

# SBIR/STTR SUPPORT

FAST Center of Illinois



## FAST Center SBIR/STTR FAQs

- **What is the SBIR/STTR Program?**

- From the U.S. [Small Business Administration](#): “The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs are highly competitive programs that encourages domestic small businesses to engage in Federal Research/Research and Development that has the potential for commercialization.”

“Encourages” primarily means “provides funding and other support.” The program awards money to small businesses to develop advanced technologies they can then sell. SBIR projects should also meet federal R&D goals, which cover virtually any technology. The projects should also address broader societal goals such as diverse representation in business and science, public welfare, national defense, and scientific literacy.

The programs award from around \$100,000 to \$1.5 million in a three-phase program (more info on each in a later question):

Phase I: 6 months – 1 year, feasibility demonstration

Phase II: 2 years – more complete development

Phase III (not funded by SBIR/STTR) – customers buy the technology

To receive an award, businesses must submit a proposal for Phase I and be selected, and then submit a second proposal for Phase II (with some exceptions). Businesses don't apply directly to “the SBIR/STTR program,” but to one of the eleven different federal agencies that are required to offer SBIR/STTR funding.

- **What is the Illinois FAST Center and what services are offered for free to Illinois entrepreneurs seeking SBIR/STTR funding?**

- The FAST Center at the University of Illinois Urbana-Champaign is a statewide resource center for the State of Illinois, funded by the US Small Business Administration and the University of Illinois. The FAST Center provides free resources, support, and expertise necessary to submit a highly competitive proposal – and helps startups and companies bridge the gap between research and commercialization.

<https://researchpark.illinois.edu/resource/sbir-program/>

- The FAST Center offers free beginner and advanced workshops for those interested in pursuing SBIR/STTR awards. Some of these are done with host partners at other incubators or universities throughout Illinois.

- Every Wednesday office hours are available for sign-up to receive 1:1 assistance with one of our experts.
  - Once a month, we offer an hour “introductory” SBIR 101 workshop on the fourth Wednesdays of the month.
  - The FAST Center SBIR/STTR sprint 4-week cohort sessions for companies to work on building a competitive proposal package. Teams watch half hour lectures, work in collaborative workshops, and submit materials each week for review. Some of these sprint sessions are focused on specific agency funding.
  - Entrepreneurs, researchers, and inventors throughout the State of Illinois are eligible for FREE one-on-one technical assistance to learn about SBIR funding opportunities, get help with the application process, and assistance with budgets and other technical details. Sign-up for technical assistance: <http://uiucresearchpark.force.com/requests/addSbir1>
- **What are the objectives of the SBIR/STTR program?**
    - The mission of the SBIR program is to stimulate technology innovation by strengthening the role of innovative SBCs in Federal Research/ R&D. The program’s goals are four-fold:
      - Stimulate technological innovation.
      - Use small businesses to meet Federal R&D needs.
      - Foster and encourage participation in innovation and entrepreneurship by socially and economically disadvantaged small businesses.
      - Increase private-sector commercialization of innovations derived from Federal R&D funding.
    - Additionally, STTR program has a goal to foster technology transfer through cooperative R&D between small businesses and research institutions.
- **What are the main benefits of programs?**
    - Businesses can receive over \$1.5 million to advance their technology. The funding is non-dilutive. The business retains rights to IP and the Government takes no equity in the company.
    - Businesses can receive additional support to commercialize the technology.
    - Validation of an SBIR/STTR award attracts additional investment dollars.
- **What are the requirements and obligations?**
    - The proposal takes a lot of effort to prepare (more in a later response).
    - If awarded, the company needs to perform the technical work and report on it to the funding agency.
    - The company must also establish and maintain good financial and timekeeping systems.
- **How does the STTR program differ from the SBIR program?**
    - Both of these programs use the same proposal and review mechanism, and both award the same amounts of money. The primary difference for most applicants is that the STTR program requires the business to partner with a research institution, whereas it is optional with an SBIR award.
    - With an SBIR award, the small business must perform at least 2/3 of the budgeted work.

