

Quantifying Science and Engineering Research Facilities at Higher Education Institutions in the United States



The Survey of Science and Engineering Research Facilities

Throughout the United States, many higher education institutions have dedicated facilities for science and engineering (S&E) research. These spaces provide academics with the resources they need to make breakthroughs in their fields. Having space for specialty fields can help universities attract students, faculty members, and funding, all while fostering innovation.

What is the Survey of S&E Research Facilities?

The Survey of S&E Research Facilities is a biennial, congressionally mandated survey of research space at higher education institutions. This survey is a census of all research-performing colleges and universities in the United States that expended at least \$1 million in S&E research and development (R&D) funds in the prior fiscal year. It is conducted by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation.

How can I use the Survey of S&E Research Facilities?



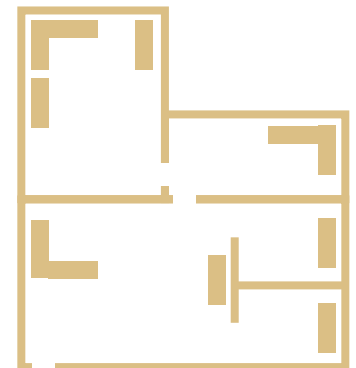
Data from the Survey of S&E Research Facilities can answer questions like

- Did the amount of higher education S&E research space increase?
- Which S&E fields have the most higher education research space?
- What is the cost of new construction of S&E research facilities started in a certain year? What is the source of these funds?
- Which specific institutions are planning new construction of S&E research space?

Why is the Survey of S&E Research Facilities important?

The Survey of S&E Research Facilities is the primary source of information on the amount and cost of S&E research space at U.S. research-performing colleges and universities. These data are used by Congress, higher education associations, state governments, academia, and architectural and engineering firms to help make decisions, analyze trends, and compare facility resources with other institutions.

For more information, the [Survey of S&E Research Facilities homepage](https://nces.nsf.gov/surveys/science-engineering-research-facilities/) (<https://nces.nsf.gov/surveys/science-engineering-research-facilities/>) features additional details about the survey, its questionnaires, and links to related publications and products.



Data details

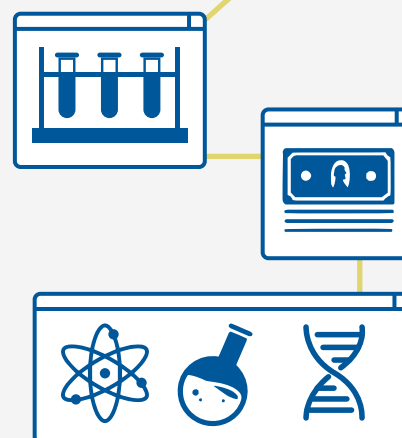
Where can I find Survey of S&E Research Facilities data?

On the survey's homepage, the Data tab offers data tables that can be downloaded by users, and the Analysis tab chronicles all NCSES publications that use the survey's data. NCSES's interactive [data tools](https://ncesdata.nsf.gov/) (<https://ncesdata.nsf.gov/>) allow users to explore S&E Research Facilities data and to build charts and tables tailored to their unique research interests. Additionally, historical microdata for each survey year beginning with 2003 can be found at the [S&E Research Facilities public use files page](https://www.nsf.gov/statistics/srvyfacilities/pub_data.cfm) (https://www.nsf.gov/statistics/srvyfacilities/pub_data.cfm).



Academic institutions report information such as

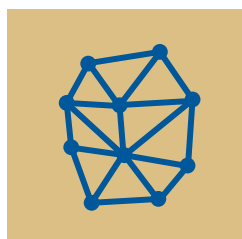
- Information on construction, repair, and renovation activities such as
 - Current project expenditures
 - Planned projects
 - Source of funds (federal, state and local, institutional)
- Amount and type of S&E research space
- Condition of research facilities
- Amount of research animal space



The Survey of S&E Research Facilities collects specific data focused on research facilities. For more data about R&D at higher education institutions in the United States, see the [Higher Education Research and Development \(HERD\) Survey](https://nces.nsf.gov/surveys/higher-education-research-development/) (<https://nces.nsf.gov/surveys/higher-education-research-development/>).

Products supported by Survey of S&E Research Facilities data

Survey of S&E Research Facilities data are used in NCSES publications, such as InfoBriefs and special reports. Data from the survey are also used to develop the series *Science and Engineering Research Facilities* and supplement *Science and Engineering Indicators*.



Survey specifics

Frequency: Biennial

Initial survey year: 1986

Reference period: Each fiscal year

Response unit: Academic institutions reporting at least \$1 million in S&E R&D expenditures in the HERD Survey

Sample or census: Census

Population size: Approximately 590 institutions

Sample size: The survey is a census of all known eligible institutions



National Center for Science and Engineering Statistics (NCSES)

For more information about NCSES's products and data collection process, visit <https://nces.nsf.gov>. You can also explore our Surveys page at <https://nces.nsf.gov/surveys> to learn more about NCSES surveys and the Survey of S&E Research Facilities, as well as its methodology, survey design, and questionnaires.