



National Science Foundation

Privacy Impact Assessment
for the
2023 and 2025 Survey of Doctorate Recipients (SDR)

Originally Issued: April 14, 2023

Updated: July 20, 2023

1. CONTACT INFORMATION

<Enter the name of the system owner, title, the name of the directorate or division and the system owner's telephone number.>

Project System Owner 1

Name: John Finamore

Titles: NCSES Chief Statistician, NCSES Confidentiality Officer

Organization: National Science Foundation

Directorate/Division: Social, Behavioral and Economic Sciences (SBE), National Center for Science and Engineering Statistics

Telephone Number: 703- 292-2258

Project System Owner 2

Name: Lynn Milan

Titles: Survey Statistician, SDR Contracting Officer Representative

Organization: National Science Foundation

Directorate/Division: Social, Behavioral and Economic Sciences (SBE), National Center for Science and Engineering Statistics

Telephone Number: 703- 292-2275

Information Technology (IT) System Owner 1

Name: Lydia Luy Tan

Titles: Senior Project Manager, SDR IT Project Manager

Organization: NORC at the University of Chicago

Directorate/Division: Information Technology, Project Management Office

Telephone Number: 312-759-5212

IT System Owner 2

Name: Karen Grigorian

Titles: Vice President, SDR Project Director

Organization: NORC at the University of Chicago

Directorate/Division: Education

Telephone Number: 312-759-4025 (office) or 312-835-8662 (work cell)

2. GENERAL SYSTEM INFORMATION

1. Name of collection or system:

2023 and 2025 Survey of Doctorate Recipients (SDR) System

2. Description of system or electronic collection of information and its purpose.

<Write a brief paragraph about the system or collection that conforms to the following format. The first sentence describes the system or collection and its function in plain English (leave out details about the underlying technology). The second sentence states whether the system or

collection is for internal purposes or serves the public. The third sentence explains the reason the system or collection is being created. Relate the reason to the program or NSF's mission.>

The Survey of Doctorate Recipients (SDR), conducted by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF), provides data on the characteristics of science, engineering, and health (SEH) doctorate degree holders. It samples individuals who have earned an SEH research doctoral degree from a U.S. academic institution and are less than 76 years of age. The SDR provides data useful in assessing the supply and characteristics of U.S.-trained SEH doctorates employed in educational institutions, private industry, professional organizations, and government in the United States, as well as in other countries worldwide.

NCSES has contracted with the National Opinion Research Center at the University of Chicago (NORC) to conduct the 2023 and 2025 SDR. NORC is an independent, non-profit research organization (www.norc.org). Under NCSES direction, NORC is responsible for the following work scope (as described in the original Request for Quote issued on January 10, 2022, under Solicitation Number 49100422Q0013):

- Conducting two (2) cycles of the SDR (2023 and 2025) that entails all the survey operations required to complete each round of the survey, including selecting the sample from previous rounds of the Survey of Earned Doctorates (SED).
- Conduct methodological research throughout the contract period of performance that focuses on improving data quality, timeliness, and cost efficiency of the SDR survey activities.
- Collecting and processing SDR data and developing SDR data files according to NCSES guidelines to support coordination with other NCSES workforce surveys such as the National Survey of College Graduates (NSCG).
- Producing publication products associated with the release of the SDR data for each survey cycle.
- Preparing data and methodological presentations in response to NCSES and NIH requests, such as presentations at professional meetings, workshop, and conferences.
- Preparing and delivering data files and supporting documentation from each survey cycle for the NCSES data repository.
- Preparing and delivering data files for the user community including creating and documenting public-use files and restricted-use files for each survey cycle, and the 2015-2025 Longitudinal SDR cycles.

The SDR information system to fulfill this work scope and described in this Privacy Impact Assessment form is managed and maintained by NORC on behalf of NSF/NCSES. The information system is a survey respondent data collection system consisting of self-administered online surveys (web), computer-assisted telephone interviews (CATI), and paper survey questionnaires (mail). Data collected is used by policymakers, researchers, and others to answer questions about the number, employment, education, and characteristics of the science and engineering (S&E) workforce. This data enables government agencies to assess the scientific and engineering resources available in the U.S. to business, industry, and academia, and provide a basis for the formulation of the nation's science and engineering workforce policies. Findings from the 2023 and 2025 SDR will enable NCSES to continue

reporting employment patterns of recent science, engineering, and health (SEH) doctorate recipients, as well as about the more experienced doctorate recipients in the labor market.