- For an STTR award, the small business must perform at least 40% of the work and the single partnering research institution must perform at least 30% of the work.
- STTR requires the Small Business Concern (SBC) and its partnering institution to establish an intellectual property agreement detailing the allocation of intellectual property rights and rights to carry out follow-on research, development, or commercialization activities.
- **What are the eligibility requirements for a company?**
  - The small business concern (SBC) must be all of the following:
    - a for-profit entity
    - an employer of 500 or fewer employees
    - owned at least 51% U.S. citizens or lawful resident aliens
    - budgeted for at least 2/3 of the work if SBIR, 40% if STTR.
    - compliant with any other agency-specific requirements, such as limits to the number of projects proposed
- **What is a Principal Investigator (PI), and what is his or her role in the SBIR or STTR project?**
  - The Principal Investigator (PI) plans and directs the project and plays a central role in leading the technical aspects of the project. The PI will usually serve as the primary contact for the federal agency's SBIR/STTR program and works to ensure that the project is concurrent with the guidelines of that federal agency's SBIR or STTR program.
  - All PIs must be primarily employed by the small business during the duration of the performance of the contract or grant.
- **What are the eligibility requirements for a Principal Investigator (PI)?**
  - The Principal Investigator is the project leader and the main individual responsible for executing the award. The PI must be all of the following:
    - primarily employed by the SBC at time of award.
      - This is defined as employed 51% or more time by the company and working no more than 19.6 hours on any other professional work.
      - PI does not have to be working for the SBC at time proposal is submitted.
      - Exception: NIH STTRs allow an individual from the collaborating research institution to be STTR PI.
    - authorized to work in the United States. Permanent residency is not required.
    - willing to meet agency-specific requirements regarding time spent on the proposed project.
- **Can I apply for an SBIR/STTR award if I am working full-time at a University or a large corporation?**
  - Yes, but only if you are willing to leave the full-time job and work primarily for the firm if you get an award.
  - A PI cannot work more than 19.6 hours per week at another employer. This means full time faculty are ineligible from serving as the PI on an SBIR proposal (unless there is a leave of absence or other manner of stopping

primary employment with the university, summer work hours are not a suitable workaround).

- **Can I take a sabbatical to serve as PI on an SBIR/STTR project?**
  - Yes, but you must be PI for the entire duration of the project.
  - Typically the same PI is on a Phase I award and the Phase II award, so the employment commitment timeframe should be considering 2+ years working for the company.
  
- **Can a faculty member receive an SBIR/STTR subcontract from a business he or she co-owns? Can he or she serve as a consultant?**
  - A faculty member/owner generally cannot be paid as a subcontractor of consultant. NSF specifically prohibits this in its proposal guidelines:
    - “No person who is an equity holder, employee, or officer of the proposing small business may be paid as a consultant unless an exception is recommended by the Program Director.”
    - “No person who is an equity holder, employee, or officer of the proposing small business may be paid under a subaward unless an exception is recommended by the Program Director and approved by the IIP Division Director.”
  - The faculty member/owner can be paid as an employee of the company as long as such an arrangement does not violate university restrictions on outside employment.
  - Faculty member/owners have also served as unpaid subcontract PIs, supervising paid students who work on the subcontract.
  - At the University of Illinois, any arrangements involving faculty subcontracts with businesses they own require a conflict of interest review with the Office of Vice-Chancellor for Research.
  
- **Which Federal Agencies participate in the SBIR program?**
  - Department of Agriculture
  - Department of Commerce - National Institute of Standards and Technology
  - Department of Commerce - National Oceanic and Atmospheric Administration
  - Department of Defense
  - Department of Education
  - Department of Energy
  - Department of Health and Human Services
  - Department of Homeland Security
  - Department of Transportation
  - Environmental Protection Agency
  - National Aeronautics and Space Administration
  - National Science Foundation
  
- **Which Federal Agencies participate in the STTR program?**
  - Department of Defense
  - Department of Energy
  - Department of Health and Human Services
  - National Aeronautics and Space Administration
  - National Science Foundation

- **What are the three phases of the SBIR/STTR programs?**
  - *Phase I.* The objective of Phase I is to establish the technical merit, feasibility, and commercial potential of the proposed Federal Research /R&D efforts and to determine the quality of performance of the small business awardee organization prior to providing further Federal support in Phase II. SBIR Phase I awards normally do not exceed \$150,000 and have a six-month period of performance.
  - *Phase II.* The objective of Phase II is to continue the Federal Research/R&D efforts initiated in Phase I. Funding is based on the results achieved in Phase I and the scientific and technical merit and commercial potential of the project proposed in Phase II. Generally, only Phase I awardees are eligible for a Phase II award. SBIR Phase II awards normally do not exceed \$1,000,000 and have a two-year period of performance.
  - *Phase III.* The objective of Phase III, where appropriate, is for the small business to pursue commercialization objectives resulting from the Phase I and Phase II Federal Research/R&D activities. The SBIR program does not fund Phase III awards. In some Federal agencies, Phase III may involve follow-on non-SBIR funded R&D or production contracts for products, processes, or services intended for use by the U.S. Government.
  
