



NATIONAL SCIENCE FOUNDATION
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NSF 22-053

Frequently Asked Questions (FAQs) for NSF Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Phase I Programs

Note: Additional FAQs may be found at: <https://www.sbir.gov/faqs/all>

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PROGRAM BASICS

1. **What are the SBIR and STTR programs? What are the differences between the two programs, and which program is more appropriate for my project?**

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs are highly competitive programs that encourage domestic small businesses to engage in Federal Research/Research and Development (R/R&D) with the potential for commercialization. Through a competitive awards-based program, SBIR and STTR enable small businesses to explore their technological potential and provide the incentive to profit from its commercialization. By including qualified small businesses in the nation's R&D arena, high-tech innovation is stimulated, and the United States gains entrepreneurial spirit as it meets its specific research and development needs.

At NSF, both SBIR and STTR Programs have identical philosophies, review criteria, review processes, and award dollar amounts. The two programs also have similar success rates.

STTR's most important role is to bridge the gap between performance of basic science and commercialization of resulting innovations. Central to the STTR program is the partnership between small businesses and nonprofit research institutions. The STTR program requires the small business to formally collaborate with a research institution. As a result, an STTR proposal must include a Cooperative Research Agreement (CRA) between the small business and the research institution or a letter indicating that a CRA will be forthcoming upon notification of an award recommendation.

We recommend that potential proposers wait until invited to submit a full proposal to choose between the SBIR and STTR programs. The budget requirements of the two programs can be used to determine which is more appropriate for a given project. For an STTR submission, a minimum of 40% of the research, as measured by the budget, must be performed by the small business concern and a minimum of 30% of the research, as measured by the budget, must be performed by the not-for-profit research institution, with the balance permitted to be allocated to either of these, or to other subawards or consultants. NSF reserves the right to convert submissions between SBIR and STTR, as appropriate, based on budget. Proposers may not submit simultaneous SBIR and STTR Phase I proposals.

2. **What are the funding priorities for the NSF SBIR/STTR programs?**

The SBIR/STTR programs are intended to support scientific and engineering excellence and technological innovation that is moving from the lab to the market. By investing

federal research and development funds into startups and small businesses, NSF hopes to build a strong national economy and stimulate the creation of novel products, services, and solutions in the private sector; strengthen the role of small business in meeting federal research and development needs; increase the commercial application of federally supported research results; and develop and increase the US workforce, especially by fostering and encouraging participation by socially and economically disadvantaged and women-owned small businesses.

The SBIR/ STTR programs at NSF solicit proposals based on groundbreaking scientific discoveries or significant engineering breakthroughs from small businesses consistent with NSF's mission to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense.

The NSF SBIR/STTR programs are technology-agnostic and do not seek to address specific technical challenges. The portfolio is divided into broad technology areas listed here: <https://seedfund.nsf.gov/portfolio/>. Note: This list is NOT exhaustive. A small business has the freedom to pursue any technology and market area, with two exceptions: 1. Projects where the envisioned commercialization pathway involves the production, distribution or sale by the company of chemical components, natural or synthetic variations thereof, or other derivatives related to Schedule I controlled substances; and, 2. Efforts where NSF funding is requested for clinical trials (discussed in [Question 36](#) and [Question 37](#) below).

3. What is innovative research and how do I gauge whether my research is a good fit?

The NSF SBIR/STTR programs fund the research and development (R&D) of deep technologies, which are based on discoveries in fundamental science and engineering. Proposals that are a good fit for the programs generally feature most or all of the below aspects:

- the application of creative, original, and potentially transformative concepts to systematically study, create, adapt, or manipulate the structure and behavior of the natural or man-made worlds;
- the use of the scientific method to propose well-reasoned, well-organized activities based on sound theory, computation, measurement, observation, experiment, or modeling;
- the demonstration of a well-qualified individual, team, or organization ready to deploy novel methods of creating, acquiring, processing, manipulating, storing, or disseminating data or metadata; and/or
- the availability of adequate resources to carry out the applications and novel integration of new theories, analysis, data, or methods regarding cognition,

heuristics, and related phenomena.

The NSF SBIR/STTR programs require that projects funded contain both technical risk and technological innovation. Technical risk assumes that the possibility of technical failure exists for an envisioned product, service, or solution to be successfully developed. This risk is present even to those suitably skilled in the art of the component, subsystem, method, technique, tool, or algorithm in question. Technological innovation indicates that the new product or service is differentiated from current products or services; that is, the new technology holds the potential to result in a product or service with a substantial and durable advantage over competing solutions on the market. It also generally provides a barrier to entry for competitors. This means that if the new product, service, or solution is successfully realized and brought to the market, it should be difficult for a well-qualified, competing firm to reverse-engineer or otherwise neutralize the competitive advantage generated by leveraging fundamental science or engineering research techniques.

NSF requires that potential proposers first submit a Project Pitch (see [Question 23](#)) so that the project's fit within the NSF program can be assessed, before the submission of a full proposal. Only if the Project Pitch is invited by the NSF Program Director will a full proposal be allowed. NSF looks for detailed evidence of technical risk and scientific/engineering innovation in the Project Pitch.

4. How does NSF select which projects to support? Who manages the review and selection process?

The submission process has two steps: The first step is the submission and evaluation of a Project Pitch (see [Question 23](#)). If the Project Pitch results in an invitation, the second step is the submission of a full proposal.

All full proposals are carefully reviewed according to the [NSF Merit Review Process](#). The [Timeline for the Proposal and Award Process](#) is 6-8 months. Read more on the program website: [Peer Review Guidelines](#) and [Review Process](#).

During the NSF SBIR/STTR Merit Review Process, at least three experts with relevant technical and/or market expertise assess how the proposal meets the review criteria. The Merit Review Criteria are listed here: <https://seedfund.nsf.gov/resources/review/peer-review/> as well as in the solicitations. These reviewers are selected by NSF Program Directors who, in turn, lead and oversee the review process. The Program Director uses the proposal itself, the reviewers'/panelists' statements, their knowledge of the field and marketplace, and other programmatic factors to make a recommendation for funding or declination.

5. What activities and expenses are appropriate to be funded in a Phase I project?

What activities and expenses are not permitted?

NSF SBIR/STTR funding is for research and development (R&D) only. Generally, NSF SBIR/STTR funding can be used for salary and wages for company employees, associated fringe benefits, materials and supplies, and a number of other direct costs needed to conduct the proposed R&D. NSF SBIR/STTR projects may also fund consultants to the project and subawards to partner organizations. Some types of indirect costs necessary for the small business to conduct the project are also appropriate. Awardees may request indirect costs as per normal practice and as permitted by the Federal Acquisition Regulations (FAR), part 31.

In general, NSF SBIR/STTR Phase I funds may not be used for business development, marketing and sales, production, or any activity unrelated to the underlying research and development effort (either as direct or indirect costs). There are two notable exceptions: an awardee may request a small business fee as part of the award. This fee should be consistent with the normal profit margins provided to profit-making firms for R&D work; Such funds are unrestricted. NSF also permits proposers to budget for costs related to an awardee's participation in NSF's Beat-The-Odds Boot Camp.

