

CIT

CENTER FOR INNOVATIVE TECHNOLOGY

**An Overview of the Federal
SBIR/STTR Programs**

CIT Support for Innovation

- **Seed Funding:**
 - **CIT GAP Funds** | Place equity investments in Virginia-based technology, life science, and clean tech companies.
 - **Virginia Founders Fund** | Serves underserved regions in Virginia, women owned, minority owned and veteran owned high growth potential tech based firms in Virginia.
 - <https://www.cit.org/gap.html>
- **Commonwealth Commercialization Fund** | Provides grants to Virginia companies that have strong potential to drive economic growth in Virginia
 - <https://www.cit.org/ccf.html>
- **SBIR/STTR Support** | Provides guidance, training and valuable resources to enhance the competitiveness of your SBIR/STTR proposal strategy.
 - <https://www.cit.org/sbirsttr.html>

Commonwealth Commercialization Fund -- CCF

- In FY2021, CIT is conducting a single CCF solicitation for young Virginia companies that have strong potential to drive economic growth in Virginia, including through revenue and job creation. Up to \$7 million is available to award; a one-to-one match is required.
- Grants up to \$100,000 to support companies' commercialization and market entry goals through product or service development, market research, intellectual property protection, marketing, pilots, and more.
- **Required Executive Summary Deadline is Feb. 8, 2021.**

Commonwealth Commercialization Fund -- CCF

- High-potential projects are sought in seven strategically important sectors:
 1. Agricultural and environmental technologies
 2. Autonomous systems
 3. Clean energy
 4. Cybersecurity
 5. Data science and analytics
 6. Life and health sciences
 7. Space and satellites

All Virginia companies that meet the eligibility criteria are invited to seek funding.

Commonwealth Commercialization Fund -- CCF

- **Virtual Briefings** are set to take place on Jan. 25 and 28.

All Virginia companies that meet the eligibility criteria are invited to seek funding.

Complete information on the FY2021 round is available:

www.cit.org/ccf-fy21.html

CIT's Federal Funding Assistance Program

For Virginia based co's and researchers

- Assists Virginia-based tech firms in SBIR/STTR
- SBIR strategy consultation and mentoring
- Low cost proposal training and review courses
- Discounts with expert proposal consultants
- VC/Angel Capital "Readiness" review and consideration for CIT GAP Fund
- Phase "0" and "00" awards of \$500-\$3,500 to qualified Phase I & Phase II applicants to help pay for proposal development resources. Slightly increased funding for women and/or minority owned firms.

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www.cit.org/programs/cit-entrepreneur

What is SBIR and STTR?

- SBIR: Small Business Innovation Research
 - 3.2% of extramural research budgets over \$100M
- STTR: Small Business Technology Transfer
 - 0.45% of extramural research budgets over \$1B
- \$3.7 Billion (annually) of Federal Funding to:
 - Support **small business** to:
 - Stimulate *technological innovation* to
 - Develop products with *commercial merit*
- ***Over 5000 new projects each year!***

Goal of SBIR/STTR Programs

- Provide critical early stage funding for projects that have high commercial potential but are too early to be attractive to other sources of funding (Banks, Angel Investors, Venture Capital, Strategic Partner Funding).
- Helps to lower the risk for these other funding sources.
- **“Come back when”...** you have a working prototype, beta testing with customers, etc...

What does an SBIR firm look like?



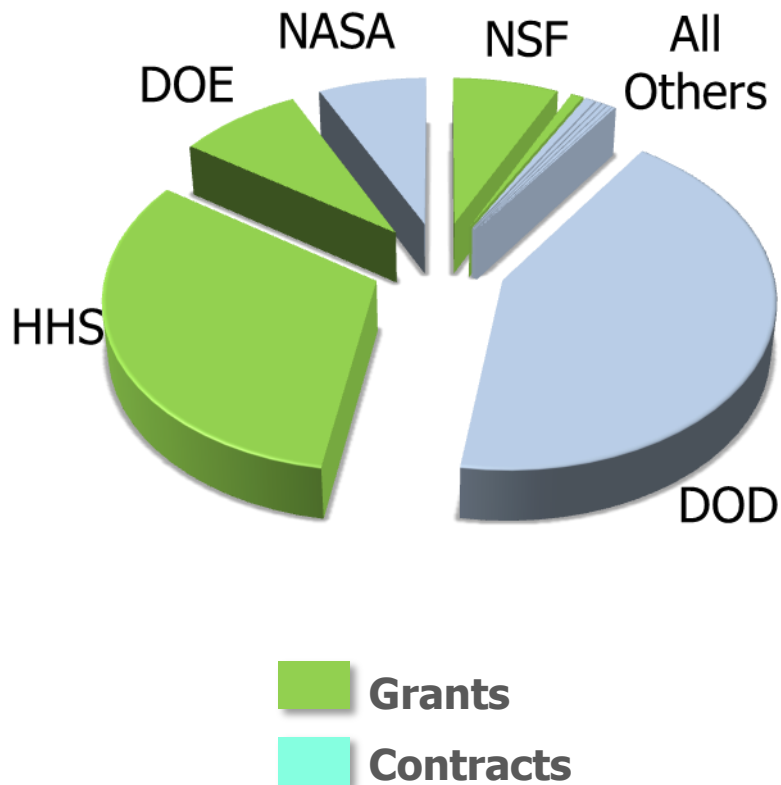
- Company must be for profit, U.S. owned/operated, and under 500 people
- Work must be done in the U.S.
- Focus is on performing R&D – Not purchasing equipment, commercializing a technology that has already been developed, or one that has very low risk and only needs capital

Basics

- Agencies use program to help serve their mission
- Small awards to vet high risk, high pay-off research that can be commercialized.
- \$3.7+ Billion available each year. If budgets increase, SBIR/STTR budgets increase.
- Gated funding process
- This is a Commercialization Focused Program with a product or service resulting from research.
- 1-4 times per year by each agency.
- Approx. 25% of all seed capital in US.

