



SBIR



Small Business Innovation Research

Notice of Funding Opportunity (NOFO)

FY2025 Phase II

This NOFO is only open to those small business concerns that were awarded a SBIR Phase I Grant in response to the FY 2024 Phase I NOFO: NOAA-OAR-TPO-2024-2008184

Funding Opportunity Number:

NOAA-OAR-TPO-2025-0002

Assistance Listings or Catalog of Federal Domestic Assistance(CFDA) Number:

11.021 NOAA Small Business Innovation Research (SBIR) Program

Opening Date:

January 10, 2025

Closing Date:

March 14, 2025

**U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
<http://www.techpartnerships.noaa.gov>**

Table of Contents

US DEPARTMENT OF COMMERCE	3
1.0 PROGRAM DESCRIPTION AND FEDERAL AWARD INFORMATION	3
1.1 Introduction	3
1.2 Three-Phase Program	3
Phase I – Feasibility Research	4
Phase II – Research and Development	4
1.3 Manufacturing-Related Priority	4
1.4 Energy Efficiency and Renewable Energy Priority	5
1.5 SBIR Applicant Eligibility and Limitation	5
Applicant Qualification	5
Company Registry Requirements	6
Performance Benchmark Ratings Requirements	6
1.6 Contact with NOAA	7
1.7 Fraud, Waste and Abuse	7
1.8 Other Information	8
Personal and Business Information	8
2.0 CERTIFICATIONS	9
2.1 Funding Agreement Certifications	9
2.2 Research Activities Involving Human Subjects, Human Tissue, Data or Recordings Involving Human Subjects	9
Protection of Human Subjects	9
IRB Education Documentation	11
2.3 Research Project Involving Live Vertebrate Animals	11
3.0 APPLICATION PREPARATION INSTRUCTIONS AND REQUIREMENTS	12
3.1 Phase II Application Requirements	12
3.2 Phase II Application	13
Project Narrative	13
SBIR Cover Page and Project Abstract	13
Technical Content	14
Commercialization Plan	17
4.0 METHOD OF SELECTION AND EVALUATION CRITERIA	19
4.1 Evaluation and Selection Process	19
4.2 Phase II Screening Criteria	19
4.3 Phase II Evaluation Criteria	21
4.4 Phase II Award Selections	21
4.5 Federal Awarding Agency Review of Risk Posed By Applicants	22

4.6 Release of Application Review Information	22
5.0 CONSIDERATIONS	22
5.1 Awards	22
5.2 Reporting Requirements	23
5.3 Payment Schedule	23
5.4 Innovations, Inventions and Patents	24
5.4.1 Proprietary Information	24
5.4.2 Rights in Data Developed Under SBIR Funding Agreements	25
5.4.3 NOAA-Owned Inventions	29
5.4.4 Patent Rights	29
5.4.5 Invention Reporting	29
5.5 Cost Sharing	29
5.6 Profit or Fee	30
5.7 Joint Venture or Limited Partnerships	30
5.8 Research and Analytical Work	30
5.9 Awardee Commitments	30
5.10 Summary Statements	31
5.11 Additional Information	31
5.12 Technical Assistance for Application Preparation and Project Conduct	32
5.13 NOAA Grant Management Office Statements	32
6.0 SUBMISSION OF APPLICATIONS	41
6.1 Deadline for Applications	41
6.2 Application Submission	41
7.0 SCIENTIFIC AND TECHNICAL INFORMATION SOURCES	43
8.0 SUBMISSION FORMS AND CERTIFICATIONS	43
8.1 Required Application Forms and Documents	43
8.2 Verifying the Submission and Tracking the application	45
9.0 RESEARCH TOPICS	46
Appendix A. Definitions	47
Appendix B. SBIR Funding Agreement Certification (At Time of Award)	49
Appendix C. SBIR Funding Agreement Certification (Life-Cycle Certification)	52
Appendix D. Cover Page	54
Appendix E. Small Business Innovation Research (SBIR) Program Phase II Application Checklist	57
Helpful Hints	57
Are you eligible?	57
Are you registered?	57
Appendix F. Performance Benchmark Ratings Requirements	60

**US DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
FY 2025 SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM
NOTICE OF FUNDING OPPORTUNITY (NOFO)**

1.0 PROGRAM DESCRIPTION AND FEDERAL AWARD INFORMATION

1.1 Introduction

The Department of Commerce (DOC) National Oceanic and Atmospheric Administration (NOAA) invites small businesses to submit research proposals under this NOFO. The Small Business Innovation Research (SBIR) Program is not a substitute for existing unsolicited proposal mechanisms. Unsolicited proposals are not accepted under the SBIR program.

Only FY 2024 NOAA SBIR Phase I awardees under NOFO number NOAA-OAR-TPO-2024-2008184 with project start dates of August 1, 2024, and project end dates of no later than January 31, 2025, are eligible to submit a Phase II application in response to this NOFO.

The Small Business Innovation Research (SBIR) program was originally established in 1982 by the Small Business Innovation Development Act (P.L. 97-219), codified at 15 U.S.C. § 638. It was then expanded and extended by the Small Business Research and Development Enhancement Act of 1992 (P.L. 102-564) and received subsequent reauthorization and extensions, the most recent of which extends the SBIR program through 2025. (P.L. 117-183).

Each Federal agency with an extramural budget for Research/Research and Development (R/R&D) in excess of \$100,000,000 must participate in the SBIR program and spend (obligate) a minimum percentage of their extramural R/R&D budgets (obligations) of not less than 3.2% of such budget in fiscal year 2017 and for the percentage required by statute for each fiscal year after for awards to small business concerns (SBCs) for R/R&D under the SBIR program. The objectives of the SBIR program are to: stimulate technological innovation in the private sector; strengthen the role of small business in meeting Federal R&D needs; foster and encourage participation by businesses owned by socially and economically disadvantaged persons and women-owned SBCs in technological innovation; and increase private sector commercialization of innovations derived from federal R&D funding.

Fostering diversity by encouraging the participation of individuals from nationally underrepresented groups in the scientific research workforce is a longstanding interest of Congress, and a key component of NOAA's commitment to diversity, equity, inclusion, and accessibility (e.g., Public Law 114-329, American Innovation and Competitiveness Act of 2017, and <https://techpartnerships.noaa.gov/abouttpo/dei-statement/>). Increasing participation by socially and economically disadvantaged and women-owned small businesses is critical to the success of the SBIR program.

1.2 Three-Phase Program

The SBIR statute (15 U.S.C. § 638) requires the DOC to establish a three-phase SBIR program by reserving a

percentage of its extramural R&D budget to be awarded to SBCs R&D. SBIR policy is provided by the Small Business Administration (SBA) through the SBIR Policy Directive found at: <http://www.sbir.gov> and is incorporated here by reference. The NOAA-specific program authority will vary depending on the nature of the proposed project. A list of the most prevalent assistance authorities are 15 U.S.C. 1540; 16 U.S.C. 661 et seq.; 16 U.S.C. 1456c; 15 U.S.C. 2901 et. seq.; 33 U.S.C. 883a-d; 33 USC 893a; 33 U.S.C. 1442; and 49 U.S.C. 44720(b).

The NOAA SBIR program identifies and solicits proposals on topics that fall within NOAA's mission. NOAA has the unilateral right to select SBIR research topics and awardees in both Phase I and Phase II and award several or no grants under a given topic. All awards are subject to the availability of funds. NOAA is not responsible for any costs expended by the applicant in the development of the proposal and prior to award. Only proposals that are directly responsive to the topics described in NOAA-OAR-TPO-2024-2008184 will be considered.

Phase I – Feasibility Research

This NOFO does not request proposals for Phase I; however, a description of Phase I is provided here. The purpose of Phase I is to determine the scientific, technical, and commercial merit and feasibility of the proposed research and the quality of performance of the SBC receiving an award. The Phase I proposal should focus on research that will significantly contribute to evaluating the feasibility of the project, a prerequisite to further support in Phase II. Applicants are strongly encouraged to consider and discuss in their proposal, the commercial application and private sector potential for the proposed effort.

NOAA Phase I awards provide up to \$190,000 with up to a six (6) month period of performance. The number of awards is dependent on NOAA's budget. To accommodate the Phase II award process, no-cost extensions are not permitted in Phase I projects that intend to advance to Phase II. If an awardee requests a no-cost extension for the Phase I project, the awardee will be ineligible to submit an application for Phase II.

Phase II – Research and Development

This NOFO requests proposals for FY 2025 Phase II from FY 2024 Phase I NOAA SBIR awardees only. In Phase II, work from Phase I that exhibits potential for commercial application is further developed. Phase II is the R&D or prototype development phase. While the number of awards is dependent on NOAA's budget, NOAA anticipates providing approximately 18 awards. To apply for a Phase II award, each Phase I awardee will be required to submit a comprehensive application outlining the proposed research and a detailed plan to commercialize the final product. NOAA Phase II awards provide up to \$690,000 with up to a twenty-four (24) month period of performance. For planning purposes, NOAA's goal is to make Phase II awards around August of fiscal year 2025.

Phase III - Commercialization

Under Phase III, the small business entity obtains funding from either the private sector, a non-SBIR Government source, or both, to commercialize the SBIR research or technology. SBIR Phase III includes work that derives from, extends, or completes an effort made under prior SBIR funding agreements but is funded by sources other than the SBIR Program.

1.3 Manufacturing-Related Priority

Executive Order (EO) 13329 "Encouraging Innovation in Manufacturing" requires SBIR agencies, to the extent permitted by law and in a manner consistent with the mission of that department or agency, to give high priority within the SBIR programs to manufacturing-related R&D. "Manufacturing-related" is defined as "relating to

manufacturing processes, equipment, and systems; or manufacturing workforce skills and protection.”

The NOAA SBIR Program solicits manufacturing-related projects through many of the topics described in this NOFO. Further, NOAA encourages innovation in manufacturing by giving high priority, where feasible, to projects that can help the manufacturing sector through technological innovation in a manner consistent with NOAA’s mission. This prioritization will not interfere with the core project selection criteria: scientific and technical merit and the potential for commercial success.

1.4 Energy Efficiency and Renewable Energy Priority

The Energy Independence and Security Act of 2007 (P.L. 110-140) directs SBIR Programs to give high priority to SBCs that participate in or conduct energy efficiency or renewable energy system R&D projects.

The NOAA SBIR Program solicits energy efficiency or renewable energy system R&D projects through many of the topics described in this NOFO. Further, NOAA encourages innovation in energy efficiency or renewable energy system R&D by giving high priority, where feasible, to projects that conduct energy efficiency or renewable energy system R&D through technological innovation in a manner consistent with NOAA’s mission. This prioritization will not interfere with the core project selection criteria: scientific and technical merit and the potential for commercial success.

1.5 SBIR Applicant Eligibility and Limitation

Applicant Qualifications

Each applicant must qualify as an SBC for R/R&D purposes, as defined in this section of the NOFO, at the time of the award and at any other time set forth in the SBA’s regulations at 13 CFR 121.701- 121.705. Each awardee, at the time of the award (but not at the time of the application), must submit a certification (See Appendix B) stating that it meets the size, ownership, and other requirements of the SBIR Program and at any other time set forth in SBA’s regulations at 13 CFR 121.701-121.705 in order to qualify for the award.

In addition, the primary employment of the principal investigator (PI) must be with the SBC at the time of the award and during the conduct of the proposed project. Primary employment means that at least 51% of the PI’s time is spent in the employ of the SBC. Primary employment with a SBC precludes full-time employment with another organization. Further, an SBC may only replace the principal investigator on an SBIR Phase II award if the NOAA Grants Officer provides prior written approval. Requests for a waiver of the requirement must be submitted in writing at the time of application submission. Only rare and unique circumstances will be considered for an exemption. The NOAA Grants Officer, in consultation with the SBIR Program Manager, must approve each exemption and its terms in writing.

For Phase II, a minimum of one-half of the research and/or analytical effort must be performed by the awardee. The total cost for all consultant fees, facility leases, usage fees, and other subcontract/subaward or purchase agreements may not exceed one-half of the total award.

Applicants (and any affiliated individuals) may not participate in the selection of any topic. Additionally, they may not participate in the review of proposals. All associated entities to applicants to this NOFO (including Guest Researchers, Cooperative Research and Development Agreement (CRADA) partners and others working with

NOAA) may only submit a proposal if they:

- Had no role in developing or reviewing the topic;
- Have not been the recipient of any information on the topic not available in the NOFO or by other public means; and
- Have not received any assistance from DOC in preparing the proposal for this specific NOFO (including any 'informal' reviews) prior to submission.

Each applicant will be required to provide certain information via www.sbir.gov as well as other information required by the SBIR Policy Directive (see Appendices V-VI), found at:

https://www.sbir.gov/sites/default/files/SBA%20SBIR_STTR_POLICY_DIRECTIVE_May2023.pdf. Each SBC applying for an award is required to update the appropriate information in SBIR.gov for any of its existing and prior SBIR awards.

Venture Capital Participation: NOAA elects not to use the authority that would allow venture capital operating companies (VCOs), hedge funds, or private equity firms to participate in the SBIR Program. Applications in which work would be performed by VCOs, hedge funds, or private equity firms will not be considered for award.

Company Registry Requirements

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. **Each Phase II applicant must register in the Company Registry prior to submitting an application. The applicant must save its information from the registration in a .pdf document and append this document to the SF-424 form as described at the end of Section 8.1 of this NOFO.** All applicants are required to report and/or update their registration information in the SBA Company Registry prior to each SBIR application submission or if any information changes prior to an award.

Performance Benchmark Ratings Requirements

Performance benchmark rating requirements are only applicable to Phase I; however, information is provided here for future reference. All Phase I applicants with a current SBA assessment of their *Phase I to Phase II Transition Rate* must, at the time of the application under this FY25 NOFO, have satisfied the requirements of that Performance Benchmark to be eligible for a new Phase I award. NOAA will automatically disqualify proposals from firms that are currently ineligible for Phase I awards as a result of failing to meet the benchmark rate at the last assessment. For additional information, see Appendix F.

1.6 Contact with NOAA

For general programmatic, electronic submission, or grants questions, please contact the appropriate individual:

Subject Area	Point of Contact
Programmatic Questions	The SBIR Team Email: noaa.sbir@noaa.gov Subject Line: NOAA-OAR-TPO-2025-0002

Electronic Application Submission through Grants.gov at: https://www.grants.gov/	Grants.gov Phone: 1-800-518-4726 Email: support@grants.gov
Grant Administrative Rules and Regulations	Raishan Adams Email: raishan.adams@noaa.gov

1.7 Fraud, Waste and Abuse

Prevention of Fraud, Waste, and Abuse is very important to the NOAA SBIR program. All applicants must complete the DOC OIG agency mandatory training and submit the certification of completion along with their application. The Fraud, Waste, and Abuse training can be found, under “Resources for Applicants” at: <https://techpartnerships.noaa.gov/wp-content/uploads/2022/02/DOC-SBIR-Mandatory-Training-Slides-and-Certification-Form.pdf> . Certification can be found at the end of the training module. All applicants must print, sign, and submit certification of completion as an attachment to their application (See Section 8.1).

