

## **Supporting Statement for Paperwork Reduction Submission**

### **Grantee Reporting Requirements for Experimental Program to Stimulate Competitive Research Infrastructure Improvement Programs: 3145 - NEW**

#### **A. Justification**

##### **A.1. Circumstances Requiring the Collection of Data**

The Research Infrastructure Improvement (RII) Programs Integrative (e.g., RII Track-1, RII Track-2) program provides multiyear (up to 5 years) support to Experimental Program to Stimulate Competitive Research (EPSCoR) awardees as continuing awards that are among the largest (up to \$4 million a year) awarded by the National Science Foundation (NSF). Since the duration and size of these awards are extensive, it is necessary for the NSF to ensure that its substantial investment is spent appropriately, that each of the project meets the goals stated in its multi-year strategic plan, and that activities satisfy the goals and objectives of the EPSCoR program. The RII program currently funds 65 projects (and it is expected to increase). To enable effective oversight of its investment, the NSF requires that each currently funded project submit an annual progress report that describes all activities of the project (research, integration of research and education, diversity, workforce development, external engagement, evaluation and assessment, management and sustainability).

The annual reports contain information that contributes to NSF's efforts to answer broad evaluative research questions: 1) What is the overall value-added of the program? 2) What is the quality and impact of the research conducted? 3) What is the quality and impact of education? 4) What is the quality and impact of the knowledge transfer and economic development? 5) Do the projects effectively encourage the participation of US citizens, underrepresented minorities, women, and persons with disabilities in their activities? 6) Do

the projects create and sustain organizational connections and linkages within and among academia, government, and industry? Do the projects increase academic research competitiveness of eligible jurisdictions? Do the projects improvement the physical, human, and cyber infrastructure of eligible jurisdictions? Do the project stimulate effective collaboration within and among eligible jurisdictions? Do the projects align with the strategic needs of the jurisdictions' science and engineering enterprises?

In addition, American COMPETES Reauthorization Acts of 2010 (and renewed Acts being considered by Congress) require that EPSCoR report on specific items and as a result EPSCoR must seek data from awardees to be able to comply with the directives of the Act. The Act's language specific to EPSCoR is provided in Appendix 1.

The annual progress reports will be used to:

- **Evaluate annual progress.** The primary purpose of the annual reports is to provide the information necessary for the NSF to monitor and evaluate the progress and accomplishments, as well as, to identify problems of individual projects. The annual reports provide background information for the reverse site visit/site visit reviews/evaluations that are conducted by teams of external reviewers and the NSF staff. The reviews and evaluations provide feedback to the EPSCoR and the NSF about strengths, weaknesses and recommendations to address any weaknesses.
- **Develop internal performance indicators and controls for a center.** The annual reports provide information that is used by the leadership of each project to create and monitor metrics or performance indicators in the management of their projects.

- **Make funding decisions.** The RIIs are funded under cooperative agreements, and funds are allocated to each project on an annual basis. The NSF staff uses each annual report together with input from the project's external evaluator and findings of the cognizant of the Program Officer to make decisions on the continuation and level of funding for the Center.
- **Evaluate overall effectiveness of the program.** The aggregate reports from all PROJECTs are used by NSF in evaluating the effectiveness of the PROJECT Program on an ongoing basis.
- **Respond to Legislative Directives.** The aggregate data is used in the reports required by America COMPETES Reauthorization Acts, in responses to numerous Congressional inquiries and in responses to NSF Senior Leadership.

## **A.2. Purpose and Use of Data**

The reports will be used in the:

- **External Reviewer Reverse Site/Site Visits.** External site visit teams (one for each project) are convened by the NSF to evaluate the individual projects. The external teams are selected by NSF program staff. Typically a team will have 5-8 members that have scientific, educational and management expertise that corresponds to the specific project's activities. The teams use the information in the annual reports to assist in the evaluation of each project's progress relative to its stated goals and objectives and to its performance during the previous year. The team summarizes in writing strengths and weaknesses of the project's progress and submits its report to NSF EPSCoR. EPSCoR follow-up with the team to develop action plans to in response to the team recommendations for improvement.

- **NSF Staff Evaluation of Progress and Funding Decision for Following Year.**

The cognizant Program Officer overseeing each project monitors center activities and progress, in part through data recorded in the annual reports, and make decisions about continued funding.

- **Development of Aggregate Reports for Overall Program Management.** The effectiveness of the project is reviewed periodically by the NSF Senior Management and Round Table (SmaRT) or their representatives. Also, data complied *via* the annual reports is used as input to external evaluation of the NSF EPSCoR Program, some of which are required by Legislative directives or OMB. For the purpose of generating the aggregated information, NSF staff may utilize data mining tools to review the reports and extracts relevant information from them, producing aggregate reports that provide for easy program monitoring.

### **A.3. Use of Automation**

All reports are submitted electronically via research.gov, and will be analyzed using newly developed data mining tools.

### **A.4. Efforts to Identify Duplication**

No other federal agencies or organization within NSF collects the data pertaining to the RII Programs required to assess progress and respond to Legislative directives.

### **A.5. Small Business Consideration**

N/A

## **A. 6. Consequences of Less Frequent Collection**

The reports generated by the annual data collection comprise one of the primary mechanisms used by the NSF for approving funding for the projects on an annual basis. Less frequent data collection would preclude NSF's annual monitoring and documentation of the progress of each project and, thus, would not allow for informed decisions about funding and timely correction of any weaknesses identified in a project's activities. The consequence of less frequent collection would manifest itself in lack of an effective way to continuously monitor the large investments of resources and time that NSF has committed to the RII Programs. Furthermore, the annual data collection is congruent with the annual cycle of academic institutions in which these projects reside increasing the likelihood that the improvements to project's activities will be made. NSF EPSCoR has supported the development of automated data collection tools/portals to minimize burden of data collection by the awardees.

