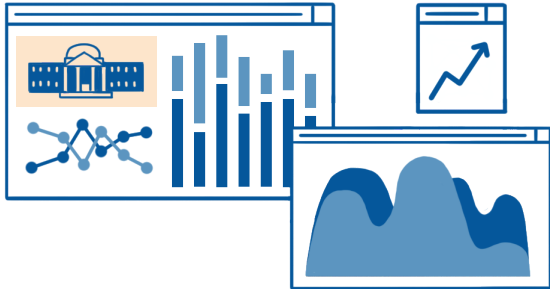


# Examining the Career Paths of Doctoral Scientists and Engineers



## The Survey of Doctorate Recipients

Following the career paths of doctorate recipients can assist government agencies, academic researchers, and prospective students with decisions regarding policy, education, research, training, and salary.

## What is the SDR?

The Survey of Doctorate Recipients (SDR) is a biennial survey of individuals who are less than 76 years old and have received a research doctoral degree awarded by a U.S. academic institution in a science, engineering, or health field. The SDR collects demographic, education, and career history information. It is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation and by the National Institutes of Health.

## How can I use the SDR?

### Data from the SDR can answer questions like

- How many doctoral scientists and engineers who received their degrees from U.S. academic institutions no longer reside in the United States?
- How many doctoral scientists and engineers are unemployed, underemployed, retired, or not in the labor force for other reasons?
- What is the median annual salary of a full-time employed doctoral scientist or engineer relative to their field of study or occupation?
- How many doctoral scientists and engineers are employed in a given sector (e.g., education, business, government)?
- What are the occupations and fields of study of employed doctoral scientists and engineers?
- What are the demographic characteristics of U.S. doctorate holders (e.g., age, sex, race or ethnicity, citizenship)?



## Why is the SDR important?

The SDR is the key comprehensive source of data on the training, experience, and career development of S&E research doctorate holders from U.S. academic institutions. The SDR sample design allows for longitudinal analysis across survey cycles to track trends in the doctorate-holding population over time.

For more information, the [SDR homepage](https://nsf.gov/statistics/srvydoctoratework/) (<https://nsf.gov/statistics/srvydoctoratework/>) features additional details about the survey, its questionnaires, and links to related publications and products.



## Data details

### Where can I find SDR data?

SDR data can be found in several places throughout the NCSES website. The [SDR data page](https://nsf.gov/statistics/srvydoctoratework/#tabs-2/) (<https://nsf.gov/statistics/srvydoctoratework/#tabs-2/>) offers data tables and access to public-use microdata files. NCSES's [data tools](https://ncses.nsf.gov/explore-data) (<https://ncses.nsf.gov/explore-data>) allow users to explore SDR data and build charts and tables tailored to their unique research interests. SDR restricted-use microdata files are also available via the NCSES [Restricted Use Data License Program](https://ncses.nsf.gov/about/licensing) (<https://ncses.nsf.gov/about/licensing>) on its Secure Data Facility and the [Federal Statistical Research Data Centers](https://census.gov/about/adrm/fsrdc.html) (<https://census.gov/about/adrm/fsrdc.html>).

### Doctorate holders report information such as

- Employment status
- Employer sector
- Work activities
- Occupation and salary
- Education history including degree field, start/award dates
- Age, sex, race and ethnicity
- Citizenship status
- Disability status

While the SDR gathers information on the employment history and career development of established scientists and engineers, a related study—the annual [Survey of Earned Doctorates](https://nsf.gov/statistics/srvydoctorates/) (<https://nsf.gov/statistics/srvydoctorates/>), which updates the SDR's sampling frame—provides information on new research doctorate recipients from U.S. academic institutions.



### Products supported by SDR data

SDR data are used in NCSES publications, such as InfoBriefs, special reports, and data tables. Its data also supplement NCSES publications such as *Women, Minorities, and Persons with Disabilities in Science and Engineering*, *Science and Engineering State Profiles*, and *Science and Engineering Indicators*.



### Survey specifics

**Frequency:** Biennial

**Initial survey year:** 1973

**Reference period:** The week of 1 February of the survey year

**Response unit:** Individuals

**Sample or census:** Sample

**Population size:** Approximately 1.2 million individuals

**Sample size:** Approximately 120,000 individuals



### National Center for Science and Engineering Statistics (NCSES)

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