SBIR/STTR Budgets by Agency, FY2019

TOTAL: \$3.7B



Agencies with SBIR and STTR Programs	Budget
Department of Defense (DOD)	\$ 1.8 B
Department of Health and Human Services (HHS), including the National Institutes of Health (NIH)*	\$1.15 B
Department of Energy (DOE), including Advanced Research Projects Agency – Energy (ARPA-E)	\$308M
National Aeronautics and Space Administration (NASA)	\$ 183M
National Science Foundation (NSF)	\$212 M
Agencies with SBIR Programs	Budget
U.S. Department of Agriculture (USDA)	\$30M
Department of Homeland Security (DHS): Science and Technology Directorate (S&T) and Domestic Nuclear Detection Office (DNDO)	\$17M
Department of Commerce: National Oceanic and Atmospheric Administration (NOAA) and National Institute of Standards and Technology (NIST)*	\$13M
Department of Transportation (DOT)	\$5.2 M
Department of Education (ED)	\$7.5 M
Environmental Protection Agency (EPA)	\$3.6 M

Proposal/Application Submission Windows for New Applications

Agency	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
DHS			█	█											
DOC - NIST				█	█	█	█								
DOC - NOAA			█	█	█										
DoD				█	█	█	█	█	█	█	█	█	█	█	█
DOE		█	█	█	█					█	█	█	█		
DOT				█	█	█	█								
ED				█	█	█									
EPA									█	█					
HHS - Omnibus	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
HHS - R&D Contracts										█	█	█			
NASA				█	█	█	█								█
NSF			█	█	█	█	█	█	█	█	█	█	█	█	█
USDA										█	█	█	█		

Granting vs. Contracting

- **Agencies have different missions**
- **User vs. Non-User agency**
- **Topics vs. Investigator initiated proposals**

Three Phase Process



Success Rates

Phase I: 10-20%

Phase II: About 40% (must have phase I)

Venture Capital takes 6-12 months

About 1% probability

Some cool perks



- No equity – *vs VC -- and, not a loan*
- IP retention – *vs "work for others"*
- Credibility from Federal Government's evaluation
- Phase 3 "sole source" possibility to gain entry to fed acquisitions

Differences Between SBIR and STTR

	SBIR	STTR
Partnering Requirement	Permits partnering	Requires a non-profit research institution partner
Principal Investigator	Primary employment (>50%) must be with the small business	PI may be employed by either the research institution partner or small business (Not NSF--check solicitation)
Work Requirement	May subcontract up to: 33% (Phase I) 50% (Phase II)	Minimum: 40% Small Business 30% Research Institution Partner
Program Size	3.2% (FY19 - \$3.28B)	0.45% (FY19 - \$453M)
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)

Other Considerations

- Use your knowledge of customer needs to suggest new topics to hard to solve problems (DOD, NASA)
- Must be prepared for growth, audits, project management, time keeping, cyber security requirements, etc. Find a system that helps -- **DO THIS EARLY!** If you win an SBIR, start this in PHASE I. Don't wait – can impact ability to secure Phase II.
- SBIR funding covers direct, indirect, overhead and a fee (usually about 7%). Rent, benefits, accounting systems, payroll systems, etc. can be included in these rates.

Key Links:

Topic Search: www.sbir.gov/sbirsearch/topic/past

Award Search: www.sbir.gov/sbirsearch/award/all

All SBIR/STTR Agency Links:

<https://www.sbir.gov/agencies-landing>

NSF: <https://seedfund.nsf.gov/apply/>

Proposal Pitch tips webinar link I can send – hear back in 3 weeks if approved to submit full proposal.

NIH: <https://sbir.nih.gov/>

APPLYING TO NIH: <https://sbir.nih.gov/apply>

DOD SBIR Topics (2 links to search)

<https://rt.cto.mil/rtl-small-business-resources/sbir-sttr/>

<https://www.dodsbirsttr.mil/submissions/login>

Upcoming CIT SBIR Training

- **Upcoming LIVE Webinar Training:**
 - **NSF SBIR/STTR Proposal Prep Virtual Classroom**
 - Feb. 4, 2021 – 8:30AM-2PM
 - **Multi-Agency SBIR/STTR Proposal Prep Virtual Classroom**
 - March 18, 2021 – 8:30AM-2PM
 - **University Participation in SBIR/STTR NSF SBIR/STTR Proposal Prep Virtual Classroom**
 - March 25, 2021 – 3:00-4:30PM

<https://www.cit.org/events.html>

RECORDED SBIR Training

- 40+ Recorded Webinars – FREE for Virginia firms and university researchers!
- **Recently Held – available to view recordings:**
 - **Homeland Security** SBIR Intro, *WEBINAR*
 - **Dept. of Defense** SBIR/STTR Proposal Prep *WEBINAR*
 - **NASA** SBIR Proposal Prep *WEBINAR*
 - **NIH** SBIR Tips Q&A *WEBINAR*

<https://www.cit.org/sbir-webinar-archives.html>



SBIR / STTR Support for Virginia Firms

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