

NOTICE OF FUNDING OPPORTUNITY (NOFO)
NIST Public Safety Innovation Accelerator Program (PSIAP) –
Follow-on Funding for Technical and Business Assistance
and Demonstration Projects with Public Safety Agencies

EXECUTIVE SUMMARY

- **Federal Agency Name:** National Institute of Standards and Technology (NIST), United States Department of Commerce (DoC)
- **Funding Opportunity Title:** NIST Public Safety Innovation Accelerator Program (PSIAP) – Follow-on Funding for Technical and Business Assistance and Demonstration Projects with Public Safety Agencies
- **Announcement Type:** Amendment
- **Funding Opportunity Number:** 2020-NIST-PSIAP-TABA-01
- **Assistance Listing (CFDA Number):** 11.620
- **Dates:** Applications must be received at [Grants.gov](https://www.grants.gov) no later than 11:59 p.m. Eastern Time, July 21, 2022. Applications received after this deadline will not be reviewed or considered.

When developing your submission timeline, please keep in mind that (1) all applicants are required to have current registrations in the System for Award Management (SAM.gov) and Grants.gov; (2) the free annual registration process in the System for Award Management (SAM.gov) (see Section IV.3. of this NOFO) often takes between three and five business days and may take as long as two weeks; and (3) applicants will receive a series of e-mail messages from Grants.gov over a period of up to two business days before learning whether a Federal agency's electronic system has received its application. Please note that a federal assistance award cannot be issued if the designated recipient's registration in the System for Award Management (SAM.gov) is not current at the time of the award.

NOTE: As of Monday, April 4, 2022, the federal government stopped using the DUNS number to identify entities. All entities doing business with the federal government must use a Unique Entity Identifier (UEI) generated in [SAM.gov](https://sam.gov). Applicants must request and be assigned a UEI number prior to completing the grant application forms and submitting their application via [Grants.gov](https://www.grants.gov). For more information, please see [Planned UEI Updates | GRANTS.GOV](#). The Standard Forms (e.g., SF424, SF424 R&R, etc.) were also updated on April 4, 2022, to allow entities to enter the UEI number. Applicants must use the applicable UEI Forms for all submissions.

- **Application Submission Address:** Applications must be submitted using Grants.gov.

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

- **Anticipated Amounts:** NIST PSCR anticipates funding individual projects in the \$5,000 - \$25,000 per range for Rapid Prototype Advancement through Needed Technical and Business Assistance and \$50,000 - \$200,000 per range for Demonstration Project with Partnering Public Safety Agency. All projects have a maximum one-year project performance period.
- **Funding Instrument:** Grant or cooperative agreement, as appropriate.
- **Eligibility:** This NOFO is open to entities that have been awarded a grant or cooperative agreement (including Small Business Innovation Research and Small Business Technology Transfer awards originally made in the form of a procurement contract), or received an award as part of a prize challenge, from a federal agency (“entities with a previous award”) for a public-safety focused communication technology innovation.

NIST will only consider one application per applicant, for a single technology innovation, at a time. Applicants may only request funding for either (1) technical and business assistance or (2) a demonstration project, in a single application. Entities with multiple eligible technology innovation awards may submit multiple applications, but only one application per technology innovation will be considered at a time. After the applicant has completed their proposed technical and business assistance or demonstration project (or been notified that their initial application will not be funded), they may reapply to this NOFO for the other funding opportunity (i.e., the same technology innovation may not receive two technical and business assistance awards or two demonstration project awards, but may receive one of each type).

- **Cost Sharing Requirements:** There are no cost sharing requirements.
- **Table of Contents**

I. Program Description.....	2
II. Federal Award Information.....	5
III. Eligibility Information	5
IV. Application and Submission Information	6
V. Application Review Information.....	18
VI. Federal Award Administration Information	20
VII. Federal Awarding Agency Contacts.....	32
VIII. Other Information.....	33

FULL ANNOUNCEMENT TEXT

I. Program Description

The statutory authority for the NIST Public Safety Innovation Accelerator Program is 15 U.S.C. § 3706 and 47 U.S.C. § 1443.

The NIST PSIAP is seeking applications from eligible organizations - entities that previously were awarded a grant, cooperative agreement, prize challenge, including a Small Business Innovation

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

Research or Small Business Technology Transfer award originally made in the form of a procurement contract, or subaward by a federal entity (“entities with a previous award”), such as NIST Public Safety Communications Research Division, National Telecommunications and Information Administration, Department of Homeland Security, etc., for a public-safety focused communication technology innovation - to propose activities that will either: (1) more rapidly advance their prototypes through needed technical and business assistance or (2) a demonstration project with a partnering public safety agency, to provide additional testing and research.

A. Background of NIST PSCR

The Public Safety Communications Research (PSCR) division, aligned under the NIST Communications Technology Laboratory, conducts research to advance communication technology for public safety. In addition to conducting its own research, PSCR has funded and supported external research through the NIST Public Safety Innovation Accelerator Program (grants and cooperative agreements) and PSCR’s prize challenges. Acknowledging the technology development and life cycle gap from early-stage research and prototypes to publicly available technology, PSCR is providing these funding opportunities to entities with a previous award in an effort to further propel forward their research and prototypes and more quickly advance needed improvements in communication technology for first responders.

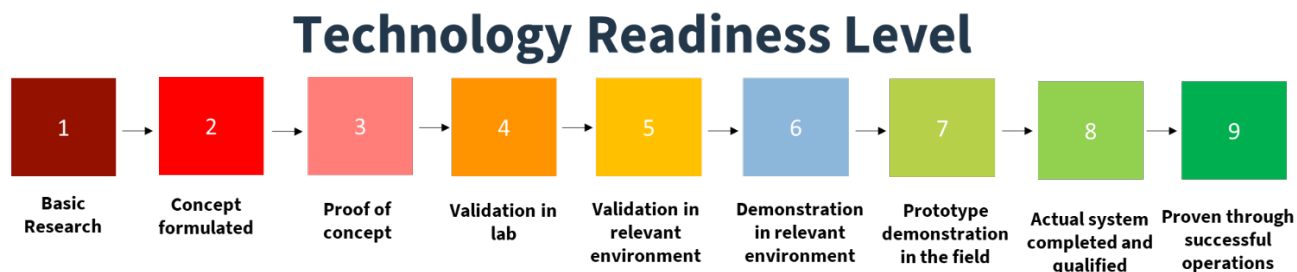
PSCR works in coordination with public safety, industry, academia, and local, State, tribal, and Federal practitioners to identify critical communications technology gaps. As a result of this coordination, PSCR prioritized the following key communication technology areas and cross-cutting initiatives to drive its R&D program: User Interfaces User Experiences; Highly Mobile Deployable Networks; Location-Based Services; Mission Critical Voice; and Security. Entities with a previous award should describe how their technology aligns with one of these technology area or cross-cutting initiatives.

B. Funding Opportunities:

(1) Rapid Prototype Advancement through Needed Technical and Business Assistance

With this opportunity, PSCR is looking to provide funding for applicants to receive technical and business assistance that will make a measurable difference in their process to bring their public-safety focused communication technology product to market. PSCR requests applicants to (a) name what type of needed technical and business assistance would assist them in more rapidly advancing their prototypes and/or business/entity; (b) describe why they feel this specific assistance would assist their research/prototype and (c) from where they propose to receive the technical and business assistance.

Applicants interested in this funding opportunity should have technology that, at a minimum, is considered a working proof of concept or prototype, or, on the Technology Readiness Level (TRL) scale meets or exceeds a TRL 3 rating.



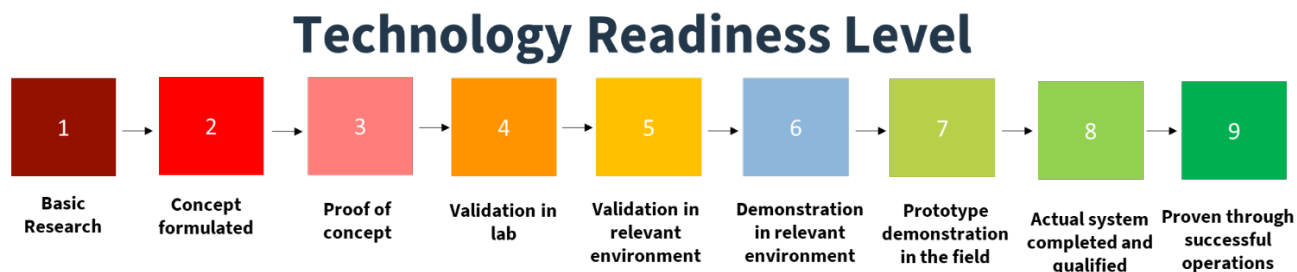
Examples of possible technical and business assistance that PSCR anticipates supporting includes, but is not limited to, the following: assistance with securing intellectual property rights; licensing assistance; conducting market research; technology readiness levels tests; pitch assistance; business model canvas; business plan assistance; financial planning for businesses; manufacturing/sourcing assistance; export assistance, customer development, etc.

