



# “AMERICA’S SEED FUND”

## SMALL BUSINESS INNOVATION RESEARCH (SBIR) SMALL BUSINESS TECHNOLOGY TRANSFER (STTR)

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# **OBJECTIVES OF THIS PRESENTATION**

**BRIEF HISTORICAL DEVELOPMENT OF THE PROGRAMS**

**OVERVIEW OF SBIR AND STTR**

**OUTLINE BASICS IN APPLYING TO THE PROGRAMS**

**SBIR/STTR POLICY DIRECTIVE**

**ECONOMIC IMPACT OF THE PROGRAMS**

**RESOURCES TO CONSIDER TO BETTER UNDERSTAND THE PROGRAMS**

**SUCCESS STORIES**



# HOW SBIR/STTR GOT THEIR START

- 1982 – SBIR
- 1992 – STTR
- Roland Tibbetts the driving force behind both programs.





# WHY SBIR/STTR?

## Small Business Innovation Research (SBIR)

3.2% of the extramural research budget for agencies with a budget greater than \$100 M per year

- **Greater than \$3.2 billion minimum spent each year**

## Small Business Technology Transfer (STTR)

0.45% of the extramural research budget for agencies with a budget greater than \$1B per year

- **Greater than \$450 million spent each year**



# DIFFERENCES BETWEEN SBIR AND STTR

## SBIR

## STTR

**Partnering Requirement**

Permits partnering

Requires a non-profit research institution partner

**Principal Investigator**

Primary employment(>50%) w/ small busn. PI may be employed by either the RI partner or small business

**Work Requirement**

May subcontract up to:  
33% (Phase I)  
50% (Phase II)

Minimum:  
40% Small Business  
30% Research Institution Partner

**Program Size**

3.2% (FY 19 \$3.B)

0.45% (FY 19 \$453 M)

**Majority VC Ownership**

Allowed by some agencies

Not allowed

**Participating Agencies**

11 Agencies  
(extramural R&D budget > \$100M)

5 Agencies  
(extramural R&D budget > \$1B)







# SBIR/STTR PARTICIPATING AGENCIES

## SBIR AND STTR (11)

Department of Agriculture - Department of Commerce - 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 Admin.  
National Science Foundation

## STTR ONLY (5)

Department of Defense – Department of Energy – Department of Health and Human Services  
National Aeronautics and Space Administration – National Science Foundation





# FY2019 SBIR/STTR BUDGETS BY AGENCY

(Most Recent Year Annual Report Data Provided By SBA On SBIR.GOV)

<u>Agency</u>	<u>Budget</u>
Department of Defense	\$1.80 B
Department of Health and Human Services	\$1.15 B
Department of Energy	\$ 308 M
National Science Foundation	\$ 212 M
National Aeronautics and Space Administration	\$ 183 M
US Department of Agriculture	\$ 30 M
Department of Homeland Security	\$ 17 M
Department of Commerce	\$ 13.4M
Department of Education	\$ 8.4M
Department of Transportation	\$ 5.2M
Environmental Protection Agency	\$ 3.6M



# CONTRACTING VS GRANTING AGENCIES

## CONTRACTING AGENCIES

Agency established plans, protocols, reqmnts  
Highly focused topics  
Procurement mechanism  
More fiscal requirements  
Invoiced on progress  
Binding agreement between buyer/seller of goods

**DoD, DHS, NASA, EPA, DOT, DoED**

**Contracting and Granting: HHS (mostly grants)**

## GRANTING AGENCIES

Principal Investigator initiates approach  
Less-specified topics  
Assistance mechanism  
More flexibility  
Allows upfront payment  
Funds support a public purposes, best efforts

**NSF, DoE, USDA, DOC**





# SBA'S ROLE IN SBIR/STTR

- Provide oversight/guidance on SBIR/STTR programs
  - Survey and monitor agencies and report to Congress annually
  - Develop and provide policy and program guidance
  - Responsible for all data to include gathering, analysis, reporting, and manage SBIR.gov data platform.



# GOALS

- Meet federal **research and development needs**
- Increase private-sector **commercialization** of innovation derived from federal research and development funding
- Stimulate technological **innovation**
- Foster and encourage **participation** in innovation and entrepreneurship by women and socially/economically disadvantaged individuals
- Foster **technology transfer** through cooperative Research and Development between small businesses and research institutions.