3. What is the purpose of the system or electronic collection of information?

<Provide a concise, general description of the project or system using non-technical language. Clarify whether the system or collection is for internal NSF purposes or whether the system or collection provides a service to the public. Describe the purpose(s) for which the records are collected. Generally, the purpose should be apparent in a statute or an executive order or can be reasonably inferred from it as a necessity to administer an agency program. If System of Records Notice (SORN) exists, the purpose should parallel what's in the SORN.>

The system is used to facilitate the collection and analysis of the SDR data. This system is used:

1. To provide a source of information on demographic, educational, and employment characteristics of doctorate-holders in the United States, in compliance with Foundation responsibilities to monitor scientific and technical resources.
2. To provide indicators of the state of science and engineering in the United States, as required by congressional mandate.
3. To report biennially on the participation and employment of men and women by race and by ethnic group, in scientific and technical fields, as required by congressional mandate.
4. To provide the data base of doctorate-holders in science and engineering for the Scientific and Technical Personnel Data System maintained by the Foundation.

The America COMPETES Reauthorization Act of 2010¹ § 505 established the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF) to "...collect, acquire, analyze, report, and disseminate statistical data related to the science and engineering enterprise in the United States and other nations that is relevant and useful to practitioners, researchers, policymakers, and the public." Information obtained through the SDR is critically important to NCSES's ability to measure the education and employment outcomes of scientists and engineers. Furthermore, the SDR and NCSES's National Survey of College Graduates (NSCG) are coordinated in both survey content and timing to form data collections that serve as the nation's only source of comprehensive information about the size and characteristics of the science and engineering (S&E) workforce.² These data are solicited under the authority of the NSF Act of 1950³, as amended, and are central to the analysis presented in a pair of congressionally mandated reports^{4,5} published by NSF:

- *Science and Engineering Indicators*

¹ Section 505, Pub. L. No. 111-358, See Appendix A.

² The S&E workforce includes individuals with degrees or occupations in computer and mathematical sciences, life sciences, physical sciences, social sciences, engineering, and health sciences.

³ See Appendix A.

⁴ 42 U.S. Code § 1863(j)(1)

⁵ 42 U.S. Code § 1885(a), 1885(d)

- *Diversity and STEM: Women, Minorities, and Persons with Disabilities*

In addition, the Science and Engineering Equal Opportunities Act of 1980 directs NSF to provide to Congress and the Executive Branch an “accounting and comparison by sex, race, and ethnic group and by discipline, of the participation of women and men in scientific and engineering positions.”⁶ The SDR and NSCG provide much of the information to meet this mandate. The coordinated designs of these two surveys were developed throughout the past two decades and are based on recommendations from the National Research Council’s Committee on National Statistics (CNSTAT) report to NSF.⁷

4. Requested Operational Date?

July 20, 2023

5. Does the collection create a new Privacy Act System of Records Notice (SORN), or is the PII collection covered by one or more existing SORNs? If so, name the SORN.

<It is unlikely that a new system or collection would trigger writing a new SORN. It is more likely that a new or modified collection or system would require amending and republishing an existing SORN. As a reminder, a SORN is triggered by the collection of information that is retrieved by a personal identifier, e.g. name or Social Security number.>

81 FR 37645⁸

6. What specific legal authorities, arrangements and/or agreements require collection?

<List the full legal authority for operating the system, specifically the authority or executive order that authorizes collection and maintenance of the PII. Provide the authorities in a manner that is understandable to any potential reader. In other words, do not simply provide a legal citation; use statute names or regulations in addition to citations.>

The SDR data are solicited under the authority of the **NSF Act of 1950, as amended**, and are central to the analysis presented in a pair of congressionally mandated reports, published by NSF.

The **America COMPETES Reauthorization Act of 2010⁹ § 505** established the National Center for Science and Engineering Statistics (NCSES) within the NSF to “...collect, acquire, analyze, report, and disseminate statistical data related to the science and engineering enterprise in the United States and other nations that is relevant and useful to practitioners, researchers, policymakers, and the public.”

