

SUPPORTING STATEMENT FOR PAPERWORK REDUCTION SUBMISSION
Reporting Requirements for the National Science Foundation (NSF)
Innovation Corps (I-Corps) Hubs Program

SUPPLEMENTARY INFORMATION

Section A. Justification

This request seeks approval to revise an existing information collection (OMB Number: 3145-0258) for the [NSF Innovation Corps Hubs \(I-Corps Hubs\) Program](#) (NSF 22-566).

The [National Science Foundation \(NSF\) Innovation Corps \(I-Corps™\) Program](#), herein known as the I-Corps Program, was established at NSF in Fiscal Year (FY) 2012 to transform discoveries with commercial realization potential into innovative technologies. The goal of the I-Corps Program is to use experiential education to help researchers reduce the time necessary to translate a promising idea from the laboratory to the marketplace. In addition to accelerating technology translation, I-Corps Program seeks to improve technology development incorporating insights on industry requirements and challenges. The I-Corps Program uses a lean startup approach to encourage scientists to think like entrepreneurs through intensive workshop training and ongoing support.

In FY 2017, the American Innovation and Competitiveness Act (AICA), Public Law 114-329, Sec. 601 formally authorized and directed the expansion of the I-Corps Program to increase the economic competitiveness of the United States, enhance partnerships between academia and industry, develop an American Science, Technology, Engineering, and Math (STEM) workforce that is globally competitive, and support female entrepreneurs and individuals from historically underrepresented groups through mentorship, education, and training.

Under AICA, NSF has built and expanded the I-Corps Program through the National Innovation Network (NIN) model. The NIN was established as a collection of NSF I-Corps Nodes and Sites that implemented the I-Corps Program to grow and sustain the national innovation ecosystem. I-Corps Nodes are typically large, multi-institutional collaborations that deliver the NSF National I-Corps Teams training curriculum and recruit and train the National I-Corps instructors. I-Corps Sites are entrepreneurial centers located at individual colleges and universities that catalyze potential I-Corps Teams within their local institutions. Together, the Nodes and Sites have served as the backbone of the NIN.

In FY 2020, the NSF Innovation Corps Hubs Program (I-Corps Hubs) Solicitation, [NSF 20-529](#), was published to formalize the launching of the I-Corps Hubs Program, which further expands and strengthens the NIN. The I-Corps Hubs are designed to support inclusive, regional communities of innovators, in that Hubs are encouraged to recruit diverse members at all levels. In addition, the I-Corps Hubs Program also provides new pathways for regional I-Corps teams to qualify for the participation in the [National I-Corps Teams program](#). Through the I-Corps Hubs solicitation, NSF seeks to advance the current NIN structure into a more integrated model, capable of sustained operation at the scope and scale required to support the expansion of the I-Corps Program as directed by AICA.

NSF is directed—under the AICA—to collect data and information about the characteristics, outputs, and outcomes from the I-Corps Teams as well as individuals funded by the I-Corps Program. The collection of this information will enable the reporting on the four themes as outlined in the FY 2021 I-Corps Biennial Report to Congress: 1) Technology Translation, 2) Entrepreneurial Training and Workforce Development, 3) Economic Impact, and 4) Collaboration and Inclusion.

Recently, NSF published [a new I-Corps Hubs Solicitation, NSF 22-566](#), that supplants the now archived NSF 20-529. The new solicitation contains a set of modified grantee reporting requirements. In response to these modifications, NSF requests the revision of the previously cleared grantee reporting requirements under 3145-0258 to reflect the updates in NSF 22-566. NSF will modify the awards made under NSF 20-529 to comply with the new reporting requirements outlined in NSF 22-566 once this Paperwork Reduction Act request is approved.