Equipment purchases and foreign travel expenses are not permitted on a Phase I award but the purchase of equipment is permitted in Phase II. Please consult the NSF SBIR/STTR Phase II solicitation for more information.

The NSF SBIR/STTR programs do not support clinical trials or proposals from companies whose commercialization pathway involves the production, distribution or sale by the company of chemical components, natural or synthetic variations thereof, or other derivatives related to Schedule I controlled substances.

6. Will NSF fund work on a product that has already been developed? Will the program fund small businesses to pay sales and marketing, business development, or other related costs?

NSF SBIR/STTR funding is for research and development (R&D) only. If the proposed idea has already been proven to be technically feasible and the company is hoping to use funding to perform analytical testing on the product, execute the business plan, and/or begin manufacturing, the project is NOT a good candidate for Phase I funding. Projects focusing on incremental improvements to existing products will not be funded. The aim of a Phase I project should be to demonstrate the technical feasibility of the proposed innovation thereby bringing the innovation closer to market.

The NSF SBIR/STTR programs will not fund a small business to pay for sales and marketing, business development or other related costs.

7. Must Phase I proposers submit preliminary data as part of the proposal?

Preliminary data are not required for NSF SBIR/STTR Phase I proposals; However, preliminary data often helps build the case that the small business is well positioned to demonstrate technical feasibility if the Phase I project is funded.

8. Are new startup companies appropriate candidates for the program?

Yes. NSF encourages proposals from many types of small businesses. In fact, most NSF SBIR/STTR Phase I awards are made to companies that are newly formed and very small. Companies with no current revenues and/or a minimal history of operations are encouraged to apply. However, those small businesses must show that they have a clear plan to quickly launch the company operations and assemble a team capable of carrying out the proposed Phase I project. Conversely, companies with a significant history of operations and/or R&D funding will be evaluated based on their track record of prior technology development and commercialization and whether NSF funding will be catalytic to their further development.

9. Are first-time entrepreneurs appropriate candidates to participate in the program?

Many, if not most, NSF SBIR/STTR awardee companies are launched by first-time entrepreneurs. NSF encourages proposals from entrepreneurs of all experience levels — new and seasoned. It is critical that the team demonstrate commitment to advancing the technology to the market. The lack of a commercialization track record does not result in a disadvantage if the proposer shows commitment to the business' mission and a path to successful commercial outcomes.

10. What are the expected outcomes (deliverables) of a Phase I project?

The aims of the Phase I project should include a demonstration of the technical feasibility of the proposed innovation and thereby a path to advancing the innovation toward commercialization. The R&D outcomes best demonstrating technical feasibility vary widely based on the technology field and the particulars of the project.

The required deliverable at the end of an NSF SBIR/STTR Phase I grant is a report that summarizes the project's technical accomplishments. Phase I outcomes take many forms depending on the technology area and stage of the research. Outcomes could be proof-of-concept data, a prototype, analytical/testing results of the product under development, etc.

Phase I projects should mitigate the technical risks central to future commercial success. Phase I R&D work should present high technical risk; thus, not all projects will achieve the desired technical outcomes. Successful projects will naturally be better positioned to obtain follow-on funding, including SBIR/STTR Phase II funding.

11. What other benefits does the NSF SBIR/STTR program provide?

There are significant benefits beyond Phase I funding:

- Merit Review: Even proposers who do not receive a Phase I award can benefit from the NSF's Merit Review Process. NSF provides valuable feedback from technical experts and commercial reviewers for every full proposal it receives. This information may positively impact a company's future technology development and/or business model.
- The NSF "Stamp of Approval": NSF's recognized peer review process shows investors or partners that the subject project and technology met NSF's requirements for novelty and innovation.
- Potential follow-on funding: Only NSF Phase I awardees may apply for an NSF Phase II award. Once a small business has obtained a Phase II award, it is eligible to apply for additional supplemental funding that could augment the total Phase II amount. With these supplements, many Phase II awards total more than \$1.5 million.
- Network access: NSF's awardees have access to one of the nation's largest networks of promising startups and small businesses.
- Beat the Odds Boot Camp: NSF awardees have the ability to access the renowned [Beat the Odds Boot Camp](#) training program – a highly condensed, experiential training activity that enables customer discover and marketplace feedback on proposed products and services.

12. Where do I go to learn more?

The program's website, seedfund.nsf.gov, is a great place to start. This site also has links to videos covering program basics (on the program's YouTube page) as well as to informational webinars hosted by NSF staff that occur multiple times each month.

13. Are examples available of recently funded NSF Phase I proposals and/or awards?

Companies and projects funded by the NSF SBIR/STTR programs may be explored on the portfolio webpages: for [Phase I awardees](#), [Phase II awardees](#), or [COVID-19 related projects](#). Award information can also be found on the [NSF Award Website](#).

The NSF SBIR/STTR programs do not provide sample proposals or sample Project Pitches though you may contact awardees directly to see if they would share their proposal. You may also submit an official [Freedom of Information Act Request \(FOIA\)](#).

ELIGIBILITY

14. The NSF SBIR/STTR Phase I programs solicitation requires that I receive an

invitation to submit a full proposal. How do I get invited to submit?

Potential SBIR/STTR proposers must first create an account and submit a written "Project Pitch" through this [link](#). The cognizant NSF SBIR/STTR Program Director (PD) will use the Project Pitch to determine whether the proposed project is a good fit with the program's objectives. The Project Pitch is an online form with questions about the technological innovation, key technical objectives and challenges, the market opportunity, the company, and the team. Specifically, the cognizant PD will look for: (i) detailed descriptions of the innovative scientific or engineering technologies with the promise of commercial and/or societal impact, and (ii) explanation of the project's significant technical risk.

A Project Pitch may be submitted at any time (there is no deadline). Small businesses that have been invited to submit a full Phase I proposal may do so based on that Project Pitch at any time for up to one year. Please see the current solicitation for the proposal submission windows.

15. What happens if I submit a Project Pitch and am not invited to submit a full proposal?

A small business submitting a Project Pitch that is not invited to submit a full Phase I proposal is permitted to resubmit their Project Pitch (with revisions to address any deficiencies) in the next submission window. Please refer to the solicitation for exact submission window dates.

16. I have many ideas. Can I submit more than one Project Pitch at the same time?

No. A small business with a pending Project Pitch must wait to receive a response before submitting another Project Pitch. Additional Project Pitches submitted by companies with a pending Project Pitch will neither be reviewed nor invited.

17. Must the proposing small business be legally incorporated at the time of the Project Pitch submission? At the time of the full proposal submission?

A small business does not need to be legally incorporated to submit a Project Pitch.

However, the proposing small business must be a legal entity at the time of full proposal submission. To become a legal entity, you must complete all the necessary registrations (see [Question 31](#)). Phase I proposing small businesses need not have commenced company operations at the time of proposal submission.

18. Do the NSF SBIR/STTR programs support non-U.S. companies or work that is performed abroad?

SBIR/STTR eligibility guidelines state that the majority (more than 50%) of a small business' equity must be directly owned and controlled by individuals (one or more) who are U.S. citizens or permanent residents of the United States. Additionally, the NSF SBIR/STTR programs only support work that is performed in the U.S. (including work performed by subawardees and consultants).