⁶ 42 U.S. Code § 1885(d)

⁷ National Research Council, Committee on National Statistics. 1989. *Surveying the Nation’s Scientists and Engineers: A Data System for the 1990s*. Washington: National Academy Press.

⁸ See https://www.nsf.gov/privacy/NSF-43_Doctorate_Work_History_Files_Survey_of_Doctorate_Recipients.pdf.

⁹ Section 505, Pub. L. No. 111-358, See Appendix A.

In addition, the **Science and Engineering Equal Opportunities Act of 1980** directs NSF to provide to Congress and the Executive Branch an “accounting and comparison by sex, race, and ethnic group and by discipline, of the participation of women and men in scientific and engineering positions.”¹⁰ The SDR and NSCG provide much of the information to meet this mandate.

All information captured in the SDR is treated as confidential, protected under the **Privacy Act of 1974** and the **Confidential Information Protection and Statistical Efficiency Act (CIPSEA) of 2002**. Both statutes mandate that SDR data must be exclusively used for statistical purposes. Under CIPSEA, data may not be released to unauthorized persons. Willful and knowing disclosure of protected data to unauthorized persons is a felony punishable by up to five years imprisonment and up to a \$250,000 fine. Per the **Federal Cybersecurity Enhancement Act of 2015**, SDR data are protected from cybersecurity risks through screening of the Federal systems that transmit your data.

3. PII IN THE SYSTEM

1. What PII is to be collected, used, disseminated or maintained in the system or collection?

Full Name

Email Address

Phone Number

Mailing Address

Postsecondary Degree History for degrees awarded, data includes the type of degree, field of degree, degree-granting institution, and year of degree award

Date of Birth

Place of Birth

Employment Status and Employer

The system will **NOT** collect or maintain Social Security Numbers (SSN).

2. What are the sources of the PII?

There are multiple sources for the PII collected and maintained in the SDR system. First and foremost, the PII comes from the SDR sample members as they report it in the Survey of Earned Doctorates (SED) or the SDR.

SED is the annual survey of newly awarded research doctorates in the U.S. and is used to build the Doctorate Records File (DRF). The DRF contains records about persons who have received research doctorates from U.S. institutions since 1920 and who have filled out the SED questionnaire. The DRF is maintained by the NSF and used as the sampling frame for the SDR.

Additionally, for SDR sample members with outdated contacting information who need to be located, updated contacting information which contains PII – specially, email address, phone numbers, mailing addresses, and employer information – is collected directly from the SDR sample member, their contact persons, publicly-available online sources, and commercial batch search sources.

¹⁰ 42 U.S. Code § 1885(d)

3. What technologies will be used to collect the PII?

SDR sample status and initial contacting information will be stored in a case management system programmed by NORC using a Java web and OutSystems application and SQL Server database. This is the system that will capture updated contacting information reported by the sample member or found through searching.

The SDR self-administered online surveys will be programmed using Acuity4Survey (A4S) by Voxco.

The SDR computer-assisted telephone interviews (CATI) will use standard telephony to make or receive calls from the SDR sample members and the actual survey data will be captured in a Voxco system.

Paper forms will be sent and returned by mail. Data from the completed paper forms will be entered into a separate, secure database by an NORC subcontractor and converted into a SAS file and returned to NORC via a secure file transfer process.

4. ATTRIBUTES OF THE DATA (USE AND ACCURACY)

1. Describe the uses of the PII.

<Identify and list each use, both internal and external to NSF, of the information collected or maintained, including each major programmatic activity supported by the system. In the grants area, for example, uses might be “to receive a proposal,” “to schedule a panel,” or “to generate a grant funding commitment.” “Purpose” and “use” are different, however. Each use must be compatible with the purpose and statutory authority established for the system.

When nonproduction use of PII is justified based on evaluation of cost and/or feasibility, the nature of the use, the justification and any compensating safeguards, such as methods for obscuring the data, should be documented in the PIA. Examples of nonproduction uses include supporting software development or testing, regular training of new system users, research purposes or assisting visualization in meetings.>¹¹

The PII will be used to find and contact SDR sample members to ask them to participate in the survey. After the survey is collected some PII (i.e., name and doctorate degree information) will be used to verify the correct sample member was reached and completed survey. Respondent demographic and employer information and other survey responses will be assembled into a data file and shared with NSF/NCSES for analytic purposes. Sample member’s names and contacting information will be updated at the conclusion of data collection in preparation for the next survey cycle. As an extra layer of confidentiality for the SDR sample members, this type of PII is not shared with the NSF/NCSES.¹² Instead, the PII

¹¹ Vulnerability when data is applied to nonproduction uses is explained in NIST Special Publications 800-53, Appendix J, and NIST 800-122.