A.1 Circumstances Requiring the Collection of Data

With the changes in the new solicitation (NSF 22-566), each Hub is now asked to report on the following information:

1. Results from evaluation surveys to track the entrepreneurial progress of program participants (the surveys have been cleared for collection under 3145-0267)
2. Results from a customer feedback survey gauging the level of satisfaction from program participants (the survey has been cleared under 3145-0267)
3. Structure of the Hub:
 - a. Name of the Member Institutions
 - b. Role in the Hub [Lead or Partner Institution]
 - c. Year they joined the Hub
4. Personnel working at the Lead and Partner institutions within the Hub:
 - a. Name of the Personnel [Last Name, First Name, Middle Initial]
 - b. Role [Director, Principal Investigator, Members of the Leadership Team]
 - c. Contact Information [Email Address]
5. Records of cohorts trained:
 - a. Date of the Cohort
 - b. Location of the Cohort [Institution Name]
 - c. Name(s) of the instructor(s) [Last Name, First Name, Middle Initial]
 - d. Professional Affiliation of the Instructor(s) [Institution/Agency/Organization]
 - e. Contact information of the Instructor(s) [Email Address(es)]

6. Records of participation:
 - a. Teams –
 - i. Team Name or other designation
 - ii. Cohort (participation) Date
 - b. Individual participants –
 - i. Team Name or other designation
 - ii. Name of the Participant (Last Name, First Name, Middle Initial)
 - iii. Contact Information (Email Address)
 - iv. Current Occupation (Faculty member, Student, Post-doc, Startup Management, or Other)
 - v. Professional Affiliation
 - vi. Role in the Team (Entrepreneurial Lead, Technical Lead, Mentor)
 - vii. Demographics
 1. Sex
 2. Race
 3. Disability Status
 4. Veteran Status
7. Outcomes of the team:
 - a. Advancement to the I-Corps National Program
 - i. Has the team applied or been accepted into the NSF National I-Corps Program? If accepted, the Team Number and the Name of the Cohort in the NSF I-Corps National Program
 - b. Startup Formation
 - i. Name of the startup companies founded by the Team (the data needs to be verified with the U.S. Security and Exchange Commission database)
 - c. Private Capital Funding

Subsequent private funding received by the teams after their participation of the I-Corps Program (data obtained from a third-party subscription database). Each transaction is dated, funding amount recorded, and funding type categorized by:

 - i. Venture capital,
 - ii. Angel or Individual Investor, or
 - iii. Private Industry, Corporate Funding, or Other
 - d. Public Funding

Subsequent public funding received by the teams after their participation of the I-Corps Program (data obtained from USASpending.gov). Each transaction is dated, funding amount recorded, and funding type categorized by:

- i. SBIR/STTR Program (in any Federal agency),
 - ii. Other federal funding [non-SBIR/STTR], or
 - iii. State funding
- e. Exit Activities of startups linked to teams participating in the regional program:
- i. Mergers
 - ii. Acquisitions
 - iii. IPOs

The reporting requirements listed above are in addition to the data collected by the agency's annual, final, and outcomes report requirements for the grantees. The information collected will help NSF report on NIN activities in the Biennial Report to Congress and will provide managing Program Directors a means to monitor the progress of the I-Corps Hubs.

A.2 Purposes and Use of the Data

The *I-Corps Hubs Program Reporting Requirements* have been designed primarily to meet our Congressional AICA reporting requirements.

In addition, the collection of these data serves several purposes, including:

- Monitoring and assessing the effectiveness of the new funding and operational model,
- Tracking the progress of the NIN expansion and growth of the innovative ecosystem,
- Responding to Congressional requests and, inquiries from the general public, NSF's external merit reviewers who serve as advisors, and NSF's Office of the Inspector General,
- Supporting the agency's policymaking and internal evaluation and assessment needs.

A.3 Use of Information Technology to Reduce Burden

All components in the collection will utilize electronic forms and electronic submissions to minimize data errors and respondent burden. In some cases, Program Directors, NSF staff, and/or NSF authorized representatives may contact the respondents for clarifications or follow-up questions to ascertain data veracity and robustness, as well as quality assurance.