**Over 4,000 new awards every year**



# THREE PHASES TO SBIR/STTR

## Phase I

Concept Development  
6 months  
\$50,000 - \$275,000



## Phase II

Prototype Development  
24 months  
\$750,000 - \$1.8M

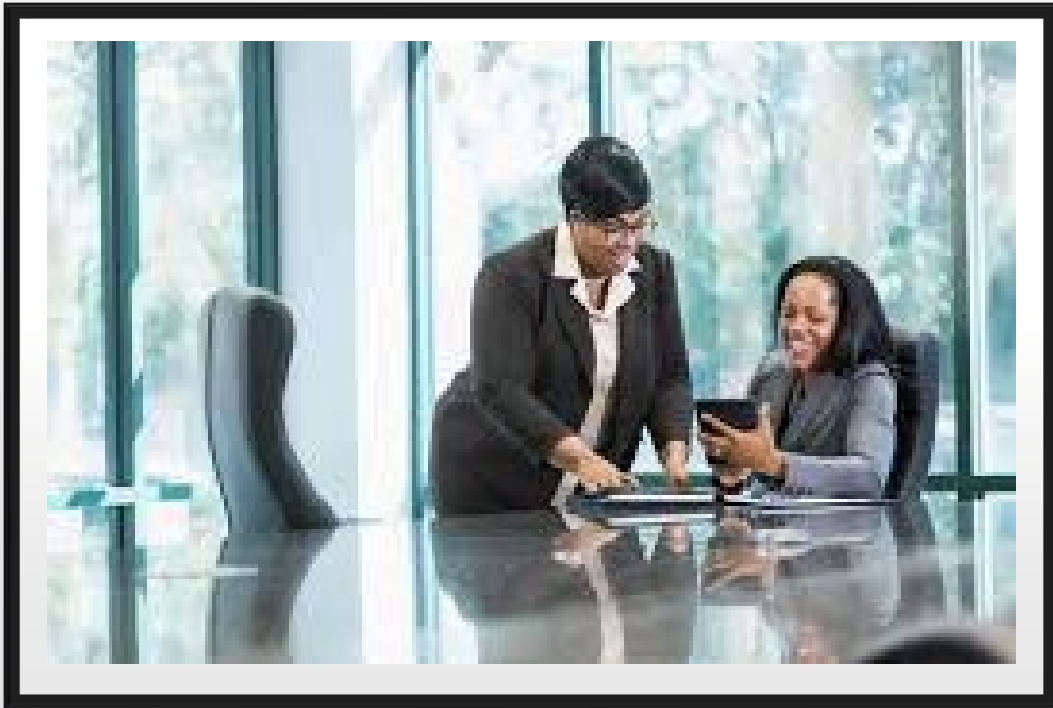


## Phase III

Commercialization  
**Non SBIR/STTR funding**



# BASIC PROGRAM QUALIFICATIONS



- Company must be for profit, US owned/operated, under 500 employees
- Work must be done in the US
- Focus is on performing R & D – not purchasing equipment, commercializing a technology that has already been developed, or one that has very low risk and only needs capital



## FIND SOLICITATIONS

- Each agency releases its own solicitations (requests for proposals), usually once or twice a year. You can find these solicitations on:
- The agency's SBIR website
- The SBIR.gov website
- SAM





# PREPARE YOUR PROPOSAL

- Proposals typically include the following sections:
- **Project Summary/Abstract:** A brief overview of the project.
- **Technical Objectives:** Specific goals and objectives.
- **Work Plan:** Detailed plan on how you will achieve the objectives.
- **Qualifications:** Information on the team's expertise and facilities.
- **Commercialization Plan:** Plan for bringing the technology to market.



# REGISTER YOUR BUSINESS

- You need to register your business with several federal systems:
- **DUNS Number:** Obtain a Data Universal Numbering System (DUNS) number.
- **System for Award Management (SAM):** Register in the SAM database.
- **SBIR.gov Company Registry:** Register your business at [SBIR.gov](https://www.sbir.gov).