¹² NSF/NCSES is continuously engaged in research to find efficiencies in the data collection effort; future research may rely on record linking techniques.

data is securely maintained by NORC throughout the life of the project according to the contract held with NSF.

When NSF/NCSES issues a new contract to conduct the next SDR cycles, NORC will securely transfer the PII data to the new contractor along with other data files and documentation needed to conduct the survey. The secure file transfer process will follow procedures approved by NCSES and will only occur after the new contractor has their own secure systems in place as described in their NCSES-approved “Confidentiality Plan and Data Security Procedures.”

2. Does the system perform any strictly analytical functions on the PII?

<Some systems sift through large amounts of information in response to a user inquiry or programmed functions, raising concerns about limits on use, drawing inaccurate conclusions about an individual, or reaching unfair adverse determinations about eligibility for a right, benefit, or privilege provided by government. PII captured in tracking cookies for web measurement and customization is a common example.

Describe any analytical functions. If the system or collection stores the new information about an individual, explain what its uses are. Describe whether new information is made part of the individual's existing record or a separate record is created. Describe measures, such as obscuring data, to reduce privacy vulnerabilities from these analyses.>

The system does not perform any analytical functions on the PII or derive new data. All analytical review of the PII will be done by the project’s staff.

3. How will the accuracy of the PII collected from individuals or derived by the system be ensured?

<Describe the process used to check the accuracy of information an individual provides, or if there are any online or administrative means to correct the individual's record. Typically, an individual provides information, and NSF relies on the individual to provide accurate information at the time the information was provided.>

Some PII data captured in the SDR system are validated. The formats of reported telephone numbers, email addresses, and ZIP codes are validated to prevent any obvious data entry mistakes, but the system relies on individuals to provide accurate information whether it is the sample member completing the self-administered online or paper survey, an interviewer capturing the telephone interview, or a locator finding updated contacting information.

Before a survey is accepted as valid or new contacting information is added to a sample member’s record in the case management system, the survey record or contacting data must be authenticated through a Sample Member Verification (SPV) process. The SPV process primarily relies on matching the sample member’s name and doctorate degree information but might also include the matching to the sample member’s date of birth or past address information.

5. SHARING PRACTICES

1. Describe any sharing of the PII with internal or external organizations.

NSF/NCSES has no current plan to share the direct PII data with other organizations for research or analysis. However, it is possible that a research project or analysis within the Agency or at another organization might require the SDR PII data. Should that occur, NCSES will develop a protocol to safeguard the data. The data confidentiality and security protocol will be reviewed and approved by the NCSES Chief Statistician.

During survey data collection, NORC will rely on several small business subcontractors during data collection. These subcontractors will have access to only the PII needed to be able to perform their tasks and all will follow a strict confidentiality plan and data security procedures that will be reviewed and approved by NSF/NCSES. Specifically, physical mailings to SDR sample members will be performed by a printing and mailing vendor; data entry of the completed paper forms will be conducted by a data entry service, and new contacting information will be obtained from commercial database companies that perform batch searches. For all data collection activities, NORC assigns a separate case identifier (ID) to each sample member – this ID is separate from the ID that will be attached to the reported survey data provided to NSF/NCSES and separate from the ID from the sample frame source, the DRF.

While SDR restricted use data files contain no direct PII, data with the files could potentially be combined in way that make the data disclosive. Licensees approved by NCSES may use SDR restricted-use data as a resource to create summary statistical information to report on the education and career outcomes of science, engineering, and health doctorate holders.

2. How is the PII transmitted or disclosed to the internal or external organization?

As noted above, NCSES does not currently have any current plans to share the direct SDR PII data with other internal or external organizations.