PSCR encourages applicants interested in this funding opportunity to research other free or low-cost assistance, programs and services provided by federally-funded resource partners, such as [Manufacturing Extension Partnership Centers](#); [FAST Grant designees](#) for businesses interested in applying for SBIR and STTR funding; [federally funded accelerators](#); Small Business Development Center Centers (SBDC); Women's Business Centers (WBC); Procurement Technical Assistance Centers (PTAC) for small businesses on how to apply, find and write successful proposals to government contracts; Veteran Business Outreach Centers (VBOC); Regional Innovation Clusters (entities focused on connecting tech-based businesses in their regionally competitive industry); and SCORE chapters. To find your local entities, please visit: <https://www.sba.gov/local-assistance/find/>.

PSCR also requires applicants to include travel funding to the annual PSCR Stakeholder meeting in their proposed budget to demonstrate their advanced prototypes and how their received business and technical assistance has advanced their technology's growth towards commercialization.

(2) Demonstration Project with Partnering Public Safety Agency

To advance the research projects, PSIAP invites applicants to propose a user testing and demonstration project in partnership with a public safety entity. PSCR is seeking to support applicants with a prototype that has previously been validated in a laboratory setting or meets a TRL 4 rating. Therefore, through this funding opportunity, applicants should seek to validate or demonstrate their prototype in a relevant public safety environment (TRL 5 or 6 rating) or conduct a prototype demonstration in the public safety field (TRL 7 rating).



The proposal should describe how the proposed demonstration project with a public safety entity will advance their research and better advance and align the technology with their targeted end public safety user. If the applicant previously conducted a demonstration or collaboration project with a public safety entity as part of a previous award, this proposed project should either propose collaboration with a different public safety entity or a different form of demonstration/user testing that will ideally advance their technology to the next technology readiness level.

The PSIAP recognizes that operational demands and limited budgets typically preclude public safety entities from dedicating resources to participate in R&D activities. Therefore, applicants may include funding in their proposed budget for non-federal first responders and public safety personnel to actively participate within their project.

PSCR also requires applicants to include travel funding to the annual PSCR Stakeholder meeting in their proposed budget to demonstrate their advanced prototypes and how their demonstration project has advanced their technology's path towards commercialization.

II. Federal Award Information

- Funding Instrument.** The funding instruments used in these programs will be grants or cooperative agreements, as appropriate. Where cooperative agreements are used, the nature of NIST's "substantial involvement" will generally include collaboration with the recipient in executing the approved scope of work, in accordance with 2 CFR § 200.24.
- Funding Availability.** From FY2020-FY2022, NIST PSCR anticipates funding individual projects in the \$5,000 - \$25,000 per project range for Rapid Prototype Advancement through Needed Technical and Business Assistance and \$50,000 - \$200,000 per project range for Demonstration Project with Partnering Public Safety Agency. All projects have a maximum one-year performance period.

III. Eligibility Information

- Eligible Applicants.** This NOFO is open to entities that have been awarded a grant or cooperative agreement (including Small Business Innovation Research and Small Business Technology Transfer awards originally made in the form of a procurement contract), or received

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

an award as part of a prize challenge, from a federal agency (“entities with a previous award”) for a public-safety focused communication technology innovation.

NIST will only consider one application per applicant, for a single technology innovation, at a time. Applicants may only request funding for either (1) technical and business assistance or (2) a demonstration project, in a single application. Entities with multiple eligible technology innovation awards may submit multiple applications, but only one application per technology innovation will be considered at a time. After the applicant has completed their proposed technical and business assistance or demonstration project (or been notified that their initial application will not be funded), they may reapply to this NOFO for the other funding opportunity (i.e., the same technology innovation may not receive two technical and business assistance awards or two demonstration project awards, but may receive one of each type).

2. Cost Sharing or Matching: Matching funds are not required.

IV. Application and Submission Information

1. Address to Request Application Package

The application package is available at Grants.gov under Funding Opportunity Number 2020-NIST-PSIAP-TABA-01.

2. Content and Form of Application Submission

a. Required Forms and Documents. The Application must contain the following, based on the applicant’s desired funding opportunity:

(1) SF-424 (R&R), Application for Federal Assistance. The SF-424 (R&R) must be signed by an authorized representative of the applicant organization.

For SF-424 (R&R), Items 5, 14, and 19, use the Zip Code + 4 format (##### - ####) when addresses are called for.

For SF-424 (R&R), Item 17, the list of certifications and assurances is contained in the SF-424B (item (3) below).

SF-424 (R&R), Item 18. If the SF-LLL, Disclosure of Lobbying Activities form (item (6) below) is applicable, attach it to field 18.

Instructions for filling in the SF-424 (R&R) can be found on Grants.gov.

(2) Research & Related Budget (Total Fed + Non-Fed). The budget

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

should reflect anticipated expenses for the full term of the project, considering all potential cost increases, including cost of living adjustments.

The budget should be detailed in these categories:

- A. Senior/Key Person;
- B. Other Personnel;
- C. Equipment Description;
- D. Travel;
- E. Participant/Trainee Support Costs
- F. Other Direct Costs;
- G. Direct Costs (automatically generated);
- H. Indirect Costs;
- I. Total Direct and Indirect Costs (automatically generated);
- J. Fee (not relevant to this competition);
- K. Total Costs and Fee (automatically generated);
- L. Budget Narrative and Justification document (item (8) below) should be attached to field L.

(3) SF-424B, Assurances – Non-Construction Programs (if applicable). The SF-424B is required for all applicants that have not updated their System for Award Management (SAM.gov) entity registration since February 2, 2019 to include the Federal financial assistance certifications and representations (certs and reps). If an applicant has updated their SAM.gov entity registration since February 2, 2019 to include the certifications and representations, then the SF-424B is not required.

(4) CD-511, Certification Regarding Lobbying. Enter “2020-NIST- PSIAP-TABA-01” in the Award Number field. Enter the title of the application, or an abbreviation of that title, in the Project Name field.

(5) SF-LLL, Disclosure of Lobbying Activities (if applicable).

(6) Project Narrative. The Project Narrative is word-processed document of not more than twenty (20) pages (excluding the resume(s) and the cover page) that describes the proposed project. The components of the Project Narrative depend on the type of assistance being sought:

Rapid Prototype Advancement through Needed Technical and Business Assistance	Demonstration Project with Partnering Public Safety Agency
(a) Cover page: Provide your previous award title, award number, awarding funding agency and a description of the previous work performed or research conducted	(a) Cover page: Provide your previous award title, award number, awarding funding agency and a description of the previous work performed or research conducted

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

under the previous award funding. Clearly demonstrate the applicability of your project to public safety communications.	under the previous award. Clearly demonstrate the applicability of your project to public safety communications.
(b) Project Description This is a detailed description of the proposed technical and business assistance and potential impacts for both the team and the technology. This section should include: i. Detailed description of any previous technical and business assistance you have received or explored to advance the applicant's technology and/or business. ii. Detailed description of the technical and business assistance for which the applicant is seeking funding, and how it addresses the goals and requirements of this NOFO, and how the proposed activities will impact and benefit the entity, their technology and public safety. iii. Description of the applicant's motivation and reasoning for why they feel this specific assistance would assist their research/prototype.	(b) Project Description. This is a detailed description of the proposed project and potential impacts. This section should include: i. Detailed description of any previous demonstration project completed or explored with a public safety agency. ii. Detailed description of the approach to address the goals and requirements of this NOFO and how the proposed activities will impact and benefit public safety. iii. Proposed list of technical outputs, details on how these outputs will be made available to the broader public safety and R&D communities, and how their adoption and impact will be tracked. iv. Access to the necessary staff, equipment, facilities, support, and resources to accomplish the proposed objectives.
(c) Project Plan/Schedule. This section should provide clear and quantifiable goals, milestones, timelines, and methods to assess progress and performance towards achieving the objectives and how the impact of the assistance will be evaluated and tracked.	(c) Project Execution. This section should provide: i. Clear and quantifiable goals, milestones, timelines, and methods to assess progress and performance towards achieving the objectives in the Technical Proposal. ii. Description of the cost effectiveness and value of the proposed project in terms of meeting the stated objectives.
(d) Qualifications/Merits of Proposed Technical and Business Assistance	(d) Qualifications of Principal Investigator and Key Personnel.

