Solicitation Name: NIST SBIR Phase 1 Submission Date: 11:59 PM ET on December 22, 2023

Solicitation Number: 2024-NIST-SBIR-01 Last Updated: [Fill in]

Proposal Manager: [Fill in] Legend: Forms, Formatting

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc | Due Date | Status | |
|---------|--------------------------------|--|---|---------------------------|---------------------------------|----------|--------|--|
|---------|--------------------------------|--|---|---------------------------|---------------------------------|----------|--------|--|

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 16, the NIST SBIR Program is not covered by that Executive Order.

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

For 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, as well as in the NIST Grants Management Division SF-424 Research and Related (R&R) Application Package Guidance.

| Field 3. | Date Received Leave this field blank. This date will be assigned by the Federal agency. | | | |
|-----------|---|--|--|--|
| Field 7. | Applicant Information This information is for the Applicant Organization, not a specific individual. The small business concern is ALWAYS the applicant organization for an SBIR award. | | | |
| Field 9. | Name of Federal Agency Input the full name of the Federal Agency application is being transmitted to. Do not use abbreviations. | | | |
| Field 10. | Funding Opportunity Number Item 10 should list the NOFO number 2024-NIST-SBIR-01. | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|-----------|---|--|---|---------------------------|--------------------------------------|----------|--------|
| Field 11. | Descriptive Title of Applicant's Project Enter a brief descriptive title of the project. | | | | | | |
| Field 15. | Estimated Funding Enter the amount requested, or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines, as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses. | | | | | | |
| Field 16. | Executive Order 12372 Process The response to #16 should be 'no' – the NIST SBIR Program is not covered by that Executive Order. | | | | | | |
| Field 19. | Electronic Signature Certification For SF-424, Item 19, the list of certifications and assurances is contained in the SF-424B, which is item 3 in the list of Required Forms and Documents from the NOFO. | | | | | | |

2. Research and Related Budget (Total Fed + Non-Fed)

The budget 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 (not relevant to this competition);
- F. Other Direct Costs;
- G. Direct Costs (automatically generated);
- H. Indirect Costs;
- I. Total Direct and Indirect Costs (automatically generated);

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc | Due Date | Status |
|--|--|--|---|---------------------------|---------------------------------|--------------|--------|
| L. Budget N Instructions for Division SF-4 | sts and Fee (automatically generated); farrative and Justification document (item 8. below) should be attached or completing the Research & Related Budget (Total Fed + Non-Fed) for 24 Research and Related (R&R) Application Package Guidance. | | nd on Grants. | gov, as well a | s in the NIST (| Grants Manag | gement |
| A. Senior/ Key Person General Informatio n | Complete a separate block for each senior/key person associated with the project for the particular budget period from the applicant organization (or subaward organization). The first Senior/Key Person block must match the Principal Investigator reported in the SF 424 R&R Application Form. | | | | | | |
| B. Other Personn el | The Other Personnel section captures additional roles that are integral and directly related the project. Data is captured and requested at the project role level, and not the individual level for Other Personnel. Individuals accounted for in Section B may not be included in the applicant organization's indirect cost pool. | | | | | | |
| C. Equipm ent Descript | This section captures the applicant organization's request for funding for specific equipment. Per 2 CFR 200.33, Equipment is defined as tangible personal property having a useful life of more than one year and a per-unit acquisition cost of \$5,000 (or lesser value if established by the applicant organization). List each equipment item separately and provide justification in the Budget Narrative. All fields are required for each line item of equipment proposed. | | | | | | |
| D. Travel General Informa tion | This section captures the applicant organization's request for funding for travel related to executing the proposed project. All fields are required if requesting travel. | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|--|---|--|---|---------------------------|--------------------------------------|----------|--------|
| E. Particip ant/Trai nee Support Costs | This section captures the applicant organization's request for funding participant and/or trainee support costs. This section should only be completed if so, stated in the NOFO. Commonly utilized forms of participant/trainee support are included in items 1-4 on the form. The applicant organization may use the free form "Other" field for any support costs that do not fall within the pre-defined fields. | | | | | | |
| F. Other Direct Costs | This section captures the applicant organization's other direct costs associated with the execution of the proposed program. Refer to the NOFO for any restrictions or additional information for specific other direct cost line item categories. Each field is required for every line item under which funds are requested for the program. | | | | | | |
| G. Direct Costs | This section will automatically calculate all direct costs requested in Section A thru F. | | | | | | |
| H. Indirect Costs | Indirect Costs, commonly referred to as Facilities & Administrative Costs, are defined as costs incurred by the applicant organization that cannot otherwise be directly assigned or attributed to a specific project. Refer to the NOFO for any approved limitations regarding indirect cost rates for specific programs. For additional information on negotiating indirect cost rate agreements, or eligibility requirements of utilizing the de minimis rate, refer to the following: 2 CFR 200.414, Indirect F&A Costs 2 CFR 200 Appendix III, Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Institutions of Higher Education 2 CFR 200 Appendix IV, Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Nonprofit Organizations | | | | | | |