As defined in the SBIR Policy Directive section 9(f), fraud includes any false representation about a material fact or any intentional deception designed to deprive the United States unlawfully of something of value or to secure from the United States a benefit, privilege, allowance, or consideration to which an individual or business is not entitled. Waste includes extravagant, careless, or needless expenditure of Government funds, or the consumption of Government property, that results from deficient practices, systems, controls, or decisions. Abuse includes any intentional or improper use of Government resources, such as misuse of rank, position, or authority or resources. Examples of fraud, waste, and abuse relating to the SBIR Program include, but are not limited to:

- i. misrepresentations or material, factual omissions to obtain, or otherwise receive funding under, an SBIR award;
- ii. misrepresentations of the use of funds expended, work done, results achieved, or compliance with program requirements under an SBIR award;
- iii. misuse or conversion of SBIR award funds, including any use of award funds while not in full compliance with SBIR Program requirements, or failure to pay taxes due on misused or converted SBIR award funds;
- iv. fabrication, falsification, or plagiarism in applying for, carrying out, or reporting results from an SBIR award;
- v. failure to comply with applicable federal costs principles governing an award;
- vi. extravagant, careless, or needless spending;
- vii. self-dealing, such as making a sub-award to an entity in which the PI has a financial interest;
- viii. acceptance by agency personnel of bribes or gifts in exchange for grant or contract awards or other conflicts of interest that prevents the Government from getting the best value; and
- ix. lack of monitoring, or follow-up if questions arise, by agency personnel to ensure that awardee meets all required eligibility requirements, provides all required certifications, performs in accordance with the terms and conditions of the award, and performs all work proposed in the application.

Report any allegations of fraud, waste and abuse using the online Department of Commerce Office of Inspector General Complaint Form, available at: <https://www.oig.doc.gov/Pages/Hotline.aspx> or send an e-mail to:

hotline@oig.doc.gov.

Note: Because the Internet is not secure, it is possible, though unlikely, that e-mail complaints may be read by persons other than your intended source. If you are concerned about this, you may choose to call or mail. Contact information for the Office of Inspector General is available at: <https://www.oig.doc.gov/contact/> .

Please do not include Personally Identifiable Information (PII) through the website or via email. PII is considered to be items containing Social Security numbers, dates of birth, credit card and passport numbers, or other personally identifying information that could adversely affect an individual. Web submissions and e-mails containing such information will be blocked by our system administrator and will not be processed by our Complaint Department. Should you desire to provide this information, please contact the Hotline by telephone at the numbers listed below:

Phone:	Toll Free 800-424-5197 In the DC metro area 202-482-2495 TTD Toll Free 855-860-6950 TTD in the DC metro area 202-482-5923
Mail:	Office of Inspector General Complaint Intake Unit, Mail Stop 7886 1401 Constitution Avenue, N.W. Washington, DC 20230
Fax:	855-569-9235

1.8 Other Information

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 DOC in conducting reviews and evaluations of its financial assistance programs. For this purpose, applicant information and data may be accessed, reviewed and evaluated by DOC 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 the DOC 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 DOC financial assistance award.

In addition, DOC 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 NOFO may be subject to requests for release under the Act. In the event that 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 DOC will protect from disclosure confidential business information contained in financial assistance applications and other documentation provided by applicants to the extent permitted by law.

2.0 CERTIFICATIONS

2.1 Funding Agreement Certifications

Awardees will be required to certify size, ownership, and other SBIR Program requirements at the time of award and during the funding agreement life cycle using the “SBIR Funding Agreement Certification (At Time of Award)” and the “SBIR Funding Agreement Certification (Life-Cycle Certification)”, which are provided in Appendix B and Appendix C of this NOFO, respectively. Awardees must submit Life-Cycle Certification both prior to receiving more than 50% of the total award amount and prior to final payment or disbursement to verify compliance with specific SBIR program requirements.

2.2 Research Activities Involving Human Subjects, Human Tissue, Data or Recordings Involving Human Subjects

Protection of Human Subjects

Any application that includes participation in research involving human subjects, human tissue/cells, data or recordings involving human subjects must meet the requirements of the Common Rule for the Protection of Human Subjects (“Common Rule”), codified for the DOC at 15 C.F.R. Part 27. In addition, any such proposal that includes research on these topics must be in compliance with any statutory requirements imposed upon the Department of Health and Human Services (DHHS) and other Federal agencies regarding these topics, all regulatory 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 these topics.

NOAA reserves the right to make an independent determination of whether an applicant’s research involves human subjects. If NOAA determines that your research project involves human subjects, you will be required to provide additional information for review and approval. If an award is issued, no research activities involving human subjects shall be initiated or costs incurred under the award until the NOAA Grants Officer issues written approval. Retroactive approvals are not permitted.

NOAA will accept applications that include research activities involving human subjects that have been or will be approved by an Institutional Review Board (IRB) currently registered with the Office for Human Research Protections (OHRP) within the DHHS and that will be performed by entities possessing a currently valid Federal wide Assurance (FWA) on file from OHRP that is appropriately linked to the cognizant IRB for the protocol. Information regarding how to apply for a FWA and register an IRB with OHRP can be found at: <http://www.hhs.gov/ohrp/assurances/index.html>.

Generally, NOAA does not fund research involving human subjects in foreign countries. NOAA will consider, however, the use of preexisting tissue, cells, or data from a foreign source on a limited basis if all of the following criteria are satisfied:

1. the scientific source is considered unique;
2. an equivalent source is unavailable within the United States;
3. an alternative approach is not scientifically of equivalent merit; and
4. the specific use qualifies for an exemption under the Common Rule.

Any award issued by NOAA is required to adhere to all Presidential policies, statutes, guidelines, and regulations

regarding the use of human embryonic stem cells. The DOC follows the National Institutes of Health (NIH) Guidelines by supporting and conducting research using only human embryonic stem cell lines that have been approved by NIH in accordance with the NIH Guidelines. Detailed information regarding NIH Guidelines for stem cells is located on the NIH Stem Cell Information website: <http://stemcells.nih.gov>. The DOC will not support or conduct any type of research that the NIH Guidelines prohibit NIH from funding. The DOC will review research using human embryonic stem cell lines that it supports and conducts in accordance with the Common Rule and NOAA implementing procedures, as appropriate.

Any request to support or conduct research using human embryonic stem cell lines not currently approved by the NIH, will require that the owner, deriver, or licensee of the human embryonic stem cell line apply for and receive approval of the registration of the cell line through the established NIH application procedures: http://hescregapp.od.nih.gov/NIH_Form_2890_Login.htm. Due to the timing, uncertainty associated with establishing an embryonic stem cell line in the NIH registry, the use of existing human embryonic stem cell lines in the NIH Embryonic Stem Cell Registry may be preferred by applicants or current award recipients. The NIH Embryonic Stem Cell Registry is located at: http://grants.nih.gov/stem_cells/registry/current.htm.

An applicant or current award recipient proposing to use a registered embryonic stem cell line will be required to document an executed agreement for access to the cell line with the provider of the cell line and acceptance of any established restrictions for use of the cell line, as may be noted in the NIH Embryonic Stem Cell Registry.

If the proposal includes exempt and/or non-exempt research activities involving human subjects the following information is required in the application:

1. The name(s) of the institution(s) where the research will be conducted;
2. The name(s) and institution(s) of the cognizant IRB(s), and the IRB registration number(s);
3. The FWA number of the applicant linked to the cognizant IRB(s);
4. The FWAs associated with all organizations engaged in the planned research activity linked to the cognizant IRB;
5. If the IRB review(s) is pending, the estimated start date for research involving human subjects;
6. The IRB approval date (if currently approved for exempt or non-exempt research);
7. If any FWAs or IRB registrations are being applied for, that should be clearly stated.

Additional documentation may be requested, as warranted, during review of the proposal, but may include the following for research activities involving human subjects that are planned in the first year of the award:

1. A signed (by the study principal investigator) copy of each applicable final IRB-approved protocol;
2. 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;
3. 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;
4. A brief description of what portions of the IRB submitted protocol are specifically included in the proposal submitted to NOAA, if the protocol includes tasks not applicable to the proposal, or if the protocol is supported by multiple funding sources. For protocols with multiple funding sources, NOAA 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;
5. If a new protocol will only be submitted to an IRB if an award from NOAA issued, a draft of the

- proposed protocol may be requested;
6. Any additional clarifying documentation that NOAA may request during review of proposals to perform the NOAA administrative review of research involving human subjects. (See 15 C.F.C. § 27.112 (Review by Institution)).

IRB Education Documentation

A signed and dated letter is required from the Organizational Official who is authorized to enter into commitments on behalf of the organization documenting that appropriate IRB education has been received by the Organizational Official, the IRB Coordinator or such person that coordinates the IRB documents and materials if such a person exists, the IRB Chairperson, all IRB members, and all key personnel associated with the application. The NOAA requirement of documentation of education is consistent with NIH notice OD-00-039 (June 5, 2000). Although NOAA will not endorse an educational curriculum, there are several curricula that are available to organizations and investigators that may be found at: <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-039.html>

2.3 Research Project Involving Live Vertebrate Animals

Any proposal that includes research involving live vertebrate animals must 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>. In addition, such proposals must meet the requirements of the Animal Welfare Act (AWA) (7 U.S.C. § 2131 et seq.), the AWA 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). These regulations do not apply to proposed research using pre-existing images of animals or to research plans that do not include live animals that are being cared for, euthanized, or used by the project participants to accomplish research goals, teaching, or testing. These regulations also do not apply to obtaining animal materials from commercial processors of animal products or to animal cell lines or tissues from tissue banks.

NOAA reserves the right to make an independent determination of whether your research involves live vertebrate animals. If NOAA determines that your research project involves live vertebrate animals, you will be required to provide additional information for review and approval. If an award is issued, no research activities involving live vertebrate animal subjects shall be initiated or costs incurred under the award until the NOAA Grants Officer issues written approval.

If the proposal includes research activities involving live vertebrate animals, the following information is required in the proposal:

1. The name(s) of the institution(s) where the animal research will be conducted;
2. 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; a 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];

3. The IACUC approval date (if currently approved);
4. If the review by the cognizant IACUC is pending, the estimated start date for research involving vertebrate animals;
5. If any assurances or IACUCs need to be obtained or established, that should be clearly stated.

Additional documentation will be requested, as warranted, during review of the proposal, but may include the following for research activities involving live vertebrate animals that are planned in the first year of the award:

1. A signed (by the Principal Investigator) copy of the IACUC approved Animal Study Proposal (ASP);
2. Documentation of the IACUC approval indicating the approval and expiration dates of the ASP; and
3. If applicable, a non-duplication-of-funding letter if the ASP is funded from several sources;
4. If a new ASP will only be submitted to an IACUC if an award from NOAA issued, a draft of the proposed ASP may be requested, and;
5. Any additional clarifying documentation that NOAA may request during review of proposals to perform the NOAA administrative review of research involving live vertebrate animals.

3.0 APPLICATION PREPARATION INSTRUCTIONS AND REQUIREMENTS

3.1 Phase II Application Requirements

Applicants should use the SBIR forms in Appendix D and E to ensure that eligibility requirements are met and that all required information is submitted, respectively.

A proposal must be self-contained and written with all the care and thoroughness of a scientific paper submitted for publication. It should indicate a thorough knowledge of the current status of research in the topic area addressed by the proposal. Each proposal should be checked carefully by the applicant to ensure inclusion of all essential material needed for a complete evaluation. The proposal will be peer-reviewed as a scientific paper. All units of measurement should be in the metric system.

The applicant must provide sufficient information to demonstrate that the proposed work represents a sound approach to the investigation of an important scientific or engineering innovation worthy of support. The proposal must not only be responsive to the specific NOAA program interests but also serve as the basis for technological innovation leading to new commercial products, processes, or services that benefit the public.

The proposal should be direct, concise, and informative. Promotional and other material not related to the project should be omitted. **Do not include hyperlinks to websites or other resources.**

Only FY 2025 Phase II applications may be submitted in response to this NOFO. Phase I applications are not being accepted at this time.

All applicants are required to provide information for SBA's database (www.sbir.gov). The following are examples of the data to be entered by applicants into the database:

- Any business concern or subsidiary established for the commercial application of a product or service for which an SBIR award is made;
- Revenue from the sale of new products or services resulting from the research conducted under each Phase II award;
- Additional investment from any source, other than Phase I or Phase II awards, to further the research

- and development conducted under each Phase II award;
- Updated information in the SBA database on sbir.gov for any prior award received by the SBC. The SBC may apportion sales or additional investment information relating to more than one Phase II award among those awards, if it notes the apportionment for each award; and
- All awardees are required to update appropriate information on the award in the database upon completion of the last program objective under the funding agreement and are requested to voluntarily update the information in the database annually thereafter for a minimum period of five years.

3.2 Phase II Application

The Project Narrative, including the Cover Page, Project Abstract, and Technical Content, is limited to 25 pages, including references cited. The only exception to the 25-page limit is for SBCs addressing the requirement related to prior SBIR Phase II Awards as listed in Section 3.3 (14). Additional pages beyond the 25-page limit will not be considered in the evaluation process. The Commercialization Plan is limited to 10 pages.

A complete application must include a **Project Narrative** and **Commercialization Plan** (described below) and all other forms and documents listed in Section 8.1 of this NOFO. 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, Arial or Times New Roman font. All units of measurement should be presented in metric units. The document should be converted into the Adobe Portable Document Format (PDF) prior to submission to NOAA.

Please review Section 8.1 for the entire list of required application forms and documents to submit as part of a complete application package.

Project Narrative

The Project Narrative portion of the application requires the following:

- SBIR Phase II Cover Page** pages 1 and 2 (Appendix D);
- Project Abstract** page 3; and
- Technical Content** pages 4 through 25.

SBIR Cover Page and Project Abstract

SBIR Cover Page

A completed SBIR Cover Page is a required part of the Project Narrative. The Cover Page is counted as pages 1 and 2 of the Project Narrative (Appendix D).

Project Abstract

Applicants will be required to include a one-page project summary of the proposed R/R&D including at least the following:

- (1) Name and complete address of SBC;
- (2) Name and title of Principal Investigator;
- (3) Participating Agency name, Program Solicitation number, and Program Solicitation topic;
- (4) Title of project;
- (5) Technical abstract; and
- (6) Summary of the anticipated results and implications of the approach and the potential commercial applications of the research.

The technical abstract and summary of anticipated results are limited to two hundred words each. Project abstracts will be provided to the SBA and should not contain proprietary information. Awardee's abstract and summary of potential commercial applications will be published on the NOAA SBIR website and SBIR.gov. The Project Abstract is counted as page 3 of the Project Narrative.

Technical Content

1. **Identification and Significance of the Problem or Opportunity.** Provide a clear statement of the specific research problem or opportunity addressed, its innovativeness, commercial potential, and explanation of importance. Explain how it applies to a relevant topic and fulfills the NOAA mission.
2. **Phase I Summary.** Summarize Phase I activities and key results and findings related to this application. The summary should demonstrate that the Phase I project was successful in achieving the objectives identified in the funded Phase I application. If any objectives were not achieved, please explain why. (Two pages maximum).
3. **Phase II Technical Objectives.** State the specific objectives of the Phase II research and development efforts.
4. **Phase II Work Plan.** Include a detailed description of the Phase II research and development 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 sufficient detail.
5. **Related Research or Research and Development (R/R&D).** Describe previous R/R&D that is directly related to the application, including any conducted by the PI or by the proposing SBC. Describe how the R/R&D relates to the proposed effort, and describe any planned coordination with outside sources. The applicant must persuade evaluators of their awareness of key, recent R/R&D conducted by others in the specific topic area.
6. **Key Individuals and Bibliography of Related Work.** Identify key individuals involved in Phase II, including their related education, experience, current and previous position titles and employers, 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. **Relationship with Future R/R&D.** Discuss the significance of the Phase I effort in providing a foundation for the Phase II R/R&D effort. Also state the anticipated results and products of the proposed approach if Phase II of the project is successful.
8. **Facilities and Equipment.** Provide a detailed description, availability, and location of instrumentation and physical facilities proposed for Phase II.
9. **Consultants, Contracts, and Sub-awards.** 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. It is important that these individuals be clearly identified as consultants, sub-awardees, or subcontractors. This should match and be reflected in the budget tables and budget narrative sections.