- **What do the SBIR/STTR Programs fund?**
  - The SBIR/STTR Programs primarily funds expenses research & development of technology, including
    - Staff time
    - Materials and Supplies
    - Travel
    - Consultants, subawards
  - The program also funds general expenses the company incurs but are not associated directly with the project, such as rent, utilities, telephone, and time spent running the company. These are called indirect expenses.
  - Increasingly, agencies also provide or fund Technical And Business Assistance (TABAs) activities, such as market research, customer discovery, and website development.
  
- **What do the SBIR/STTR programs not fund?**
  - The programs do not support, either directly or indirectly:
  - Basic Research
  - Incremental improvements to existing technology
  - Marketing and public relations, except as expressly funded in the award.
  - Design improvements
  - Intellectual property protection
  - Late fees, fines, interest expenses, bad debts, lobbying activities, other organizational expenses
  
- **Does the State of Illinois provide matching funding for SBIR/STTR grants to help with expenses?**
  - Historic legislation signed by Governor Pritzker in March 2021 included creation of a new funding program that will advance Illinois startups who secure federal small business innovation grants.

- The equity-centric legislative package, which focuses on expanding economic access and opportunity across the state, adds a new Illinois Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Matching Funds Program. This program provides a cash match for federal funds that help finance early-stage technology companies.
  - The Illinois SBIR/STTR Matching Funds Program will provide a state match of 50 percent, up to \$50,000, for qualifying Illinois companies who receive a Phase I SBIR/STTR grant award.
  - The Illinois Department of Commerce and Economic Opportunity (DCEO) will administer the Illinois SBIR/STTR Matching Funds Program. No details regarding eligibility or application processes have been released at this time.
- **When do I apply for SBIR or STTR funding?**
    - Each agency has its own schedule, from once a year to more frequently.
    - [SBIR.gov](https://www.sbir.gov) provides an overview of the typical schedule.
- **How can I tell if my idea/technology is fundable?**
    - The primary considerations are how well the technology meets the goals of the program mentioned above. Each is addressed in a separate question following this one.
      - how innovative it is
      - whether it's aligned with federal research & development needs
      - how much demand there is for it in the marketplace
      - to what extent it meets broader societal needs
    - Other importance factors include:
      - the team's ability to develop the technology
      - basis for confidence in eventual technological success
      - the team's ability to enter and compete in the marketplace
      - ability of the enterprise to prosper as a business
    - With most agencies, businesses can get valuable feedback from an SBIR/STTR Program Manager before writing a proposal. Various agencies have various mechanisms for this. Some examples:
      - The National Science Foundation requires a 3-page to 4-page Project Pitch, effectively a pre-proposal.
      - AFWERX sponsors pitch days expressly for discussing technology concepts appropriate to the Air Force.
      - Several SBIR Road Tours each year make Program Managers available. Research Park at Illinois hosted one virtually in 2020.
    - SBIR.gov offers a [topic area lookup](#) to help determine which agencies are looking for technology specifically in your domain.
    - The Illinois FAST Center offers workshops and one-on-one consulting to help refine and develop proposals. [Click here](#) for details and to request assistance.
- **Is my idea innovative enough for SBIR/STTR funding?**
    - Innovative technologies **advance scientific knowledge**. Competitive SBIR projects require and provide new information about the world and how it works, Projects that use existing technologies, even if in new ways, are less competitive.

- There are no absolute guidelines, but positive indicators of high innovation include whether the project:
  - will develop **protectable IP**, via patent, copyright, trade secret, etc.
  - has a high level of **uncertainty and risk**. Anything that pushes the boundaries of science is by definition unproven and risky. The SBIR program seeks risk in return for potential high payoff.
  - would result in **publishable** articles, conference presentations, or other juried dissemination.
  - requires lead-the-field, **specialized knowledge** to develop. Projects that are easily outsourced or achievable with low-level technical support are usually not considered innovative.
  - can demonstrate by **citing existing lead-the-field work** that no one else has done the same work or is likely to.
  