A.4 Efforts to Identify Duplication

The *I-Corps Hubs Program Reporting Requirements* do not duplicate other efforts undertaken by NSF, other federal agencies, or other data collection agents.

A.5 Small Business

N/A

A.6 Consequences of Not Collecting the Information

If the information was not collected, NSF would be unable to capture and report to Congress any of the I-Corps Hubs activities or outcomes (e.g., workforce training, broadening participation in entrepreneurship, technology translation activities—formation of startups, amount of follow-on funding raised, and/or intellectual property generated).

If NSF were unable to document the progress and outcomes of the I-Corps Hubs, the agency would also be unable to assess whether the Hubs are meeting their programmatic and strategic goals over time. This would preclude NSF from adequately monitoring and documenting of the progress of the NIN as a whole.

A.7 Special Circumstances Justifying Inconsistencies with Guidelines in 5 CFR 1320.6

Data collected for the *I-Corps Hubs Program Reporting Requirements* will comply with 5 CFR 1320.6. First, a valid OMB control number will be displayed at the beginning of the electronic form. Second, as the reporting requirement is mandatory, the NSF I-Corps Program will communicate clearly—through proposal solicitations and Terms & Conditions of I-Corps Hubs awards—that collection of this information is required to satisfy a condition of the award.

Each I-Corps Hub will be asked to report one set of data on behalf of the Lead and Partner institutions of that Hub. Information will be collected twice per year for the first year of implementation, and then once per year thereafter.

A.8 Federal Register Notice and Consultation Outside the Agency

The agency's notice, as required by 5 CFR 1320.8(d), was published in the *Federal Register Bulletin* on 18 May 2022, at 87 FR 10654. No comments from the public were received.

A.9. Payments or Gifts to Respondents

Not applicable

A.10. Assurance of Confidentiality

Respondents will be informed that any information on specific individuals will be maintained in accordance with the Privacy Act of 1974. Every data collection instrument will display both OMB and Privacy Act notices.

Respondents will be told that data collected are available to NSF officials and staff, as well as authorized contractors and/or grantees who manage the data and data collection software. Data will be processed according to federal and state privacy statutes. The data collection system will limit access to personally identifiable information to authorized users. Data submitted will be used in accordance with criteria established by NSF for monitoring research and education grants and in response to Public Law 99-383 and 42 USC 1885c.

A.11 Questions of a Sensitive Nature

In the *I-Corps Hubs Program Reporting Requirements*, personal information, including name, job title, email address, gender, demographics, disability status, and veteran status are being requested. These data are collected to allow us to randomly select individuals and/or startups to validate the authenticity, verify the accuracy, and ultimately to ensure the quality, robustness, and integrity of the data that are being reported to NSF, as these data are intended to be aggregated and used for Congressional reporting.

Please note, while individual-level data are being collected, these data will only be provided to managing Program Directors, NSF senior management, and supporting staff conducting analyses using the data as authorized by NSF. Any public reporting of data will be in aggregate form, and all personal identifiers will be removed.

A.12 Estimates of Response Burden

A.12.1. Number of Respondents, Frequency of Response, and Annual Hour Burden – by Information Collection

Existing Information Collections: Record of Participation and Follow-up Survey

Affected Public: Participants who complete the I-Corps Hubs Program

Total Respondents: We projected no more than 1000 participants being trained per hub per year, and we are planning to have a total of 6-9 hubs awards (during the next 3 years), for an average of 6,000 respondents per year.

Frequency: The *Record of Participation* will be collected once from each participant; the *Follow-up Survey* will be sent to each participant one year after their I-Corps Program completion.

Total responses: 6,000-9,000 entries per Hub during the course of 3 years. An entry is being defined as both the *Record of Participation* and the *Follow-up Survey* that will be sent out to each participant one year after completion of the Program.