For Phase II, a minimum of one half 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 but is not a requirement of the program. The total cost for all consultant fees, facility leases, usage fees, and other subcontract/subaward or purchase agreements may not exceed half the total award.

No individual or entity may serve as consultant, contractor, or sub-recipient if they (a) had any role in suggesting, developing, or reviewing the NOAA topic; or (b) have been the recipient of any NOAA information on the topic not available to the public.

The following definitions apply to this NOFO:

- **Consultant** - A person outside the firm, named in the application as contributing to the research, must provide a signed statement confirming his/her availability, role in the project, and agreed consulting rate for participation in the project.
- **Contract** - Similarly, where a contract is involved in the research, the contractor institution must furnish a letter signed by an appropriate official describing the programmatic arrangements and confirming its agreed participation in the research, with its proposed budget for this participation.
- **Sub-awards** - As the funding instrument used in this program is financial assistance, an awardee might pass through funds to another organization to carry out part of the Federally-supported project. A "subaward" relationship fits the circumstances more appropriately than a contract to carry out part of the Federally-supported project. See 2 CFR §§ 200.1 (sub-award), 200.1 (sub-recipient), and 200.331 (Sub-recipient and contractor determinations), respectively.

The applicant **must also include Letters of Commitment from any participating consultants, subawards, or subcontractors** signed by an appropriate official of that institution describing the programmatic arrangements and confirming its agreed participation in the research, with its proposed budget and budget justification for this participation included as attachments as part of the application package.

10. **Cooperative Research and Development Agreements (CRADA).** State if the applicant is a current CRADA partner with NOAA, or with any other Federal agency, naming the agency, title of the CRADA, and any relationship with the proposed work. An Agency may NOT enter into, or continue, a CRADA with an awardee under this NOFO on the subtopic of the award.
11. **Guest Researcher.** State if the applicant or any of its consultants or subcontractors is a guest researcher at NOAA, naming the sponsoring laboratory.
12. **Cost Sharing.** Cost sharing is not required and is not considered during the evaluation process for Phase II applications. Cost sharing or matching funds are not to be included in the Research and Related Budget form. The amount and planned use of these funds can be described in the technical narrative.
13. **Technical and Business Assistance (TABA) Request for use of TABA:** 15 U.S.C. § 638(b) permits SBIR Phase II awardees to enter into agreements with one or more vendors for the vendor(s) to provide to the awardee Technical and Business Assistance (TABA). NOAA is able to fund TABA assistance to all NOAA SBIR Phase II grantees. Grant recipients have two options for receiving TABA assistance: (1) utilize

services provided by a NOAA vendor or (2) identify their own TABA assistance provider. This section of the proposal should describe whether an applicant intends to use NOAA vendor-provided TABA services or have identified their own TABA assistance provider.

- If you wish to receive TABA assistance from NOAA's vendor, you do not need to include this expense in your budget. If you are awarded a Phase II grant, you will receive notification from NOAA and follow-up contact from NOAA's TABA vendor on what services are available to you and how to obtain these services at no cost to your small business.
- If you wish to utilize your own TABA assistance provider, you are required to include this as "Other Direct Costs" in your budget, provide a detailed budget justification, and a signed letter of commitment from the provider. You may include up to \$50,000 for assistance. Please note that this commercialization assistance **does** count toward the maximum grant amount of \$690,000. Funding is limited to services received that comply with 15 U.S.C. § 638(b). TABA may be obtained from entities such as public or private organizations; including from an agency or other entity established or funded by a State that facilitates or accelerates the commercialization of technologies or assists in the creation and growth of private enterprises that are commercializing technology. Applicants acquire TABA services described above on their own. Small business applicants must include the request to exercise this authority from NOAA at the time of application and demonstrate in their SBIR Phase II proposal that the TABA vendor(s) or entity(ies) selected can provide the specific TABA services needed. In addition, costs must be included in the application. The TABA vendors/provider(s) may not be the small business applicant, an affiliate of the small business applicant, an investor of the small business applicant, or a subcontractor or consultant of the small business applicant otherwise required as part of the paid portion of the research effort (e.g., research partner or research institution).

14. **Similar Applications 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 Agency Program Solicitations, it is unlawful to enter into Funding Agreements requiring Essentially Equivalent Work (see 15 U.S.C. § 638(bb)(3)). 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 project narrative of the application.

If there is any question concerning this, it must be disclosed to the soliciting agency or agencies before award.

If an Applicant elects to submit identical proposals or proposals containing a significant amount of Essentially Equivalent Work under other Federal Agency Program Solicitations, a statement must be included in each such proposal indicating:

- i. The name and address of the Federal Agencies to which proposals were submitted or from which awards were received;
- ii. Date of proposal submission or date of award;
- iii. Title, number, and date of Program Solicitations under which proposals were submitted or awards received;
- iv. The specific applicable research topics for each proposal submitted or award received;
- v. Titles of research projects;
- vi. Name and title of Principal Investigator/Project Manager for each proposal submitted or award received

Commercialization Plan

The commercialization plan must be a separate document that provides information to NOAA regarding how the potential awardee will convert their research into commercial applications. The Commercialization Plan is limited to 10 pages.

A major objective of the SBIR program is to encourage high quality research that meets government and industry needs. Additionally, it requires a demonstration on the potential return to the Nation on its economic investment in R&D which includes new products, services, sales, investment, and job growth.

The commercialization plan should clearly demonstrate items such as, but not limited to:

- Economic impact and public benefit
- Number and record of past performance for SBIR and STTR awards
- Existence of outside non-SBIR funding or partnering commitments
- The presence of other relevant supporting material contained in the proposal that indicates the commercial potential of the idea

NOAA requires the submission of a brief Commercialization Plan indicating how the Phase II research results are to be carried out in Phase III with private (or non-SBIR) funding and other evidence of commercial potential.

The Commercialization Plan should provide information directly related to bringing to market the anticipated research results. It should include concise paragraphs on each of the following areas:

1. MARKET OPPORTUNITY

- a. Describe succinctly what product or service you are planning to deliver based on your innovation.
- b. What customer needs will be addressed with your product or service?
- c. Describe your target customer(s). Providing generally-known examples may be helpful.
- d. How does the target customer currently meet the need that you are addressing, or convincingly describe how there is a significant problem that is not yet being addressed?
- e. What is the business model you plan to adopt to generate revenue from your innovation?
- f. How do you plan to “exit” the investment?
- g. Is the target market domestic, international, or both?
- h. Describe the channels you would employ to reach the targeted customer?
- i. What is the current size of the broad market you plan to enter and the “niche” market opportunity you are addressing?
- j. What are the growth trends for the market and the key trends in the industry that you are planning to target?
- k. What are the barriers to enter your target markets?
- l. Describe the technology/development objectives and critical milestones that must be met to address the market opportunity.
- m. If there are potential societal, educational, or scientific benefits beyond commercial considerations, they should be included here and explained in sufficient detail to convey the significance of the effort.

2. COMPANY/TEAM

- a. Provide a short description of the origins of the company.
- b. What type of corporate structure is in place?
- c. What is the current capitalization?
- d. What is the current employee count?
- e. What is the revenue history for the past three years?
- f. What are the sources of operating capital or revenue: product sales, consulting/services, license revenues, R&D grants/contracts and others?
- g. Give a brief description of the experience and credentials of the personnel responsible for taking the innovation to market.
- h. What specific experience does the team lack and how will this be addressed during the Phase II effort and beyond?
- i. How does the background and experience of the team enhance the credibility of the commercialization plan; have they previously taken similar products/services to market?
- j. What additional resources do you have committed e.g., Board of Directors, Board of Advisors, Technical Advisors, Legal Counsel; provide details on names, affiliations and expertise of these resources?

3. PRODUCT/TECHNOLOGY AND COMPETITION

- a. What are the critical needs (“pain points”) that your product or service is fulfilling for your customer?
- b. What features of your technology will allow you to provide a compelling value proposition? How have you validated the significance of these features?
- c. What is your customer willing to pay for your product or service? How have you validated this assumption?
- d. What are your costs to produce the product or service? What are the assumptions that underlie your cost model(s)?
- e. How does your technology/innovation allow your team to compete and win in the marketplace?
- f. How does your product or service match up to that of the competition?
- g. What do you anticipate the competitive landscape to look like when you get to the market?
- h. Describe the intellectual property landscape.
- i. Do you have “freedom to operate?”
- j. How do you plan to protect the intellectual property associated with your technology?
- k. What other sources of intellectual property will you need to access in order to address the market opportunity described above?

4. FINANCE AND REVENUE MODEL

- a. Describe an appropriate staged finance plan given the market opportunity described above; enumerate the level of funding required for each stage along the path to commercialization.
- b. How will you access the appropriate funds? Provide specific contacts, leads, previous relationships and agreements already in place.
- c. What commitments do you have for follow-on funding?
- d. Describe the revenue streams (licensing, product sales or other) associated with your commercialization plan. What are the adoption rates?
- e. When do you anticipate “first revenues” from each stream?
- f. When do you expect to reach “break-even”?

- g. Provide annual pro-formas for the next five years (2 years of the Phase II effort + 3 years post Phase II). Income Statements are required. Cash Flow and Balance Sheets may be included if they are considered critical for your strategy. If not included, Cash Flow and Balance Sheets should be available upon request from NOAA.
- h. What are the assumptions made when developing your models? How have you validated these assumptions?

4.0 METHOD OF SELECTION AND EVALUATION CRITERIA

4.1 Evaluation and Selection Process

All applications will be independently evaluated on their own merit and ranked on a competitive basis. Applications will be evaluated based only on information provided in the application. Applications will be initially screened to determine responsiveness, eligibility, and completeness (see Section 4.2). NOAA reserves the right not to forward an application for technical review if NOAA determines the application has incomplete scientific and technical information or is missing any of the required forms and documents. Applications passing these initial screenings will be technically evaluated in accordance with the evaluation criteria (see Section 4.3). NOAA is under no obligation to fund any application or any specific number of applications in a given topic. NOAA may elect to fund several or none of the applications for the same topic. A proposal will be deemed unacceptable if it represents presently available technology.

4.2 Phase II Screening Criteria

Please carefully read the entire NOFO and review the following Phase II Screening Criteria to assure that your application meets NOAA requirements. Phase II applications that do not satisfy all the screening criteria will not be reviewed and will be eliminated from consideration for award. However, NOAA, in its sole discretion, may continue the review process for an application that is missing minor non-substantive information, the absence of which may easily be rectified.

The screening criteria are:

1. The proposing firm must qualify as a small business, in accordance with the definition of a Small Business Concern in Section 1.5.
2. The Phase II proposal must meet all of the requirements stated in Section 3 “APPLICATION PREPARATION INSTRUCTIONS AND REQUIREMENTS”.
3. The Phase II proposal must be limited to one topic, clearly address research for that topic, and directly relate to the applicant’s Phase I SBIR project in response to NOFO number NOAA-OAR- TPO- 2024-2008184.
4. Phase II proposal budgets must not exceed \$690,000.
5. The project duration for the Phase II research and development must not exceed twenty-four (24) months.
6. The proposing firm must carry out a minimum of half of expenditures under each Phase II project.
7. All work must be performed by the SBC and its subawardees/subcontractors in the United States, unless a waiver has been granted in advance by the NOAA Grants Officer, in consultation with the SBIR Program Manager (see Section 1.5).

8. The primary employment of the principal investigator (PI) must be with the SBC at the time of the award and during the conduct of the proposed project.
9. The application must be received by NOAA before the deadline specified in Section 6.1.
10. The proposing firm must qualify as eligible according to the criteria provided in Section 1.5.
11. If an application is submitted for a topic that requires a license to use a NOAA-owned invention covered by a patent or patent application, the relevant NOAA-owned invention must be available for licensing prior to the close of this NOFO in the field of use relevant to the topic. If such NOAA-owned invention has become unavailable for licensing prior to the close of this NOFO in the field of use relevant to the topic, NOAA has the sole discretion to deem such application ineligible under the topic.
12. The Phase II application must include all required forms and documents listed in Section 8.1:
 - a) Project Narrative (see section 3.2 for details)
 - b) Commercialization Plan (see section 3.2 for details)
 - c) SF-424, Application for Federal Assistance
 - d) SF424A, Budget Information – Non-Construction Programs
 - e) Budget Narrative – see Section 8.1
 - f) SF-424B, Assurances – Non Construction Programs
 - g) CD-511, Certification Regarding Lobbying
 - h) SF-LLL – Disclosure of Lobbying Activities (if applicable)
 - i) Indirect Cost Rate Agreement – see Section 8.1
 - j) SBA Company Registry Form – see Section 8.1
 - k) Research and Related Personal Data – see Section 8.1
 - l) Compliance with SBIR Program Requirements, Applicant Fraud Awareness Training – Certificate of Training Completion – see Section 8.1
 - m) Disclosure of Foreign Relationships – see Section 8.1

4.3 Phase II Evaluation Criteria

Phase II applications that comply with the screening criteria in Section 4.2 will go through the following review process. The applications will be evaluated by at least three NOAA and/or external reviewers via peer review in accordance with the following criteria:

1. The scientific merit and technical approach of the proposed research (40 points);
2. The level of innovation the proposed effort offers to the research topic area (20 points);
3. Consideration of an application's commercial and societal impacts and potential applications (20 points); and
4. Qualifications of the proposed principal/key investigators, supporting staff, and consultants and availability of instrumentation and physical facilities necessary to complete the proposed work (20 points).

Reviewers will base their evaluations only on information contained in the application. Do NOT include hyperlinks. Applicants should be specific and clear when writing their applications and not assume information not clearly spelled out can be inferred by the reviewer. No technical clarifications may be made after application submission. The Program Manager will average the scores of the reviewers and rank from highest to lowest. Based upon the distribution of scores, the Program Manager will determine the score above which applications will be considered "technically superior." Applications not rated as technically superior will not be considered further. A final ranking of the technically superior applications will be forwarded to the Selecting Official for final

consideration based on selection factors.

4.4 Phase II Award Selections

Final award recommendation decisions will be made by NOAA's Selecting Official based upon rankings assigned by the Program Manager and upon consideration of the following selection factors:

1. final ranking of technically superior applications;
2. diversity across the topics and project types;
3. diversity across participants;
 - geographically
 - by type of institutions
 - by type of partners
 - by researchers
4. applicants that have received fewer than 20 SBIR awards in the past;
5. applicants prior award performance;
6. possible duplication of other federally-funded research; and
7. availability of funding.

In the event of a "tie" between applications, manufacturing-related projects as well as those regarding energy efficiency and renewable energy systems will receive priority in the award selection process. Subsequent to the assessment and prior to award, NOAA may ask for supplemental information and may negotiate the scope and amount of the award. The final approval of selected applications and issuance of awards will be made by the NOAA Grants Officer. The award decisions of the NOAA Grants Officer are final.

