



NCSES survey data on COVID-19 impact

Presentation to the NASEM Study Group on the Potential Impact of COVID-19 on the Careers of Women in Sciences, Engineering, and Medicine

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August 24, 2020

Zoom

National Center for Science and Engineering Statistics

Social, Behavioral and Economic Sciences

National Science Foundation

NCSES: A Principal Statistical Agency within NSF

National Science Foundation

Directorate for Social, Behavioral and Economic Sciences

National Center for Science and Engineering Statistics

Provides data on science and engineering education and workforce, R&D intensity, and U.S. competitiveness; provides policy-relevant, policy-neutral information.

NCSES Surveys: Survey of Earned Doctorates

- The Survey of Earned Doctorates (SED) is an annual census conducted since 1957 of all individuals receiving a research doctorate from an accredited U.S. institution in a given academic year.
- Currently 2020 AY data are being collected.
- Data collected includes degree information, educational history, postgraduation plans, and demographic information.
- <https://www.nsf.gov/statistics/srvydoctorates/>

NCSES Surveys: Survey of Earned Doctorates

COVID-19 questions added to the 2021 SED:

The next questions focus on how the Coronavirus Disease 2019 (COVID-19) may have affected your graduate experiences and career plans. Did you experience any of the following as a result of the COVID-19 pandemic?

- 1. The timeline for completing my doctoral degree changed. (Yes/No; If Yes, How did the timeline change?)*
- 2. My research was disrupted. (Yes/No; If Yes, How did your research disrupted?)*
- 3. Funding for my doctoral studies was reduced or suspended. (Yes/No; If Yes, How your funding reduced or suspended?)*
- 4. My immediate postgraduate employment or education plans changed. (Yes/No; If Yes, How did your plans change?)*
- 5. My longer term career plans or goals changed (e.g., type of employer, research focus). (Yes/No; If Yes, How did your plans change?)*
- 6. My plans about where to live in the year after graduation were affected. (Yes/No; If Yes, How did your plans change?)*
- 7. My graduate experience or career plans changed in other ways. (Yes/No; If Yes, In what other ways did your graduate experience or plans change?)*

NCSES Surveys: Survey of Earned Doctorates

- 2021 SED data collection began in May with Summer 2020 graduates, and will continue until end of next year with data release in 2022.
- However, 2020 SED data may have been impacted by the pandemic as some doctoral students postponing their graduation due to not being able to finish their doctoral work or because they couldn't find employment.
- 2020 SED data will be available in 2021.

NCSES Surveys: Survey of Graduate Students and Postdoctorates in Science and Engineering

- The Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) is an annual census of all U.S. academic institutions granting research-based master's degrees or doctorates in science, engineering, and selected health fields.
- Data collected includes number of graduate students by degree (master's, doctorate) and by field, sex, citizenship, and race and ethnicity. Data on postdoctoral fellows is also collected.
- 2020 GSS data will be available in 2021.
- <https://www.nsf.gov/statistics/srvygradpostdoc/>

NCSES Surveys: Survey of Graduate Students and Postdoctorates in Science and Engineering

Proposed COVID-19 questions for 2020 survey include:

- Impact of COVID-19 in institution's ability to complete the GSS 2020 survey;
- Any changes in institution's graduate student policies, enrollments, or funding due to COVID-19;
- Did any graduate programs reduce, suspend, or eliminate enrollment of new students?;
- Has school changed the definition of full-time or part-time graduate enrollment?;
- Have any programs extended the number of years doctoral students have to complete degree or receive funding?;
- Have any programs extended the number of years postdocs are allowed to receive funding?;
- Have postdocs been affected by hiring freezes, furloughs, or layoffs?; and
- Are there other COVID-19 impacts?

NCSES Surveys: National Survey of College Graduates

- The National Survey of College Graduates (NSCG) is a longitudinal biennial survey that collects data on the nation's college graduates.
- Data collected include:
 - Current and past employment;
 - Information collected on those not employed;
 - Educational background and certifications and licenses held; and
 - Demographic information.
- 2021 NSCG data will be available in 2022.
- <https://www.nsf.gov/statistics/srvygrads/>

NCSES Surveys: Survey of Doctorate Recipients

- The Survey of Doctorate Recipients (SDR) is a longitudinal biennial survey that collects information on individuals with a U.S. research doctoral degree in a science, engineering, or health field.
- Data collected include:
 - Current and past employment information;
 - Additional information collected on those with academic positions;
 - Information collected on those not employed;
 - Educational background; and
 - Demographic information.
- 2021 SDR data will be available in 2022.
- <https://www.nsf.gov/statistics/srvydoctoratework/>

NCSES Surveys: NSCG and SDR

Draft COVID-19 questions for 2021 NSCG and the 2021 SDR include:

- Was respondent's total earned income affected by the pandemic?
- How was basic annual salary affected? Decreased; increased; did not receive expected raise.
- Did the respondent receive new or additional paid leave due to the pandemic?
- Was respondent allowed to telework due to the pandemic?
- Did respondent change employer due to the pandemic?
- Was the respondent laid off or lost job due to the pandemic?
- If respondent was working part time, was it due to the pandemic?

Other Surveys: Current Population Survey

- The Current Population Survey (CPS) is a joint project of the Bureau of Labor Statistics and the Census Bureau, and is the source of the U.S. official unemployment rate.
- The CPS is a monthly survey of about 60,000 households and has a panel structure (mini-longitudes can be constructed).
- BLS and Census have conducted the CPS every month this year, and so provides detailed information on month-to-month changes in the U.S. labor force situation.
- Data collected includes labor force information including occupation, industry, hours worked, and earnings; demographic info; household info; and limited geographic info.
- <https://www.bls.gov/cps/>

Other Surveys: American Time Use Survey

- The American Time Use Survey (ATUS) is a Bureau of Labor Statistics survey that is collected continuously almost every day of the year. Data are released annually in June of the following year. All ATUS respondents were in a CPS panel so data can be linked back to CPS.
- The ATUS suspended data collection mid-March but was able to resume in mid-May. Even with the missing months, the 2020 ATUS data will provide a detailed look at how the pandemic altered Americans' lives.
- Data collected include one-day time diary; labor force information; demographic information; household information; and limited geographic information.
- Aspects of the data of interest include time spent working; where working; time spent in childcare duties; time spent in grocery shopping and meal prep; where activities done; and whom respondent was with during activities.
- <https://www.bls.gov/tus/>

Timeline of survey data releases

- First Friday of each month—CPS data for previous month
- Summer 2021: 2020 GSS data and 2020 ATUS data
- December 2021: 2020 SED data
- Late 2022: 2021 NSCG data and 2021 SDR data
- December 2022: 2021 SED data



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