During survey data collection, most data containing PII will be transmitted to NORC subcontractors via SFTP file sharing. Internal sharing of PII will be contained to the system applications that are all behind NORC's secure firewall. There is one exception where PII is not transmitted electronically, completed paper forms that contain PII will be transferred to the data entry vendor after initially being receipted in the case management system, and then picked-up in person by the vendor. At the conclusion of data entry and all processing, the paper forms will be securely shred with a certificate of destruction. Any electronic data files shared that contain any PII for the SDR sample members will be password protected prior to being shared and sent via a secure file transfer process (SFTP).

Licensees for restricted-use microdata files are bound by the terms of the license, which specifies stringent data privacy and security requirements that must be met and maintained. The restricted use data Licensing Guide is at <http://www.nsf.gov/statistics/license>.

3. How is the shared PII secured by external recipients?

As noted above, SDR direct PII is not shared with other organizations for purposes other than data collection as described in items 5.1 and 5.2.

Restricted use data files are following the protocols established in the Licensing Guide.

6. NOTICE TO INDIVIDUALS TO DECLINE/CONSENT USE

The following questions address actions taken to provide notice to individuals of their right to consent/ decline to collection and use of information (other than required or authorized uses) and how individuals can grant consent.

1. How does the program or collection provide individuals notice prior to the collection of information? If notice is not provided, explain why not.

<In many cases, agencies provide written or oral notice before they collect information from individuals. That notice may include a posted privacy notice, a Privacy Act statement on forms, a PIA, or a SORN published in the Federal Register. Describe what notice was provided to the individuals whose information is collected by the system or collection.

Provide information on any notice provided on forms or on websites associated with the collection or system. Describe how the notice provided for the collection of information is adequate to inform those impacted.>

The SDR will receive Office of Management and Budget review and approval. Prior to the start of each SDR survey cycle, there will be a first and second Federal Register Notice that the NSF intends to conduct the survey; some SDR sample members will be aware of these notices.

At the start of data collection, all SDR sample members will be contacted and asked to participate in the survey. That outreach message and every other subsequent request for participation will include the basic elements of informed consent. The following information is printed on the reverse of the letterhead used to request survey participation:

- What is the Survey of Doctorate Recipients (SDR)?
Since the 1970s, the SDR has been the most important source of information on the education and training, work experience, and career development of science, engineering, and health (SEH) doctorate holders trained in the U.S. The SDR is sponsored by the National Center for Science and Engineering Statistics within the National Science Foundation and the National Institutes of Health.
- How is the information used?
The SDR provides data useful for policymakers, academic organizations, and governmental agencies. This unique data supports understanding about the educational and occupational achievements and career movements of U.S.-trained doctoral scientists and engineers in the U.S. and around the world.
- Who should participate?
You have been randomly selected to represent the population of doctorate holders trained in SEH fields at U.S. academic institutions for the 2023 Survey of Doctorate Recipients. The SDR is not an employer-based survey; the SDR seeks to represent doctorate-degree holders whether they are working, retired, seeking work, or in some other situation. Your survey participation and honest responses help make the SDR data series more complete, accurate, and reliable. While we hope that you will agree to fully participate in the SDR, it is a voluntary survey, and you are not required to answer any questions.

- Will my information be kept confidential?
All information you provide will be kept strictly confidential and safeguarded in accordance with the Privacy Act of 1974 and the Confidential Information Protection and Statistical Efficiency Act of 2018. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the Federal systems that transmit your data. Your responses are used for research purposes only. Information that personally identifies you is separated from your survey responses. Published reports show only summary information.
- How long will this survey take?
The average time to complete the survey is 22 minutes. Depending on your circumstances, it might be a little shorter or longer.
- Who can I contact for more information?
The 2023 SDR data collection activities are contracted to NORC at the University of Chicago, an objective, nonpartisan research organization. If you have questions about taking the survey, you can reach out to SDR@norc.org or call toll-free 1-800-685-1663. If you have questions about your rights as a study participant, you may call the NORC Institutional Review Board Administrator, toll-free within the U.S., at 1-866-309-0542.