As required by the SBIR Policy Directive, NOAA will notify the applicants whether they have been recommended for a potential award within 90 calendar days of the closing date of this NOFO. If selected for potential award and approved by the Grants Officer, the applicant can anticipate receiving an award within 180 calendar days of the closing date of the NOFO. The SBC applicant shall not proceed with work until an official award notification is received, the award is accepted, and at the effective start date of the award has been reached.

4.5 Federal Awarding Agency Review of Risk Posed By Applicants

After applications are proposed for funding by the selecting official, the NOAA Grants Management Division (GMD) performs administrative reviews, including an assessment of risk posed by the non-Federal entity under 2 C.F.R. 200.206. These may include assessments of the financial stability of a non-Federal entity and the quality of the non-Federal entity's management systems, history of performance, and the non-Federal entity's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities. Specific award conditions that address any risks determined to exist may be applied. Non-Federal entities may submit comments to the Federal Awardee Performance and Integrity Information System (FAPIIS) about any information included in the system about their organization for consideration by the awarding agency.

In addition, prior to making an award, NOAA 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, NOAA 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 NOAA Grants Officer will make a responsibility determination concerning whether the applicant is qualified to receive the subject award and, if so, whether appropriate special conditions that correspond to the degree of risk posed by the applicant should be applied to an award.

4.6 Release of Application Review Information

After final award decisions have been announced, the reviewers' technical/merit evaluations of applications that passed the screening criteria will be provided to the applicant with written notification of award/non-award. The identity of the reviewers will not be disclosed.

5.0 CONSIDERATIONS

5.1 Awards

The NOAA SBIR program uses a grant mechanism for all awards. Phase II awards generally shall be for no more than \$690,000. The proposed R&D activity period of performance in Phase II will depend upon the scope of the research but is typically 24 months.

For planning purposes, NOAA anticipates making awards with a period of performance start date of August 1, 2025. Please use this start date in your application and for your planning schedules. Historically it is anticipated that approximately 50-75% of the FY 2024 -Phase I awardees will receive follow-on Phase II awards, subject to the availability of funds. To provide for an in-depth review of the Phase II proposal and commercialization plan, Phase II awards will be made approximately five to six months after the completion of Phase I.

5.2 Reporting Requirements

Phase II awardees will be required to submit the Department of Commerce-required Research Performance Progress Report (RPPR, OMB Number: 0690-0032). The RPPR form can be found here:

<https://techpartnerships.noaa.gov/wp-content/uploads/2024/11/eRA-RPPR-Template.pdf>

Associated documentation regarding the RPPR can be found here:

[https://www.era.nih.gov/erahelp/Commons/Commons/rppr/rppr.htm?tocpath=Research%20Performance%20Progress%20Report%20\(RPPR\)%7C0](https://www.era.nih.gov/erahelp/Commons/Commons/rppr/rppr.htm?tocpath=Research%20Performance%20Progress%20Report%20(RPPR)%7C0)

Additionally, the NOAA SBIR Program Office will distribute a progress reporting guidance document once the awards are made, which will further explain the RPPR and specific requirements for reporting.

Phase II awardees will be required to submit semi-annual reports and one final report. The final report shall be comprehensive and discuss all the objectives or tasks, results, and conclusions based on the original proposal.

The acceptance of each progress report will be contingent upon appropriate alignment with the solicited and proposed milestones. Consideration will be given to changes from the solicited and proposed milestones if results from experimentation warrant a deviation from plan. Inclusion of proprietary information within the progress reports and final report may be necessary in order to effectively communicate progress and gain appropriate consultation from NOAA experts regarding next steps. All such proprietary information will be marked according to instructions provided in Section 5.4.1.

All final reports must carry an acknowledgement on the cover page such as: "This material is based upon work supported by the National Oceanic and Atmospheric Administration (NOAA) under grant number NAXXOARXXXXXXX. Any opinions, findings, conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of NOAA."

To help assess the effectiveness of our program in meeting programmatic and SBIR objectives, NOAA may periodically request information from small businesses about progress taken towards commercialization of the technology after the completion of Phase I and II awards.

5.3 Payment Schedule

A NOAA grant will include an award term with electronic payment system information. Pursuant to 2 C.F.R. § 200.305 awardees are to be paid in advance, provided they maintain or demonstrate the willingness to maintain written procedures that minimize the time elapsing between the transfer of funds and disbursement by the recipient and financial management systems that meet the standards for fund control and accountability as established in 2 C.F.R. § 200.302. Advances of funds to an awardee shall be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the awardee in carrying out the purpose of the approved program or project.

The DOC policy requires that in the usual case, awardees time advance payment requests so that Federal funds are on hand for a maximum of 30 calendar days before being disbursed by the awardee for eligible award costs.

Unless otherwise provided for in the award terms, payments from DOC to recipients under this award will be made using the Department of Treasury's Automated Standard Application for Payment (ASAP) system. Under the ASAP system, payments are made through preauthorized electronic funds transfers directly to the recipient's bank account, in accordance with the requirements of the Debt Collection Improvement Act of 1996. To receive payments under ASAP, recipients are required to enroll with the Department of Treasury, Financial Management Service, Regional Financial Centers, which allows them to use the on-line and Voice Response System (VRS) method of withdrawing funds from their ASAP established accounts.

5.4 Innovations, Inventions and Patents

5.4.1 Proprietary Information

Information contained in unsuccessful applications will remain the property of the SBC applicant. To the extent permitted by Federal law, funded proposals will not be made available to the public, except for the Project Abstract information, a required document submitted as an attachment. (See Section 3.2, Section 8.1(1b) for more information on the project abstract).

Applicants are discouraged from submitting proprietary information unless the information is deemed essential for proper evaluation of the application. If proprietary information is provided in an application, which constitutes a trade secret, proprietary commercial or financial information, confidential personal information or data affecting the national security, it will be treated in confidence, to the extent permitted by law. This information must be clearly marked by the applicant with the term “confidential proprietary information” and the following legend must appear on the title page of the proposal:

“This proposal contains information that shall not be disclosed outside the Federal Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this proposal, unless otherwise authorized by law. If an award is made to this applicant as a result of or in connection with the submission of this proposal, the Government shall have the right to duplicate, use, or disclose the proprietary information to the extent provided in the resulting award and pursuant to applicable law. This restriction does not limit the Government's right to use information contained in the proposal if it is obtained from another source without restriction. The information subject to this restriction is contained on pages ____ of this proposal.”

Any other legend may be unacceptable to the Government and may constitute grounds for removing the application from further consideration, without assuming any liability for inadvertent disclosure. The Government will limit dissemination of such information to within official channels. Information contained in unsuccessful proposals will remain the property of the applicant. The Government may, however, retain copies of all proposals. Public release of information in any proposal submitted will be subject to existing statutory and regulatory requirements. These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling.

Examples of laws that restrict the government to protect confidential/proprietary information about business operations and trade secrets possessed by any company or participant include: Freedom of Information Act (FOIA) – 5. U.S.C. § 552(b); Economic Espionage Act – 18 U.S.C. § 1832; and Trade Secrets Act – 18 U.S.C. § 1905.

In view of the above, applicants are cautioned that proposals are likely to be less competitive if significant details are omitted due to the applicant’s reluctance to reveal confidential/proprietary information.

5.4.2 Rights in Data Developed Under SBIR Funding Agreements

In lieu of the Department of Commerce Financial Assistance Standard Terms and Conditions (dated October 1, 2024, available at:

<https://www.commerce.gov/sites/default/files/2024-09/DOC%20Financial%20Assistance%20General%20Terms%20and%20Conditions%20as%20of%2001%20October%202024.pdf>

Section C.03, Intellectual Property Rights, the following terms and conditions will apply to and be included in all SBIR awards issued under this NOFO:

(a) Definitions. As used in regard to this NOFO and awards made pursuant to this NOFO:

“Computer database” or **“database”** means a collection of recorded information in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

“Computer software” (1) means: Computer Software. Computer programs, source code, source code listings, object code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the software to be reproduced, recreated, or re-compiled. (2) does not include computer databases or computer software documentation.

“Computer software documentation” means owner’s manuals, user’s manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software.

“Data” means all recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing or management information.

“Form, fit, and function data” means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability as well as data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements. For computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithms, processes, formulas, and flow charts of the software.

“Limited rights data” means data (other than computer software) developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged.

“Government Purpose” means any activity in which the United States Government is a party, including cooperative agreements with international or multinational defense organizations or sales or transfers by the United States Government to foreign governments or international organizations. Government Purposes include competitive procurement, but do not include the rights to use, modify, reproduce, release, perform, display, or disclose Technical Data or Computer Software for commercial purposes or authorize others to do so.

“Operations, Maintenance, Installation, or Training Purposes (OMIT) Data” Data that is necessary for operation, maintenance, installation, or training purposes (but not including detailed manufacturing or process data).

“Restricted computer software” means computer software developed at private expense and that is a trade secret; is commercial or financial and confidential or privileged; or is copyrighted computer software; including modifications of the computer software.

“SBIR data” means data first produced by an Awardee that is an SBC in performance of a small business innovation research award issued under the authority of 15 U.S.C. § 638, which data are not generally

known, and which data without obligation as to its confidentiality have not been made available to others by the Awardee or are not already available to the Government.

“SBIR rights” means the rights in SBIR data set forth in the SBIR Rights Notice of paragraph (d) of this clause.

“Technical data” means recorded information (regardless of the form or method of the recording) of a scientific or technical nature (including computer databases and computer software documentation). This term does not include computer software or financial, administrative, cost or pricing, or management data or other information incidental to contract administration. (See 41 U.S.C. § 403(8)). The term includes recorded Data of a scientific or technical nature that is included in Computer Databases.

“Unlimited rights” means the right of the Government to access, use, modify, prepare derivative works, reproduce, release, perform, display, disclose, or distribute Data in whole or in part, in any manner and for any purpose whatsoever, and to have or authorize others to do so.

(b) Allocation of rights.

(1) Except as provided in paragraph (c) section regarding copyright, the Government shall have unlimited rights in—

- i. Data specifically identified in this award as data to be delivered without restriction;
- ii. Form, fit, and function data delivered under this award;
- iii. Data delivered under this award (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this award; and
- iv. All other data delivered under this award unless provided otherwise for SBIR data in accordance with paragraph (d) of this clause or for limited rights data or restricted computer software in accordance with paragraph (f) of this clause.

(2) The Awardee shall have the right to—

- i. Assert copyright in data first produced in the performance of this award to the extent provided in paragraph (c)(1) of this clause;
- ii. Protect SBIR rights in SBIR data delivered under this award in the manner and to the extent provided in paragraph (d) of this clause;
- iii. Substantiate use of, add, or correct SBIR rights or copyright notices and to take other appropriate action, in accordance with paragraph (e) of this clause; and
- iv. Withhold from delivery those data that are limited rights data or restricted computer software to the extent provided in paragraph (f) of this clause.

(c) Copyright

(1) Data first produced in the performance of this award.

- i. Except as otherwise specifically provided in this award, the Awardee may assert copyright subsisting in any data first produced in the performance of this award.
- ii. When asserting copyright, the Awardee shall affix the applicable copyright notice of 17 U.S.C. § 401 or § 402 and an acknowledgment of Government sponsorship (including award number).
- iii. For data other than computer software, the Awardee grants to the Government, and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Awardee grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government.

(2) *Data not first produced in the performance of this award.* The Awardee shall not, without prior written permission of the Grants Officer, incorporate in data delivered under this award any data that are not first produced in the performance of this award unless the Awardee: (i) identifies such data; and (ii) grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause.

(3) *Removal of copyright notices.* The Government will not remove any copyright notices placed on data pursuant to this paragraph (c), and will include such notices on all reproductions of the data.

(d) Rights to SBIR data

- (1) The Awardee is authorized to affix the following “SBIR Rights Notice” to SBIR data delivered under this award and the Government will treat the data, subject to the provisions of paragraphs (e) and (f) of this clause, in accordance with such Notice:

SBIR Rights Notice

These SBIR data are furnished with SBIR rights under Award No. _____ (and contract or sub-award, if appropriate). For a period of twenty (20) years, unless extended, after acceptance of all items to be delivered under this award, the Government will use these data for Government purposes only, and they shall not be disclosed outside the Government (including disclosure for procurement purposes) during such period without permission of the Awardee, except that, subject to the foregoing use and disclosure prohibitions, these data may be disclosed for use by support contractors and/or sub-recipients. After the protection period, the Government has a paid-up license to use, and to authorize others to use on its behalf, these data for Government purposes, but is relieved of all disclosure prohibitions and assumes no liability for unauthorized use of these data by third parties, except that any such data that is also protected and referenced under a subsequent SBIR award shall remain protected through the protection period of that subsequent SBIR award. This Notice shall be affixed to any reproductions of these data, in whole or in part.

(End of notice)

- (2) The Government’s sole obligation with respect to any SBIR data shall be as set forth in the paragraph above (d(1)). The twenty-year period of protection applies for Phases I, II and III.

(e) Omitted or incorrect markings

- (1) Data delivered to the Government without any notice authorized by paragraph (d) of this clause shall be deemed to have been furnished with unlimited rights. The Government assumes no liability for the disclosure, use, or reproduction of such data.

If the unmarked data has not been disclosed without restriction outside the Government, the Awardee may request, within six months (or a longer time approved by the Grants Officer in writing for good cause shown) after delivery of the data, permission to have authorized notices placed on data at the Awardees' expense, and the Grants Officer may agree to do so if the Awardee—

- i. Identifies the data to which the omitted notice is to be applied;
- ii. Demonstrates that the omission of the notice was inadvertent;
- iii. Establishes that the use of the proposed notice is authorized; and
- iv. Acknowledges that the Government has no liability with respect to the disclosure or use of any such data made prior to the addition of the notice or resulting from the omission of the notice.

- (2) If the data has been marked with an incorrect notice the Grants Officer may—

- i. Permit correction, at the Awardee's expense, if the Awardee identifies the data and demonstrates that the correct notice is authorized, or
- ii. Correct any incorrect notices.

(f) *Protection of limited rights data and restricted computer software.* The Awardee may withhold from delivering qualifying limited rights data and restricted computer software that are not identified in paragraphs (b)(1)(i), (ii), and (iii) of this clause. As a condition to this withholding, the Awardee shall identify the data being withheld and furnish form, fit, and function data instead.

(g) *Contracting and Sub-awards.* The Awardee shall obtain from its contractors and sub-awardees all data and rights therein necessary to fulfill the Awardee's obligations to the Government under this award. If a contractor or sub-awardee refuses to accept terms affording the Government those rights, the Awardee shall promptly notify the Grants Officer of the refusal and not proceed with the contract or sub-award without further authorization in writing from the Grants Officer.

(h) *Relationship to patents.* Nothing contained in this subsection shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

5.4.3 NOAA-Owned Inventions

Awardees will not have any automatic rights to make, use or sell products or services incorporating NOAA-owned inventions, unless otherwise noted. For any SBIR award for a subtopic that requires a license to use a NOAA-owned invention covered by a patent or patent application, the SBIR awardee will be required to contact NOAA's Technology Partnerships Office for a patent license for research or for commercial use.

Such awardees will be granted a non-exclusive research license and will be given the opportunity to negotiate a non-exclusive or an exclusive commercialization license to the NOAA-owned invention, in accordance with the Federal patent licensing regulations, set forth in 37 C.F.R. Part 404, and to the extent that such NOAA-owned invention is available for licensing and has not otherwise been exclusively licensed to another party.