19. Who is the Principal Investigator (PI) on an NSF SBIR/STTR Phase I grant? What are the responsibilities of the PI? Does the PI need to have a PhD? Can the PI be a graduate student?

The Principal Investigator (PI) is the person who assumes legal responsibility for executing the NSF-funded project and for reporting project changes and outcomes to NSF. The PI is often the technical lead on the project. They must be capable of communicating and tracking technical progress on the award. The PI is responsible for communicating with the cognizant NSF PD and staff during the award and for monitoring the performance of the project to assure adherence to performance goals, schedules, or other requirements as appropriate for the project or the terms of the award. The PI is also responsible for submitting required reports to the NSF.

The PI is NOT required to have a PhD or any other specific degree. A graduate student or post-doctoral researcher is eligible to serve as the PI on an NSF SBIR/STTR Phase I proposal, if s/he has a plan to meet the primary employment requirement at the time a Phase I award is made (see next paragraph). Many PIs have no post-graduate training.

The PI MUST be more than 50 percent legally-employed by the proposing small business by the time of the award and for the entire duration of the Phase I project. NSF considers a full-time work week to be 40 hours and considers employment elsewhere of greater than 19.6 hours per week to not meet this requirement. Additionally, anything that prevents an individual from meeting this legal employment requirement (including residency status or university policy) will make that individual ineligible to be PI.

The PI must also commit a minimum level of effort to the project described in the application (not to be confused with the greater than 50% employment requirement). The minimum level of effort for the PI is one person-month per six months of project duration.

20. May a faculty member at a college or university serve as the Principal Investigator on an NSF SBIR/STTR project?

In most cases, employment as a faculty member at a college or university conflicts with the primary employment requirement for the PI of an SBIR/STTR project (see [Question 19](#)). However, in some cases, the college or university may grant a leave of absence or otherwise indicate that the faculty member is permitted to be employed more than 50%

at the small business. If this is case, the faculty member can be the PI on the project. NSF may ask for written confirmation that the faculty member is on leave or otherwise authorized to be employed appropriately to serve as PI.

21. Is a non-profit eligible to submit an NSF SBIR or STTR proposal?

No. A non-profit organization cannot directly receive an NSF SBIR or STTR award. However, non-profits may be a minority investor or subcontractor or sub-grantee on an NSF SBIR or STTR project. The following types of institutions are eligible to serve as minority investors or subcontractors or sub-grantees on an NSF STTR Project:

- Non-profit college or university,
- Domestic nonprofit scientific /research organization, and/or
- Federally Funded R&D Center (FFRDC).

Non-profit organizations may consider submitting proposals to the NSF [Partnerships for Innovation \(PFI\)](#) Program.

22. Do the NSF SBIR/STTR programs support cannabinoid-related technologies?

The NSF SBIR/STTR programs do not support proposals from companies whose commercialization pathway involves the production, distribution or sale by the company of chemical components, natural or synthetic variations thereof, or other derivatives related to Schedule I controlled substances.

THE PROJECT PITCH

23. The NSF SBIR/STTR Phase I programs solicitation requires that I submit a Project Pitch prior to starting a full proposal. What is a Project Pitch and why is it required?

The Project Pitch is an online form with questions about the technological innovation, key technical objectives and challenges, the market opportunity, the company, and the team. The Project Pitch is submitted directly via the NSF portal: <https://nsfiip.force.com/sbir/s/login/> (users must first create an account and log in to access the portal). If the proposed project is determined to be a good fit, you will receive an official email invitation from NSF to submit a full proposal. This invitation entitles you to submit a full proposal to the SBIR/STTR Phase I programs solicitation and is valid for 12 months from the date the invitation is issued.

The Project Pitch is used to: (1) provide specific feedback to entrepreneurs or small businesses regarding whether proposed projects are a good fit for the NSF SBIR/STTR Phase I programs and (2) ensure that potential entrepreneurs or small businesses do not expend time or resources in the development of full proposals where the goals do

not align with the objectives of the NSF SBIR/STTR programs.

24. Who should submit a Project Pitch?

We recommend that the Project Pitch be submitted by the person likely to become the Principal Investigator for the project and/or an officer of the small business.

25. How do I submit my Project Pitch?

Proposers can create an account and submit the Project Pitch at this site:
<https://nsfiip.force.com/sbir/s/login/>.

26. When should I submit my Project Pitch?

Submit a Project Pitch at any time. NSF encourages small businesses to submit the Project Pitch as soon as they consider applying for funding. The Project Pitch evaluation process typically takes about a month.

27. How does NSF determine the topic area and who is the cognizant Program Director?

NSF SBIR/STTR Staff (Program Directors and Experts) review Project Pitches based on technical topic areas. Your Project Pitch may be re-assigned and reviewed under a different topic area if NSF determines there is better portfolio alignment. If you have additional questions, contact us at sbir@nsf.gov.

NSF funds almost all areas of technology. A list of current NSF SBIR/STTR topics and their associated Program Directors are listed [here](#). Please note that if you do not see your topic on this list, you are allowed to submit to “Other Topics.”

28. What happens after I submit my Project Pitch? How does NSF use this information to decide whether to invite a small business to submit a full proposal?

Once NSF receives a Project Pitch, the cognizant NSF staff member will review its contents to determine whether the proposed project is a good fit for the NSF SBIR/STTR Phase I programs' objectives. A successful Project Pitch will adequately address: (i) innovative technologies showing promise of commercial and/or societal impact and (ii) technical risk with techniques drawn from fundamental science and engineering research.

The NSF staff member may reach out to the small business to request for more information so that they are able to make a recommendation; to extend an invitation to submit a full proposal; or to notify the small business that the proposed project is not a fit for the NSF SBIR/STTR programs.

29. Is there a limit to how many Project Pitches my small business can submit?

Yes. A small business may only have one Project Pitch or SBIR/STTR proposal under consideration at any time. You may not submit a new Project Pitch if your small business has any of these: (1) a pending Project Pitch; (2) an invitation; (3) a pending SBIR/STTR proposal. Furthermore, if your Project Pitch is declined, you will need to wait for the next submission window to submit a new or revised Project Pitch. Any Project Pitch submissions from a company with a pending Project Pitch, an invitation, or a pending proposal will not be considered and an invitation will not be issued.

30. What else is needed besides the Project Pitch invitation?

A small business with an official invitation must obtain the required registrations if the company hasn't worked with the Federal Government before. You will need to register in the following systems in order to submit your full Phase I proposal: 1) [Dun and Bradstreet Data University Numbering System*](#); 2) [System for Award Management](#); 3) [Small Business Administration \(SBA\) Company Registration](#), and 4) [Research.gov](#). After you register with Research.gov, you can login to [Fastlane](#) to start your proposal. NOTE: It is recommended to start these registrations while working on the proposal because they may take several weeks to complete. * **Effective February 28, 2022, NSF will transition from DUNS numbers to the New System for Award Management (SAM) Unique Entity Identifier (UEI) in NSF systems.** See the [NSF Advisory Page](#) for more details.