| Fie | eld # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|-----|---------------------------------|---|--|---|---------------------------|--------------------------------------|----------|--------|
| I. | Total Direct and Indirect Costs | This section will automatically calculate the sum of direct and indirect costs (Section G + Section H) for the proposed budget period. Applicant Organizations are encouraged to review the NOFO for any funding limitations. | | | | | | |
| J. | Fee | This section captures the fee associated with the proposed project. Refer to the NOFO for allowability and restrictions for Fee. | | | | | | |
| K. | Total Costs and Fee | This section will automatically calculate the sum of total direct and indirect costs and fee (Section I + Section J) for the proposed budget period. Refer to the NOFO for any funding limitations. | | | | | | |
| L. | Budget Justifica tion | The Budget Justification or Budget Narrative must be uploaded as an attachment. The Budget Narrative provides additional information requested in each budget category identified within the SF 424 R&R and any additional information the applicant organization wishes to include for consideration. Refer to the instructions above for those specific categories and line items requiring justification and further explanation or detail. The budget justification should include any significant increase or decrease between proposed budget periods. Refer to the NOFO for additional requirements of the budget justification. | | | | | | |
| | CD F11 | See below for instructions. | | | | | | |

3. CD-511, Certification Regarding Lobbying Form

Enter "2024-NIST-SBIR-01" in the Award Number Field. Enter the title of the application used in field 11 of the SF-424 (R&R), or an abbreviation of that title, in the Project Name field.

4. Research and Related Other Project Information

| Field # | RFP Requirement (Text Extract) | RFP Page, N Section, S Paragrap P | Proposal Volume/ Section, Page, Paragrap h | Notes Regarding Complianc e | Due Date | Status | |
|---------|--------------------------------|---|--|--------------------------------------|-----------------|--------|--|
|---------|--------------------------------|---|--|--------------------------------------|-----------------|--------|--|

Answer the highlighted questions and use this form to attach the Cover Sheet and Technical Proposal (item (7) below), the Indirect Cost Rate Agreement (item (9) below), the SBA Company Registry Form (item (10) below), the Data Management Plan (item (11) below), the Research & Related Personal Data form(s) (item 13 below), the Current and Pending Support Form (item (14) below), the Compliance with SBIR Program Requirements, Applicant Fraud Awareness Training (item (15) below), and Letters of Commitment (item (16) below). Instructions for completing the Research and Related Other Project Information can be found on Grants.gov, as well as in the NIST Grants Management Division SF-424 Research and Related (R&R) Application Package Guidance.

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".

There are no separate documents required for field 9, "Bibliography & References Cited'; or for field 10, "Facilities & Other Resources;" or for field 11, "Equipment". Any details relating to these topics should be included in other documents and forms, if and as specified in this NOFO.

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

If applicable, complete the form bearing all information related to lobbying activities conducted by the small business concern.

6. Technical Content (Cover Sheet and Technical Proposal)

The Technical Proposal, both the Cover Sheet and Technical Content, is limited to 15 pages. The only exception to the 15-page limit is for applicants covered by the provision for Prior SBIR Phase II Awards (Section 3.02.02 (15)). Additional pages beyond the 15-page limit will not be considered in the evaluation process. Pages should be of standard size (8 1/2" x 11"; 21.6 cm x 27.9 cm) with margins of 2.5 cm and type at least 10-point font. All units of measurement should be presented in metric units.

The Technical Proposal portion of the application requires the following:

- (a) Cover Sheet (3.02.01) pages 1 and 2, and
- (b) Technical Content (3.02.02) pages 3 through 15.

The listing of all forms and documents needed to complete the application is given in Section 8.01 of this NOFO. The additional required forms and documents in Section 8.01 are not included in the 15-page count.