5.4.4 Patent Rights

Normally, SBCs may retain worldwide patent rights to any invention developed with Federal support. The specific requirements governing the development, reporting, and disposition of rights to inventions and patents resulting from Federal awards are described in more detail in 37 C.F.R. Part 401, which implements 35 U.S.C.

202 through 204 and includes standard patent rights clauses in 37 C.F.R. § 401.14, which will be incorporated by reference into all awards.

5.4.5 Invention Reporting

SBIR awardees must report inventions to the NOAA SBIR Program within two months of the inventor's report to the awardee. The reporting of patents and other patent obligations shall be completed in accordance with award agreement. Inventions must also be reported through the iEdison Invention Reporting System at:

www.iedison.gov.

5.5 Cost Sharing

Cost sharing is permitted for applications under this program NOFO; however, cost sharing is not required and will not be considered in evaluation of applications. Cost sharing or matching funds are not to be included in the Research and Related Budget form. The amount and planned use of these funds can be described in the technical narrative.

5.6 Profit or Fee

As specified in the SBIR Policy Directive, awarding agencies must provide for a reasonable fee or profit on SBIR funding agreements, consistent with normal profit margins provided to profit-making firms for R/R&D work. For this NOFO, a reasonable profit or fee not to exceed 7% of the sum of the direct and indirect costs is allowed. This profit is outlined as a separate "Other Cost" and should be added under the "Other" cost category on the budget (SF-424A) form and in the budget narrative. The profit or fee can be drawn in increments proportional to the drawdown of funds for direct and indirect costs. Utilizing profit fee is optional, if the applicant decides to opt-out from using the 7% fee this must be stated in the budget narrative under the Other costs category.

Example calculation of 7% fee:

- (1) *Direct Costs: \$460,614*
- (2) *Indirect Costs at 40%: \$184,246*
- (3) *Sum of Direct & Indirect Cost: \$644,860*
- (4) *7% fee on (3) \$45,140*
- (5) *Total Costs for the award: \$690,000*

5.7 Joint Venture or Limited Partnerships

See [13 C.F.R. § 121.103\(h\)](#). Joint ventures and limited partnerships are eligible, provided the entity created qualifies as a small business as defined in this NOFO. However, NOAA has elected to not permit awards to a small business concern that is majority-owned by a venture capital operating company(s), hedge funds(s), or private equity firm(s). The awardee may enter into contracts, sub-awards, or other agreements with universities or other non-profit organizations provided they still meet the requirements outlined in Section 1.5.

5.8 Research and Analytical Work

For Phase II, a minimum of one-half of the research and/or analytical effort, per Section 1.5, must be performed by the proposing SBC. The total cost for all consultant fees, facility leases, usage fees, and other subcontract/subaward or purchase agreements may not exceed one-half of the total award.

5.9 Awardee Commitments

Upon award of a funding agreement, the awardee will be required to review and accept the terms and conditions of the award, including making certain legal commitments through acceptance of numerous Specific Award Conditions (SAC) in the funding agreement. Awards also will be governed by the Administrative Standard Award Conditions for National Oceanic and Atmospheric Administration (NOAA) Financial Assistance Awards (February 18, 2021), Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, adopted by the Commerce Department through 2 C.F.R. § 1327.101; and the Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements, 79 FR 78390 (December 30, 2014).

Section 5.10 describes the types of terms and conditions to which the awardee would commit. This list is not a complete list of terms and conditions to be included in Phase II funding agreements and is not the specific wording of such terms and conditions.

5.10 Summary Statements

The following statements apply to Phase I and Phase II awards and are examples of some of the topic areas that will be addressed in the award terms and conditions.

1. Access to Records. Government officials have the right of timely and unrestricted access to records of awardees, including access to personnel for discussion related to the records. See 2 C.F.R. § 200.337, available at: <https://www.ecfr.gov/current/title-2/section-200.337>.
2. Termination. Awards may be terminated (a) by the NOAA Grants Officer, if an awardee materially fails to comply with the terms and conditions of an award, or for cause; (b) by the NOAA Grants Officer with the consent of the awardee, in which case the two parties shall agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated; (c) by the awardee upon sending to the NOAA Grants Officer written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. See 2 C.F.R. §§ 200.340 available at: <https://www.ecfr.gov/current/title-2/section-200.340>
3. Non-Discrimination. The awardee will be required to comply with statutory and other non-discrimination requirements. No person in the United States shall, on the ground of race, color, national origin, handicap, age, religion, or sex, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance. See Department of Commerce Financial Assistance Standard Terms and Conditions, available at <https://www.commerce.gov/sites/default/files/2024-09/DOC%20Financial%20Assistance%20General%20Terms%20and%20Conditions%20as%20of%2001%20October%202024.pdf>, Section G.02.
4. Audit Requirements. Government officials may conduct an audit of an award at any time. Unless otherwise specified in the award, for-profit organizations that expend \$750,000 or more in federal funds during their fiscal year must have an audit conducted for that year in accordance with the DOC Financial Assistance

Standard Terms and Conditions. See Department of Commerce Financial Assistance Standard Terms and Conditions, Section D.01(c).

5. **Codes of Conduct.** Codes of Conduct. Pursuant to the certification in Form SF- 424B, paragraph 3, the awardee must maintain written standards of conduct to establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain in the administration of the award. See Department of Commerce Financial Assistance Standard Terms and Conditions, Section F.

5.11 Additional Information

1. This Program Solicitation is intended for informational purposes and reflects current planning. If there is any inconsistency between the information contained herein and the terms of any resulting SBIR/STTR Funding Agreement, the terms of the Funding Agreement are controlling. Before award of an SBIR funding agreement, the Government may request the applicant to submit certain organizational, management, personnel, and financial information to assure responsibility of the applicant.
2. The Federal Government is not responsible for any monies expended by the Applicant before award of any Funding Agreement.
3. This program's NOFO is not an offer by the Government and does not obligate the Government to make any specific number of awards. Also, awards under the SBIR Program are contingent upon the availability of funds.
4. The SBIR Program is not a substitute for existing unsolicited application mechanisms. Unsolicited applications will not be accepted under the SBIR Program in either Phase I or Phase II.
5. If an award is made pursuant to an application submitted under this SBIR Program NOFO, a representative of the SBC will be required to certify that the concern has not previously been, nor is currently being, paid for essentially equivalent work by any Federal agency.
6. The responsibility for the performance of the principal investigator, and other employees or consultants who carry out the proposed work, including those of sub-recipients or contractors, lies with the management of the organization receiving an award.

5.12 Technical Assistance for Application Preparation and Project Conduct

Applicants may wish to contact the National Institute of Standards and Technology (NIST) Hollings Manufacturing Extension Partnership (MEP), a nationwide network of locally managed extension centers whose sole purpose is to provide small- and medium-sized manufacturers with the help they need to succeed. The centers provide guidance to high-technology companies seeking resources and teaming relationships. To be referred to an MEP center for technical assistance, call 1-800-MEP-4-MFG (1-800- 637-4634) or visit MEP's website at: <http://www.nist.gov/mep>.

MEP Centers are also prepared to provide referrals to state and local organizations offering resources and technical assistance to all NOAA SBIR applicants after awards have been announced.

5.13 NOAA Grant Management Office Statements

UNIQUE ENTITY IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT (SAM). Excerpt 2 CFR 200 Appendix I.D.3 Each applicant (unless the applicant is an individual or Federal awarding agency that is excepted from those requirements under 2 CFR 25.110(b) or (c), or has an exception approved by the Federal awarding agency under 2 CFR 25.110(d)) is required to: (i) Be registered in SAM before submitting its application; (ii) Provide a valid unique entity identifier (UEI) 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. NOAA may not make a Federal award to an applicant until the applicant has complied with all applicable UEI and SAM requirements and, if an applicant has not fully complied with the requirements by the time NOAA is ready to make a Federal award, NOAA 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.

PRE-AWARD COSTS. Per 2 CFR 200.458, NOAA authorizes award recipients to expend pre-award costs up to 90 days before the period of performance start date at the applicant's own risk without approval from NOAA and in accordance with the applicant's internal policies and procedures. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the Federal award. This does not include direct proposal costs (as defined at 2 CFR 200.460). In no event will NOAA or the Department of Commerce be responsible for direct proposal preparation costs. Pre-award costs will be a portion of, not in addition to, the approved total budget of the award. Pre-award costs expended more than 90 days prior to the period of performance start date require approval from the Grants Officer. This does not change the period of performance start date.

GRANTS OFFICER SIGNATURE. Proposals submitted in response to this solicitation are not considered awards until the Grants Officer has signed the grant or cooperative agreement. Only Grants Officers can bind the Government to the expenditure of funds. The Grants Officer's digital signature constitutes an obligation of funds by the federal government and formal approval of the award.

LIMITATION OF LIABILITY. Funding for programs listed in this notice is contingent upon the availability of funds. Applicants are hereby given notice that funds may not have been appropriated yet for the programs listed in this notice. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS. Through 2 C.F.R. § 1327.101, the Department of Commerce adopted Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, which applies to awards in this program. Refer to: <http://go.usa.gov/SBYh> and <http://go.usa.gov/SBg4>.

DEPARTMENT OF COMMERCE PRE-AWARD NOTIFICATION REQUIREMENTS FOR GRANTS AND COOPERATIVE AGREEMENTS. The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 30, 2014 (79 FR 78390) are applicable to this solicitation and may be accessed online at: <http://www.gpo.gov/fdsys/pkg/FR-2014-12-30/pdf/2014-30297.pdf>.

DEPARTMENT OF COMMERCE (DOC) GENERAL TERMS AND CONDITIONS. Successful applicants who accept a NOAA award under this solicitation will be bound by the DOC Financial Assistance General Terms and Conditions. This document will be provided in the award package in NOAA's eRA system at: <https://www.commerce.gov/oam/policy/financial-assistance-policy>

RESEARCH TERMS AND CONDITIONS. For awards designated on the CD-450 as Research, the Commerce Terms, and the Federal-wide Research Terms and Conditions (Research Terms) as implemented by the Department of Commerce, currently, at: <https://www.nsf.gov/awards/managing/rtc.jsp>, both apply to the award. The Commerce Terms and the Research Terms are generally intended to harmonize with each other; however, where the Commerce Terms and the Research Terms differ in a Research award, the Research Terms prevail, unless otherwise indicated in a specific award condition.

BUREAU TERMS AND CONDITIONS. Successful applicants who accept an award under this solicitation will be bound by bureau-specific standard terms and conditions. These terms and conditions will be provided in the award package in NOAA's eRA system. For NOAA awards only, the Administrative Standard Award Conditions for National Oceanic and Atmospheric Administration (NOAA) Financial Assistance Awards U.S. Department of Commerce are applicable to this solicitation and may be accessed online at: <https://www.noaa.gov/organization/acquisition-grants/financial-assistance>.

HUMAN SUBJECTS RESEARCH. For research projects involving Human Subjects, an Institutional Review Board (IRB) approval or an exemption determination will be required in accordance with DOC Financial Assistance Standard Terms and Conditions "Research Involving Human Subjects" found at: <https://www.commerce.gov/oam/policy/grants-policy/doc-grants-and-cooperative-agreement-regulations>. (See 15 CFR Part 27)

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA). NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals which are seeking NOAA federal funding opportunities. Detailed information on NOAA compliance with NEPA can be found at the following NOAA NEPA website: <http://www.nepa.noaa.gov/>, including our NOAA Administrative Order 216-6 for NEPA, http://www.nepa.noaa.gov/NAO216_6.pdf, and the Council on Environmental Quality implementation regulations, http://energy.gov/sites/prod/files/NEPA-40CFR1500_1508.pdf. Consequently, as part of an applicant's package, and under their description of their program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, species and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems). In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting an environmental assessment, if NOAA determines an assessment is required. Applicants will also be required to cooperate with NOAA in identifying feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. Failure to do so shall be grounds for not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the Grants Officer under a specific award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on any impacts that a project may have on the environment.

FREEDOM OF INFORMATION ACT (FOIA). 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 Notice of Funding Opportunity may be subject to requests for release under the Act. In the event that 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.

MINORITY SERVING INSTITUTIONS. The Department of Commerce/National Oceanic and Atmospheric Administration (DOC/NOAA) is strongly committed to increasing the participation of Minority Serving Institutions (MSIs), i.e., Historically Black Colleges and Universities, Hispanic-serving institutions, Tribal colleges and universities, Alaskan Native and Native Hawaiian institutions, and institutions that work in underserved communities.

DATA SHARING PLAN. (1) Environmental data and information collected or created under NOAA grants or cooperative agreements must be made discoverable by and accessible to the general public, in a timely fashion (typically within two years), free of charge or at no more than the cost of reproduction, unless an exemption is granted by the NOAA Program. Data should be available in at least one machine-readable format, preferably a widely-used or open-standard format, and should also be accompanied by machine-readable documentation (metadata), preferably based on widely used or international standards. (2) Proposals submitted in response to this Announcement must include a Data Management Plan of up to two pages describing how these requirements will be satisfied. The Data Management Plan should be aligned with the Data Management Guidance provided by NOAA in the Announcement. The contents of the Data Management Plan (or absence thereof), and past performance regarding such plans, will be considered as part of proposal review. A typical plan should include descriptions of the types of environmental data and information expected to be created during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; methods for providing data access; approximate total volume of data to be collected; and prior experience in making such data accessible. The costs of data preparation, accessibility, or archiving may be included in the proposal budget unless otherwise stated in the Guidance. Accepted submission of data to the NOAA National Centers for Environmental Information (NCEI) is one way to satisfy data sharing requirements; however, NCEI is not obligated to accept all submissions and may charge a fee, particularly for large or unusual datasets. (3) NOAA may, at its own discretion, make publicly visible the Data Management Plan from funded proposals, or use information from the Data Management Plan to produce a formal metadata record and include that metadata in a Catalog to indicate the pending availability of new data. (4) Proposal submitters are hereby advised that the final pre-publication manuscripts of scholarly articles produced entirely or primarily with NOAA funding will be required to be submitted to NOAA Institutional Repository after acceptance, and no later than upon publication. NOAA shall make such manuscripts publicly available, one year after publication by the journal.

More information can be found on NOAA's Data Management Procedures at:

https://nosc.noaa.gov/EDMC/documents/Data_Sharing_Directive_v3.0_remediated.pdf and at: NAO 212-15 Management of Environmental Data and Information: <https://www.noaa.gov/organization/administration/nao-212-15-management-of-environmental-data-and-information>

NOAA SEXUAL ASSAULT AND SEXUAL HARASSMENT PREVENTION AND RESPONSE POLICY. NOAA requires organizations receiving federal assistance to report findings of sexual harassment, or any other kind of harassment, regarding a Principal Investigator (PI), co-PI, or any other key personnel in the award. NOAA expects all financial assistance recipients to establish and maintain clear and unambiguous standards of behavior to

ensure harassment-free workplaces wherever NOAA grant or cooperative agreement work is conducted, including notification pathways for all personnel, including students, on the awards. This expectation includes activities at all on- and offsite facilities and during conferences and workshops. All such settings should have accessible and evident means for reporting violations and recipients should exercise due diligence with timely investigations of allegations and corrective actions. For more information, please visit:

<https://www.noaa.gov/organization/acquisition-grants/noaa-workplace-harassment-training-for-contractors-and-financial>.