This section should provide the following descriptions: i. Description of the applicant’s research and reasoning for their proposed selection of the entity/source of which they plan to receive this type of assistance. ii. Qualifications of the individuals, teams, and organizations that will be executing or providing the business and technical assistance to the applicant. Should the applicant not have a named provider, please list the minimum qualifications the applicant will use to determine the provider. iii. Demonstrated success executing projects similar in scope and magnitude to the proposed project, including any examples of working with a broad cross-section of public safety practitioners. iv. How the proposed assistance will provide access to the necessary staff, equipment, facilities, support, and resources to accomplish the proposed objectives.	This section should provide the following qualifications: i. Qualifications of the individuals, teams, and organizations that will be executing or supporting the proposed project relative to the program goals. The applicant should note if listed principal investigator and key personnel are different from their original, qualifying funding opportunity, and the reasoning for the adjustment. ii. Demonstrated success executing projects similar in scope and magnitude to the proposed project, including any examples of working with a broad cross-section of public safety practitioners.
Resume(s). Resumes are required for all key personnel, including the principal investigator/project lead. Awardees are advised that any changes to individuals deemed ‘key personnel’, including disengagement from the project for more than three months or a 25% reduction of effort, will require prior approval, in writing, by the NIST Grants Officer. There are no page limits for resumes, and they do not count toward the Project Narrative page limitation. However, any material considered inappropriate for inclusion in a resume (e.g. supplementary text for another section) will be redacted and not provided to the reviewers.	Resume(s). Resumes are required for all key personnel, including the principal investigator/project lead. Awardees are advised that any changes to individuals deemed ‘key personnel’, including disengagement from the project for more than three months or a 25% reduction of effort, will require prior approval, in writing, by the NIST Grants Officer. There are no page limits for resumes, and they do not count toward the Project Narrative page limitation. However, any material considered inappropriate for inclusion in a resume (e.g. supplementary text for another section) will be redacted and not provided to the reviewers.

IP Ownership Disclosure. If applicable, include any disclosures required pursuant to Section VI.2.g of this NOFO.	IP Ownership Disclosure. If applicable, include any disclosures required pursuant to Section VI.2.g of this NOFO.
--	--

(7) Budget Narrative and Justification.

There is no set format for the Budget Narrative and Justification. The Budget Narrative and Justification must be attached to the Research & Related Budget (Total Fed + Non-Fed). The written justification should include the necessity and the basis for the cost. Proposed funding levels must be consistent with the project scope, and only allowable costs should be included in the budget. Information on cost allowability is available in the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200 (<http://go.usa.gov/SBYh>), which apply to awards in this program. The Budget Narrative does not count against the twenty (20) page limit of the Project Narrative.

This section will be evaluated in accordance with the Budget Narrative evaluation criteria. It will also be reviewed to determine if all costs are reasonable, allocable, and allowable under 2 C.F.R. Part 200 Subpart E, Cost Principles.

Information needed for each category is as follows:

- A. Senior/Key Person** – At a minimum, the budget justification should include the following: name, job title, commitment of effort on the proposed project in terms of average number of hours per week or percentage of time, salary rate, total direct charges on the proposed project, description of the role of the individual on the proposed project and the work to be performed.

Fringe benefits should be identified separately from salaries and wages and based on rates determined by organizational policy. The items included in the fringe benefit rate (e.g., health insurance, parking, etc.) should not be charged under another cost category.

- B. Other Personnel** - Data is requested at the project role level, and not at the individual level for Other Personnel. The budget justification should include the following: job title, commitment of effort on the proposed project in terms of average number of hours per week or percentage of time, salary rate, total direct charges on the proposed project, description of the role of the position on the proposed project and the work to be performed.

Fringe benefits should be identified separately from salaries and wages and based on rates determined by organizational policy. The items included in the fringe benefit rate (e.g., health insurance, parking, etc.) should not be charged under another cost category.

- C. Equipment Description** – Equipment is defined as an item of property that has an acquisition cost of \$5,000 or more (unless the organization has established lower levels) and an expected service life of more than one year. The budget justification should list each piece of equipment, the cost, and a description of how it will be used and why it is necessary to the successful completion of the proposed project. Please note that any general use equipment (computers, etc.) charged directly to the award should be allocated to the award according to expected usage on the project. Any items that do not meet the threshold for equipment can be included under the Materials and Supplies line item in Section F, Other Direct Costs.
- D. Travel** - For all travel costs, required by the recipient to complete the project, including attendance at any relevant conferences, the budget justification for travel should include the following: destination; names or number of people traveling; dates and/or duration; mode of transportation, lodging and subsistence rates; and description of how the travel is directly related to the proposed project. For travel that is yet to be determined, please provide best estimates based on prior experience. If a destination is not known, an approximate amount may be used with the assumptions given for the location of the meeting.
- E. Participant/Trainee Support Costs** – Participant support costs are stipends, subsistence allowances, travel, and registration fees paid to or on behalf of participants or trainees, who are not employees of your organization, for conferences or training projects. The budget justification should indicate the names or number of participants or trainees, a description and calculation of costs per person, a description and date of the event, and a description of why the cost is necessary for the successful completion of the proposed project.
- F. Other Direct Costs** – For costs that do not easily fit into the other cost categories, please list the cost, and the breakdown of the total costs by quantity or unit of cost. Include the necessity of the cost for the completion of the proposed project. Only allowable costs can be charged to the award.

Each subaward or contractual cost should be treated as a separate item in the Other Direct Costs category. Describe the services to be provided and the necessity of the subaward or contract to the successful performance of the

proposed project. Contracts are for obtaining goods and services. Subawardees perform part of the project scope of work. For each subaward, applicants must provide budget detail justifying the cost of the work performed on the project.

H. Indirect Costs – Commonly referred to as Facilities & Administrative Costs, Indirect Costs are defined as costs incurred by the applicant organization that cannot otherwise be directly assigned or attributed to a specific project. For more details, see Section IV.2.b.(8) of this NOFO.

(8) Indirect Cost Rate Agreement. If indirect costs are included in the proposed budget, provide a copy of the approved negotiated agreement if this rate was negotiated with a cognizant Federal audit agency. If the rate was not established by a cognizant Federal audit agency, provide a statement to this effect. If the successful applicant includes indirect costs in the budget and has not established an indirect cost rate with a cognizant Federal audit agency, the applicant will be required to obtain such a rate in accordance with Section B.06 of the [Department of Commerce Financial Assistance Standard Terms and Conditions](#), dated November 20, 2020.

Alternatively, in accordance with 2 C.F.R. § 200.414(f), applicants that do not have a current negotiated (including provisional) indirect cost rate, except those non-Federal entities described in [appendix VII, paragraph D.1.b.](#) of 2 CFR 200, may elect to charge a de minimis rate of 10 percent of modified total direct costs (MTDC). Applicants proposing a 10 percent de minimis rate pursuant to 2 C.F.R. § 200.414(f) should note this election as part of the budget portion of the application. Please be aware that Foreign applicants will be limited to use of the de minimis rate and will not have the opportunity to negotiate an indirect cost rate with NIST.

(9) Letters of Commitment. (if applicable)

(10) Subaward Budget Form. The Research & Related Subaward Budget Attachment Form is required if sub-recipients and contractors are included in the application budget.

Instructions for completing subaward budget forms are available by visiting the [R & R Family section](#) of the Grants.gov Forms Repository and scrolling down to the R & R Subaward Budget Attachment(s) Form and selecting “Instructions.”

(11) Data Management Plan. Consistent with NIST Policy 5700.00¹, *Managing Public Access to Results of Federally Funded Research*, and NIST Order 5701.00²,

¹ https://www.nist.gov/system/files/documents/2018/06/19/final_p_5700.pdf

² https://www.nist.gov/system/files/documents/2019/11/08/final_o_5701_ver_2.pdf

Managing Public Access to Results of Federally Funded Research", applicants must include a Data Management Plan (DMP).

The DMP is a supplementary document of not more than two pages that must include, at a minimum, a summary of proposed activities that are expected to generate data, a summary of the types of data expected to be generated by the identified activities, a plan for storage and maintenance of the data expected to be generated by the identified activities, and a plan describing whether and how data generated by the identified activities will be reviewed and made available to the public. As long as the DMP meets these NIST requirements, it may take the form specified by the applicant's institution or some other entity (e.g., the National Science Foundation³ or the National Institutes of Health⁴).

All applications for activities that will generate scientific data using NIST funding are required to submit a DMP or explain why data sharing and/or preservation are not within the scope of the project.

For the purposes of the DMP, NIST adopted the definition of "research data" at 2 C.F.R. § 200.315(e)(3) (available at <http://go.usa.gov/3sZvQ>).

Reasonable costs for data preservation and access may be included in the application.

The inclusion of the DMP will be considered as part of the administrative review (see Section V.2.a. of this NOFO); however, the DMP will not be evaluated against any evaluation criteria.