Average Time (to complete both questionnaires): 15 minutes (10 minutes for *Record of Participation* and 5 minutes for *Follow-up Survey*)

Estimated Total Burden Hours: 1,500 – 2,250 hours over 3 years (On average: 250 hours per hub per year). [1,500 is derived by multiplying 6,000 entries by 15 minutes, and dividing the product by 60 minutes/hour.]

Revised Information Collection: I-CORPS Hubs Reporting Requirements

Respondents: NSF I-Corps Hubs grantees

Total Respondents: 10 – 15 Hubs

Frequency: Twice per year for the first year, then once per year thereafter.

Total responses: 10 - 15 responses, one from each Hub. Each Hub reports once annually.

Average Time: 300 - 400 hours per Hub

Estimated Total Burden Hours: 3000 – 6000 hours per year (for all Hubs).

Total responses for all three information collections:

Record of Participation: 6,000 respondents at 10 minutes per respondent = 1,000 hours

Follow-up Survey: 6,000 respondents at 5 minutes per respondent = 500 hours

Reporting Requirements: 15 Hubs respondents at 400 hours per respondent = 6,000 hours

Total respondents: 6,015

Total burden hours: 7,500

A.12.2. Estimates of Annualized Cost to Respondents for the Hour Burdens

The following table shows the annualized estimate of costs to the respondents, who are the I-Corps Hubs grantees. The Evaluation Lead of each Hub will most likely be the one leading the data collection efforts. The annual salary of an Academic Evaluator is estimated between \$ 65,000 and \$ 90,000. Dividing the range by the number of standard annual work hours (n = 2,080) to calculate an average hourly wage of approximately \$31 – 43 per hour.

Since the I-Corps Hubs Program is still at its infancy stage, the annual cost for this data collection would be on the lower bound of the estimates in the first two years, and as the Program expands, and the number of Hubs grows, the annual cost would gradually move toward the upper bound.

Table 2. Annuitized Cost to Respondents

Respondent Type	Total Burden (Hours/Hub)	Average Hourly Wage	Estimated Annual Cost per Hub	Number of Hubs	Estimated Annual Cost (all Hubs)
Academic Evaluator	300 – 400	\$31 - \$43	\$9,300 – \$17,200	10 -15	\$93,000 – \$258,000

A.13 Estimate of Total Capital and Startup Costs/Operation and Maintenance Costs to Respondents or Record Keepers

Not applicable.

A.14 Estimates of Costs to the Federal Government

The analyst assigned to the project will need to invest about 120 -160 hours every year on this project (to check the reported data, to organize and ingest the data into a database, and to clean and format the data). Based on the salary of \$80,000, we divide by the number of standard annual work hours (2,080) to calculate an average hourly wage of approximately \$38 per hour, which amounts to \$4,615 – \$6,154 per year.

In addition, there may be costs associated with a Customer Relationship Management (CRM) platform. The CRM platform of choice will be FISMA-compliant, meet Fed-Ramp and cybersecurity requirements as set forth by the agency. The approximate cost for housing this project on a government-approved, secured, and contractor-maintained CRM platform would be somewhere between \$10,000 - \$50,000 per year depending on the CRM platform of choice, and whether there is an existing contract in the agency on the CRM platform.

The total estimated annual costs to the Federal Government are \$56,154.

A.15. Changes in Burden

Recently, NSF published [a new I-Corps Hubs Solicitation, NSF 22-566](#), that supplants the now archived NSF 20-529. The new solicitation contains a set of modified grantee reporting requirements. In response to these modifications, NSF requests the revision of the previously cleared grantee reporting requirements under 3145-0258 to reflect the updates in NSF 22-566. NSF will modify the awards made under NSF 20-529 to comply with the new reporting requirements outlined in NSF 22-566 once this Paperwork Reduction Act request is approved.

A.16. Plans for Publication, Analysis, and Schedule

Not applicable.

A.17. Approval to Not Display Expiration Date

Not applicable.

A.18 Exceptions to Item 19 of OMB Form 83-I

No exceptions apply.