Prior to completing the survey, sample members will be provided or read an informed consent statement that reinforces the purpose of the SDR, who is conducting it, how the data will be used, and that the survey is voluntary. The informed consent statement is as follows:

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended, and the Confidential Information Protection and Statistical Efficiency Act of 2002. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the federal systems that transmit your data. The information you provide will be used for statistical purposes only. Your responses will be kept confidential. Your response is voluntary and failure to provide some or all of the requested information will not in any way adversely affect you. The average time to complete this survey is about 22 minutes. Please send any comments on the time required for this survey to National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314, Attn: NSF Reports Clearance Officer.

Additionally, in every written request for survey participation, sample members will be provided with the means to reach NORC, the data collection contractor, to ask further questions (i.e., email address, telephone number, and mailing address), contact information for NORC's Institutional Review Board, and a link to the SDR sample member support website (www.NSFsdr.org) that explains more about the survey and provides a complete list of frequently asked questions and answers. NORC will staff an in-bound help desk throughout the field period and sample members will be made aware of when staff are available to answer telephone calls directly.

2. Do individuals have the opportunity and/or right to decline to provide any or all PII?

<Describe whether individuals can decline to provide information, and whether there are any consequences if they decline to provide information. Consequences might include, for example, limiting their access to certain services or disqualifying them from eligibility for a privilege or

legal benefit. When individuals are required to grant consent for NSF to use their information, explain how individuals would grant consent, e.g., checking a box to opt-in.>

Yes. The SDR is a voluntary survey. Sample members may decline to provide their information and may opt out of the survey data collection as a whole or decline to answer any question in the survey by omitting any answer.

3. Do individuals have the right to consent to particular uses of their PII?

<The question is directed at whether an individual may provide consent for specific uses or the consent is given to cover all uses of their information. If specific consent is required, how would the individual consent to each use? For example, is the system or collection designed to permit opt-in or opt-out consent?>

No, the system does not allow individuals to consent to particular uses of their PII.

7. ACCESS TO DATA (ADMINISTRATIVE AND TECHNICAL CONTROLS)

1. What categories of individuals will have lawful access to the system?

DATA COLLECTION ACCESS

System User – Authorized, trained NORC project staff will have access to the system for internal management purposes only, including searching for updated contact information for sample members, conducting telephone interviews, receipting return mail and paper forms, fielding in-bound calls and emails from sample members requesting information or support, and reviewing project information submitted by sample members, and accessing reports generated from such information.

Administrator – Authorized NORC leadership and program managers for internal management purposes only, including reviewing project information submitted by sample members and accessing reports generated from such information.

Developer – Developers are needed to program, validate, and test the application's functionality.

DATA ANALYSIS ACCESS

Public Users – Public users have access to only public-use data which contains no PII and has undergone disclosure analysis.

Restricted Users – Users that have access to non-aggregated microdata files. **The microdata files do not contain any direct PII data.**

- NSF staff members have defined classes or sets of access privileges to SDR that are commensurate with the level of access required to perform their official duties.
- Licensees are granted tightly-regulated access to restricted use data files through the NCSES licensing process.

2. How is permissible access by a user determined? Are procedures documented?

As noted above, at the outset of the project, NSF has authorized NORC to conduct the SDR at their direction and on their behalf and that is documented in a contractual agreement.

Within NORC, administrative and program-level access to the system by NORC leadership, managers, and program project officers is determined by the level of information needed to monitor project, program, and NORC-wide performance information. Those with access to the SDR-specific system and to PII via the system are limited to those who assist in managing, securing, developing, operating, and otherwise supporting the system, or who assist sample members as they navigate the system, need to update their own PII, or complete the SDR. All access is granted through Active Directory. Individual Active Directory groups are created for each NORC project and only staff requiring access to the SDR project information are added to the SDR project group after they have confirmed they have completed confidentiality and security training and signed a data use agreement.

Restricted users are required to authenticate using a user ID and password. Restricted users are required to accept NSF warning notices prior to authentication. Restricted users are limited to privileges and data in each assigned class. The NSF data licensing for access to restricted use SDR data files may be found here: <http://www.nsf.gov/statistics/license/>.

3. What auditing measures/controls and technical safeguards are in place to prevent exposure or misuse of PII by authorized users, e.g., record browsing, extraction?

For data collection, the following administrative, technical, and physical controls are in place to safeguard PII from exposure or misuse by authorized users.

Administrative: Personnel Screening, audits, access agreements, sanctions, Risk Assessment, Planning, System and Services acquisition, security assessments, system access review, system log review.