- (12) Current and Pending Support Form.** Any application that includes investigators, researchers, and key personnel must identify all sources of current and potential funding, including this proposal. Any current project support (e.g., Federal, state, local, public or private foundations, etc.) must be listed on this form. The proposed project and all other projects or activities requiring a portion of time of the Principal Investigator (PI), co-PI, and key personnel must be included, even if no salary support is received. The total award amount for the entire award period covered, including indirect costs, must be shown as well as the number of person-months per year to be devoted to the project, regardless of the source of support. Similar information must be provided for all proposals already submitted or that are being submitted concurrently to other potential funders.

³ <http://www.nsf.gov/bfa/dias/policy/dmp.jsp>

⁴ http://grants.nih.gov/grants/policy/data_sharing/data_sharing_guidance.htm

Applicants must complete the Current and Pending Support Form, using multiple forms as necessary to account for all activity for each individual identified in the PI, co-PI and key personnel roles. A separate form should be used for each identified individual.

Applicants must download the [Current and Pending Support Form](#) from the NIST website and reference the guidance provided as it contains information to assist with accurately completing the form.

- (13) Research and Related Other Project Information.** Answer the highlighted questions and use this form to attach the Project Narrative (item (6) above); the Indirect Cost Rate Agreement (item (8) above); the Letters of Commitment, if applicable to the submission, (item (9) above); the Data Management Plan (item (11) above); and the Current and Pending Support Form (item (12) above). Instructions for completing the Research and Related Other Project Information can be found in the Research and Related Other Project Information form Instructions document found in Grants.gov's [R&R Family Section](#).

Please note that the Project Summary/Abstract is not relevant to this competition. However, Grants.gov requires an attachment to field 7 of the Research and Related Other Project Information form to successfully pass through Grants.gov. Please attach a document to field 7 stating, "A Project Summary/Abstract is not relevant to this competition".

b. Attachment of Required Documents

Items IV.2.a.(1) through IV.2.a.(4) above are part of the standard application package in Grants.gov and can be completed through the download application process.

Item IV.2.a.(5), the SF-LLL, Disclosure of Lobbying Activities form, is an optional application form which is part of the standard application package in Grants.gov. If item IV.2.a.(5), the SF-LLL, Disclosure of Lobbying Activities form is applicable to this proposal, attach it to field 18 of the SF-424 (R&R), Application for Federal Assistance.

Item IV.2.a.(6), the Project Narrative, should be attached to field 8 (Project Narrative) of the Research and Related Other Project Information form by clicking on "Add Attachment".

Item IV.2.a.(7), the Budget Narrative and Justification, should be attached to field L (Budget Justification) of the Research and Related Budget (Total Fed + Total Non-Fed) form by clicking on "Add Attachment".

Items IV.2.a.(8), the Indirect Cost Rate Agreement, IV.2.a.(11), the Data Management Plan, and IV.2.a.(12), the Current and Pending Support Form, must be completed and attached by clicking on “Add Attachments” found in item 12 (Other Attachments) of the Research and Related Other Project Information form.

Item IV.2.a.(9), Letters of Commitment, if applicable to the submission, should be attached by clicking on “Add Attachments” found in item 12 (Other Attachments) of the Research and Related Other Project Information form.

Item IV.2.a.(10), the Subaward Budget Form(s), if applicable to the submission, should be attached to the Research & Related Subaward Budget (Total Fed + Non-Fed) Attachment(s) Form in the application package.

Following these directions will create zip files which permit transmittal of the documents electronically via Grants.gov.

Applicants should carefully follow specific Grants.gov instructions to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov indicates only that an application was transferred to a system. It does not provide details concerning whether all attachments (or how many attachments) transferred successfully. Applicants will receive a series of e-mail messages over a period of up to two business days before learning whether a Federal agency’s electronic system has received its application.

Applicants are strongly advised to use Grants.gov’s “Download Submitted Forms and Applications” option to check that their application’s required attachments were contained in their submission.

After submitting the application, check the status of your application here: [CHECK APPLICATION STATUS](#). If any, or all, of the required attachments are absent from the submission, follow the attachment directions found above, resubmit the application, and check again for the presence of the required attachments.

If the directions found at <https://www.grants.gov/help/html/help/index.htm#t=GetStarted%2FGetStarted.htm> are not effective, please contact the Grants.gov Help Desk immediately. If calling from within the United States or from a U.S. territory, please call 800-518-4726. If calling from a place outside the United States or a U.S. territory, please call 606-545-5035. E-mails should be addressed to support@grants.gov. Assistance from the Grants.gov Help Desk will be available around the clock every day, with the exception of Federal holidays. Help Desk service will resume at 7:00 a.m. Eastern Time the day after Federal holidays.

NIST uses the Tracking Numbers assigned by Grants.gov, and does not issue Agency Tracking Numbers.

c. Application Format

- (1) **Paper, E-mail and Facsimile (fax) Submissions.** Will not be accepted.
- (2) **Figures, Graphs, Images, and Pictures.** Should be of a size that is easily readable or viewable and may be landscape orientation. Any figures, graphs, images, or pictures will count towards the page limit for the Technical Proposal.
- (3) **Font.** Easy to read font (12-point minimum). Smaller type may be used in figures and tables but must be clearly legible.
- (4) **Page Limits.**

Rapid Prototype Advancement through Needed Technical and Business Assistance	Demonstration Project with Partnering Public Safety Agency
Cover Page: 1 page	Cover Page: 1 page
Project Narrative: 20 pages. (Resumes do not count toward this page limit).	Project Narrative: 20 pages. (Resumes do not count toward this page limit).
Data Management Plan: 2 pages	Data Management Plan: 2 pages
	Letter from Proposed Partnering Public Safety Agency: 1 page
	Proposed Project Timeline with Public Safety Agency: 3 pages

- (5) **Page Limit Excludes:** SF-424 Research & Related (R&R), Application for Federal Assistance; Research & Related Budget (Total Fed + Non-Fed); Assurances for Non-Construction Programs (SF-424B - R & R); CD-511, Certification Regarding Lobbying; SF-LLL, Disclosure of Lobbying Activities; Budget Narrative and Justification; Research & Related Budget (Total Fed + Non-Fed); Research and Related Other Project Information; Indirect Cost Rate Agreement; Letters of Commitment; Data Management Plan; Subaward Budget Form; Current and Pending Support Form.
- (6) **Page size.** 21.6 centimeters by 27.9 centimeters (8 ½ inches by 11 inches).
- (7) **Application language.** English.

d. Application Replacement Pages. Applicants may not submit replacement pages and/or missing documents once an application has been submitted. Revisions can only be made by submitting a complete new application that is received by NIST before the submission deadline.

e. Pre-Applications. Pre-applications will not be accepted under this NOFO.

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

f. Statement of Intent. To assist NIST in gauging interest and planning for the evaluation process all potential applicants are strongly encouraged to send an e-mail to pscr@nist.gov with "Follow-on Funding for TABA and Demo" in the subject line indicating intent to apply. The statement of intent will only be used for competition planning purposes; it will not be used as part of the evaluation process or to eliminate any applicants from consideration under this NOFO. A statement of intent is not required for an applicant to receive full consideration under this NOFO.

g. Certifications Regarding Federal Felony and Federal Criminal Tax Convictions, Unpaid Federal Tax Assessments and Delinquent Federal Tax Returns. In accordance with Federal appropriations law, an authorized representative of the selected applicant(s) may be required to provide certain pre-award certifications regarding Federal felony and Federal criminal tax convictions, unpaid Federal tax assessments, and delinquent Federal tax returns.

3. Unique Entity Identifier and System for Award Management (SAM)

Pursuant to 2 C.F.R. part 25, applicants and recipients (as the case may be) are required to: (i) be registered in SAM before submitting its application; (ii) provide a valid unique entity identifier in its application; and (iii) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency, unless otherwise excepted from these requirements pursuant to 2 C.F.R. § 25.110. NIST will not make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant has not fully complied with the requirements by the time that NIST is ready to make a Federal award pursuant to this NOFO, NIST may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

4. Submission Dates and Times

Applications must be received at Grants.gov no later than 11:59 p.m. Eastern Time, July 21, 2022. Applications received after this deadline will not be reviewed or considered.

When developing your submission timeline, please keep in mind that (1) all applicants are required to have current registrations in the System for Award Management (SAM.gov) and Grants.gov; (2) the free annual registration process in the electronic System for Award Management (SAM.gov) (see Section IV.3. of this NOFO) often takes between three and five business days and may take as long as two weeks; and (3) applicants will receive email notifications over a period of up to two business days as the application moves through intermediate systems before the applicant learns via a validation or rejection notification whether NIST has received the application. (See <http://www.grants.gov>) for full information on application and notification through Grants.gov.). Please note that a federal assistance award cannot be issued if the designated recipient's registration in the System for Award Management (SAM.gov) is not current at the time of the award. Applicants will find instructions on registering with

SAM.gov as part of the Grants.gov process at:

<https://www.grants.gov/web/grants/applicants/organization-registration.html>.