See Section 6.0 for information on the submission of applications in response to this NOFO.

Cover Sheet

A completed Cover Sheet (see Appendix A of the NOFO) is a required part of the Technical Proposal. The Cover Sheet is counted as pages 1 and 2 of the Technical Proposal.

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|------------------------------|--|--|---|---------------------------|--------------------------------------|----------------|----------|
| applicants n strengthen g | ant checks 'Yes' on #11, the applicant's contact information will be proving be contacted by your local MEP Center to explore a wide range of serrowth and competitiveness in the global marketplace for small and medianenefit the applicant's proposed project. | vices and init | iatives to help | o identify pote | ential opportuni | ties to accele | rate and |
| | The applicant must provide in the space available on the Cover Sheet an abstract (limited to 200 words) and summary of potential commercial application of the research results (limited to 100 words). | | | | | | |
| Technical | , , , , , , , , , , , , , , , , , , , | | | | | | |
| Abstract | Each applicant's abstract and summary of potential commercial applications will be provided to the SBA and should not contain proprietary information. Each awardee's abstract and summary of potential commercial applications will be published on the NIST | | | | | | |
| T 1 : 10 | SBIR website and www.sbir.gov. | | | | | | |
| | ontent (Technical Proposal) n page 3 of the Technical Proposal, include the following items with hea | dinas as shaw | n | | | | |
| Deginining (| The first paragraph of the proposal must describe a research project | unigs as snow | 11. | | | | |
| (4) NHOTE | that addresses a current NIST technical program area falling within | | | | | | |
| (1) NIST | one of the research areas identified in Section 9.0 or utilizes a NIST- | | | | | | |
| Program Area or | patented technology available for licensing. a. Proposals addressing a commercialization opportunity | | | | | | |
| NIST- | related to a current NIST technical program area must cite a | | | | | | |
| Patented | current webpage (provide the full URL) available on the | | | | | | |
| Technology | external NIST website (http://www.nist.gov). Simply | | | | | | |
| Available | providing a research area from Section 9.0 is not sufficient. | | | | | | |
| for | Applicants may not cite webpages describing NIST | | | | | | |
| Licensing | extramural activities or pages related to the NIST budget or | | | | | | |
| | appropriations. The NIST extramural programs are the Manufacturing Extension Program; the Baldridge | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc | Due Date | Status |
|---------|---|--|---|---------------------------|---------------------------------|----------|--------|
| | Performance Excellence Program; the Office of Advanced Manufacturing, AMTech; and Manufacturing USA. NIST is interested in receiving proposals that will lead to commercial products. While the proposals must align with a NIST program area, the end product does not need to mimic closely any particular NIST project found within a NIST program area. For example, the NIST Material Measurement Laboratory has an active technical program area for creating methods for determining fatigue and fracture of structural materials. A specific project in that program area could be developing methods for determining the effect of hydrogen embrittlement on the fatigue properties of steel. A proposal that aligns with the program area of (determining) fatigue and fracture of structural materials is sufficient; it does not need to apply directly to one of the specific projects listed within that program area. b. Proposals addressing a commercialization opportunity related to a NIST-patented technology that is available for licensing must cite the appropriate invention page from the Federal Laboratory Consortium (https://www.federallabs.org/labs/national-institute-of-standards-and-technology-nist-0) or cite a U.S. patent number, patent application number, or patent serial number for a NIST-owned patent. If information is needed regarding the availability of a particular NIST-owned patent for licensing, please contact Jacqueline Gray (jacqueline.gray@nist.gov) and include the patent identifying number in the communication, before submitting an application. | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|--|---|--|---|---------------------------|--------------------------------------|----------|--------|
| (2) Identificati on and Significanc e of the Problem or Opportunit y | Make a clear statement of the specific research problem or opportunity addressed, its innovativeness, commercial potential, and why it is important. | | | | | | |
| (3) Phase I Technical Objectives | State the specific objectives of the Phase I effort, including the technical questions it will try to answer, to determine the feasibility of the proposed approach. | | | | | | |
| (4) Phase I Work Plan | Include a detailed description of the Phase I feasibility research plan. The plan should indicate what will be done, where it will be done, and how the research will be carried out. The method(s) planned to achieve each objective or task should be discussed in detail. | | | | | | |
| (5) Related R/R&D | Describe significant R/R&D that is directly related to the application, including any conducted by the principal investigator or by the proposing SBC. Describe how it relates to the proposed effort and describe any planned coordination with outside sources. The applicant must persuade evaluators of his or her awareness of key, recent R/R&D conducted by others in the specific topic area. | | | | | | |
| (6) Key Individuals and Bibliograph y of Related Work | Identify key individuals involved in Phase I, including their related education, experience, and publications. Where vitae are extensive, summaries that focus on the most relevant experience and publications are desired and may be necessary to meet application size limitations. | | | | | | |
| (7) Relationshi p with | Discuss the significance of the Phase I effort in providing a foundation for the Phase II R/R&D effort. Also state the anticipated | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|--|---|--|---|---------------------------|--------------------------------------|----------|--------|
| Future R/R&D | results of the proposed approach if Phases I and II of the project are successful. | | | | | | |
| (8) Facilities and Equipment | A detailed description, availability, and location of instrumentation and physical facilities proposed for Phase I should be provided. | | | | | | |