PREPARING A FULL PROPOSAL

31. I have been invited to submit a proposal. What steps I should take first?

If you have been invited to submit a proposal, we STRONGLY recommend that the small business immediately start the process of completing the four required registrations, in the following order:

1. Register with DUNS* at <https://www.dnb.com/duns-number/get-a-duns.html>. A DUNS and Employer Identification Number (EIN) are required for SAM registration. * **Effective February 28, 2022, NSF will transition from DUNS numbers to the New System for Award Management (SAM) Unique Entity Identifier (UEI) in NSF systems.** See the [NSF Advisory Page](#) for more details.
2. Register the small business in the System for Award Management (SAM) <https://www.sam.gov/SAM/> as early as possible! Read the [SAM Quick Start Guide](#) for guidance.
3. Before applying, register your company with NSF in Research.gov: <https://www.research.gov/research-web/>. Only after registering with

Research.gov can you login to FastLane (<https://fastlane.nsf.gov>) and begin preparing your proposal. (SBIR and STTR proposals are not accepted in Research.gov). We recommend you explore FastLane before submitting your application. For help in determining who should be the PI on the project, see [Question 19](#).

4. Register with the SBIR Company Registry. See the "Registrations" page for more details: <https://www.sbir.gov/registration>.

Additionally, letters of support from outside individuals or organizations are an important part of the proposal. However, these letters take time to obtain. Potential proposers are recommended to start obtaining these letters as early as possible. See [Question 66](#) for more information.

You must submit a full proposal within one year from the date the Project Pitch invitation was issued. An invitation issued during a given submission window may be used to submit a full proposal in a subsequent submission window, assuming it is within this one-year period. The invitation must be included with the proposal. Proposals without invitations will be Returned Without Review.

32. I noticed that the solicitation has submission "windows." How does this compare to a specific deadline? Is there a deadline?

The end of a submission window is like a traditional deadline in that proposals submitted before the deadline may be grouped together for evaluation. The submission windows differ from deadlines as they allow the invited small business to submit a full proposal at any time during the year (see the SBIR/STTR Phase I solicitation for specific submission window dates), increasing the proposer's flexibility on submission time. Once a submission window closes (at 5:00 pm proposer's time), another submission window usually opens the next day — allowing your proposal to be submitted as soon as it is ready.

33. How long does the review of a full proposal take?

The duration of the Merit Review process may vary among topic areas. All full proposals are carefully reviewed according to the [NSF Merit Review Process](#). The [timeline for the proposal and award process](#) is about 6 months. Read more on the program website: [Peer Review Guidelines](#) and [Review Process](#).

34. May a small business submit multiple Phase I proposals during the same submission window?

No. A given small business may only submit ONE proposal to a given submission window. Small businesses are prohibited from submitting the same project or separate

projects to both the SBIR and STTR programs in a single submission window. This requirement allows a proposer to focus on submitting one strong proposal that best aligns with the goals of her/his business and the NSF SBIR/STTR review criteria.

35. Can the NSF SBIR/STTR programs fund work on products whose target customers will be in the defense sector or whose customers or end users are government entities?

The NSF SBIR/STTR programs do not dictate which markets or customers small businesses may serve; However, if an intended customer for the solution developed under the SBIR/STTR grant will be the Department of Defense (DOD), the Department of Homeland Security (DHS), or the National Aeronautics and Space Administration (NASA), proposers should consider applying through the SBIR/STTR programs at those agencies (DOD - <https://osbp.army.mil/Programs/SBIR-STTR>; DHS - <http://www.dhs.gov/science-and-technology/sbir>; NASA - <https://sbir.nasa.gov/>). Those agencies (and others) focus on the acquisition of solutions developed under the SBIR/STTR programs. The submission of an identical or overlapping proposal to both NSF and another agency is possible (see [Question 38](#)) if a project could be appropriate for both NSF and the other agency. Note: The federal government cannot fund the same work twice (see [Question 38](#)).

36. Both NSF and NIH fund biomedical/health-related projects through the SBIR/STTR programs. How are the programs different?

NSF SBIR/STTR funding may not be used to support clinical trials, the clinical validation of information technologies or medical devices, or studies performed primarily for regulatory purposes. Limited studies with human subjects may be acceptable to the extent that they are performed in support of feasibility, proof-of-concept studies, or early-stage technologies. For more information on NIH SBIR/STTR Clinical Trials, see their Opportunity Decision Tree at: <https://sbir.nih.gov/decision-tree>.

More specific guidance on representative projects of NSF SBIR/STTR support of biomedical and health-related technologies may be found on our [portfolio page](#). Please be aware that NSF SBIR/STTR technology topics and subtopics are neither restrictive nor exhaustive but give a general sense of the types of proposals that are funded.

Another way to explore typical awards under NIH and/or NSF is via an [SBA Award Search](#). [SBA.gov](https://www.sba.gov) houses data on all SBIR/STTR awards regardless of the funding agency.

37. What documentation is required if my proposed SBIR/STTR Phase I research and development (R&D) activities involve human subjects and/or vertebrate animals?

Projects involving research with human subjects must ensure that subjects are protected from research risks in conformance with the relevant Federal policy known as the Common Rule (*Federal Policy for the Protection of Human Subjects*, 45 CFR 690). All projects involving human subjects must either (1) have approval from an Institutional Review Board (IRB) before issuance of an NSF award; or, (2) must obtain a statement from the IRB indicating research exemption from IRB review. This documentation must be completed before issuance of an NSF award, in accordance with the applicable subsection, as established in section 101(b) of the Common Rule. If certification of exemption is provided after submission of the proposal and before the award is issued, the exemption number corresponding to one or more of the exemption categories also must be included in the documentation provided to NSF. The small business has three basic options with regard to human subjects review:

1. Use the review board of a (usually local) university or research institution, either via consultants to the project, a project subcontract, or directly through its own contacts;
2. Use a commercial provider;
3. Establish your own IRB (see Office for Human Research Protections (OHRP) at the Department of Health and Human Services (HHS):
<http://www.hhs.gov/ohrp/assurances/index.html#registernew>).

For projects lacking definite plans for the use of human subjects, their data or their specimens, pursuant to 45 CFR § 690.118, NSF can accept a determination notice that establishes a limited time period under which the PI may conduct preliminary or conceptual work that does not involve human subjects. See more information and instructions regarding this documentation in the PAPPG [here](#).

Any project proposing use of vertebrate animals for research or education shall comply with the Animal Welfare Act (7 USC 2131, et seq.) and the regulations promulgated thereunder by the Secretary of Agriculture (9 CFR 1.1-4.11) pertaining to the humane care, handling, and treatment of vertebrate animals held or used for research, teaching or other activities supported by Federal awards. In accordance with these requirements, proposed projects involving use of any vertebrate animal for research or education must be approved by the submitting organization's Institutional Animal Care and Use Committee (IACUC) before an award can be made. For this approval to be accepted by NSF, the organization must have a current Public Health Service (PHS) Approved Assurance. See also PAPPG Chapter XI.B.3 for additional information on the administration of awards that utilize vertebrate animals. This documentation must be completed before issuance of an NSF award.

38. May a small business submit identical or overlapping proposals to the NSF SBIR/STTR programs and another federal agency?