- **Will innovations that have been patented or have patents pending be considered under SBIR?**
  - No. SBIR is a program for NEW high-tech innovations.
  - However, extension to existing patents or new work based on existing patents could be considered innovations worthy of support.
  
- **How does the Small Business Administration define “small business concern” for purposes of the SBIR/STTR programs?**
  - It is defined as a concern that on the date of award for both Phase I and Phase II funding agreements:
    1. is organized for profit, with a place of business located in the United States, which operates primarily within the United States or which makes a significant contribution to the United States economy through payment of taxes or use of American products, materials, or labor;
    2. is in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust, or cooperative, except that where the form is a joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture;
    3. is at least 51 percent owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the United States; and,
    4. has, including its affiliates, not more than 500 employees.
  
- **Are non-profit concerns eligible for SBIR awards?**
  - No
  
- **What non-profit institutions qualify to participate in the STTR program?**
  - The research institution must be owned and operated exclusively for scientific or educational purposes, non-profit, and located in the US. Research institutions eligible to participate in the STTR Program include:
    - Nonprofit college or university
    - Domestic nonprofit scientific/research organization
    - Federally Funded R&D Centers (FFRDC)

- **May a portion of an SBIR award be subcontracted?**
  - Yes. For Phase I, a minimum of two-thirds of the research and/or analytical effort must be performed by the proposing firm.
  - For Phase II, a minimum of one-half of the research and/or analytical effort must be performed by the proposing firm.
  
- **I have a business, however, I am not federally registered (thus I don't have an EIN/TIN). Can I still apply to the SBIR/STTR programs?**
  - You must have an EIN/TIN to receive an award
  
- **Can I submit the same proposal to multiple agencies?**
  - Yes, but you can accept federal funding for the same work from only one agency. If selected for an award for the same work by more than one agency, you must decline one of the awards.
  - Most agencies specify where in the proposal to state that you are applying for duplicate or overlapping work.
  
- **Can I submit the same proposal multiple times within the same agency?**
  - The agencies differ considerably in how they view multiple proposals on one topic in their solicitation. They may have different rules about submitting the same idea in multiple proposals, and whether an idea can be submitted for consideration under both SBIR and STTR programs. It is important to read the specific agency's solicitation guidelines carefully before submitting your proposal multiple times to the same agency.
  
- **How long is the whole SBIR process?**
  - From proposal to the end of Phase II the typical amount of time is 3.5 to 4 years.
  
- **How long does it take SBIR/STTR agencies to notify award winners after a solicitation has closed to applications?**
  - The amount of time that lapses before award winners are notified can vary between 3 and 6 months, depending on the agency.
  - The AFWERX and SOFWERX programs with the Department of Defense are organized to provide much quicker timeframes, less than a month in some cases.
  
- **What are my chances of winning an SBIR award?**
  - SBIR success rate for Phase I proposals is about 15-20 percent.
  - SBIR success rate for Phase II is around 30-50 percent.
  
- **What does proposal preparation typically involve?**
  - The time commitment depends on how much supporting material and planning are already in place. Proposers with deep experience in their technology, rigorous project plans, and strong market awareness & placement report spending one to three person months on a competitive proposal.
  - The proposal package can be 50-100 pages, with 6-30 pages dedicated to narrative description and justification of the project. The rest are budget and

justification, biosketches of personnel, administrative forms, and other supporting documents.

- **How can I protect my intellectual property in an SBIR/STTR proposal?**
  - Agencies take pains to protect the IP of applicants to encourage participation and entrepreneurship. These include:
    - requiring reviewers in writing to hold proposal information confidential.
    - mandating that no proprietary information be disclosed in abstracts and public documents.
    - providing mechanisms to identify proprietary information in a proposal, so that these sections can be redacted in the event of legal actions requiring disclosure of contents.
    - allowing applicants to request that individuals or organizations from reviewing a proposal, to reduce the chance of negative reviews from potential competitors.
  - The most practical method of protecting IP is to disclose as little of it as possible in the proposal. In many cases, it is possible to provide sufficient information for review without revealing trade secrets or other IP to be protected.
  
