### SUPPORTING STATEMENT FOR PAPERWORK REDUCTION SUBMISSION

National Science Foundation (NSF) Innovation Corps (I-Corps™) Program Presubmission Executive Summary Form

#### SUPPLEMENTARY INFORMATION

#### Section A. Justification

This request is for approval of the *NSF I-Corps Program Pre-Submission Executive Summary Form* to be submitted by teams of academic researchers or small businesses interested in applying for the NSF I-Corps (National) Teams program.

Founded in Fiscal Year (FY) 2011, the <u>NSF I-Corps program</u> was designed to develop and nurture a national innovation ecosystem built upon fundamental research that guides the output of scientific and engineering discoveries closer to the development of technologies, products, and services that benefit society.

The goal of the NSF I-Corps program is to use experiential education to help entrepreneurial researchers reduce the time necessary to translate promising ideas from the laboratory bench to widespread implementation. In addition to accelerating technology translation, the NSF I-Corps program also seeks to reduce the risk associated with technology development conducted without insight into industry requirements and challenges.

In 2017, the American Innovation and Competitiveness Act (AICA, Public Law 114-329, Sec. 601) formally authorized and directed the expansion of the NSF I-Corps program. To support that expansion, NSF reorganized the National Innovation Network (NIN) to include a new *regional* operational structure, I-Corps (Regional) Hubs. The I-Corps Hubs consist of a network of universities, NSF-funded researchers, established entrepreneurs, local and regional entrepreneurial communities, and other federal agencies, will work collaboratively to build, and sustain an inclusive innovation ecosystem that includes the participation of all Americans including those from groups traditionally underserved in innovation and entrepreneurship throughout the United States. The creation of I-Corps Hubs has supplanted the previous I-Corps Regional model – the I-Corps Nodes and Sites. Collectively, both the NSF I-Corps (National) Teams (herein referred as *I-Corps Teams*) and NSF I-Corps (Regional) Hubs (herein referred as *I-Corps Hubs*) constitute the NSF I-Corps<sup>™</sup> program.

To meet the eligibility requirement of the *I-Corps Teams* program, researchers need to have had an active relevant and related research award with NSF within the past five years, or by participating in an NSF I-Corps Regional program (Hub) and earned eligibility for the *I-Corps Teams* program.

These eligibility requirement questions make up part of the *NSF I-Corps Program Pre-Submission Executive Summary Form*, which is a pre-proposal submission requirement for teams of academic researchers or small businesses considering applying to the *I-Corps Teams* program.

In order for these teams to apply to the *I-Corps Teams* program, they must first submit an executive summary, which is then reviewed by the cognizant I-Corps Program Director (PD). The executive summary asks for information on each team member<sup>1</sup>, the proposed technology,

<sup>&</sup>lt;sup>1</sup> In general, each team consists of three to five members and includes a technical lead, an entrepreneurial lead and an industry mentor.

its commercial application and commercialization plans. Teams who meet the eligibility requirements are invited to an interview with I-Corps staff. Finally, a subset of teams is selected to <u>submit an I-Corps Teams proposal</u> and participate in the National I-Corps training program.

## A.1 Circumstances Requiring the Collection of Data

The purpose of the pre-submission step is to ensure the teams applying to the *NSF I-Corps* (*National*) *Teams* program meets the following eligibility requirements:

- 1. Pathway of entry: NSF lineage or through recommendation by the I-Corps Hubs program;
- 2. Technical and/or commercial maturity level of the technology proposed;
- 3. Confirmation that the team members are currently in place (as opposed to not yet determined).

## A.2 Purpose and Use of the Data

The information collected on the I-Corps Executive Summary Form will not only allow the program to achieve the objectives outlined in Section A.1 but also allow NSF to see broad trends in community research interests.

The I-Corps Executive Summary Form requests information on the members of the applying team (name, email address, and a brief biographical sketch to list out his/her/their qualification), the eligibility pathway, and a description of the team's proposed technology innovation, which includes the intellectual property status, commercial application, and commercialization plan.

#### A.3 Use of Information Technology to Reduce Burden

All components in the collection will utilize secure electronic forms to minimize data errors and respondent burden. In some cases, NSF PDs, NSF staff, and/or NSF authorized representatives may contact the respondents for clarifications or follow-up questions to ensure quality assurance.

### A.4 Efforts to Identify Duplication

The data collection does not duplicate other efforts undertaken by NSF, other federal agencies, or other data collection agents.