NOTE: As of Monday, April 4, 2022, the federal government stopped using the DUNS number to identify entities. All entities doing business with the federal government must use a Unique Entity Identifier (UEI) generated in [SAM.gov](https://sam.gov). Applicants must request and be assigned a UEI number prior to completing the grant application forms and submitting their application via [Grants.gov](https://grants.gov). For more information, please see [Planned UEI Updates | GRANTS.GOV](#). The Standard Forms (e.g., SF424, SF424 R&R, etc.) were also updated on April 4, 2022, to allow entities to enter the UEI number. Applicants must use the applicable UEI Forms for all submissions.

V. Application Review Information

1. Evaluation Criteria

- i. Rationality. The rationality and innovation of the application and the fit of the proposed work to the objectives of the either option of the funding opportunity. (0 - 30 points)
- ii. Technical Merit of Proposed Activity. The likelihood that the proposed activities will shorten the next phase of development and accelerate the time-to-market for the public-safety focused communication technology innovation. (0 - 30 points)
- iii. Proposed Team's Capability to Perform the Work. The extent of the proposed staff and partners' relevant experience and the likelihood of achieving the objective of the application. (0 – 25 points)
- iv. Match of Budget to Proposed Work. Assessment of the budget against the proposed work to ascertain the reasonableness of the request. (0 – 15 points)

2. Review and Selection Process

Proposals, reports, documents and other information related to applications submitted to NIST and/or relating to financial assistance awards issued by NIST will be reviewed and considered by Federal employees, Federal agents and contractors, and/or by non-Federal personnel who have entered into confidentiality and conflict of interest agreements covering such information, when applicable.

- a. **Initial Screening of Applications.** All applications received in response to this NOFO will be reviewed on a rolling basis to determine whether they are eligible, complete, and responsive to the objectives of this NOFO. Applications that do not clearly demonstrate that the applicant entity has previously received funding from a federal agency for a public-safety focused communication technology innovation will be deemed ineligible. Applications determined to be ineligible, incomplete, and/or non-responsive based on the initial screening will be eliminated from further review. However, NIST, in its sole discretion, may continue the review process for an application that is missing non-substantive information that can easily be rectified or cured during the review process.
- b. **Merit Review of Eligible, Complete, and Responsive Applications.** Applications that are determined to be eligible, complete, and responsive will proceed for merit reviews in which at

2020-NIST-PSIAP-TABA-01

Amendment 3

June 21, 2022

least three (3) objective individuals, knowledgeable about the particular scientific area, will evaluate the merits of each application based on the evaluation criteria (see Section V.1 of this NOFO). The reviewers may discuss the applications with each other, but scores will be determined on an individual basis, not as a consensus.

- c. **Selection.** The Selecting Official, the Director of the Communications Technology Laboratory, or designee, will make final award recommendations to the NIST Grants Officer taking into consideration the results of the reviewers' evaluations, relevance to the objectives described in the Program Description, and the availability of funds.

NIST reserves the right to negotiate the budget costs with the applicants that have been selected to receive awards, which may include requesting that the applicant remove certain costs. Additionally, NIST may request that the applicant modify objectives or work plans and provide supplemental information. NIST will follow applicable U.S. laws and policies including for international applications. NIST also reserves the right to reject an application where information is uncovered that raises a reasonable doubt as to the responsibility of the applicant. NIST may select some, all, or none of the applications, or part(s) of any particular application. In some cases, NIST may ask applicants to consider combining projects. The final approval of selected applications and issuance of awards will be by the NIST Grants Officer. The award decisions of the NIST Grants Officer are final.

- d. **Federal Awarding Agency Review of Risk Posed by Applicants.** After applications are proposed for funding by the Selecting Official and prior to the issuance of an award, the NIST Grants Management Division (GMD) will conduct an assessment of the risk posed by the applicant in accordance with 2 C.F.R. § 200.205, which may include a review of the financial stability of an applicant, the quality of the applicant's management systems, the history of performance, and/or the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities.

In addition, prior to making an award where the total Federal share is expected to exceed the simplified acquisition threshold (currently \$250,000), NIST GMD will review and consider the publicly available information about that applicant in the Federal Awardee Performance and Integrity Information System (FAPIIS). An applicant may, at its option, review and comment on information about itself previously entered into FAPIIS by a Federal awarding agency. As part of its review of risk posed by applicants, NIST GMD will consider any comments made by the applicant in FAPIIS in making its determination about the applicant's integrity, business ethics, and record of performance under Federal awards. Upon completion of the pre-award risk assessment, the NIST Grants Officer will make a responsibility determination concerning whether the applicant is qualified to receive the subject award and, if so, whether appropriate specific conditions that correspond to the degree of risk posed by the applicant should be applied to an award.

- 3. **Anticipated Announcement and Award Dates.** All awards submitted under this funding opportunity will be made approximately 90 days after the end of the review process.

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

4. Additional Information

1. **Safety.** Safety is a top priority at NIST. Employees and affiliates of award recipients who conduct project work at NIST will be expected to be safety conscious, to attend NIST safety training, and to comply with all NIST safety policies and procedures, and with all applicable terms of their guest research agreement.
2. **Notification to Unsuccessful Applicants.** Unsuccessful applicants will be notified in writing.
3. **Retention of Unsuccessful Applications.** Copies of each unsuccessful application will be retained in accordance with the General Record Schedule 1.2/021.

VI. Federal Award Administration Information

1. **Federal Award Notices.** Successful applicants will receive an award package from the NIST Grants Officer.
2. **Administrative and National Policy Requirements:**
 - a. **Uniform Administrative Requirements, Cost Principles and Audit Requirements.** Through 2. C.F.R. § 1327.101, the Department of Commerce adopted the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, which apply to awards made pursuant to this NOFO. Refer to <http://go.usa.gov/SBYh> and <http://go.usa.gov/SBq4>.
 - b. **Department of Commerce Financial Assistance Standard Terms and Conditions.** The Department of Commerce will apply to each award in this program, the Financial Assistance Standard Terms and Conditions in effect on the date of award. The current version, dated November 12, 2020, is accessible at [Department of Commerce Financial Assistance Standard Terms and Conditions](#). Refer to Section VII. of this NOFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if you need more information.
 - c. **Pre-Award Notification Requirements.** The Department of Commerce will apply the Pre-Award Notification Requirements for Grants and Cooperative Agreements in effect on the date of award to any award made under this NOFO. The current version, dated December 30, 2014 (79 FR 78390), is accessible at <http://go.usa.gov/hKkR>. Refer to Section VII. of this NOFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if you need more information.
 - d. **Funding Availability and Limitation of Liability.** In no event will NIST or the Department of Commerce be responsible for application preparation costs, including, but not limited to, if the program fails to receive funding or is cancelled because of agency priorities. Publication of this NOFO does not oblige NIST or the Department of Commerce to award any specific project or to obligate any available funds.

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

- e. Collaborations with NIST Employees.** All applications should include a description of any work proposed to be performed by an entity other than the applicant, and the cost of such work should ordinarily be included in the budget. If an applicant proposes collaboration with NIST, the statement of work should include a statement of this intention, a description of the collaboration, and prominently identify the NIST employee(s) involved, if known. Any collaboration by a NIST employee must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the approval of the proposed collaboration. Any unapproved collaboration will be stricken from the application prior to the merit review. Any collaboration with an identified NIST employee that is approved by appropriate NIST management will not make an application more or less favorable in the competitive process.
- f. Use of Government-Owned Intellectual Property.** If the applicant anticipates using any Government-owned intellectual property to carry out the work proposed, the applicant should identify such intellectual property. This information will be used to ensure that no Federal employee involved in the development of the intellectual property will participate in the review process for that competition. In addition, if the applicant intends to use Government-owned intellectual property, the applicant must comply with all statutes and regulations governing the licensing of Federal government patents and inventions, described in 35 U.S.C. §§ 200-212, 37 C.F.R. Part 401, 2 C.F.R. § 200.315, and in Section C.03 of the [Department of Commerce Financial Assistance Standard Terms and Conditions](#) (November 20, 2020). Questions about these requirements may be directed to the Chief Counsel for NIST, (301) 975-2803, nistcounsel@nist.gov.
- Any use of government-owned intellectual property by an applicant is at the sole discretion of the Federal Government and will be negotiated on a case-by-case basis if a project is deemed meritorious. The applicant should indicate within the statement of work whether it already has a license to use such intellectual property or whether it intends to seek one.
- If any inventions made in whole or in part by a Federal employee arise in the course of an award made pursuant to this NOFO, the United States Government may retain its ownership rights in any such invention. Licensing or other disposition of the Federal Government's rights in such inventions will be determined solely by the Federal Government, and include the possibility of the Federal Government putting the intellectual property into the public domain.
- g. Applicant's Communication Technology Product Intellectual Property Rights.** Each applicant's communication technology product must be original, the work of the applicant, and must not infringe, misappropriate or otherwise violate any intellectual property rights, privacy rights, or any other rights of any person or entity. The applicant must disclose as part of the technical proposal if they are subject to any obligation to assign intellectual property rights to parties other than the applicant, if the applicant is licensing or, through any other legal instrument, utilizing intellectual property of another party.

h. Research Activities Involving Human Subjects, Human Tissue, Data or Recordings Involving Human Subjects Including Software Testing.