# Required Registrations Vary by Agency

	NASA	HHS	NSF	DOE	DOD
DUNS	X	X	X	X	X
SAM	X	X	X	X	X
Company Registry (SBIR.gov)	X	X	X	X	X
Electronic Handbook (EHB)	X				
eRA Commons		X			
Grants.gov		X		X	
NSF FastLane			X		
Portfolio Analysis and Management System (PAMS)				X	
fedconnect.net				X	
Funding Accountability and Transparency Act Sub-award Reporting System				X	
DoD Submission Website					X



# Submit Your Proposal

Submit your proposal through the agency's electronic submission system by the specified deadline.

## Review and Selection

After submission, the proposals are reviewed by the agency's technical and commercial experts. Selection criteria generally include:

- Scientific and technical merit.
- Feasibility of the proposed approach.
- Potential for commercialization.



- Application **may be** submitted to **different agencies** for similar work
- Awards may **NOT** be accepted from different agencies **for duplicative projects**



# Principal Investigator (PI)

- Must be employed by the SBC at **time of award**
- Is **not** required to have a Ph.D./M.D.
- Is required to have appropriate expertise to oversee project scientifically and technically





# Typical Application Process





## SBIR/STTR POLICY DIRECTIVE

- SBIR/STTR Policy Directive is unique in that most federal agencies have a chapter in the Code of Federal Regulations. The SBIR/STTR Policy Directive is similar in that it provides the guidelines for the operation of the two programs flowing from the mandates of the Small Business Act –

13 USC 638



# SBIR/STTR POLICY DIRECTIVE – HIGHLIGHTS

- SBA and Agency roles
- Eligibility
- Proposal solicitation, evaluation, and award
- Program phases
- Data rights
- Commercialization and reporting
- Venture capital



# ECONOMIC STUDIES / ANNUAL REPORTS

➤ The value of the SBIR/STTR programs is underscored by a number of Economic Studies conducted over the years. In addition, the success of the programs from year to year and individual agency award data can be garnered from the annual program reports issued by SBA. These Economic Studies and Annual Reports can be found on SBIR.GOV @:

<https://www.sbir.gov/impact/impact-reports>

One report found in evaluating DOD (which accounts for half the programs) that the total employment resulting from the DoD SBIR/STTR awards in this study was 1,508,295 job years, or an average of 65,578 jobs per year over the 23-year period from 1995-2017.





# TRAINING MODULES

The image shows a screenshot of the SBIR-STTR website. At the top left is the logo for SBIR-STTR, America's Seed Fund, powered by SBA. To the right of the logo are social media icons for LinkedIn, Facebook, Twitter, and YouTube, along with a search icon and the SBA logo. Below the logo is a navigation menu with links for HOME, ABOUT, FUNDING, AWARDS, NEWS, EVENTS, and RESOURCES. The main content area features a large banner with the text 'ON-LINE TUTORIALS' in white on a blue background. Below this text is a paragraph of placeholder text and a 'Start Learning' button with a right-pointing arrow. The banner background is a hand holding various digital icons like a globe, a tree, a gear, and a lightbulb. Below the banner, the word 'COURSES' is written in large blue letters.



# TRAINING MODULE TOPICS

- PROGRAM BASICS
- AGENCY INTRODUCTIONS
- AGENCY SOLICITATIONS
- REGISTRATION REQUIREMENTS
- UNIVERSITY PARTNERING
- DATA RIGHTS
- ACQUISITION BASICS



## SUCCESS STORIES

<https://www.sbir.gov/news/success-stories>

<https://www.sbir.gov/about-tibbetts-awards>

123andMe

illumina

enchroma

sonicare

IRobot

Qualcomm

Symmantec

Biogen

INTUITIVE SURGICAL



SBIR · STTR  
America's Seed Fund



# RESOURCES

- SBIR.GOV (ONE STOP DYNAMIC SITE)
- SBIR/STTR POLICY DIRECTIVE
- 15 U.S.C. 638
- FEDERAL AGENCY SBIR/STTR PROGRAM MANAGERS
- SBA OFFICE OF INNOVATION AND TECHNOLOGY STAFF
- SMALL BUSINESS DEVELOPMENT CENTERS (SBDC)
- TRAINING MODULES ON SBIR.GOV
- SBIR ROAD TOUR



# RECAP

HOPEFULLY I HAVE BEEN SUCCESSFUL IN PROVIDING YOU WITH MEANINGFUL INFORMATION .....

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# QUESTIONS



## **CONTACT INFORMATION**

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