Proposers may submit identical or overlapping SBIR/STTR proposals to different agencies, but NSF will not make awards that duplicate research funded by, or anticipated to be funded by, other agencies. Proposers must note potential overlap on the Cover Sheet and Current and Pending Support Forms of the NSF proposal. If a proposer fails to disclose that another Federal Agency has received this proposal (or an identical or overlapping proposal) on the proposal Cover Sheet and Current and Pending Support Forms, the proposer could be liable for administrative, civil, or criminal sanctions.

If a proposal is selected for award by NSF and another agency, the cognizant agencies will work together to determine which agency will fund the work. Sometimes, the project scope and/or budgets will be adjusted if both projects will be funded to ensure that no portion of the work is funded twice. The NSF SBIR/STTR programs will not co-fund proposals with another agency.

39. If a proposing small business elects to partner with a university or research institute as part of an STTR Phase I proposal, must the partner also be part of their Phase II proposal?

It is important to note that proposing small businesses are welcome to partner with a university or research institute in both the SBIR Program and the STTR Program. See [Question 1](#) or the SBIR/STTR Phase I solicitation for budget requirements that may help determine which program is more appropriate.

The type of Phase I proposal (SBIR or STTR) does not determine the type of Phase II proposal. For example, an NSF STTR Phase I awardee may submit an NSF SBIR Phase II proposal and an NSF SBIR Phase I awardee may submit an STTR Phase II proposal.

The research partner for an NSF STTR Phase I and its associated Phase II proposals do not have to be the same. The company is allowed to change research partners for the STTR Phase II submission.

40. Can I switch from a SBIR Phase I proposal to an STTR Phase II proposal? From an STTR Phase I proposal to an SBIR Phase II proposal?

Yes, as long as the budget allocates the proper percentage to the research partner (see [Question 1](#)) per the SBIR and STTR rules, you can switch between SBIR and STTR proposals and vice versa.

41. What is the NSF Proposal & Award Policies & Procedures Guide (PAPPG)? Some guidelines in the NSF PAPPG are not spelled out in the NSF SBIR/STTR Phase I solicitation or conflict with information in the solicitation. Which policy document

should I follow?

The NSF Proposal & Award Policies & Procedures Guide (PAPPG):

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg, contains NSF's general proposal preparation and submission guidelines. The SBIR/STTR programs have solicitations modifying and superseding the general provisions of the PAPPG. In those cases, where there are requirements in the SBIR/STTR solicitation that are not in the PAPPG or conflict with the PAPPG, the guidelines of the SOLICITATION must be followed.

The SBIR/STTR Phase I solicitation includes MANY instructions that deviate from the PAPPG. The solicitation includes the rules and guidelines that proposers must follow to submit a proposal.

42. **What are the rules or restrictions regarding contact with NSF SBIR/STTR Program Directors, and what is the appropriate way to engage?**

Small businesses are welcome to contact the [NSF SBIR/STTR Program Directors](#) at any time. Proposers may also contact sbir@nsf.gov or call 703-292-8050. Please note: NSF SBIR/STTR Program Directors become increasingly busy as each submission window closes, so small businesses are strongly encouraged to contact NSF staff early within a given window for guidance on submitting a Project Pitch or full proposal. A proposing PI may reach out to only one NSF SBIR/STTR Program Director prior to submitting a proposal, but there is no requirement to do so. Program Directors can provide guidance on the process, but not the content, of a proposal prior to submission.

43. **Where do I prepare and submit a full SBIR or STTR Phase I proposal?**

Full proposals are submitted via FastLane at <https://fastlane.nsf.gov/>. Proposals may not be submitted via Research.gov or grants.gov.

FULL PROPOSAL PREPARATION AND SUBMISSION

44. **Is help available for navigating FastLane or troubleshooting proposal submission problems?**

FastLane provides [Help for Proposal Preparation](#) and [Frequently Asked Questions About FastLane Proposal Preparation](#). As a reminder, if the PAPPG and the solicitation conflict, the solicitation rules apply. Read step-by-step instructions and tips about [how to submit your proposal in Fastlane](#) on the NSF SBIR/STTR [website](#).

For advanced questions and troubleshooting, the FastLane Help Desk is another resource and can be reached at fastlane@nsf.gov or 1-800-673-6188 (available 7 a.m. to 9 p.m. Eastern time, Monday-Friday).

45. What if there are changes or updates after a proposal is submitted (but before the submission window closes)? Does NSF review SBIR/STTR proposals as soon as they are submitted?

NSF SBIR/STTR Program Directors may start processing or viewing proposals upon receipt. If your company has updates or new information pertinent to the project after the full proposal is submitted, we encourage you to contact the Program Director reviewing your Project Pitch to provide details.

46. What rules must be followed to ensure that a proposal passes the initial administrative review for completeness and continues to the Merit Review Process?

Please refer to Section V., "Proposal Preparation and Submission Instructions", in the current Phase I solicitation for guidance. Please also see the [Fastlane guide](#) on our [website](#).

ALL invited full proposals passing the initial screening for compliance undergo the NSF [Merit Review Process](#). The Merit Review criteria are given here: <https://seedfund.nsf.gov/resources/review/peer-review/> as well as in the solicitation.

47. What happens if my proposal doesn't comply with the submission rules? May I resubmit?

A proposal that does not comply with the guidelines in the solicitation will be Returned Without Review. It is especially important that a proposal includes its Project Pitch invitation. If a proposal is Returned Without Review, the proposer may resubmit without submitting a new Project Pitch, if it is within the one-year period of the Project Pitch invitation and the proposal's compliance issues have been addressed.

48. If the System for Award Management (SAM) indicates that it will take several weeks for a proposing business's registration to be complete, what should the business do?

An active SAM registration is required to create a new account in Fastlane. A Fastlane account is required to submit a proposal to NSF. If the SAM registration for a company has not been created before the end of the NSF SBIR/STTR Phase I submission window, the proposer will not be able to submit a proposal during that window. The proposer should then submit their proposal in the next solicitation window. We highly encourage any small business considering applying to the SBIR/STTR programs to register in SAM.gov as early as possible! Visit sam.gov for guidance.

49. How does a proposer know that they successfully submitted an NSF SBIR/STTR

Phase I proposal?

When a proposal has been received by NSF, the proposer will receive a proposal number that is seven digits long and starts with the last two digits of the current fiscal year. For example, proposal numbers for proposals submitted between October 1, 2021 and September 30, 2022 should be seven digits long and begin with "22".

If the final proposal number has not been assigned via email, it is likely that the PI submitted the proposal but has not yet performed the final step, which is to forward the proposal to the small business' Authorized Organizational Representative (AOR)/Sponsored Projects Officer (SPO), who signs and submits the proposal through FastLane. Instructions for this step can be found in the [FastLane Step-by-Step Guide: https://seedfund.nsf.gov/fastlane/proposal-submission/](https://seedfund.nsf.gov/fastlane/proposal-submission/).

50. **How can proposers check on the status of an NSF SBIR/STTR Phase I proposal after it has been submitted?**

The Principal Investigator (PI) on a given proposal can log into Research.gov: [NSF User Sign In](#) and click "Proposal Functions," then "Proposal Status." Each proposal and its status will be listed. Navigating to an individual proposal will enable proposers to view reviewer comments and, if available, the Panel Summary once the proposal has been officially recommended for award or declination. For proposals reviewed in a panel, a proposing Principal Investigator will receive a Panel Summary, which is a consensus statement from all panel members. For ad hoc review of proposals (meaning that a panel was not held), there will be no Panel Summary.