- **What are some common causes for Administrative Rejection SBIR Applications?**
  - This information from the NOAA SBIR website applies to other agencies as well.
  - **Non-responsive to Subtopics**
    - The Technical Content portion of an application must respond to one of the subtopics in the NOFO.
  - **Missing Cover Sheet**
    - A completed Cover Sheet must be included.
  - **Over Budget**
    - NOAA's maximum Phase I award amount is \$120,000.
  - **Missing Budget Narrative**
    - In addition to the applicant's budget provided on the SF-424A, the budget must be fully described in a Budget Narrative.
  - **Missing SBIR.gov SBC Registration**
    - A copy of the Company Registration confirmation from SBIR.gov must be included.
  - **Missing Data Management Plan**
    - The Data Management Plan is required.
  - **Missing Proposal**
    - In addition to all forms and registrations, the Technical Content portion of the application must be included.
  
- **What are some common misconceptions?**
  - **SBIR/STTR is just a governmental, red-tape riddled mess**
    - It's inaccurate to say SBIR is an entirely governmental program.
    - "SBIR is quasi-governmental," says John Williams, Director of Innovation and Technology for the Office of Investment and Innovation within the US Small Business Administration. "It's a public-private

partnership. And there are many advantages to going the SBIR Route over angel, VC, or other types of funding.”

- **SBIR is a grant program**
  - Some of the 11 SBIR agencies are grant programs; most others are *contract programs*.
  - The main difference?
    - In *grant* programs, you pitch your own idea. If it’s good, it’ll get funded.
    - In *contract* programs, you solve a particular problem in the way that the government wants it solved.
    - Before submitting, know well which you are applying for, and change your approach accordingly.
- **There’s no way most agencies will be interested in your innovation**
  - Don’t assume that your innovation will only apply to tech-y agencies; they have diverse and often surprising interests. With some creativity, chances are that you can frame up your technology as solutions to multiple government problems across agencies.
- **Invent first, market later**
  - It’s probably not worth applying to SBIR unless you’ve talked to 30+ potential buyers. You won’t make it into Phase 1.
  - There’s some history to this. When the SBIR program was young, most recipients were failing in Phase 3—after the research had been completed, the product designed, the money spent. And no one bought the innovation.
  - Quickly, the SBIR program managers wised up, and now applicants must prove on the very front-end that they can grow a business.
- **SBIR/STTR is a research program**
  - “The aim of SBIR/STTR is not research for the sake of research,” says Vic Johnson, Manager of LTTO-NASA Stennis Space Center Office, and Tech Transfer Specialist at LSU. “The goal is to *bring an innovative product or service to market*. We get a lot of questions about that last part.”
- **What is the I-Corps Program and how is it related to the SBIR/STTR program?**
  - National Science Foundation's (NSF) Innovation Corps or I-Corps is a public-private partnership program that teaches university faculty and student entrepreneurs with a targeted curriculum to identify valuable product opportunities that can emerge from academic research, and provides entrepreneurship training to participants.  
[https://www.nsf.gov/news/special\\_reports/i-corps/teams.jsp](https://www.nsf.gov/news/special_reports/i-corps/teams.jsp)
  - I-Corps provides a cohort structure to explore the business potential or commercial viability of research, helps gain valuable insights into entrepreneurship, and learn about value proposition from innovation.
  - Each I-Corps team receives up to \$2,000 to take part in the customer discovery process of their innovation. Upon completion, teams are also eligible to apply to the national I-Corps program, which provides a \$50,000 grant for each team.

- Many teams may participate in I-Corps before applying for SBIR funding, which often enhances their success potential for receiving SBIR awards.
- The Illinois I-Corps Site is a collaboration between the Technology Entrepreneur Center in The Grainger College of Engineering, EnterpriseWorks at the Research Park, with participation from the Office of Technology Management, and IllinoisVentures. <https://tec.illinois.edu/programs/icorps>
- The Polsky Center for Entrepreneurship and Innovation launched the Innovation Corps (I-Corps) program to empower UChicago scientists, researchers, and students to test the commercial potential of their research and ideas. <https://polsky.uchicago.edu/programs-events/polsky-i-corps/>

## Resources

- [SIBR.gov](https://sibr.gov) has tutorials, explanations, and several other resources:
  - an [SBIR overview](#)
  - a [FAQ](#) with several questions not covered here.
  - a [resource locator](#)
  - [topic area lookup](#)
  - [SBIR Road Tour](#) schedule
  - a list of [participating federal agencies](#), with links to their sites.