| | The purpose of this section is to show that any third-party research assistance would materially benefit the proposed effort and that arrangements for such assistance are in place at time of application submission. | | | | | | |
| (9) Consultants , Contracts, and Subawards | For Phase I, a minimum of two-thirds of the research and/or analytical effort must be performed by the awardee. Outside involvement in the project is encouraged where it strengthens the conduct of the research. Outside involvement is not a requirement of this program and is limited to no more than one-third of the research and/or analytical effort in Phase I. The total cost for all consultant fees, facility leases, usage fees, and other subcontract/subaward or purchase agreements may not exceed one-third of the total award. No individual or entity may serve as consultant, contractor, or subrecipient if they have been the recipient of any NIST information | | | | | | |
| | related to the research area that is not generally available to the public. The applicant must also include Letters of Commitment from any participating consultants, subrecipients, or subcontractors. The Letters of Commitment are separate from the Technical Proposal and do not count against the page limit. See Section 8.01.16 of this NOFO. | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|--|---|--|---|---------------------------|--------------------------------------|----------|--------|
| (10) Potential Commercia I Application | A program goal is to provide opportunities for small businesses to convert research into technological innovation in the private sector. All proposed research should have some potential commercial outcome. Describe in detail the commercial potential of the proposed research, how commercialization would be pursued and potentially used by the private sector and/or the Federal Government. Include any optional letters of support and relevant supporting material such as references to journal articles, literature, or government publications. Provide any indicators of commercial potential and address the following: a) Market opportunity – Describe the current and anticipated target market, the size of the market, and include a brief profile of the potential customer(s). b) Technology and competition – Describe the competitive landscape, the value proposition and competitive advantage of the product or service enabled by the proposed innovation. Also include what critical milestones must be met to get the product or process to market and the resources required to address the business opportunity. c) Finances – Describe your strategy for financing the innovation beyond the SBIR award. Describe the existence of any outside, non-SBIR funding or partnering commitments including any Phase II funding commitments from private sector or non-SBIR funding sources and/or the existence of Phase III follow-on commitments for the subject research. d) Benefits - Describe the anticipated commercial benefits of the resulting product or service. e) Experience Describe your record of commercializing SBIR or other research. Include any additional indicators of the commercial potential of the idea. | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|--|--|--|--|---------------------------|--------------------------------------|----------|--------|
| (11) Cooperativ e Research and Developme nt Agreements (CRADA) | State if the applicant is a former or current CRADA partner with NIST, or with any other Federal agency, naming the agency, title of the CRADA, and any relationship with the proposed work. The statement of work of an SBIR award awarded under the NOFO cannot overlap with the statement of work of an existing CRADA with any federal agency, including NIST, with the awardee. NIST will consider whether there is any overlap on a case by case basis. | | | | | | |
| (12) Guest Researcher | State if the applicant or any of its consultants, contractors, or subrecipients or their employees is a domestic or foreign guest researcher at NIST (see http://www.nist.gov/tpo/collaborations/guestresearchers.cfm), naming the sponsoring laboratory. | | | | | | |
| (13) Cost Sharing | Cost sharing is not required and is not considered under an evaluation factor in consideration of Phase I applications. | | | | | | |
| (14) Similar Application s or Awards | WARNING While it is permissible to submit identical applications or applications containing a significant amount of essentially equivalent work for consideration under numerous Federal program funding announcements, it is unlawful to enter into a funding agreement requiring essentially equivalent work to an SBIR award (see 15 U.S.C. § 638(bb)(3)). If there is any question concerning this, it must be disclosed to the soliciting agency or agencies before award. If an application submitted in response to the NOFO is substantially the same as another application that has been funded, is now being funded, or is pending with another Federal Agency, the applicant must provide the following information: a) Names and addresses of agencies to which an application was submitted or from which an award was received. | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|--------------------------|---|--|---|---------------------------|--------------------------------------|----------|--------|
| | b) Date of application submission or date of award. Ditle number and date of NOFO(s) under which an application | | | | | | |
| | c) Title, number, and date of NOFO(s) under which an application was submitted or award received. | | | | | | |
| | d) Specific applicable research topic(s) for each application submitted or award received. | | | | | | |
| | e) Title of research projects for each application submitted or award received. | | | | | | |
| | f) Name and title of principal investigator or project manager for each application submitted or award received. | | | | | | |
| | If no equivalent application is under consideration or award for equivalent work received, a statement to that effect must be included | | | | | | |
| | in this section of the technical content area of the application. If the SBC has received more than 15 Phase II awards in the prior 5 | | | | | | |
| | fiscal years, the SBC must submit the following information in its | | | | | | |
| (15) Duian | Phase I application: name of the awarding agency; date of award; | | | | | | |
| (15) Prior SBIR Phase | funding agreement number; amount of award; topic or subtopic title; | | | | | | |
| II Awards | follow-on agreement amount; source and date of commitment; and | | | | | | |
| 11 /1// 11 11 11 | current commercialization status for each Phase II award. This | | | | | | |
| | required information will not be counted toward the 15-page | | | | | | |
| 7 D L () | Technical Proposal limitation. | | | | | | |