BUDGET PREPARATION

51. **Does the budget maximum in the solicitation refer to the total award budget or the direct costs only?**

The maximum budget in the solicitation refers to the total budget, inclusive of indirect costs and any requested small business fee.

52. **What is a reasonable salary for the PI and other personnel on the project?**

The best way to ensure that salary requests are appropriate is to propose salaries that do not exceed the median levels based on Bureau of Labor Statistics (BLS) Wage Data for the same geography and job title. More information on using BLS Wage Data can be found here: <https://www.bls.gov/bls/blswage.htm>.

53. **Can I have a co-PI on an NSF SBIR/STTR proposal?**

NSF SBIR proposals may NOT have co-PIs. Proposals may include subawardees but

should not list a co-PI.

NSF STTR proposals MUST have a subawardee research institution with an associated co-PI listed on the Cover Sheet and on the subaward budget.

54. How should indirect costs be structured for an NSF SBIR/STTR Phase I project, if the proposing small business does not have an established indirect cost rate?

Small businesses without an established indirect cost rate should create an estimate based on itemizing specific indirect costs expected during the Phase I project. Common indirect costs are rent, utilities, some types of insurance, and other company expenses that are not directly required by the NSF project but are necessary for the overall business operation. It is recommended that small businesses without an established indirect cost rate request indirect costs and fringe benefits at or below the "safe rate" (i.e., total budgeted indirect costs plus budgeted fringe benefits should not exceed 50 percent of the total direct salaries and wages) or 10% de minimis on MODIFIED total direct costs on the project. See the solicitation for details.

55. Can a person be listed on the budget as a subawardee (or consultant) and also on the main budget?

In general, no person should request funds or otherwise financially benefit through more than one institutional affiliation for a single NSF SBIR/STTR project. Individuals with a financial interest in the proposing small business (including company equity holders or anticipated employees) may not request funds through a subaward budget or as a consultant. In rare cases, this requirement might prove unusually onerous; therefore, it is possible for NSF to grant an exception if recommended by the Program Director and approved by the Division Director.

56. May I budget a subaward to a Federal lab or Federally-Funded Research and Development Center (FFRDC)?

Yes, FFRDCs and Federal labs are eligible to be subawardees on an NSF SBIR/STTR proposal. A list of FFRDCs is located at: <https://www.nsf.gov/statistics/ffrdclist/>.

57. What types of costs can be requested on a subaward budget?

A subaward budget may request funds on the same lines as permitted for the main project budget, but with two main exceptions. First, if the subaward is to a research institution, the subaward budget may contain a request for funds for Postdoctoral Scholar(s) in Line B.1, Other Personnel (whereas the main budget may not). Second, subaward budgets may NOT contain funds on Line K, which is used for a small business fee that may only be requested by the proposing small business in the main budget.

58. May proposers submit a proposal with more than one subaward (sub-budget)?

Proposers may request funds for multiple subawards if the requirements regarding total budget allocations are met (see the solicitation). For each requested subaward, a full subaward budget must be prepared with an accompanying justification at the same level of detail as the main project budget.

59. How does NSF define a project participant as a consultant (Line G.3 of the budget)?

Consultants (also referred to as "contractors") are persons who will work on the project but are not company employees. Consultants typically do not receive a W-2 tax form from the small business and are often used to provide a specific service or skill based on hourly or daily compensation. Consultant services include specialized work performed by professionals who are not employees of the proposing small business. Purchases of analytical services, other services, or fabricated components from commercial sources should not be listed under consultant services but should instead be reported in the budget under Other Direct Costs/Other (Line G.6). No person who is a shareholder, employee, or officer of the proposing small business may be paid as a consultant unless an exception is recommended by the NSF SBIR/STTR Program Director and approved by the Division Director. All research on an SBIR/STTR project, including that conducted by consultants, must be conducted in the United States.

60. What are the budget requirements for consultants?

Each consultant included in the budget should provide a signed commitment letter to be included in the proposal's Supplementary Documents, stating: a) their specific tasks; b) the number of hours or days that they are committing to the project; and c) the agreed-upon level of compensation, not to exceed the NSF maximum of \$1,000 per day (NSF defines a day as 8 hours). The proposal's Budget Justification must also address how the consultant effort will contribute to the project. A company wishing to compensate a consultant at a higher rate must supply the incremental funding from sources outside the NSF grant (and should explicitly state this in the Budget Justification). Biographical sketches for each consultant may be requested by the NSF SBIR/STTR Program Director after the proposal is reviewed, as part of their due diligence efforts.

61. If other R&D will be performed by the proposing small business, in parallel to the NSF SBIR/STTR-funded research, should those efforts be described in the proposal?

The funds provided by an NSF SBIR/STTR Phase I award are rarely sufficient to bring a new product to market. The NSF SBIR/STTR project focuses on meeting specific technical goals to ensure the commercial success of the anticipated product or service.

Therefore, an NSF SBIR/STTR proposal should primarily address only the R&D activities to be funded by the NSF award. Other R&D to be performed with or funded by other partners may be mentioned briefly, but the R&D plan should concentrate only on NSF-funded work.

Any resources available to or volunteered by the small business but not to be procured with Phase I award funds may be listed in the Facilities, Equipment, and other Resources section of the proposal.

62. How much of the NSF-funded research and development must be performed by the awardee? (In Phase I and Phase II)?

These requirements differ for SBIR and STTR awards:

- For **Phase I SBIR** awards, a minimum of two-thirds (66 percent) of the R&D, as stated in the budget, must be performed by the awardee. The rest may be performed by a subawardee(s). For **Phase II SBIR** projects, a minimum of one-half (50 percent) of the R&D must be performed by the awardee, with the rest performed by a subawardee(s).
- For **Phase I and Phase II STTR projects**, a minimum of 40 percent of the R&D, as stated in the budget, must be performed by the small business, and a minimum of 30 percent of the R&D, as stated in the budget, must be performed by the partner research institution.

PROPOSAL REVIEW

63. What criteria are used to evaluate NSF SBIR/STTR proposals?

All NSF proposals are reviewed for Intellectual Merit and Broader Impacts. In addition, SBIR/STTR proposals have a set of additional criteria describing Commercial Impact. For more information on these criteria in the context of SBIR/STTR proposals, see: <https://seedfund.nsf.gov/resources/review/peer-review/>. The Merit Review Criteria are given below:

Intellectual Merit criterion encompasses the potential to advance knowledge and leverages fundamental science or engineering research techniques to overcoming technical risk. This can be conveyed through the Research and Development (R&D) of the project:

- the application of creative, original, and potentially transformative concepts to systematically study, create, adapt, or manipulate the structure and behavior of the natural or man-made worlds;
- the use of the scientific method to propose well-reasoned, well-organized activities

based on sound theory, computation, measurement, observation, experiment, or modeling;

- the demonstration of a well-qualified individual, team, or organization ready to deploy novel methods of creating, acquiring, processing, manipulating, storing, or disseminating data or metadata; and/or
- the novel integration of new theories, analysis, data, or methods regarding cognition, heuristics, and related phenomena.