SCIENCE INTEGRITY. (1) Maintaining Integrity. The non-Federal entity shall maintain the scientific integrity of research performed pursuant to this grant or financial assistance award including the prevention, detection, and remediation of any allegations regarding the violation of scientific integrity or scientific and research misconduct, and the conduct of inquiries, investigations, and adjudications of allegations of violations of scientific integrity or scientific and research misconduct. All the requirements of this provision flow down to subrecipients. (2) Peer Review. The peer review of the results of scientific activities under a NOAA grant, financial assistance award or cooperative agreement shall be accomplished to ensure consistency with NOAA standards on quality, relevance, scientific integrity, reproducibility, transparency, and performance. NOAA will ensure that peer review of "influential scientific information" or "highly influential scientific assessments" is conducted in accordance with the Office of Management and Budget (OMB) Final Information Quality Bulletin for Peer Review and NOAA policies on peer review, such as the Information Quality Guidelines. (3) In performing or presenting the results of scientific activities under the NOAA grant, financial assistance award, or cooperative agreement and in responding to allegations regarding the violation of scientific integrity or scientific and research misconduct, the non-Federal entity and all subrecipients shall comply with the provisions herein and NOAA Administrative Order (NAO) 202-735D, Scientific Integrity, and its Procedural Handbook, including any amendments thereto. That Order can be found at: <https://sciencecouncil.noaa.gov/scientific-integrity-commons/>. (4) Primary Responsibility. The non-Federal entity shall have the primary responsibility to prevent, detect, and investigate allegations of a violation of scientific integrity or scientific and research misconduct. Unless otherwise instructed by the grants officer, the non-Federal entity shall promptly conduct an initial inquiry into any allegation of such misconduct and may rely on its internal policies and procedures, as appropriate, to do so. (5) By executing this grant, financial assistance award, or cooperative agreement the non-Federal entity provides its assurance that it has established an administrative process for performing an inquiry, investigating, and reporting allegations of a violation of scientific integrity or scientific and research misconduct; and that it will comply with its own administrative process for performing an inquiry, investigation, and reporting of such misconduct. (6) The non-Federal entity shall insert this provision in all subawards at all tiers under this grant, financial assistance award, or cooperative agreement.

REVIEW OF RISK. After applications are proposed for funding by the Selecting Official, the Grants Office will perform administrative reviews, including an assessment of risk posed by the applicant under 2 C.F.R. 200.206. These may include assessments of the financial stability of an applicant and the quality of the applicant's management systems, history of performance, and the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities. Special conditions that address any risks determined to exist may be applied. Applicants may submit comments to the System of Award Management (SAM) about any information included in the system about their organization for consideration by the awarding agency.

REVIEWS AND EVALUATION. 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 the Department of Commerce and external program evaluators. In accordance with §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.

REQUIRED USE OF AMERICAN IRON, STEEL, MANUFACTURED PRODUCTS, AND CONSTRUCTION MATERIALS.

Buy America Preference. Recipients of an award of Federal financial assistance from the Department of Commerce (Department) for a program for infrastructure are hereby notified that none of the funds provided under this award may be used for an infrastructure project unless:

1. All iron and steel used in the project are produced in the United States – this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
2. All manufactured products used in the project are produced in the United States – this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard that meets or exceeds this standard has been established under applicable law or regulation for determining the minimum amount of domestic content of the manufactured product; and
3. All construction materials are manufactured in the United States – this means that all manufacturing processes for the construction material occurred in the United States. The construction materials standards are listed below.

Incorporation into an infrastructure project. The Buy America Preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America Preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

Categorization of articles, materials, and supplies. An article, material, or supply should only be classified into one of the following categories: (i) Iron or steel products; (ii) Manufactured products; (iii) Construction materials; or (iv) Section 70917(c) materials. An article, material, or supply should not be considered to fall into multiple categories. In some cases, an article, material, or supply may not fall under any of the categories listed in this paragraph. The classification of an article, material, or supply as falling into one of the categories listed in this paragraph must be made based on its status at the time it is brought to the work site for incorporation into an infrastructure project. In general, the work site is the location of the infrastructure project at which the iron,

steel, manufactured products, and construction materials will be incorporated.

Application of the Buy America Preference by category. An article, material, or supply incorporated into an infrastructure project must meet the Buy America Preference for only the single category in which it is classified.

Determining the cost of components for manufactured products. In determining whether the cost of components for manufactured products is greater than 55 percent of the total cost of all components, use the following instructions:

- a. For components purchased by the manufacturer, the acquisition cost, including transportation costs to the place of incorporation into the manufactured product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- b. For components manufactured by the manufacturer, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (a), plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the manufactured product.

Construction material standards. The Buy America Preference applies to the following construction materials incorporated into infrastructure projects. Each construction material is followed by a standard for the material to be considered “produced in the United States.” Except as specifically provided, only a single standard should be applied to a single construction material.

1. Non-ferrous metals. All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
2. Plastic and polymer-based products. All manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.
3. Glass. All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
4. Fiber optic cable (including drop cable). All manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding and jacketing, occurred in the United States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.
5. Optical fiber. All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
6. Lumber. All manufacturing processes, from initial debarking through treatment and planning, occurred in the United States.
7. Drywall. All manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.
8. Engineered wood. All manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

Waivers

When necessary, recipients may apply for, and the Department may grant, a waiver from these requirements.

To help federal agencies and recipients meet BABA requirements, the U.S. Department of Commerce, National Institute for Standards and Technology (NIST), Hollings Manufacturing Extension Partnership (MEP) National Network™ provides a service to connect stakeholders, including recipients, to U.S. manufacturers that have relevant production capabilities and capacities to help fulfill current market and supply chain needs. Recipients considering a BABA nonavailability waiver are strongly encouraged to contact the NIST/MEP for assistance with supplier scouting services prior to seeking a BABA nonavailability waiver. Further information on the NIST/MEP supplier scouting services is available at: <https://nist.gov/mep/supply-chain/supplier-scouting>.

When the Department has made a determination that one of the following exceptions applies, the awarding official may waive the application of the Buy America Preference in any case in which the Department determines that:

applying the Buy America Preference would be inconsistent with the public interest (public interest waiver);

the types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality (nonavailability waiver); or

the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent (unreasonable cost waiver).

A request to waive the application of the Buy America Preference must be in writing. The Department will provide instructions on the format, contents, and supporting materials required for any waiver request. Waiver requests are subject to public comment periods of no less than 15 days and must be reviewed by the Made in America Office.

There may be instances where an award qualifies, in whole or in part, for an existing waiver described on the Department's Build America, Buy America website found at <https://www.commerce.gov/oam/build-america-buy-america>.

Definitions

Please refer to <https://www.ecfr.gov/current/title-2/section-184.3> for definitions of terms used in this section.

REPORTING. In accordance with 2 CFR 200.328-9 and the terms and conditions of the award, financial reports are to be submitted semiannually. Reports are submitted electronically through NOAA's eRA system. The Federal Funding Accountability and Transparency Act, 31 U.S.C. 6101 note, includes a requirement for awardees of applicable Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards. All awardees of applicable grants and cooperative agreements are required to report to the FFATA Subaward Reporting System (FSRS) available at <https://www.fsrs.gov/> on all subawards over \$30,000. Refer to 2 CFR Part 170.

6.0 SUBMISSION OF APPLICATIONS

6.1 Deadline for Applications

Phase II applications must be received no later than 11:59 p.m. Eastern Time, March 14, 2025. . Only electronic applications submitted via Grants.gov will be accepted.

6.2 Application Submission

Applications must be submitted electronically through Grants.gov at: www.grants.gov under announcement NOAA-OAR-TPO-2025-0002. Paper applications or applications submitted by other electronic means will not be accepted.

1. Supplementary material, revisions, substitutions, audio or video tapes, or computer storage media or devices will **not** be accepted. While applicants may not submit replacement pages or missing documents once an application has been submitted, an applicant may submit a complete, new application including such information by the required deadline. The last application received in Grants.gov will be used for evaluation.
2. 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 indicating an application is received does not provide information about whether attachments have been received. For further information or questions regarding the electronic application process for the 2025-NOAA-SBIR-02 announcement, submit an email to: noaa.sbir@noaa.gov, with the subject line: NOAA-OAR-TPO-2025-0002.
3. Applicants are strongly encouraged to start early and not wait until the approaching due date before logging on and reviewing the instructions for submitting an application through Grants.gov. The Grants.gov registration process must be completed before a new registrant can apply. If all goes well, the registration process takes three (3) to five (5) business days. If problems are encountered, the registration process can take up to two (2) weeks or more.
4. Applicants must have a valid unique entity identifier number and must maintain a current registration in the Federal government's primary registrant database, the System for Award Management: (<https://sam.gov/SAM/>), at the time of application submission. After registering, it may take several days or longer from the initial log-on before a new Grants.gov system user can submit an application. Only authorized individuals(s) will be able to submit an application, and the system may need time to process a submitted application. Applicants should save and print the proof of submission they receive from Grants.gov. If problems occur while using Grants.gov, the applicant is advised to: (a) print any error message received; and (b) call Grants.gov directly for immediate assistance. If calling from within the United States or from a U.S. territory, please call 800-518-4726. If calling from a place other than the United States or a U.S. territory, please call 606-545-5035. Assistance from the Grants.gov Help Desk will be available around the clock every day, with the exception of Federal holidays. Help Desk assistance will resume at 7:00 a.m. Eastern Time the day after Federal holidays. For assistance using Grants.gov, you may also email: support@grants.gov.
5. To find instructions on submitting an application on Grants.gov, Applicants should refer to the "Applicants" tab in the banner just below the top of the <http://www.grants.gov> home page. Clicking on the "Applicants" tab produces two exceptionally useful sources of information, Applicant Actions and Applicant Resources, which applicants are advised to review.
6. Applicants should pay close attention to the guidance under "Applicant FAQs," as it contains information

important to successful submission on Grants.gov, including essential details on the naming conventions for attachments to Grants.gov applications.

7. When developing your submission timeline, please keep in mind that: (1) all applicants are required to have a current registration in the System for Award Management (SAM.gov) at the time of application; (2) the free annual registration process in the electronic System for Award Management (SAM.gov; see Section 6.2, #4 of this NOFO) may take between three and five business days or as long as a month or more; Please note that applications will be rejected if applicants are not registered in the System for Award Management (SAM) at the time of submission. (3) A grant cannot be issued if the designated recipient's registration in the System for Award Management (SAM.gov) is not fully up to date at the time of the award. (4) Applicants will find instructions on registering with SAM.gov as part of the Grants.gov process at: <https://www.grants.gov/applicants/applicant-registration>.
8. 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. Closely following the detailed information in these subcategories will increase the likelihood of acceptance of the application by the Federal agency's electronic system.
9. The Grants.gov Online Users Guide available at the Grants.gov site: (<https://www.grants.gov/help/html/help/index.htm?callingApp=custom#t=GetStarted%2FGetStarted.htm>) provides vital information on checking the status of applications.

Applicants should be aware that adequate time must be factored into applicants' schedules for delivery of their application. Submitters are advised that volume on Grants.gov may be extremely heavy leading up to the deadline date. Applications not received by the specified due date and time, as recorded by Grants.gov, or that do not adhere to the other requirements of this NOFO (see Section 4.2 Screening Criteria and Section 8.1 Required Forms and Documents) will not be considered. NOAA will not make allowances for any late submissions.

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

Refer to important information in Section 6.1, Deadline for Applications, to help ensure your application is received on time.

Any amendments to this NOFO will be announced through Grants.gov. Applicants can sign up for: <https://grants.gov/connect/manage-subscriptions/>.

7.0 SCIENTIFIC AND TECHNICAL INFORMATION SOURCES

Background information related to the research topic areas may be found on the following sources:

- <https://www.commerce.gov/about/strategic-plan>
- <http://www.noaa.gov>
- <http://techpartnerships.noaa.gov>
- <https://techpartnerships.noaa.gov/SBIR>
- <https://library.noaa.gov/>
- <https://www.oma.noaa.gov/uxs/uncrewed-aircraft-systems>
- <https://oceanservice.noaa.gov/facts/ofs.html>

8.0 SUBMISSION FORMS AND CERTIFICATIONS

8.1 Required Application Forms and Documents

Applicants should review the following list carefully to ensure the application includes all required forms and documents. **Failure to include any of the applicable listed forms and/or documents may result in rejection of the application without consideration.** Guidelines provided below are based on frequently asked questions and are not intended to be comprehensive. All documents and forms listed below must be fully completed and included in the application package as separate component Adobe PDF files where possible.

A complete application contains the following forms and documents. These component documents should each be uploaded into grants.gov as separate documents or attachments.

1. **Project Narrative**, including all items listed in section 3.2 of this NOFO.
 - a. SBIR Phase II Cover Page. A completed SBIR Cover Page is a required pre-formatted document. This form is included in Appendix D of the NOFO.
 - b. Project Abstract. Provide a short abstract of the project and anticipated results (no more than 200 words; see section 3.2 for details).
 - c. Technical Content. Read section 3.2 of this NOFO very carefully, and in its entirety, for directions on completing the required components of this section of the application.
 - d. Letters of Commitment are required from all subawardees, contractors and consultants that are working on the project, including Technical and Business Assistance (TABAs) providers if you are not using NOAA's TABA vendor
 - e. Letters of support from community leaders, members, or partners that are not working on the proposed project. Letters of support are optional.
2. **Commercialization Plan**. The commercialization plan must be a separate document that provides information to NOAA regarding how the potential awardee will convert their research into commercial applications (see section 3.2 for more information). The Commercialization Plan is limited to 10 pages.
3. **SF-424, Application for Federal Assistance**. Item #12 in this form should list the NOFO number NOAA-OAR-TPO-2025-0002. The response to #19 should be 'no' – the NOAA SBIR Program is not covered by that Executive Order. For SF-424, Item #21, the list of certifications and assurances is contained in the SF-424B, which is item 6 in this list of Required Forms and Documents. Item #21 Authorized Representative and Signature of Authorized Representative must be the same person.
4. **SF-424A, Budget Information – Non-Construction Programs**. The budget should reflect all anticipated expenses for the project. Please provide budget values in whole dollar amounts.

In Section A, the Grant Program Function or Activity on Line 1 under Column (a) should be entered as "NOAA Small Business Innovation Research (SBIR) Program". The Federal Assistance Listing on Line 1 under Column (b) should be entered as "11.021" and the total award requested amount should be entered in the Federal (e) column.

In Section B, Acceptable fees (see Section 5.6 of this NOFO) should be included in "Other (h)". These

sections of the SF-424A should reflect funds for the entirety of the award: Section A; Section B; Section C; and Section D. Section E is not relevant to this program and therefore should be left blank.

5. **Budget Narrative.** In addition to other mandatory budget information, a separate Budget Narrative is required. Budget narrative guidance can be found at:
https://www.noaa.gov/sites/default/files/atoms/files/gmd_budget_narrative_guidance_-_05-24-2017_final.pdf.

There is no set format for the budget narrative; however, it should provide a detailed breakdown in narrative and tabular form of costs under each applicable object class category as reflected on the SF-424A (personnel, fringe benefits, equipment, travel, supplies, other direct costs and indirect costs), and a written justification that includes the necessity and the basis for the cost. Proposed funding levels must be consistent with the project scope, and only allowable costs that fall within the spending limitations specified in Section 1.2 “Phase II – Research and Development” of this NOFO should be included in the budget. The proposed budget should reflect planned costs, but the awardee must charge actual costs to the award consistent with cost principles applicable to the type of awardee in accordance with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, which applies to awards in this program. More information is available at: <http://go.usa.gov/SBYh> and <http://go.usa.gov/SBg4>.