7. Budget Narrative and Justification

There is no set format for the Budget Narrative and Justification; however, the written justification should include the necessity and the basis for the cost, as described below. 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 <u>2 C.F.R.</u>

Part 200, which apply to awards in this program. If requested, include TABA funds (see Section 5.12) in the Budget Narrative and Justification.

The Budget Narrative and Justification must be attached to the Research & Related Budget (Total Fed + Non-Fed) and it **does not count against the 15-page limit** of the Technical Proposal.

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | |
|------------------------------|---|--|---|---------------------------|--------------------------------------|------------|----------|
| Information 1 | needed for each budget category is as follows (categories not listed are a | utomatically g | generated by t | he form or are | e not relevant to | this compe | cition): |
| (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., insurance, parking, etc.) should not be charged under another cost category. | | | | | | |
| (b) Other Personn el | 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) Equipm ent Descrip | 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 | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|------------------------------|--|--|---|---------------------------|--------------------------------------|----------|--------|
| | 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 (i.e. prorated cost). Applicants should provide at least two (2) quotes, if available, for equipment costing \$25,000 or more. If two (2) quotes are not available, please provide a statement as to why two (2) quotes are not available. | | | | | | |
| | 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. | | | | | | |
| (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 | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc | Due Date | Status |
|-----------------------|---|--|---|---------------------------|---------------------------------|----------|--------|
| | 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 | cannot otherwise be directly assigned or attributed to a specific project. For more details, see Section 8.01(9) of this NOFO. | | | | | | |
| (j) Fee | Profit or fee not to exceed 7% of the sum of the direct and indirect costs must be listed in this cost category if included in the proposed budget. | | | | | | |

8. Indirect Cost Rate Agreement

NIST will not negotiate indirect cost rates for Phase I awards. 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 a rate has not been established, provide a statement to this effect and a computation for the cost in the budget narrative. Applicants without an established rate may propose estimated indirect costs at a rate not to exceed 40 percent of the total direct costs and will not be required to provide further justification if selected for an award. Any profit or fee requested is not considered a direct cost for the purpose of the indirect cost base calculation.

9. SBA Company Registry Form

SBA maintains and manages a Company Registry at http://www.sbir.gov/registration to track ownership and affiliation requirements for all companies applying to the SBIR Program. The SBIR/STTR Policy Directive requires each Phase I applicant to register in the Company Registry prior to submitting an application. The applicant must save its information from the registration in a .pdf document. Attach this document to the Research and Related Other Project Information form as described in Section 8.02 of this NOFO.