SBIR/STTR proposals are required to have both the Technical Risk and Technological Innovation.

Technical Risk assumes that the possibility of technical failure exists for an envisioned product, service, or solution to be successfully developed. This risk is present even to those suitably skilled in the art of the component, subsystem, method, technique, tool, or algorithm in question.

Technological Innovation indicates that the new product or service is differentiated from current products or services; that is, the new technology holds the potential to result in a product or service with a substantial and durable advantage over competing solutions on the market. It also generally provides a barrier to entry for competitors. This means that if the new product, service, or solution is successfully realized and brought to the market, it should be difficult for a well-qualified, competing firm to reverse-engineer or otherwise neutralize the competitive advantage generated by leveraging fundamental science or engineering research techniques.

Broader Impacts criterion encompasses the potential benefit to society and contribution to the achievement of specific, desired societal outcomes. Proposers should consider the American Innovation and Competitiveness Act ([P.L. 114-329, Section 102](#)) Broader Impacts Review Criterion Update:

1. Increasing the economic competitiveness of the United States.
2. Advancing of the health and welfare of the American public.
3. Supporting the national defense of the United States.
4. Enhancing partnerships between academia and industry in the United States.
5. Developing an American STEM workforce that is globally competitive through improved pre-kindergarten through grade 12 STEM education and teacher development, and improved undergraduate STEM education and instruction.
6. Improving public scientific literacy and engagement with science and technology in the United States.
7. Expanding participation of women and individuals from underrepresented groups in STEM.

Commercialization Potential of the proposed product or service has the potential to

disrupt the targeted market segment by way of a strong and durable value proposition for the customers or users.

- The proposed product or service addresses an unmet, important, and scalable need for the target customer base.
- The proposed small business is structured and staffed to focus on aggressive commercialization of the product/service.
- The proposed small business can provide evidence of good product-market fit (as validated by direct and significant interaction with customers and related stakeholders).

64. Who evaluates NSF SBIR/STTR full proposals? What does the review process entail?

In many cases, similar proposals are typically placed into groups called a "panel." A group of external experts is assigned to a panel, with each proposal reviewed by at least three of these experts, which NSF calls "reviewers." After the reviewers read the proposals and provide written feedback, they meet in person or virtually to discuss the entire set of proposals in the panel. Alternatively, external reviewers submit reviews by email (called "ad hoc reviews"), with a minimum of three reviewers providing feedback on each proposal. The Program Director has the discretion to determine if a proposal should be panel or ad hoc reviewed and may consider topic, reviewer expertise, and other factors. All reviewer comments are anonymized and provided verbatim back to the proposing Principal Investigator.

In Phase I, technical reviewers with expertise in the field of the proposed research and/or the target market area are asked to confidentially review the proposals. These reviewers have technical training and expertise in relevant areas of science, engineering, business, or technology. The Phase I review process relies heavily on input from these experts, with some reviewers offering both commercial and technical expertise. Dedicated commercial reviewers are often asked to participate on Phase I panels.

NSF SBIR/STTR Program Directors with relevant technical and commercial expertise lead the entire review process and directly evaluate the technical and commercialization details of each proposal. For proposals reviewed in panel, a proposing Principal Investigator will receive a Panel Summary, which is a consensus statement from all panel members. For ad hoc review of proposals (meaning that a panel was not held), the PI will not receive a Panel Summary.

In many cases, proposers still in consideration for an award will be contacted directly by NSF staff following this external review, with additional questions or concerns for the proposer to address.

An excellent way to learn about the NSF Merit Review process is to serve as a reviewer. If you would like to be considered as a proposal reviewer and/or panelist: to see a panel first-hand, learn about common proposal pitfalls, discover strategies to writing strong proposals, and meet peers and colleagues working in areas of similar interest, please see: <https://seedfund.nsf.gov/resources/review/>. Note, you cannot serve as a panelist for the NSF SBIR/STTR program while your own proposal is under review.

65. How does NSF manage confidentiality and conflicts of interest during the peer review process? What can proposers do to ensure that their proprietary information is kept safe?

NSF proposals are confidential. They are not made public and are not considered a public disclosure for patent purposes. Proposals are kept confidential by NSF staff and the external reviewers certify that no conflicts of interest exist and that they will keep the proposal documents and review contents confidential (see the [Conflict of Interest form](#)). SBIR/STTR data are protected from disclosure by the participating agencies for a period of not less than twenty years. The SBA has a full set of FAQs addressing data rights: <http://www.sbir.gov/faq/data-rights>.

Even when SBIR/STTR data are no longer under the mandatory protection, NSF still does not generally release proposal information publicly, with the rare exception of a Freedom of Information Act (FOIA) request. Sections of the proposal marked as "proprietary" will not be made available even to a FOIA requester, so it is important to clearly mark sensitive sections of the proposal as "proprietary." In the event of a FOIA request, if the NSF is able to contact the submitting small business, there is a second opportunity for the business to request redaction of proprietary information from the proposal. However, it is not appropriate to mark the entire proposal as proprietary.

NSF does not release or acknowledge proposals recommended for decline and will not respond to FOIA requests on declined proposals.

66. How important are letters of support? What does a strong letter of support contain?

Letters of support are extremely important for both Phase I and Phase II proposals. Letters of support may show the reviewers that the proposed innovation, if developed, would solve a real market need. More generally, letters of support help validate claims in the proposal regarding commercial impacts. Therefore, letters from potential end users of the technology (customers) and corporate partners/collaborators are appropriate. Letters from actual or potential investors may also be appropriate. Proposers should collect these letters early in the proposal writing process.

67. Some NSF SBIR/STTR companies build on basic research previously funded by

the NSF. Are companies proposing projects that are NOT related to NSF or any Federal funding at a disadvantage?

No. All proposals are evaluated according to the [Merit Review Criteria](#). Past NSF funding (or "lineage") is not a requirement for funding and does not advantage or disadvantage a proposal.

68. What happens if the company's R&D goals, business model, team, or vision change while the proposal is under review?

Proposers should alert NSF staff of significant changes in company status, team, or technology, especially if contacted by an NSF SBIR/STTR Program Director with a request for additional information during the review process. The Program Director may request that the small business update the work plan and objectives of the Phase I project.

69. How does the NSF weigh the three major SBIR/STTR review criteria — Intellectual Merit, Broader Impact, and Commercial Impact — during the review process?

Intellectual Merit, Broader Impacts, and Commercial Impacts are all important for the purposes of making award recommendations.

70. What is the typical success rate?

Unfortunately, many competitive Phase I proposals are not able to be funded due to NSF budgetary limitations. Success rates for the program in recent years are available to the public in SBIR/STTR annual reports provided by the SBA; These can be found at <https://www.sbir.gov/annual-reports-files>.

71. What is the typical proposal review timeline?

Our goal is to provide a recommendation to most proposals within six months of submission; however, the review process may take longer for some proposals.

Several general guidelines are listed below for proposals undergoing Merit Review. Proposers whose proposals did not progress past administrative review and therefore do not advance to the panel review stage may learn of this decision earlier in the process (this decision is called "Return Without Review"). Proposers, especially those in consideration for funding, may be contacted by the NSF SBIR/STTR Program Director any time after the panel, if the panel or Program Director need further information for the proposal to be fairly and completely evaluated. This process of interaction with the Program Director is called "due diligence".