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

The proposers submitting I-Corps Executive Summaries could be from small businesses. The only impact of this data collection on the business will be the time required for respondents to gather the information, complete the form, and/or engage in clarifying conversations NSF PDs.

## A.6 Consequences of Not Collecting the Information

If the information were not collected, NSF would be unable to (1) provide timely feedback on the suitability of the technology innovation and determine the team's eligibility to apply to the NSF I-Corps (National) Teams program, and (2) meet the Government Performance and Results Act (GPRA) and NSF merit review requirements [as outlined in the NSF Proposal and Award

Policies and Procedures Guide (PAPPG)] for the large volume of (full) proposals being submitted to the program each year.

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

Data collected will comply with 5 CFR 1320.6. First, a valid OMB control number will be displayed at the beginning of the electronic form. Second, the NSF I-Corps program will communicate clearly—through proposal solicitations and the program website, that such collection of information is voluntary, but it is a mandatory pre-submission step to applying to the NSF I-Corps (National) Teams program.

## A.8 Federal Register Notice and Consultation Outside the Agency

As required by 5 CFR 1320.8(d), the agency's notice was published in the *Federal Register* on August 20, 2024, at FR Doc. 2024-18616; the public comment period closed on October 21, 2024. No comments were made that were directly related to this data collection.

#### A.9 Payments or Gifts to Respondents

Not applicable.

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

Respondents will be informed that any information on specific individuals is maintained in accordance with the Privacy Act of 1974.

Respondents will be told that data collected are available to NSF officials, staff, and authorized contractors. Data will be processed according to federal and state privacy statutes. The system will limit authorized users' access to personally identifiable information. 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

Information from the correspondents, including name, affiliated organization, and email address, is requested. This information will be used to send follow-up emails and/or email invitations for an interview.

Individual-level and business-level data will be provided only to managing PDs, NSF senior management, and supporting staff conducting analyses using the data as authorized by NSF. Any public data reporting 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

Table 1. Respondents, Responses, and Annual Hour Burden

Collection Ti	tle		Number of hours per submission	Annual Hour Burden

NSF I-Corps Pre-submission	1,000 – 1,500	1	1,000 – 1,500
Executive Summary Form			
Total	1,000 - 1,500	1	1,000 – 1,500

As shown in Table 1 above, the annual response burden for the collection is between 1,000 and 1,500 hours. The respondents are typically Principal Investigators (PIs) at universities, founders, co-founders, and/or other key personnel of the small businesses.

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

The following table shows the annualized estimate of costs to PI/Founder/Co-Founder/Business Partner respondents, who are often university professors. This estimated hourly rate is based on a report from the American Association of University Professors, "The Annual Report on the Economic Status of the Profession, 2022-23," Survey Report Table 1.

According to this report, the average salary of an associate professor across all types of doctoral-granting institutions (public, private-independent, religiously affiliated) was \$110,945. When divided by the number of standard annual work hours (2,080), this calculates to approximately \$53 per hour.

Table 2. Annuitized Cost to Respondents

Respondent Type	No. of	Total Burden	Average	Estimated
	Responses	Hours	Hourly Rate	Annual Cost
PIs, (co-) Founders, Assignees, Business Partners	1,000 — 1,500	1,000 – 1,500	\$53	\$53,000 - \$79,500

# A.13 Estimates 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

On average, the managing Program Director will take about 15 - 30 minutes to review an Executive Summary entry. On average, a Program Director is the equivalent of a GS-15, and for calendar year 2024, the hourly rate was approximately \$78.

Table 3. Responses, Time to Review, and Total Annual Time and Cost Burden for NSF PDs

Task	Number of project pitches	Number of hours to review	Cost
PDs reviewing Executive Summary	1,000 – 1,500	0.25 – 0.50	\$40/hour

Total		\$30,000	
	1,500	250-750 hours	

In addition, the secure web-based form is hosted by Salesforce, a customer relationship management application. Licensing would cost the government \$400,000, and maintenance (which includes help desk support, ad hoc data request and/or reporting, uploading metadata to the system, proposal tracking for due diligence, and other application and platform maintenance) would cost an additional \$525,000.

## A.15 Change in Burden

Not applicable.

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

Not applicable. The information collected is used to assess whether the applying team meets the program eligibility criteria.

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

## A.18 Exceptions to Item 19 of OMB Form 83-I No exceptions apply.

**Section B** 

Not applicable.