Any application that includes research activities involving human subjects, human tissue/cells, or data or recordings from or about human subjects, must satisfy the requirements of the Common Rule for the Protection of Human Subjects (“Common Rule”), codified for the Department of Commerce at 15 C.F.R. Part 27. Research activities involving human subjects that fall within one or more of the classes of vulnerable subjects found in 45 C.F.R. Part 46, Subparts B, C and D must satisfy the requirements of the applicable subpart(s). In addition, any such application that includes research activities on these subjects must be in compliance with all applicable statutory requirements imposed upon the Department of Health and Human Services (DHHS) and other Federal agencies, all regulations, policies and guidance adopted by DHHS, the Food and Drug Administration (FDA), and other Federal agencies on these topics, and all Executive Orders and Presidential statements of policy on applicable topics. (Regulatory Resources: <http://www.hhs.gov/ohrp/humansubjects/index.html> which includes links to FDA regulations, but may not include all applicable regulations and policies).

NIST uses the following Common Rule definitions for research and human subjects research:

Research: A systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activities.

Human Subject: A living individual about whom an investigator (whether professional or student) conducting research: (i) Obtains information or biospecimens through intervention or interaction with the individual, and uses, studies, or analyzes the information or biospecimens; or (ii) Obtains, uses, studies, analyzes, or generates identifiable private information or identifiable biospecimens.

- (1) *Intervention* includes both physical procedures by which information or biospecimens are gathered and manipulations of the subject or the subject's environment that are performed for research purposes.
- (2) *Interaction* includes communication or interpersonal contact between investigator and subject.
- (3) *Private information* includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and that the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or

may readily be ascertained by the investigator associated with the information) in order for obtaining the information to constitute research involving human subjects.

- (4) *Identifiable biospecimen* includes a biospecimen for which the identity of the subject is or may readily be ascertained by the investigator or associated with the biospecimen.

See 15 C.F.R. § 27.102 (Definitions).

(1) Requirement for Federalwide Assurance. If the application is accepted for [or awarded] funding, organizations that have an Institutional Review Board (IRB) are required to follow the procedures of their organization for approval of exempt and non-exempt research activities that involve human subjects. Both domestic and foreign organizations performing exempt research requiring limited IRB review or non-exempt research activities involving human subjects will be required to have protocols approved by a cognizant, active IRB currently registered with the Office for Human Research Protections (OHRP) within the DHHS that is linked to the engaged organizations. All engaged organizations must possess a currently valid Federalwide Assurance (FWA) on file from OHRP. Information regarding how to apply for an FWA and register an IRB with OHRP can be found at <http://www.hhs.gov/ohrp/assurances/index.html>. See 15 C.F.R. § 27.103. NIST relies only on OHRP-issued FWAs and IRB Registrations for both domestic and foreign organizations for NIST supported research involving human subjects. NIST will not issue its own FWAs or IRB Registrations for domestic or foreign organizations.

(2) Administrative Review. The NIST Research Protections Office (RPO) reserves the right to conduct an administrative review⁵ of all applications that potentially include research involving human subjects and were approved by an authorized non-NIST institutional entity (an IRB or entity analogous to the NIST RPO) under 15 C.F.R. § 27.112 (Review by Institution). If the NIST RPO determines that an application includes research activities that potentially involve human subjects, the applicant will be required to provide additional information to NIST for review and approval. The documents required for funded proposals are listed in each section below. Most documents will need to be produced during the proposal review process; however, the Grants Officer may allow final versions of certain required documents to be

⁵ Conducting an “administrative review” means that the NIST RPO will review and verify the performing institution’s determination for research not involving human subjects or exempt human subjects research. In addition, for exempt research requiring limited IRB review and non-exempt human subjects research, the NIST RPO will review and confirm that the research and performing institution(s) are in compliance with 15 C.F.R. Part 27, which means RPO will 1) confirm the engaged institution(s) possess, or are covered under a Federalwide Assurance, 2) review the research study documentation submitted to the IRB and verify the IRB’s determination of level of risk and approval of the study for compliance with 15 C.F.R. Part 27, 3) review and verify IRB-approved substantive changes to an approved research study before the changes are implemented, and 4) review and verify that the IRB conducts a continuing review at least annually, as appropriate.

produced at an appropriate designated time post-award. Research involving human subjects may not start until the NIST Grants Officer issues an award explicitly authorizing such research. In addition, all amendments, modifications, or changes to approved research and requests for continuing review and closure will be reviewed by the NIST RPO. Please note that the NIST IRB is unable to serve as the IRB for financial assistance recipients.

(3) Required documents for proposal review. All applications involving human subjects research must clearly indicate, by separable task, all research activities believed to be exempt or non-exempt research involving human subjects, the expected institution(s) where the research activities involving human subjects may be conducted, and the institution(s) expected to be engaged in the research activities.

(a) Not research determination. If an activity/task involves human subjects as defined in the Common Rule, but the applicant participant(s) indicates to NIST that the activity/task is not research as defined in the Common Rule, the following information may be requested for that activity/task:

- (i) Justification, including the rationale for the determination and such additional documentation as may be deemed necessary by NIST to review and/or support a determination that the activity/task in the application is not research as defined in the Common Rule.
- (ii) If the applicant participant(s) used a cognizant IRB that provided a determination that the activity/task is not research, a copy of that determination documentation must be provided to NIST. The applicant participant(s) is not required to establish a relationship with a cognizant IRB if they do not have one.

NIST will review the information submitted and may coordinate further with the applicant before determining whether the activity/task will be defined as research under the Common Rule in the applicable NIST financial assistance program or project.

(b) Research not involving human subjects. If an activity/task is determined to be research and involves human subjects, but is determined to be *not human subjects research* (or *research not involving human subjects*) under the Common Rule, the following information may be requested for that activity/task:

- (i) Justification, including the rationale for the determination and such additional documentation as may be deemed necessary by NIST to review and/or support a determination that the activity/task in the application is not research as defined in the Common Rule.
- (ii) If the applicant participant(s) used a cognizant IRB that provided a determination that the activity/task is research not involving human subjects, a copy of that determination documentation must be provided to NIST. The applicant participant(s) is not required to establish a relationship with a cognizant IRB if

2020-NIST-PSIAP-TABA-01

Amendment 3

June 21, 2022

they do not have one.

(c) Exempt research determination with no IRB. If the application appears to NIST to include exempt research activities that do not meet the criteria for requiring a limited IRB review, and the performer of the activity or the supplier and/or the receiver of the information or biospecimens from human subjects **does not** have a cognizant IRB to provide an exemption determination, the following information may be requested during the review process so that NIST can evaluate whether an exemption under the Common Rule applies (see 15 C.F.R. § 27.104(b) and (d)):

- (i) The name(s) of the institution(s) where the exempt research will be conducted.
- (ii) The name(s) of the institution(s) providing the biospecimens or information from human subjects.
- (iii) A copy of the protocol for the research to be conducted; and/or the biospecimens or information from human subjects to be collected/provided, not pre-existing samples (*i.e.*, will proposed research collect only information without personal identifiable information, will biospecimens or information be de-identified and when and by whom was the de-identification performed, how were the materials or data originally collected).
- (iv) For pre-existing biospecimens or information from human subjects, provide copies of the consent forms used for collection and a description of how the biospecimens or information were originally collected and stripped of personal identifiers. If copies of consent forms are not available, explain.
- (v) Any additional clarifying documentation that NIST may deem necessary in order to make a determination whether the activity/task or use of biospecimens or information from human subjects is exempt under the Common Rule.

(d) Research review with an IRB. If the application appears to NIST to include research activities (exempt or non-exempt) involving human subjects, the proposed performer of the activity must have a relationship with a cognizant IRB registered with OHRP, and linked to their Federalwide Assurance. The following information may be requested during the review process:

- (i) The name(s) of the institution(s) where the research will be conducted.
- (ii) The name(s) and institution(s) of the cognizant IRB(s), and the IRB registration number(s).
- (iii) The FWA number of the applicant linked to the cognizant IRB(s).
- (iv) The FWAs associated with all organizations engaged in the planned research activity/task, linked to the cognizant IRB.
- (v) If the IRB review(s) is pending, the estimated start date for research involving human subjects.

- (vi) The IRB approval date (if currently approved for exempt or non-exempt research).
- (vii) If any of the engaged organizations has applied for or will apply for an FWA or IRB registration, those details should be clearly provided for each engaged organization.