72. When does NSF release proposal decisions? What feedback is provided?

Proposal decisions are provided for proposals approximately 6 months after proposal submission, once the entire Merit Review process has been completed.

Once the NSF SBIR/STTR Program Director makes a recommendation to Return Without Review, Award, or Decline a proposal, and their recommendation is reviewed and concurred by the Division Director (or delegate), the proposer will be notified by email. The Fastlane system will automatically update to reflect the recommendation and, if the proposal was reviewed, the anonymized, verbatim reviews and Panel Summary (if available) will become available. The proposer will also receive a Context or Process Statement giving additional information on how the review was conducted. For proposals that are returned without review, the reason for the return will be given in the "PO Comments" in Fastlane.

If a proposal is declined, the PI or SRO may contact the cognizant NSF SBIR/STTR Program Director to request a debrief whereby the NSF staff will give additional context for the decision-making process.

73. My Phase I proposal was declined. May I resubmit it?

If your proposal was declined, you must submit a new Project Pitch and, if invited, submit a new full proposal with substantial revisions addressing the reviewers' and/or panel's concerns. You may not submit the exact same proposal again.

74. My Phase I proposal was declined. May I have the decision reconsidered?

No, there are no reconsiderations for declined NSF SBIR/STTR Phase I proposals per the policy guidance in the NSF SBIR/STTR program solicitation and in the NSF Proposal and Award Policies and Procedures Guide (PAPPG), Section [IV.D.2.b](#).

PHASE I AWARD

75. What are my obligations to the government in terms of the intellectual property (IP) developed from NSF SBIR/STTR funding? Does the government have the right to use the invention developed under my Federal grant?

As a recipient of a Federal research grant, you are obligated to report all patents, patent applications, and invention disclosures that are a direct result of NSF support. This reporting is done via the iEdison system and needs to be completed within a certain time-frame (typically 60 days).

Guidelines for using iEdison are at:

https://era.nih.gov/iedison/iedison_Inventor_userguide.pdf.

Instructions for the timing of registration of your invention are at:

https://era.nih.gov/iedison/invention_timeline.htm.

The Bayh-Dole Act, 35 U.S.C. 200 et seq, provides that a small business may retain the entire right, title, and interest throughout the world to each subject invention (as defined in 35 U.S.C. 201) subject to the provisions of 35 U.S.C. 202 and 35 U.S.C. 203.

With respect to any subject invention in which the awardee retains title, 35 U.S.C. 202(c)(4) gives the Federal government "a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world."

Section 203 of the Bayh-Dole Act gives the U.S. government the ability to exercise "march-in rights" on inventions created by Federally funded research projects. However, these rights are designed to be used only in the case of a national emergency (defined in the Act). Information regarding these rights and the government's ability to exercise them is located at: <https://fas.org/sgp/crs/misc/R44597.pdf>.

Regulations implementing the Bayh-Dole Act can be found at: <https://era.nih.gov/iedison/bayh-dole.htm>.

Note that STTR projects are required to include a Cooperative Research Agreement between the awardee small business and the cooperating research institution which provides clarity of ownership of intellectual property that results from the project.

76. What are the terms and conditions associated with an NSF SBIR/STTR Phase I award?

NSF SBIR/STTR award conditions can be found at: https://www.nsf.gov/awards/managing/sbirsttr_conditions.jsp. The headings at the top of the award conditions show topics of interest including Patent Rights, Payments, and Project Reporting Requirements.

77. What if there are changes to the business model or R&D strategy of a small business during the NSF SBIR/STTR Phase I project?

NSF SBIR/STTR Program Directors understand that small businesses, especially those in the earliest stages of development, may undergo business model changes, such as identifying a different niche market, a changed product format, etc. During Phase I, the NSF SBIR/STTR Program Directors work with awardees to adjust (within reason and as appropriate) the Phase I project objectives, work plan, and budget to reflect changes in the market understanding and business model. However, changes to a Phase I project that completely shift the focus of the project away from the initially proposed core innovation are generally not permitted. Additionally, NSF SBIR/STTR will not support alternative R&D if the work no longer meets the Phase I program objectives.

78. How and when does NSF release SBIR/STTR Phase I funding to my small business?

Typically, the awardee small business has access to all of their Phase I funds, less \$25,000, at the beginning of the award. These funds may be drawn down in any amount, at any time, from NSF's Awardee Cash Management System (ACM\$). Award funds cannot be "put back" once withdrawn from ACM\$ and awardees should understand tax implications before withdrawing funds.

The last \$25,000 of the award is payable after the final report is approved by NSF.

79. What other support do NSF SBIR/STTR Phase I awardees receive?

NSF offers [Beat-The-Odds Boot Camp](#) to all Phase I awardees. This activity, modeled on the [NSF Innovation Corps \(I-Corps™\)](#) program and led by experienced NSF I-Corps instructors, teaches the fundamentals of customer discovery and allows Phase I companies to refine their understanding of customers, industry, markets, and competition. NSF support also includes a Commercialization Assistance Program (CAP), which offers additional resources and significant one-on-one guidance from seasoned advisors in the development of the business strategy associated with the Phase I research, as well as in the preparation of Phase II proposals.

BEYOND PHASE I

80. When and how do I apply for an NSF SBIR/STTR Phase II award?

The eligibility to submit a Phase II proposal is based on the start date of the corresponding NSF Phase I SBIR/STTR award. Phase II submissions are permitted between 6 and 24 months after the start date of the relevant NSF SBIR/STTR Phase I award. Please reference your Phase I award notice or contact your Program Director for your Phase I start date or other details on Phase II submission. You may submit **ONLY ONE** Phase II proposal for a Phase I award. Details on the Phase II proposal process can be found at: <https://seedfund.nsf.gov/resources/awardees/phase-2/apply/>.

81. Does NSF have an SBIR/STTR Phase III program?

No, NSF does not offer an SBIR/STTR Phase III program. The objective of Phase III, where appropriate, is for the small business to pursue commercialization objectives resulting from the Phase I/II R/R&D activities. The SBIR/STTR programs do not fund Phase III. At some Federal agencies, Phase III may involve follow-on non-SBIR/STTR funded R&D or production contracts for products, processes or services intended for use by the U.S. Government. NSF does not acquire technologies developed under the SBIR/STTR program, so it does not offer a Phase III option.

However, NSF does offer Phase II awardees several supplemental funding opportunities, including the possibility of obtaining up to \$500,000 in additional funding under the Phase IIB program, based on third-party investment or product/ service revenues derived from NSF-supported project(s). See information on these opportunities at: <https://seedfund.nsf.gov/resources/awardees/supplement/overview/>.

82. What are some significant outcomes or success stories that can be traced to NSF SBIR/STTR funding?

We are proud to have supported thousands of innovative startups and small businesses over the past 40+ years. Well-known firms, such as Qualcomm and Symantec, received early support from the NSF program. Since fiscal year 2016, firms funded (or previously funded) by our program have raised more than \$14 billion in follow-on private capital and reported around 200 successful exits (IPOs, mergers, and acquisitions). See more success stories on our [Showcase on seedfund.nsf.gov](#).