10. Data Management Plan

Consistent with NIST Policy 5700.00¹, Managing Public Access to Results of Federally Funded Research, and NIST Order 5701.00², Managing Public Access to Results of Federally Funded Research, applicants proposing projects that include the conduct of research must include a Data Management Plan (DMP).



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

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status | |
|---------|--------------------------------|--|---|---------------------------|--------------------------------------|----------|--------|--|
|---------|--------------------------------|--|---|---------------------------|--------------------------------------|----------|--------|--|

All applications for activities that will generate scientific data using NIST funding are required to adhere to 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).

The DMP 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, including after the end of the award's period of performance; and a plan describing whether and how data generated by the identified activities will be reviewed and made available to the public.

A template for the DMP, an example DMP, and the rubric against which the DMP will be evaluated for sufficiency is available on NIST's Public Access to NIST Research <u>Information for Awardees</u> webpage. An applicant is not required to use the template as long as the DMP contains the required information.

If an application stands a reasonable chance of being funded and the DMP is determined during the review process to be insufficient, the program office may reach out to the applicant to resolve deficiencies in the DMP. If an award is issued prior to the deficiencies being fully rectified, the award will include a Specific Award Condition (SAC) stating that no research activities shall be initiated or costs incurred for those activities under the award until the NIST Grants Officer amends the award to indicate the SAC has been satisfied.

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

11. 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 and attaching 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."

12. Research & Related Personal Data

Answer the highlighted questions. Complete and print the form available at https://www.grants.gov/forms/r-r-family.html. Attach this document to the Research and Related Other Project Information form as described in Section 8.02 of this NOFO.

13. 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.

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|--|--|--|---|--------------------------------|--------------------------------------|------------------------------|--------------------------|
| co-PI and ke | nust complete the Current and Pending Support Form, using multiple for y personnel roles. A separate form should be used for each identified incomes download the Current and Pending Support Form from the NIST we esupport and reference the guidance provided as it contains information | lividual. ebsite at <u>https</u> | ://www.nist.g | ov/oaam/gra | nts-manageme | | |
| 14. Complia Complete the Research and | nce with SBIR Program Requirements, Applicant Fraud Awareness training at: https://www.nist.gov/file/384881 . After completion, print Related Other Project Information form as described in Section 8.02 in | s Training - (| Certificate of | Training Co | mpletion | ach this docu | ument to the |
| Letters must Commitment would positive and/or produ | of Commitment be submitted by all funded and unfunded entities that will have an active must address the level of participation, qualifications of the personnel vely impact their profession or community. Letters of Commitment must to be used in the project. Letters of Commitment must be signed by a semitment do not count against the specified page limits. | who will be ac t also specify a | tively involve any voluntary | ed, and how su committed co | ost-share, inclu | letion of this ding the spec | project ific services |
| | y Commercialization Report (CCR) F copy of the CCR which was completed in your account at Sbir.gov and Output Description: | d submit along | with your pro | oposal (refer t | so Section 3.01. | 01 SBA Data | a Collection |
| Attachment | of Required Documents | | | | | | |
| | Items 8.01.1 through 8.01.4 above are part of the standard application package in Grants.gov and can be completed through the download application process. Item 8.01.5, 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 8.01.5, 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. | | | | | | |

| Field # | RFP Requirement (Text Extract) | RFP Page, Section, Paragrap h | Proposal Volume/ Section, Page, Paragrap h | Writing Assigned To | Notes Regarding Complianc e | Due Date | Status |
|---------|---|--|---|---------------------------|--------------------------------------|----------|--------|
| | Item 8.01.6, the Cover Sheet and Technical Proposal, should be attached to field 8 (Project Narrative) of the Research and Related Other Project Information form by clicking on "Add Attachment". Item 8.01.7, the Budget Narrative and Justification, should be attached to field L (Budget Justification) of the Research and Related Budget (Total Fed + Non-Fed) form by clicking on "Add Attachment". Items 8.01.8, the Indirect Cost Rate Agreement; 8.01.9, the SBA Company Registry Form; 8.01.10, the Data Management Plan; 8.01.12, the Research & Related Personal Data; 8.01.13, the Current and Pending Support Form; 8.01.14, the SBIR Applicant Fraud Awareness Training Certificate of Training Completion; 8.01.15, Letters of Commitment; and 8.01.16, Company Commercialization Report (CCR), must be attached by clicking on "Add Attachments" found in item 12 (Other Attachments) of the Research and Related Other Project Information form. Item 8.01.11, 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. | | | | | | |