If the application includes research activities involving human subjects to be performed in the first year of an award, additional documentation may be requested by NIST during pre-award review for those performers, and may include the following for those research activities:

- (i) A copy of each applicable final IRB-approved protocol.
- (ii) A signed and dated approval letter from the cognizant IRB(s) that includes the name of the institution housing each applicable IRB, provides the start and end dates for the approval of the research activities, and any IRB-required interim reporting or continuing review requirements.
- (iii) A copy of any IRB-required application information, such as documentation of approval of special clearances (*i.e.*, biohazard, HIPAA, etc.) conflict-of-interest letters, or special training requirements.
- (iv) A brief description of which portions of the IRB submitted protocol are specifically included in the application submitted to NIST, if the protocol includes tasks not included in the application, or if the protocol is supported by multiple funding sources. For protocols with multiple funding sources, NIST will not approve the study without a non-duplication-of-funding letter indicating that no other federal funds will be used to support the tasks proposed under the proposed research or ongoing project.
- (v) If a new protocol will only be submitted to an IRB if an award from NIST is issued, a draft of the proposed protocol.
- (vi) Any additional clarifying documentation that NIST may request during the review process to perform the NIST administrative review of research involving human subjects. (See 15 C.F.R. § 27.112 (Review by Institution)).

This clause reflects the existing NIST policy and requirements for Research Involving Human Subjects. Should the policy be revised prior to award, a clause reflecting the policy current at time of award may be incorporated into the award.

If the policy is revised after award, a clause reflecting the updated policy may be incorporated into the award.

For more information regarding research projects involving human subjects, contact Anne Andrews, Director, NIST Research Protections Office (e-mail: anne.andrews@nist.gov; phone: (301) 975-5445).

i. Research Activities Involving Live Vertebrate Animals or Pre-Existing Cell Lines/Tissues From Vertebrate Animals.

Any application that proposes research activities involving live vertebrate animals that are to be cared for, euthanized, or used by award recipients to accomplish research goals, teaching, or testing must meet the requirements of the Animal Welfare Act (AWA) (7 U.S.C. § 2131 et seq.), and the AWA final rules (9 C.F.R. Parts 1, 2, and 3), and if appropriate, the Good Laboratory Practice for Nonclinical Laboratory Studies (21 C.F.R. Part 58). In addition, such research activities should be in compliance with the “*U.S. Government Principles for Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training*” (Principles). The Principles and guidance on these Principles are available in the National Research Council's “Guide for the Care and Use of Laboratory Animals,” which can be obtained from National Academy Press, 500 5th Street, N.W., Department 285, Washington, DC 20055, or as a free PDF online at <http://www.nap.edu/catalog/12910/guide-for-the-care-and-use-of-laboratory-animals-eighth>.

(1) Administrative Review. NIST reserves the right to conduct an administrative review⁶ of all applications that potentially include research activities that involve live vertebrate animals, or custom samples from, or field studies with live vertebrate animals. If the application includes research activities, field studies, or custom samples involving live vertebrate animals, the applicant will be required to provide additional information for review and approval. In addition, NIST will verify the applicant's determination(s) of excluded samples from vertebrate animals. The documents required for funded proposals are listed in each section below. Some may be requested for a pre-review during the proposal review process; however, the Grants Officer may allow final versions of certain required documents to be produced at an appropriate designated time post-award. If an award is issued, no research activities involving live vertebrate animals shall be initiated or costs incurred for those activities under the award until the NIST Grants Officer issues written approval. In addition, all re-approvals, amendments, modifications, changes, annual reports and closure will be reviewed by NIST.

(2) Required documents for NIST proposal review. The applicant should clearly indicate in the application, by separable task, all research activities believed to include research involving

⁶ Conducting an “administrative review” means that the NIST RPO will review and verify the performing institution's IACUC's approval of research with live vertebrate animals and confirm that the research and performing institution(s) have an appropriate assurance and are in compliance with applicable regulations. RPO will 1) confirm the engaged institution(s) possess, or are covered under an applicable assurance, 2) review the research study documentation submitted to the IACUC and verify the IACUC's determination of level of risk and approval of the study for compliance with applicable regulations, 3) review and verify IACUC-approved substantive changes to an approved research study before the changes are implemented, and 4) review and verify that the IACUC receives an annual report for the study and conducts an appropriate continuing review at least every three years.

live vertebrate animals and the institution(s) where the research activities involving live vertebrate animals may be conducted. In addition, the applicant should indicate any activity/task that involves an excluded or custom collection from vertebrate animals, or a field study with animals.

(a) Excluded Collections from Vertebrate Animals: The requirements for review and approval by an Institutional Animal Care and Use Committee (IACUC) do not apply to proposed research using preexisting images of animals or to research plans that do not include live animals. These regulations also do not apply to obtaining stock or pre-existing items from animal material suppliers (e.g., tissue banks), such as pre-existing cell lines and tissue samples, or from commercial food processors, where the vertebrate animal was euthanized for food purposes and not for the purpose of sample collection.

For pre-existing cell lines and tissue samples originating from vertebrate animals, NIST requires that the proposer provide documentation or the rationale for the determination that the cell line or tissue is pre-existing and not a custom collection from live vertebrate animals for an activity/task within the proposal. NIST may require additional documentation to review and/or support the determination that the cells and/or tissues from vertebrate animals are excluded from IACUC review.

(b) Custom Collections Harvested from Live Vertebrate Animals: NIST requires documentation for obtaining custom samples from live vertebrate animals from animal material suppliers and other organizations (i.e., universities, companies, and government laboratories, etc.). Custom samples include samples from animal material suppliers, such as when a catalog item indicates that the researcher is to specify the characteristics of the live vertebrate animal to be used, or how a sample is to be collected from the live vertebrate animal.

(c) Field Studies of Animals: Some field studies of animals may be exempt under the Animal Welfare Act from full review and approval by an animal care and use committee, as determined by each institution. Field study is defined as “... *a study conducted on free-living wild animals in their natural habitat...*”. 9 C.F.R. § 1.1. However, this term excludes any study that involves an invasive procedure or that harms or materially alters the behavior of an animal under study. Field studies, with or without invasive procedures, may also require obtaining appropriate federal or local government permits (marine mammals, endangered species, etc.). If the applicant’s institution requires review and approval by an animal care and use committee, NIST will require that documentation to be provided as described below.

(d) For custom collections or studies with live vertebrate animals that require review and approval by an animal care and use committee the following documentation is required:

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

- (i) **Requirement for Assurance.** An applicable assurance for the care and uses of the live vertebrate animal(s) to be used in the proposed research is required. NIST may request documentation to confirm an assurance, if adequate confirmation is not available through an assuring organization's website. The cognizant IACUC where the research activity is located may hold one or more assurances applicable to the research activity that are acceptable to NIST.

These four assurances are:

- (a) Animal Welfare Assurance from the Office of Laboratory Animal Welfare (OLAW) indicated by the OLAW assurance number, *i.e.*, A-1234;
- (b) USDA Animal Welfare Act certification indicated by the certification number, *i.e.*, 12-R-3456;
- (c) Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) indicated by providing the organization name accredited by AAALAC as listed in the AAALAC Directory of Accredited Organizations; and
- (d) Letter of Assurance of compliance with the Animal Welfare Act, the U.S. Government Principles, and National Marine Fisheries Service (NMFS) IACUC policy that is valid for five years and provided by a NMFS Regional IACUC for activities with marine mammals or sea turtles (NMFS Policy Directive 04-112).

- (ii) **Documentation of Research Review by an IACUC:** If the applicant's application appears to include research activities, field studies, or custom sample collections involving live vertebrate animals the following information regarding review by an applicable IACUC may be requested during the application review process:

- (a) The name(s) of the institution(s) where the research involving live vertebrate animals will be conducted and/or custom samples collected.
- (b) The assurance type and number, as applicable, for the cognizant Institutional Animal Care and Use Committee (IACUC) where the research activity is located. [For example: Animal Welfare Assurance from the Office of Laboratory Animal Welfare (OLAW) should be indicated by the OLAW assurance number, *i.e.* A-1234; an USDA Animal Welfare Act certification should be indicated by the certification number *i.e.* 12-R-3456; and an Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) should be indicated by AAALAC.]
- (c) The IACUC approval date for the Animal Study Protocol (ASP) (if currently approved).
- (d) If the review by the cognizant IACUC is pending, the estimated start date for research involving vertebrate animals.
- (e) If any assurances or IACUCs need to be obtained or established, that should be clearly stated.

2020-NIST-PSIAP-TABA-01

Amendment 3

June 21, 2022

- (f) If any special permits are required for field studies, those details should be clearly provided for each instance, or indicated as pending.