## **A.7. Special Circumstances for Collection**

Not applicable.

## **A. 8. Federal Register Notice and Outside Consultation**

The agency's notice, as required by 5 CFR 1320.8(d), was published in the *Federal Register* on February 8, 2016 at 81 FR 6544 and no comments were received.

## **A. 9. Gifts or Remuneration**

Not applicable.

#### **A.10. Assurance of Confidentiality**

Because data are collected at the project level, individual respondents are not identified.

Projects make their annual reports publicly available.

#### **A. 11. Questions of a Sensitive Nature**

No questions of a sensitive nature are used.

#### **A. 12. Estimate of Burden**

This request pertains to the 75 active projects. Projects are replaced by new projects upon completion based on quality of project (determined by merit review) and availability of funds.

Each project (old and new) will be required to submit an annual report. Based on the input from the management of the projects, we estimate the burden of preparing annual reports, in terms of man-hours per project, as follows:

##### **RII Track-1**

1. Project Director–10 hours
2. Associate Director/ Administrator 40 – 50 hours
3. Education/Outreach/Diversity Director – 20 – 30 hours
4. Co-PIs and other researchers – 10 hours
5. Post Docs – 5 hours
6. Undergraduate/Graduate Students – 3 hours

##### **RII Track-2**

1. Project Director–10 hours
2. Associate Director/ Administrator 30 – 40 hours
3. Co-PIs and other researchers– 10 hours

4. Post Docs – 5 hours
5. Students graduate/undergraduate (material collection) – 3 hours

### **RII Track-3**

1. Principal Investigator – 10 hours
2. Education/Diversity Director – 20-30 hours

### **RII Track-4**

1. Principal Investigator – 10 hours
2. Post Docs – 5 hours

**Total hours per project** vary as given above.

### **ANNUALIZED COST TO RESPONDENTS**

Estimated cost per Center or project, based on the most recent projections is as follows:

#### **RII Track-1**

Expense category	Unit cost	Units	Total cost
1. Project Director (PD)	\$102/hour	10 hours	\$1,020
2. Associate PD/Project Administrator	\$65/hour	40 –50 hours	\$2,600 - \$3,250 (average \$2,925)
3. Education/Outreach/Diversity Director	\$32/hour	20 – 30 hours	\$640 - \$960 (average \$800)
4. Co-PIs and other researchers	\$102/hour	10 hours	\$1,020
5. Post Docs	\$65/hour	5 hours	\$325
6. Students graduate/undergraduate	\$16/hour	3 hours	\$48
<b>Total cost per Center</b>			<b>\$6,138</b>
<b>Total for 30 existing projects</b>		<i>98 hours</i>	<b>\$184,140</b>

## **RII Track-2**

Expense category	Unit cost	Units	Total cost
1. Project Director (PD)	\$102/hour	10 hours	\$1020
2. Associate PD/Project Administrator	\$65/hour	30 –40 hours	\$2,600 - \$3,250 (average \$2,925)
3. Co-PIs and other researchers	\$102/hour	10 hours	\$1,020
4. Post-docs	\$65/hour	5 hours	\$325
5. Students – graduate/undergraduate (material collection)	\$16/hour	3 hours	\$48
<b>Total per Center</b>			<b>\$5,338</b>
<b><i>Totals for 25 existing Centers</i></b>		<i>63 hours</i>	<b>\$133,450</b>

### RII Track-3

Expense category	Unit cost	Units	Total cost
1. Principal Investigator	\$102/hour	10 hours	\$1020
2. Education/ /Diversity Director	\$32/hour	20 – 30 hours	\$640 - \$960 (average \$800)
<b>Total cost per project</b>			<b>\$1,830</b>
<b>Totals for 10 existing projects</b>		<i>35 hours</i>	<b>\$18,300</b>

### RII Track-4

Expense category	Unit cost	Units	Total cost
1. Principal Investigator	\$90/hour	10 hours	\$900
2. Post Docs	\$65/hour	5 hours	\$325
<b>Total cost per Project</b>			<b>\$1,225</b>
<b>Totals for 10 new projects in FY 2017</b>		<i>15 hours</i>	<b>\$12,250</b>

The total estimated cost (using average when applicable) for all RII Centers/projects is

\$348,140

The range of cost is calculated assuming the lowest and the highest number of hours.

#### **A. 13. Annual cost burden [not included in hour cost]**

There are no additional costs beyond the estimated hours of burden shown above.

#### **A. 14. Annualized Cost to the Federal Government**

The reports submitted by the PROJECTs will be analyzed by the NSF staff using the latest data mining tools for the purpose of providing Center profile documents, various types of

data analysis, and tables for the purpose of overall program management. The following estimates of the anticipated effort are based on pilot trials of analyzing report data.

The estimate of their activities and role are as follows:

Expense category	Unit cost	Units	Total cost
Program Analyst	\$48/hour	3 hours/Center or project	\$144
Program Officer	\$82/hour	15 hours/Center or project	\$1,230
<b>Total cost per Center</b>			<b>\$1,374</b>
<b>Total cost for 75 projects</b>			<b>\$103,050</b>

#### **A. 15. Changes in Burden**

This is a new collection.

#### **A. 16 Publication of Collection**

N/A

#### **A. 17 Approval to Not Display OMB Expiration Date**

N/A

#### **A. 18 Exception to Item 19 of OMB Form 83-I Certification Statement**

N/A

## **B. STATISTICAL METHODS**

Not applicable

### **Attachments**

**Attachment I. Detailed description of information required in annual reports**

**Appendix 1. EPSCoR Specific language in America COMPETES Reauthorization Act  
of 2010**