6. **SF-424B, Assurances - Non-Construction Programs.** SF424B should have the same Authorized Representative and Signatures as in the SF424 page 3.
7. **CD-511, Certification Regarding Lobbying.** Enter “2025-NOAA-SBIR-02” in the Award Number Field. Enter the title of the application used in field 15 of the SF- 424, or an abbreviation of that title, in the Project Name field. CD511 should have the same Authorized Representative and Signatures as in the SF424 page 3.
8. **SF-LLL, Disclosure of Lobbying Activities** (if applicable).
9. **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 agency in accordance with the provisions and cost principles mandated by 2 CFR Part 200 for use on grants and cooperative agreements. Negotiated Indirect Cost Rate Agreements for use on contracts in accordance with the provision and cost principles of the Federal Acquisition Regulations will not be accepted. 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. Applicants proposing a rate exceeding 40 percent of the total direct costs may choose to negotiate a rate with the Department of Commerce. The negotiation and approval of a rate is subject to the procedures of the NOAA and Department of Commerce Standard Terms and Conditions. Applicants wishing to negotiate a rate should reach out to Raishan Adams, Grants Officer at: Raishan.Adams@noaa.gov. Any profit or fee requested is not considered a direct cost for the purpose of the indirect cost base calculation.
10. **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 Policy Directive requires each 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 SF-424 as described at the end of Section 8.1.

11. **Research & Related Personal Data.** Complete and print the form available at: <https://grants.gov/forms/forms-repository/r-r-family>. Attach this document to the SF-424 as described at the end of Section 8.1.
12. **Compliance with SBIR Program Requirements, Applicant Fraud Awareness Training - Certificate of Training Completion.** Complete the training at: <https://techpartnerships.noaa.gov/SBIR>. After completion, print and fill out the last page of the training presentation. Attach this document to the SF-424 as described at the end of Section 8.1.
13. **Disclosure of Foreign Relationships (Online form).** All SBIR and STTR applicants must disclose their foreign relationships as required by the SBIR and STTR Extension Act of 2022. The required form that must be used to disclose these relationships is available here: <https://app.smartsheetgov.com/b/form/7b4fb4e5a5dd4fabbe168e74794e3a14>. Instructions are included on the form. Please note that even if you do not have any foreign relationships, you must complete this form to certify that such relationships do not exist.

Items (1) through (8) above are part of the standard application form package in Grants.gov and are completed through the download application process. **Items (9) through (12) must be completed and attached by clicking on “Add Attachments” in the SF-424 after item 15, Application for Federal Assistance.** Applicants should carefully follow specific Grants.gov instructions at: <https://www.grants.gov/> to ensure the attachments will be accepted by the system. **A receipt from Grants.gov indicating an application is received does not provide information about whether attachments have been received.**

8.2 Verifying the Submission and Tracking the application

Applicants are urged to use the Grants.gov *Download Submitted Applications* feature to check that all required attachments were contained in their submission. Go to the *Grants.gov Online Users Guide* available at the *Grants.gov* site at: <https://www.grants.gov/help/html/help/index.htm?callingApp=custom#t=GetStarted%2FGetStarted.htm>, choose *Applicants*, then *Applicant Actions*, then select the “Check My Application Status” option, click on the *Download Submitted Applications* feature, and follow the directions. The application must be both received and validated by Grants.gov. The application is “received” when Grants.gov provides the applicant a confirmation of receipt and an application tracking number. If an applicant does not see this confirmation and tracking number, the application has not been received. After the application has been received, it must still be validated. During this process, it may be “validated” or “rejected with errors.” To know whether the application was rejected with errors and the reasons why, the applicant must log in to Grants.gov, select “Applicants” from the top navigation, and select “Track my application” from the drop-down list. If the status is “rejected with errors,” the applicant may still seek to correct the errors and resubmit your application before the deadline. If the applicant does not correct the errors, the application will not be forwarded to NOAA by Grants.gov.

Applicants can track their submission in the Grants.gov system by following the procedures at the Grants.gov site (<https://www.grants.gov/applicants/grant-applications/track-my-application>). It can take up to two business days for an application to fully move through the Grants.gov system to NOAA.

9.0 RESEARCH TOPICS

Applicants are required to use the same FY24 Phase I research topic when applying to this funding announcement.

Appendix A. Definitions

Except as specifically noted by citation or reference, all definitions below are excerpted from the SBA SBIR Policy Directive, available at:

https://www.sbir.gov/sites/default/files/SBA%20SBIR_STTR_POLICY_DIRECTIVE_May2023.pdf .

Applicant – The organizational entity that qualifies as a SBC at all pertinent times and that submits a contract proposal or a grant application for a funding agreement under the SBIR Program.

Application – Also referred to as a “proposal”.

Authorized Organizational Representative - The individual(s), named by the applicant/recipient organization, who is legally authorized to act for the applicant/recipient and to assume the obligations imposed by the federal laws, regulations, requirements, and conditions that apply to grant applications or awards.

Awardee – The organizational entity that receives a SBIR Phase I, Phase II or Phase III award.

Commercialization - The process of developing products, processes, technologies, or services and the production and delivery (whether by the originating party or others) of the products, processes, technologies, or services for sale to or use by the Federal government or commercial markets. *As used here, commercialization includes both Government and private sector markets.*

Essentially Equivalent Work - Work that is substantially the same research, which is proposed for funding in more than one contract proposal or grant application submitted to the same Federal agency or submitted to two or more different Federal agencies for review and funding consideration; or work where a specific research objective and the research design for accomplishing the objective are the same or closely related to another proposal or award, regardless of the funding source.

Feasibility - The practical extent to which a project can be performed successfully.

Funding Agreement - Any contract, grant, or cooperative agreement entered into between any Federal agency and any SBC for the performance of experimental, developmental, or research work, including products or services, funded in whole or in part by the Federal Government.

Funding Agreement Officer. Per the SBIR Policy Directive, a funding agreement officer is defined as a federal contracting officer, a grants officer, or a cooperative agreement officer.

Grant. A financial assistance mechanism providing money, property, or both to an eligible entity to carry out an approved project or activity authorized by law of the United States (31 U.S.C. 6101(3)). A grant is used whenever the Federal agency anticipates no substantial programmatic involvement with the awardee during performance.

Innovation. Something new or improved, having marketable potential, including: (1) development of new technologies: (2) refinement of existing technologies: or (3) development of new applications for existing technologies.

Joint Venture – See 13 C.F.R. § 121.103(h).

National Environmental Policy Act (NEPA) The National Environmental Policy Act, or NEPA, is a United States environmental law that promotes the enhancement of the environment and was enacted as law on January 1, 1970 (Pub.L. 91-190). All NOAA SBIR Phase I and Phase II awards must go through an agency internal NEPA

assessment before a full award is made. The purpose is to capture any details of the project that may potentially or inadvertently pollute/affect the environment. *This definition is from NOAA's NEPA implementation.*

Principal Investigator (PI) The one individual designated by the applicant to provide the scientific and technical direction to a project supported by a funding agreement.

Project Narrative – This is the main document outlining the detailed innovative solution by the applicant.

Proposal – Also referred to as an “application.”

Research or Research and Development (R/R&D) - Any activity that is:

1. a systematic, intensive study directed toward greater knowledge or understanding of the subject studied;
2. a systematic study directed specifically toward applying new knowledge to meet a recognized or unmet need; or
3. a systematic application of knowledge toward the production of useful materials, devices, services, or methods, and includes design, development, and improvement of prototypes and new processes to meet specific requirements.

SBIR Policy Directive – As mandated by the SBIR legislation, the Small Business Administration (SBA) authors this policy that outlines how the SBIR program is run in each participating agency. The link to this policy can be found on: sbir.gov.

SBIR Technical Data - All data generated during the performance of an SBIR award.

SBIR Technical Data Rights - The rights an SBIR awardee obtains in data generated during the performance of any SBIR Phase I, Phase II, or Phase III award that an awardee delivers to the Government during or upon completion of a Federally-funded project, and to which the Government receives a license.

Small Business Concern (SBC) – A concern that meets the requirements set forth in 13

C.F.R. § 121.702 (available at:

<http://www.gpo.gov/fdsys/granule/CFR-2011-title13-vol1/CFR-2011-title13-vol1-sec121-702>).

Socially and Economically Disadvantaged SBC (SDB) - See 13 C.F.R. Part 124, Subpart B.

Socially and Economically Disadvantaged Individual - See 13 C.F.R. §§ 124.103 and 124.104.

Sub-award – See 2 C.F.R. § 200.92.

Technical and Business Assistance (TABAs)- The assistance is guided by [Section 9 \(b\) of the SBIR/STTR Policy Directive](#), and it enables federal agencies to help small businesses by funding vendors to support commercializing their innovations or by providing additional funding directly to small businesses so they can contract their own vendors and consultants for commercialization purposes.

Women-Owned Small Business (WOSB) - An SBC that is at least 51% owned by one or more women, or in the case of any publicly owned business, at least 51% of the stock is owned by women, and women control the management and daily business operations.

Appendix B. SBIR Funding Agreement Certification (At Time of Award)

SBIR Funding Agreement Certification (at time of award)

All small businesses that are selected for award of an SBIR Funding Agreement must complete this certification at the time of award and any other time set forth in the Funding Agreement that is prior to performance of work under this award. This includes checking all of the boxes and having an authorized officer of the Awardee sign and date the certification each time it is requested.

Please read carefully the following certification statements. The Federal Government relies on the information to determine whether the business is eligible for a Small Business Innovation Research (SBIR) Program award. A similar certification will be used to ensure continued compliance with specific program requirements during the life of the Funding Agreement. The definitions for the terms used in this certification are set forth in the Small Business Act, SBA regulations (13 C.F.R. Part 121), the SBIR Policy Directive and also any statutory and regulatory provisions referenced in those authorities.

If the Funding Agreement officer believes that the business may not meet certain eligibility requirements at the time of award, they are required to file a size protest with the U.S. Small Business Administration (SBA), which will determine eligibility. At that time, SBA will request further clarification and supporting documentation in order to assist in the verification of any of the information provided as part of a protest. If the Funding Agreement officer believes, after award, that the business is not meeting certain Funding Agreement requirements, the agency may request further clarification and supporting documentation in order to assist in the verification of any of the information provided.

Even if correct information has been included in other materials submitted to the Federal Government, any action taken with respect to this certification does not affect the Government's right to pursue criminal, civil or administrative remedies for incorrect or incomplete information given in the certification. Each person signing this certification may be prosecuted if they have provided false information.

The undersigned has reviewed, verified and certifies that (all boxes must be checked unless otherwise directed):

(1) ☐ The Awardee business concern meets the ownership and control requirements set forth in 13 C.F.R. § 121.702.

(2) If a corporation, all corporate documents (namely: articles of incorporation and any amendments, articles of conversion, by-laws and amendments, shareholder meeting minutes showing director elections, shareholder meeting minutes showing officer elections, organizational meeting minutes, all issued stock certificates, stock ledger, buy-sell agreements, stock transfer agreements, voting agreements, and documents relating to stock options, including the right to convert non-voting stock or debentures into voting stock) must evidence that the corporation meets the ownership and control requirements set forth in 13 C.F.R. § 121.702. (Check one box). ☐ Yes ☐ N/A Explain why N/A:

(3) If a partnership, the partnership agreement evidences that it meets the ownership and control requirements set forth in 13 C.F.R. § 121.702. (Check one box). ☐ Yes ☐ N/A Explain why N/A:

(4) If a limited liability company, the articles of organization and any amendments, and operating agreement and amendments, evidence that it meets the ownership and control requirements set forth in 13 C.F.R. § 121.702. (Check one box). ☐ Yes ☐ N/A Explain why N/A:

(5) The birth certificates, naturalization papers, or passports show that any individuals it relies upon to meet the eligibility requirements are U.S. citizens or permanent resident aliens in the United States. (Check one box). ☐ Yes ☐ N/A Explain why N/A:

(6) ☐ The Awardee business concern has no more than 500 employees, including the employees of its Affiliates.

(7) ☐ SBA has not issued a size determination currently in effect finding that this business concern exceeds the 500 employee size standard.

(8) During the performance of the award, the Principal Investigator/Project Manager will spend more than one half of his/her time (based on a 40 hour workweek) as an employee of the Awardee or has requested and received a written deviation from this requirement from the Funding Agreement officer. (Check one box). ☐ Yes ☐ Deviation approved in writing by Funding Agreement officer: %

(9) All, essentially Equivalent Work, or a portion of the work proposed under this project (check the applicable line): ☐ **Has not** been submitted for funding to this Agency or another Federal agency. ☐ **Has** been submitted for funding to this Agency or another Federal agency but has not been funded under any other grant, contract, subcontract or other transaction. ☐ A portion has been funded by another grant, contract, or subcontract as described in detail in the proposal and approved in writing by the Funding Agreement officer.

(10) During performance of award, the Awardee will perform the applicable percentage of work unless a deviation from this requirement is approved in writing by the Funding Agreement officer (check the applicable line and fill in if needed):

☐ SBIR Phase I: at least two-thirds (66 2/3%) of the research.

☐ SBIR Phase II: at least half (50%) of the research.

☐ Deviation approved in writing by the Funding Agreement officer: %

(11) During performance of award, the research/research and development will be performed in the United States unless a deviation is approved in writing by the Funding Agreement officer (Check one box).

☐ Yes ☐ Waiver has been granted

(12) ☐ During performance of award, the research/research and development will be performed at the Awardee's facilities by the Awardee's employees, except as otherwise indicated in the SBIR application and approved in the Funding Agreement.

(13) The SBIR Awardee has registered itself on SBA's database as majority-owned by venture capital operating companies, hedge funds or private equity firms (check one box). ☐ Yes ☐ No ☐ N/A Explain why N/A:

(14) The SBIR Awardee is a Covered Small Business Concern (a small business concern that: (a) was not majority-owned by multiple venture capital operating companies (VCOCs), hedge funds, or private equity firms on the date on which it submitted an application in response to an SBIR NOFO; and (b) on the date of the SBIR award, which is made more than 9 months after the closing date of the NOFO, is majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms). (Check one box).

☐ Yes ☐ No

15) ☐ I will notify this Federal agency immediately if all or a portion of the work authorized and funded under this award is subsequently funded by another Federal Agency.

16) ☐ I understand that the information submitted may be given to Federal, State and local agencies for determining violations of law and other purposes.

17) ☐ I am an officer of the business concern authorized to represent it and sign this certification on its behalf. By signing this certification, I am representing on my own behalf, and on behalf of the business concern that the information provided in this certification, the application, and all other information submitted in connection with this application, is true and correct as of the date of submission. I acknowledge that any intentional or negligent misrepresentation of the information contained in this certification may result in criminal, civil or administrative sanctions, including but not limited to: (1) fines, restitution and/or imprisonment under 18 U.S.C. § 1001; (2) treble damages and civil penalties under the False Claims Act (31 U.S.C. § 3729 *et seq.*); (3) double damages and civil penalties under the Program Fraud Civil Remedies Act (31 U.S.C. § 3801 *et seq.*); (4) civil recovery of award funds, (5) suspension and/or debarment from all Federal procurement and nonprocurement transactions (FAR Subpart 9.4 or 2 C.F.R. Part 180); and (6) other administrative penalties including termination of SBIR/STTR awards.

Signature

Date

Print Name (First, Middle, Last)

Title

Business Name

Appendix C. SBIR Funding Agreement Certification (Life-Cycle Certification)

All SBIR Phase I and Phase II Awardees must complete this certification at all times set forth in the Funding Agreement (see §8(j) of the SBIR Policy Directive). This includes checking all of the boxes and having an authorized officer of the Awardee sign and date the certification each time it is requested.