Technical: Identification and Authentication – use of Active Directory groups, Access Control processes utilizing Active Directory for permissions\electronic signature, Least privilege access, encryption, Audit and accountability, System and Communication, System logging and monitoring.

Physical: Personnel Security (Guards, key cards, locked Data Center, Cameras), Physical and Environmental Protection (Fire\ Water\Uninterruptable Power Supply (UPS), Contingency Plan, Configuration Management –use of baselines (Center for Internet Security (CIS) settings\Federal Desktop Core Configuration (FDCC), Maintenance – vulnerability scanning/remediation, Media Protection – encrypted tapes, Awareness and Training of staff.

4. Describe privacy training provided users, general or specific, relevant to the program or system?

Within NCESES and NORC, all project team members are required to annually complete NCESES Data Confidentiality Training, review the confidentiality plan and data security procedures, and annually sign a DUA as a prerequisite of working on the SDR project.

Additionally, NSF staff receive training on the Privacy Act through annual Security and Privacy Awareness Training. NSF Security and Privacy Awareness Training provides the protection requirements for NSF sensitive information; the various federal laws and guidance

that relate to the protection of privacy in individuals and business; and an introduction to NSF's privacy policies. NORC project staff are required annually to take the NORC IT Security and Privacy Awareness Training and to sign the Rules of Behavior.

Restricted use data file users are required to complete NCSES Data Confidentiality Training and sign a DUA.

5. Describe the extent to which contractors will have access to the system.

<Describe contractor access to the PII in terms of their roles and responsibilities. Will contractors have regular user duties equivalent to government users? Will contractors have duties requiring elevated privileges? Describe the necessity of the access provided to contractors to the system and whether clearance is required.>

As noted above, at the outset of the project, NSF has authorized NORC to conduct the SDR at their direction and on their behalf and that is documented in a contractual agreement.

Within NORC, only SDR project staff with appropriate credentials and training will have access to the system. Outside of NORC, only SDR sample members will have the ability to access their own specific case record that represents the online survey and be able to update that single record with their own information.

6. Describe the retention period for the personal records in the system.

The NSF, through contractual agreements with its survey contractors, maintains the SDR personal records indefinitely.

At NORC, retention and destruction will be in accordance with the project's contractual requirements described by the Federal Acquisition Regulation 4.703 which states contractors shall make available records 3 years after final payment.

Any paper forms with survey and PII data will be scanned to an electronic format and securely maintained as PII data. Paper survey forms will be securely shredded when the survey data is considered final by NSF. NORC will provide NSF with a certificate of destruction associated with the shredding of the paper forms.

As part of contract closeout and at expiration of the contract, NORC shall provide all required documentation to the NSF CO and/or COR to certify that, at the government's direction, all electronic and paper records are appropriately disposed of and all devices and media are sanitized in accordance with NIST SP 800-88, Guidelines for Media Sanitization. As described previously, at NSF direction, NORC will securely transfer personal records along with other de-identified data files to the next survey contractor who has been hired to conduct data collection for the future cycles of the SDR.

7. What is the disposition of the personal records at the end of the retention period?

As noted in Section 7.6, the NSF maintains the SDR personal records indefinitely.

At NORC, any paper or electronic copies of the records that are not required to be transferred to NSF/NCSES or the next contractor hired to conduct the SDR beyond 2025 will be destroyed in accordance with current NSF and federal policy. Paper documents will be

securely shredded, and electronic data files will be erased and sanitized from all servers, systems, and devices.

8. SECURITY

Is the PII secured in accordance with FISMA requirements?

There is not an ATO for this system.

NORC IT environment enforces the NIST 800-53 Rev 5 framework at the Moderate level to comply with FISMA requirements.

9. PRIVACY ANALYSIS

All NORC and contractor employees are required to receive NORC annual IT Security and Privacy Awareness Training and to sign the Rules of Behavior.

Authorization is enforced via defined roles and authorizations. Every system action is defined as an authorization. System roles are granted only the authorizations required to perform their function.

Application and infrastructure logs are periodically reviewed by System Administrators and any suspicious findings are investigated and reported to appropriate personnel, and action is taken as needed.

System Administrators can review all data on this project.

System Users can review all data on this project.