 16		
		Completion costs	Net assignable square feet
Medical school portion included			
in Question 14 (If none, enter "0.")		\$	NASF

Question 16: Deferred repairs and renovations

16. 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 2024 or FY 2025. 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 2024 or FY 2025. 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 18L	

For Field of S&E definitions, see Question 2 on pages 5–8.

Estimated costs of deferred repairs and renovations

Field of S&E (Include costs for research animal space.)	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan
a. Agricultural sciences, animal sciences, plant sciences,	ф	Ф
veterinary sciences, and related fields		\$
b. Biological and biomedical sciences	\$	\$
c. Computer and information sciences	\$	\$
d. Engineering	\$	\$
e. Geosciences, atmospheric sciences, and ocean sciences	\$	\$
f. Health sciences	\$	\$
g. Mathematics and statistics	\$	\$
h. Natural resources and conservation	\$	\$
i. Physical sciences	\$	\$
j. Psychology	\$	\$
k. Social sciences	\$	\$
l. Other field of S&E (Please describe.)	\$	\$

INFORMATION ONLY – DO NOT USE TO REPORT		

INFORMATION ONLY – DO NOT USE TO REPORT					
Question 17: For medical schools only: deferred repairs and renovations					
17. <i>If your institution has a medical school</i> , how much of the estimated costs for deferred repair and renovation of research facilities as reported in Question 16 would be located in the medical school?					
Medical school is a school that awards the M.D. or D.O. degree.					
If your institution does <i>not</i> have a medical school, check this box and go to Question 18					
	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan			
Medical school portion of the costs					
included in Question 16 (If none, enter "0.")	\$	\$			

Question 18: Deferred new construction

18. 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 2024 or FY 2025. 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 2024 or FY 2025. 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	\neg
new construction, check this box and go to Question 20L	\sqcup

For Field of S&E definitions, see Question 2 on pages 5–8.

Estimated costs of deferred new construction

	eld of S&E nclude 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, animal sciences, plant sciences, veterinary sciences, and related fields\$		\$
b.	Biological and biomedical sciences\$		\$
c.	Computer and information sciences\$		\$
d.	Engineering\$		\$
e.	Geosciences, atmospheric sciences, and ocean sciences\$		\$
f.	Health sciences\$		\$
g.	Mathematics and statistics\$		\$
h.	Natural resources and conservation\$		\$
i.	Physical sciences\$		\$
j.	Psychology\$		\$
k.	Social sciences\$		\$
1.	Other field of S&E (Please describe.)\$		\$
1.			\$

INFORMATION ONLY – DO NOT USE TO REPORT				

Question 19: For medical schools only: deferred new construction			
19. <i>If your institution has a medical school</i> , how much of the estimated costs for deferred new construction of research facilities as reported in Question 18 would be located in the medical school?			
Medical school is a school that awards the M.D. or D.O. degree.			
If your institution does <i>not</i> have a medical school check this box and go to Question 20			
	For projects included in your institutional plan	For projects <i>not</i> included in your institutional plan	
Medical school portion of the costs included in Question 18 (If none, enter "0.")	\$	\$	
Question 20: Comments			
20. Please add any comments below. This should include any comments you previous cycles or apparent discrepancies in the data. Providing this type follow-up inquiries on those items.			