Please read carefully the following certification statements. The Federal government relies on the information to ensure compliance with specific program requirements during the life of the Funding Agreement. The definitions for the terms used in this certification are set forth in the Small Business Act, the SBIR Policy Directive, and also any statutory and regulatory provisions referenced in those authorities.

If the Funding Agreement officer believes that the business is not meeting certain Funding Agreement requirements, the agency may request further clarification and supporting documentation in order to assist in the verification of any of the information provided.

Even if correct information has been included in other materials submitted to the Federal Government, any action taken with respect to this certification does not affect the Government's right to pursue criminal, civil, or administrative remedies for incorrect or incomplete information given in the certification. Each person signing this certification may be prosecuted if they have provided false information.

The undersigned has reviewed, verified and certifies that (all boxes must be checked except where otherwise directed):

(1) The Principal Investigator/Project Manager spent more than one half of his/her time (based on a 40 hour workweek) as an employee of the Awardee or the Awardee has requested and received a written deviation from this requirement from the Funding Agreement officer. (Check one box).

☐ Yes ☐ No ☐ Deviation approved in writing by Funding Agreement officer: ____ %

(2) All Essentially Equivalent Work, or a portion of the work, performed under this project (check applicable line): ☐ Has not been submitted for funding to this Agency or another Federal Agency. ☐ Has been submitted for funding to this Agency or another Federal agency but has not been funded under any other grant, contract, subcontract or other transaction.

☐ A portion has been funded by another grant, contract, or subcontract as described in detail in the proposal and approved in writing by the Funding Agreement officer.

(3) Upon completion of the award, the Awardee will have performed the applicable percentage of work, unless a deviation from this requirement is approved in writing by the Funding Agreement officer (check the applicable line and fill in if needed):

☐ SBIR Phase I: at least two-thirds (66 2/3%) of the research.

☐ SBIR Phase II: at least half (50%) of the research.

☐ Deviation approved in writing by the Funding Agreement officer: ____%

(4) The work is completed and the small business Awardee has performed the applicable percentage of work, unless a deviation from this requirement is approved in writing by the Funding Agreement officer (check the applicable line and fill in if needed):

- ☐ SBIR Phase I: at least two-thirds (66 2/3%) of the research.
☐ SBIR Phase II: at least half (50%) of the research.
☐ Deviation approved in writing by the Funding Agreement officer: ____%
☐ N/A because work is not completed.

(5) The research/research and development is performed in the United States unless a deviation is approved in writing by the Funding Agreement officer. (Check one box). ☐ Yes ☐ No ☐ Waiver has been granted

(6) The research/research and development is performed at the Awardee's facilities by the Awardee's employees, except as otherwise indicated in the SBIR application and approved in the Funding Agreement. (Check one box). ☐ Yes ☐ No

(7) ☐ I will notify this Federal agency immediately if all or a portion of the work authorized and funded under this award is subsequently funded by another Federal agency.

(8) ☐ I understand that the information submitted may be given to Federal, State and local agencies for determining violations of law and other purposes.

(9) ☐ I am an officer of the Awardee business concern authorized to represent it and sign this certification on its behalf. By signing this certification, I am representing on my own behalf, and on behalf of the business concern, that the information provided in this certification, the application, and all other information submitted in connection with the award, is true and correct as of the date of submission. I acknowledge that any intentional or negligent misrepresentation of the information contained in this certification may result in criminal, civil or administrative sanctions, including but not limited to: (1) fines, restitution and/or imprisonment under 18 U.S.C. § 1001; (2) treble damages and civil penalties under the False Claims Act (31 U.S.C. § 3729 et seq.); (3) double damages and civil penalties under the Program Fraud Civil Remedies Act (31 U.S.C. § 3801 et seq.); (4) civil recovery of award funds, (5) suspension and/or debarment from all Federal procurement and non-procurement transactions (FAR Subpart 9.4 or 2 C.F.R. Part 180); and (6) other administrative penalties including termination of SBIR/STTR awards.

Signature

Date

Print Name (First, Middle, Last)

Title

Business Name

Appendix D. Cover Page

NOAA SBIR Phase II Cover Page

(fillable version available at <https://techpartnerships.noaa.gov/sbir/awardee-resources/applicants/>)

NOFO No.: NOAA-OAR-TPO-2025-0002

Closing Date: March 14, 2025

Name of Submitting Firm

Address of Firm (including Zip Code +4):

Title of Proposed Project:

Requested Amount:

Proposed Duration:

NOFO Topic No.:

NOFO Topic Title:

THE ABOVE ORGANIZATION CERTIFIES THAT:

- | | | |
|--|-----|----|
| 1. It is a small business firm as defined in this NOFO. | Yes | No |
| 2. The primary employment of the principal investigator will be with the firm at the time of award and during the conduct of the research. | Yes | No |
| 3. A minimum of $\frac{2}{3}$ for Phase I and $\frac{1}{2}$ for Phase II of research will be performed by this firm. | Yes | No |
| 4. It qualifies as a minority and disadvantaged small business as defined in this NOFO. | Yes | No |
| 5. It qualifies as a woman-owned small business as defined in this NOFO. | Yes | No |
| 6. Will all work on project be performed in the United States | Yes | No |
| 7. Will all supplies, equipment and materials used, leased and/ or purchased in the U.S. | Yes | No |
| 8. It will permit the government to disclose contact information of the corporate official of your concern, if your proposal does not result in an award, to appropriate local and State-level economic development organizations that may be interested in contacting you for further information | Yes | No |
| 9. Will this project consist of Manufacturing-Related R&D? | Yes | No |
| 10. Will this project produce any Energy Efficiency or Renewable energy system R&D? | Yes | No |
| 11. It authorizes contact information and project title to be provided to the NIST Manufacturing Extension Partnership (MEP) Program after awards have been announced. | Yes | No |

12 This firm and/or Principal Investigator has / has not submitted proposals for essentially equivalent work under other federal program NOFOs, or has / has not received other federal awards for essentially equivalent work.

13. The applicant and/or any of its principals are / are not presently debarred, suspended, proposed for debarment, or declared ineligible for procurement and nonprocurement transactions (FAR subpart 9.4 or 2 C.F.R. Part 180) by any Federal agency; and have / have not within a three-year period preceding this application, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract or financial assistance award; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and are / are not presently indicted for, or otherwise criminally or civilly

charged by a Government entity with, commission of any of these offenses.

- | | | |
|--|-----|----|
| 14. It is a veteran-owned small business concern. | Yes | No |
| 14a. It is a service-disabled veteran-owned small business concern. | Yes | No |
| 15. It is a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office of ownership or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR Part 126 | Yes | No |
| 16. Does this application include subcontracts, or other cost or no cost collaborations with Federal Laboratories or any Federal Agencies? If yes, insert the names of the Federal Laboratories/Agencies. | Yes | No |
| 17. Is your small business majority owned by Venture Capital operating companies, Hedge Funds, or Private Equity Funds? | Yes | No |
| 18. The company has completed the Fraud, Waste, and Abuse training available on http://techpartnerships.noaa.gov/SBIR.aspx and attached the completed certification page. | Yes | No |

PRINCIPAL INVESTIGATOR

Name:	Title:	Day Telephone No.:
Signature & Date:	Email:	Address:

CORPORATE OFFICIAL (BUSINESS)

Name:	Title:	Day Telephone No.:
Signature & Date:	Email:	Address:

OTHER INFORMATION

Year Firm Founded	Number of Employees: Avg. Previous 12 mos.	Currently
Has a proposal for essentially equivalent work been submitted to another agency? If yes, what Agency?	Yes	No
Is your company registered in SAM?	Yes	No
Taxpayer Identification Number:		
Unique Entity ID (UEI):		

PROPRIETARY NOTICE

This proposal contains information that shall not be disclosed outside the Federal Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this proposal, unless otherwise authorized by law. If an award is made to this applicant as a result of or in connection with the submission of this proposal, the Government shall have the right to duplicate, use, or disclose the proprietary information to the extent provided in the resulting award and pursuant to applicable law. This restriction does not limit the Government's right to use information contained in the proposal if it is obtained from another source without restriction. The information subject to this restriction is contained on pages _____ of this proposal.

Appendix E. Small Business Innovation Research (SBIR) Program Phase II Application Checklist

Please review all the requirements on the checklist below carefully to ensure that your proposal meets the guidelines for submission through Grants.gov. Failure to meet these requirements may result in your application being rejected without consideration. All items listed are required unless otherwise noted.

Helpful Hints

- ★ All forms (SF-424 and required certifications) must be signed by the Authorized Organizational Representative (AOR).
- ★ For applicants who experience technical issues with Grants.gov, we encourage you to contact [Grants.gov Applicant Support](#) as soon as possible to prevent rejection due to missing the application deadline.
- ★ Don't forget to add noaa.sbir@noaa.gov to your email contacts to ensure timely receipt of follow-up communications about your application.

Are you eligible?

The following conditions must be met in order to be eligible to apply for a NOAA SBIR Grant Award:

- The applicant must qualify as a small business concern (SBC) as defined by [SBA regulations](#).
- The Principal Investigator must be employed by the company at the time of award and for the duration of the award.
- All work must be performed in the United States, and all supplies, materials, and equipment should be American-made whenever possible. For any exemptions, a waiver must be submitted and granted in advance of application by the Grants Officer.
- A minimum of one-half of the research and/or analytical effort must be performed by the applicant. This should be reflected in the work plan as well as the budget. At least one-half of the total funding requested should be allocated to the applicant small business.

Are you registered?

The following registrations must be completed before applying for a NOAA SBIR Grant Award:

- [System for Award Management \(SAM\)](#) - registration can take over a month and must be renewed on an annual basis.
- [Small Business Association \(SBA\)](#) - registration can take up to 90 days.
- [Grants.gov](#) - registration typically takes between 3-10 business days.
- eRA Commons - [Register Your Organization](#).

Is your application complete?

A complete application must have a Project Narrative, Commercialization Plan, Budget Narrative, and selected forms, as specified below:

Project Narrative

Must be at least 10 point font (Arial or Times New Roman) and maximum 25 pages in length.

- SBIR Cover Page (*provided in the NOFO*)
- Abstract (*can not contain proprietary information*)
- Technical Content - *If a section does not apply, list the heading followed by "N/A":*
 1. Identification and Significance of the Problem or Opportunity
 2. Phase I Summary
 3. Phase II Technical Objectives
 4. Phase II Work Plan
 5. Related Research or R&D
 6. Key Individuals and Bibliography of Related Work
 7. Relationship with Future R&D
 8. Facilities and Equipment
 9. Consultants, Contracts, and Sub-Awards
 10. Cooperative Research and Development Agreements (CRADA)
 11. Guest Researcher
 12. Cost Sharing

13. Technical and Business Assistance (TAB A)

14. Similar Applications or Awards

- Bibliography and References Cited
- Letters of Commitment (*required from all participating consultants, subawards, subcontractors and TAB A provider*)
- Letters of Support (*optional but strongly recommended*)

Commercialization Plan

Must be at least 10 point font and maximum 10 pages in length.

The commercialization plan is a separate document that provides information to NOAA regarding how the potential awardee will convert their research into commercial applications. Sections include:

1. Market Opportunity
2. Company/Team
3. Product/Technology and Competition
4. Finance and Revenue Model

Budget Narrative(s)

A detailed budget breakdown where the total dollar amounts match the SF424 & SF424A.

- Awardee Budget Narrative ([guidance](#))
- Sub-Awardee Budget Narrative(s) (*if applicable*)

Forms

Unless otherwise indicated, forms can be found within the Grants.gov submission portal.

- Application for Federal Assistance (SF-424)
- Budget Information – Non Construction Programs (SF-424A)
- Assurances – Non-Construction Programs (SF-424B)
- Certification Regarding Lobbying (CD-511)
- Disclosure of Lobbying Activities (SF-LLL) (*if applicable*)
- Indirect Cost Rate Agreement (NICRA) (*if applicable, applicant provided*)
- [Applicant Fraud, Waste, And Abuse](#) (FWA) Awareness Training
- [Research & Related Personal Data](#) (R/RD Personal Data)
- [Disclosure of Foreign Relationships or Relationships to Foreign Countries](#)

Appendix F. Performance Benchmark Ratings Requirements

The *Phase I to Phase II Transition Rate* requirement applies only to SBIR Phase I applicants that have received more than 20 (21 or more) Phase I awards over the past 5 fiscal years (excluding the most recent year). For these applicants, the ratio of the number of Phase II awards (awarded during the past 5 fiscal years) to the number of Phase I awards (awarded during the past 5 years excluding the most recent year) must be at least 0.25. For the purposes of this NOFO, the applicable five fiscal year period is fiscal year 2019 to fiscal year 2023. On June 1st of each year, the SBA assesses the Performance Benchmark rates for all applicable SBIR and Small Business Technology Transfer (STTR) awardees in the Company Registry. STTR is another program that expands funding opportunities in the federal innovation research and development arena. See <https://www.sbir.gov/performance-benchmarks>. Performance Benchmark rates are based on a company's total SBIR/STTR awards, across all the participating agencies.

Companies that fail to meet the Performance Benchmark requirements are not eligible to submit a Phase I proposal for a period of one year from the assessment: from June 1st through May 31st. Note that this does not affect a company's eligibility for Phase II or Phase III awards.

The *Commercialization Rate* requirement applies to SBIR and STTR Phase I applicants that have received more than 15 (16 or more) Phase II awards over the past 10 fiscal years, excluding the last two years. These companies must have realized, to date, an average of at least \$100,000 of sales and/or investments per Phase II award (awarded during this period), or have

received a number of patents resulting from the SBIR work equal to or greater than 15% of the number of Phase II awards. SBA sends three notifications each year to companies affected by the benchmark performance requirements:

April 1st – SBA runs a preliminary assessment to determine which companies appear to be failing a benchmark given the data in the system on that date. SBA sends a Warning Notice to these companies so that they can review the award in the Company Registry (SBIR.gov) and update as needed.

June 1st – SBA identifies companies that fail a benchmark and notifies them that they are not eligible to submit a Phase I proposal for a period of one year.

All applicants should verify their *Transition Rate* eligibility for Phase I awards. When logged in to the Company Registry at <https://www.sbir.gov/registration>, awardees can view their last assessed *Transition Rate* by clicking on the “Performance Benchmark” side-bar. These company-specific rates appear under the heading “At Last Assessment.” A thumbs-up/thumbs-down indicator shows whether or not the company passed the benchmark rates at the last assessment. If at any time, a company believes the award information on SBIR.gov is not correct, it should notify SBA using the *dispute* link provided. If a company’s dispute of the data used for the rates is under review, it will see “TBD” under the “At Last Assessment” heading. Companies with less than the threshold number of awards (21 Phase I awards for the *Transition Rate*) will see “N/A” displayed because the requirement did not apply to them.

Under the heading “Current (On-Going)”, the page displays a running calculation of the benchmark rates using the next years’ time periods (each period moved up by one year) and current data in the system. Companies should monitor these rates to anticipate their standing for each upcoming June 1 assessment. Prior to proposal preparation, all applicants to this NOFO that have received more than 20 Phase I awards across all federal SBIR/STTR agencies over the past five (5) years should verify that their company will not have a failing status on the *Transition Rate* Benchmark at the time of award.

General information on the Performance Benchmark requirements is available at:
<https://www.sbir.gov/performance-benchmarks>