If the application includes research activities involving vertebrate animals to be performed in the first year of an award, additional documentation may be requested by NIST during pre-award review for those performers, and may include the following for those research activities, which may also include field studies, custom sample collections involving live vertebrate animals:

- (a) A copy of the IACUC approved ASP.
- (b) Documentation of the IACUC approval indicating the approval and expiration dates of the ASP.
- (c) If applicable, a non-duplication-of-funding letter if the ASP is funded from several sources.
- (d) If a new ASP will only be submitted to an IACUC if an award from NIST is issued, a draft of the proposed ASP may be requested.
- (e) Any additional clarifying documentation that NIST may request during review of applications to perform the NIST administrative review of research involving live vertebrate animals.

This clause reflects the existing NIST policy for Research Involving Live Vertebrate Animals. Should the policy be revised prior to award, a clause reflecting the policy current at time of award may be incorporated into the award.

If the policy is revised after award, a clause reflecting the updated policy may be incorporated into the award.

For more information regarding research projects involving live vertebrate animals, contact Linda Beth Schilling, Senior Analyst (e-mail: linda.schilling@nist.gov; phone: 301-975-2887).

j. Collaborations Making Use of Federal Facilities

All applications should include a description of any work proposed to be performed using Federal facilities.

If an applicant proposes use of NIST facilities, the statement of work should include a statement of this intention and a description of the facilities. Any use of NIST facilities must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the availability of the facilities and approval of the proposed usage. Any unapproved facility use will be stricken from the application prior to the merit review. Examples of some facilities that may be available for collaborations are listed on the following NIST Web site: <https://www.nist.gov/labs-major-programs/user-facilities>.

3. Reporting

2020-NIST-PSIAP-TABA-01
Amendment 3
June 21, 2022

a. Reporting Requirements. The following reporting requirements described in Sections A.01, Reporting Requirements, of the [Department of Commerce Financial Assistance Standard Terms and Conditions](#), apply to awards in this program:

(1) Financial Reports. Each award recipient will be required to submit an SF-425, Federal Financial Report on a quarterly basis for the periods ending March 31, June 30, September 30, and December 31 of each year. Reports will be due within 30 days after the end of the reporting period. A final financial report is due within 120 days after the end of the project period.

(2) Research Performance Progress Report (RPPR). Each award recipient will be required to submit a RPPR on a quarterly basis for the periods ending March 31, June 30, September 30, and December 31 of each year. Reports will be due within 30 days after the end of the reporting period. The RPPR shall conform to the requirements in 2 C.F.R. § 200.329 (<http://go.usa.gov/xkVgP>) and Department of Commerce Financial Assistance Standard Terms and Conditions, Section A.01.

A final RPPR shall be submitted within 120 days after the expiration date of the award, and publication citation information as well as links to publicly available data shall be submitted as soon as they become available.

If a recipient's Data Management Plan (DMP) has changed since their last submission of a technical progress report, the recipient must include their revised DMP in the next technical progress report following the revision to the DMP.

(3) Patent and Property Reports. From time to time, and in accordance with the Uniform Administrative Requirements (see Section VI.2. of this NOFO) and other terms and conditions governing the award, the recipient may need to submit property and patent reports.

(4) Recipient Integrity and Performance Matters. In accordance with section 872 of Public Law 110-417 (as amended; see 41 U.S.C. 2313), if the total value of a recipient's currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of an award made under this NOFO, then the recipient shall be subject to the requirements specified in Appendix XII to 2 C.F.R. Part 200, <http://go.usa.gov/cTBwC>, for maintaining the currency of information reported to SAM that is made available in FAPIIS about certain civil, criminal, or administrative proceedings involving the recipient.

b. Audit Requirements. The Department of Commerce Financial Assistance Standard Terms and Conditions, Section D.01.b.1., and 2 C.F.R. Part 200 Subpart F, adopted by the Department of Commerce through 2 C.F.R. § 1327.101, require any non-Federal entity (e.g., including non-profit institutions of higher education and non-profit organizations) that expends Federal awards of \$750,000 or more in the recipient's fiscal year to conduct a single or program-specific audit in accordance with the requirements set out in the Subpart. Additionally, unless otherwise specified in the terms and conditions of the award, entities that are not subject to Subpart F of 2 C.F.R. Part 200 (e.g., for-profit commercial entities) that expend \$750,000 or more in DOC funds during

2020-NIST-PSIAP-TABA-01

Amendment 3

June 21, 2022

their fiscal year must submit to the Grants Officer either: (i) a financial related audit of each DOC award or subaward in accordance with Generally Accepted Government Auditing Standards; or (ii) a project specific audit for each award or subaward in accordance with the requirements contained in 2 C.F.R. § 200.507. Applicants are reminded that NIST, the Department of Commerce Office of Inspector General, or another authorized Federal agency may conduct an audit of an award at any time.

- c. Federal Funding Accountability and Transparency Act of 2006.** In accordance with 2 C.F.R. Part 170, all recipients of a Federal award made on or after October 1, 2010, are required to comply with reporting requirements under the Federal Funding Accountability and Transparency Act of 2006 (Public Law No. 109-282). In general, all recipients are responsible for reporting sub-awards of \$25,000 or more. In addition, recipients that meet certain criteria are responsible for reporting executive compensation. Applicants must ensure they have the necessary processes and systems in place to comply with the reporting requirements should they receive funding. Also see the Federal Register notice published September 14, 2010, at 75 FR 55663 available here: <http://go.usa.gov/hKnQ>.

4. Award Management and Public Engagement

Publication and Technology Transfer. Each award recipient is expected to present the results of their work in appropriate professional literature and conferences in order to make the findings broadly available. Data supporting any findings or conclusions shall be made available in a manner consistent with the Data Management Plan. Award recipients are expected to fulfill their obligations consistent with Section C.03 Intellectual Property Rights of the Department of Commerce Financial Assistance Standard Terms and Conditions. See Section VI.2.f. of this NOFO.

VII. Federal Awarding Agency Contacts

Questions should be directed to the following:

Subject Area	Point of Contact
Programmatic and Technical Questions	E-mail: pscr@nist.gov with "Follow-on Funding for TABA and Demo" in subject line
Technical Assistance with Grants.gov Submissions	Grants.gov Phone: 800-518-4726 E-mail: support@grants.gov
Grant Rules and Regulations	Dean Iwasaki Phone: 301-975-8449 E-mail: dean.iwasaki@nist.gov

VIII. Other

1. Personal and Business Information

The applicant acknowledges and understands that information and data contained in applications for financial assistance, as well as information and data contained in financial, performance and other reports submitted by applicants, may be used by the Department of Commerce in conducting reviews and evaluations of its financial assistance programs. For this purpose, applicant information and data may be accessed, reviewed and evaluated by Department of Commerce employees, other Federal employees, and also by Federal agents and contractors, and/or by non-Federal personnel, all of whom enter into appropriate conflict of interest and confidentiality agreements covering the use of such information. As may be provided in the terms and conditions of a specific financial assistance award, applicants are expected to support program reviews and evaluations by submitting required financial and performance information and data in an accurate and timely manner, and by cooperating with Department of Commerce and external program evaluators. In accordance with 2 C.F.R. § 200.303(e), applicants are reminded that they must take reasonable measures to safeguard protected personally identifiable information and other confidential or sensitive personal or business information created or obtained in connection with a Department of Commerce financial assistance award.

In addition, Department of Commerce regulations implementing the Freedom of Information Act (FOIA), 5 U.S.C. Sec. 552, are found at 15 C.F.R. Part 4, Public Information. These regulations set forth rules for the Department regarding making requested materials, information, and records publicly available under the FOIA. Applications submitted in response to this Federal Funding Opportunity may be subject to requests for release under the Act. If an application contains information or data that the applicant deems to be confidential commercial information that should be exempt from disclosure under FOIA, that information should be identified, bracketed, and marked as Privileged, Confidential, Commercial or Financial Information. In accordance with 15 CFR § 4.9, the Department of Commerce will protect from disclosure confidential business information contained in financial assistance applications and other documentation provided by applicants to the extent permitted by law.

2. Public Website, and Frequently Asked Questions (FAQS)

NIST has a public website (<https://www.nist.gov/ctl/pscr/funding-opportunities/grants-and-cooperative-agreements>) that provides a “Frequently Asked Questions” page and other information pertaining to this Funding Opportunity. Any amendments to this NOFO will be announced through Grants.gov.

General questions about this opportunity including eligibility requirements, the review and selection process, and the general characteristics of a competitive application may be addressed by e-mail to pscr@nist.gov with ‘TAB A’ in the subject line. Questions submitted to NIST by e-mail may be posted on [pscr.gov](https://www.nist.gov/ctl/pscr). Discussions about specific project ideas will not be permitted and NIST staff will not critique or provide feedback on specific project ideas while they are being developed by an applicant at any time before the deadline for all applications.

2020-NIST-PSIAP-TAB A-01
Amendment 3
June 21, 2022