

Section B

B.1. Respondent Universe and Sampling Methods

The EHR program monitoring clearance's goal is a portfolio of individual collections used to count and describe the universe of NSF-funded or NSF-partnered education and training projects. The statistical method employed in all five collections is that of a census of NSF-funded projects. Some projects have only one respondent type, typically a PI; others have several types of respondents. Data collection involves all awardees in the respective programs. Exhibit 10 shows the total universe (respondent population) and sample size (equal to the population, as there is no sampling) for each of the collections.

Exhibit 10: Respondent universe and sample size of EHR program monitoring clearance collections

Attachment	Collection Title	Universe of Respondents	Sample Size
A1	Centers of Research Excellence in Science and Technology (CREST) and Historically Black Colleges and Universities Research Infrastructure for Science and Engineering (HBCU-RISE) Monitoring System	46	46
B1	Louis Stokes Alliances for Minority Participation (LSAMP) Monitoring System	643	643
C1	Louis Stokes Alliances for Minority Participation Bridge to the Doctorate (LSAMP-BD) Monitoring System	53	53
D1	Robert Noyce Teacher Scholarship Program (Noyce) Monitoring System	511	511
E1	Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) Monitoring System	640	640

B.2. Information Collection Procedures/Limitations of the Study

The data collections in this clearance use Web-based instruments. Each respondent will provide answers once a year, with the exception of respondents to the S-STEM data collection (attachments E1 and E2), who enter data each semester/quarter, for an average of two times a year.

EHR understands the limitations of the program monitoring data collected under this clearance, particularly in terms of using the data to determine program effectiveness. Data collected under this clearance are for monitoring purposes; evaluation studies are cleared under separate OMB requests. However, OMB 3145-0226 data are explicitly identified as a source of data for independent program evaluations. EHR program monitoring clearance data are not used to determine the ultimate effectiveness of STEM educational interventions, but they are a key element in EHR's efforts to manage its program portfolios, report on agency activities and goals, and lay the groundwork for future evaluations.

B.2.1. Statistical Methodology for Stratification and Sample Selection

Each of the five collections for which clearance is requested is a census, in which the sample size is the universe. Details on the size of the universe in each collection are included in the burden estimate and in Section B.1. above.

B.2.2. Estimation Procedure

Not applicable

B.2.3. Degree of Accuracy Needed for the Purpose Described in the Justification

Not applicable

B.2.4. Unusual Problems Requiring Specialized Sampling Procedures

Not applicable

B.2.5. Use of Periodic (Less Frequent Than Annual) Data Collection Cycles

Not applicable

B.3. Methods for Maximizing the Response Rate and Addressing Issues of Nonresponse

All collections in this clearance are a part of the reporting required of awardees, so a high response rate is expected. Exhibit 11 shows the expected response rates for each of the individual collections.

Exhibit 11: Response rates for EHR program monitoring clearance collections

Attachments	Collection Title	Response Rate
A1-A2	Centers of Research Excellence in Science and Technology (CREST) and Historically Black Colleges and Universities Research Infrastructure for Science and Engineering (HBCU-RISE) Monitoring System	100%
B1-B2	Louis Stokes Alliances for Minority Participation (LSAMP) Monitoring System	100%
C1-C2	Louis Stokes Alliances for Minority Participation Bridge to the Doctorate (LSAMP-BD) Monitoring System	90%
D1-D5	Robert Noyce Teacher Scholarship Program (Noyce) Monitoring System	100%
E1-E2	Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) Monitoring System	90%

PIs are responsible for ensuring that other individuals involved in the project submit all necessary data, and in many cases have access to status information via the Web-based systems indicating whether individual respondents in their projects have completed their data entry. In addition, EHR staff also have access to online monitoring sections of all of the Web-based systems and can check the status of reporting. A series of e-mail messages and phone calls are also used to follow up with respondents and ensure that all necessary data are collected.

B.4. Tests of Procedures or Methods

All of the collections for which clearance is being requested are currently in operation and have been tested both before initial implementation and throughout the data collection. The LSAMP monitoring system, for example, has been operational since 1995. Input on this system is continually received from users, and their suggestions are implemented as the system is upgraded. Other test methods used by the various collections in the EHR program monitoring clearance include feedback from PIs, both as data are collected and during meetings and conferences; review by NSF staff; and testing performed by the system developers. Many systems are based on data collection methods currently used by other NSF groups, and many of the items and response categories follow formats that are already in place.

B.5. Names and Telephone Numbers of Individuals Consulted

The following individuals were consulted on the EHR program monitoring clearance:

- Sylvia Butterfield, Assistant Director (Acting), Office of the Assistant Director, EHR, NSF (703) 292-5333
- Frances Carter-Johnson, Division of Human Resource Development, EHR, NSF, (703) 292-8640
- Luis Cubano, Division of Human Resource Development, EHR, NSF, (703) 292-7941
- Erin Dawson, Assistant General Counsel, OD/OGC, NSF (703) 292 5066
- Anne Doyle, Office of Budget, Finance and Award Management, EHR, NSF, (703) 292-4806
- Jennifer Ellis, Division of Undergraduate Education, EHR, NSF, (703) 292-2125
- Jean Feldman, Head, BFA/DIAS, NSF, (703) 292-4573
- Michael Ferrara, Division of Undergraduate Education, EHR, NSF, (703) 292-2635
- Evan Heit, Deputy Assistant Director (Acting), Office of the Assistant Director, EHR, NSF (703) 292-4305
- Martha James, Division of Human Resource Development, EHR, NSF, (703) 292-7772
- Sarah-Kay McDonald, Office of the Assistant Director, EHR, NSF, (703) 292-4648
- Suzanne Plimpton, Policy Analyst, BFA/DIAS, NSF, (703) 292-7556
- Erika Rissi, Chief Evaluation Officer and Section Head (Acting), OD/OIA, NSF, (703) 292-4525

Exhibit 12 shows the individuals involved in each collection.

Exhibit 12: Contact information for individuals responsible for collections

Attachments	Collection Title	NSF Agency Unit	Contractor or Grantee
A1-A2	Centers of Research Excellence in Science and Technology (CREST) and Historically Black Colleges and Universities Research Infrastructure for Science and Engineering (HBCU-RISE) Monitoring System	Luis Cubano, (703) 292-9456	Michael Rossi, ICF, (301) 572-0340
B1-B2	Louis Stokes Alliances for Minority Participation (LSAMP) Monitoring System	Martha James, (703) 292-7772	Michael Rossi, ICF, (301) 572-0340
C1-C2	Louis Stokes Alliances for Minority Participation Bridge to the Doctorate (LSAMP-BD) Monitoring System	Martha James, (703) 292-7772	Michael Rossi, ICF, (301) 572-0340
D1-D5	Robert Noyce Teacher Scholarship Program (Noyce) Monitoring System	Jennifer Ellis, (703) 292-2125	Michael Rossi, ICF, (301) 572-0340
E1-E2	Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) Monitoring System	Michael Ferrara, (703) 292-2635	Michael Rossi, ICF, (301) 572-0340