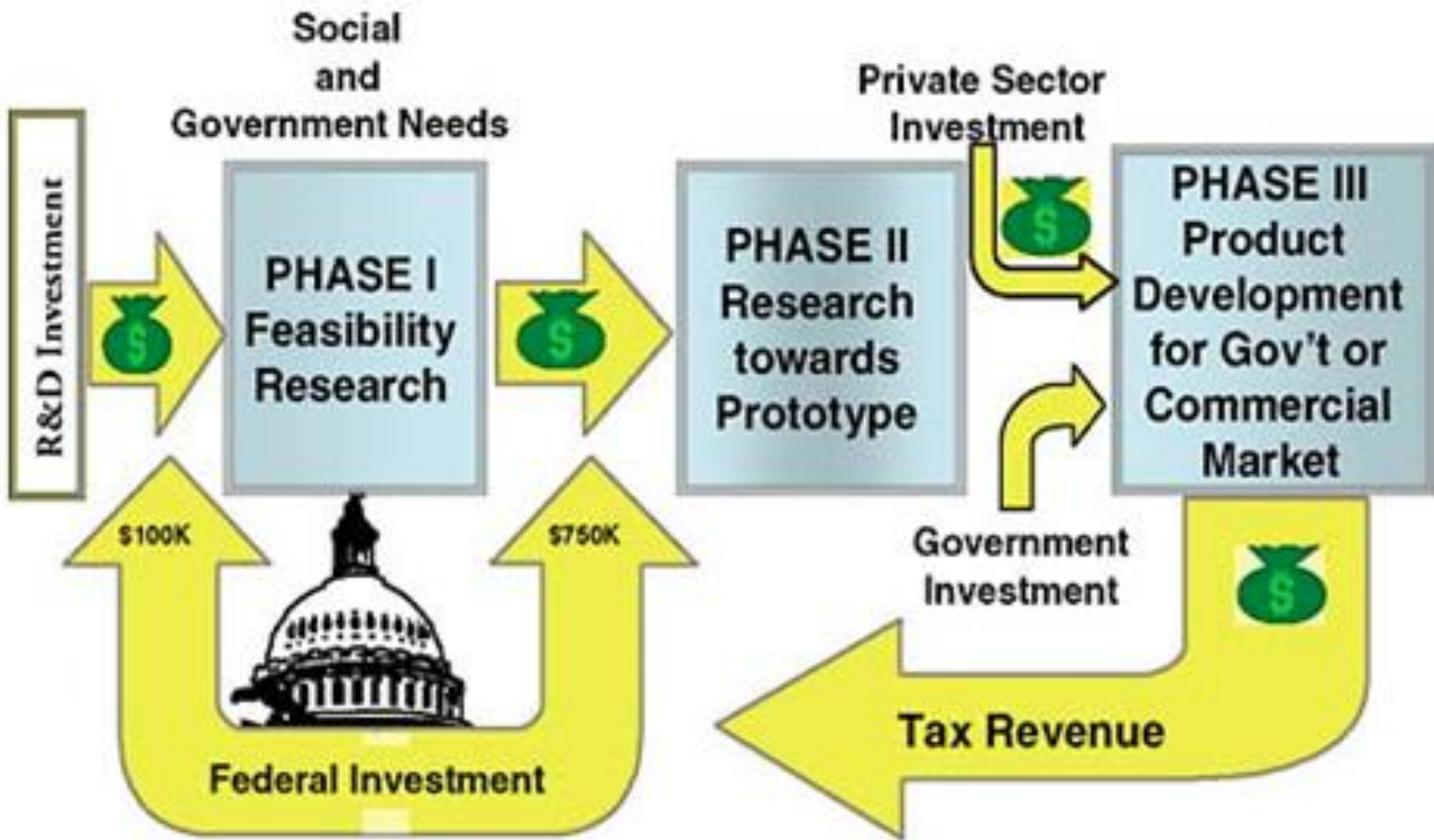


**SBIR • STTR**  
America's Seed Fund™  
POWERED BY SBA

**Equity-Free Investments:  
Annual ~\$2.5B  
Small Business Innovation Research  
and  
Small Business Technology Transfer Programs**

**March 14, 2018  
Ms. Pat Dillon, MBA**





# Mission

**MN-SBIR provides outreach, education and coaching to assist small businesses to compete and win funding allowing them to research and develop technologies across the spectrum of science, technology, engineering and manufacturing for future technology commercialization.**



**Therapist**  
**Motivator**



**Educator**  
**Supporter**  
**Navigator**  
**Advisor**  
**Connector**  
**Translator**



\$\$\$\$\$

**FEDERAL**  
**GOVERNMENT**

MN-SBIR assists qualifying science and technology-driven small businesses with the following:

- small business research and development assistance,
- technology transfer from universities to small businesses,
- proposal development and mentoring for small businesses applying for SBIR/STTR funding; and,
- commercializing technology developed through SBIR/STTR grants or contracts.

MN-SBIR is funded in part through a Cooperative Agreement with the U.S. Small Business Administration, Minnesota Department of Employment and Economic Development, University of Minnesota, Office of Technology Commercialization and MHTA.

# Small Business Profile



***Proprietary Technology*** refers to technical innovations that are unique and legally owned or licensed by a business, including innovations that are patented, patent pending, a subject of trade secrets, or copyrighted.

***Qualified high-technology fields*** include, aerospace, agricultural processing, **renewable energy**, energy efficiency and conservation, environmental engineering, food technology, cellulosic ethanol, information technology, materials science technology, nanotechnology, telecommunications, biotechnology, medical devices, pharmaceuticals, diagnostics, biologicals, chemistry, education, veterinary science, or similar.

# It's all about Commercialization

Market  
Customers  
Company  
Opportunity  
Intellectual  
Investors  
Product  
Team  
Property  
Finance  
Technology  
**Plan**  
Revenue  
Competition  
Partners

Commercialization  
is your roadmap for the  
future and should convey  
how you plan to  
generate revenues from  
your innovation.

HOME

ABOUT ▾

FUNDING ▾

AWARDS ▾


EVENTS ▾

RESOURCES

FIND FUNDS

Search for solicitations from all agencies (Open, Future, Closed)

Search Open Funding Topics

Search 

SUCCESS STORIES

[www.sbir.gov](http://www.sbir.gov)

Search for "open" topics  
– specific and broad  
(Accepting proposals)

Search for similar awards/companies



I LEARN ABOUT



I'M A(AN)...



I WANT TO...



# FEDERAL AGENCIES

~<\$1,000M	Department of Defense	SBIR and STTR
~<\$780M	Department of Health and Human Services, National Institutes of Health	
~\$184M	Department of Energy	
~\$150M	National Aeronautics and Space Administration	
~\$153M	National Science Foundation	
~18M	Department of Agriculture	SBIR
~\$16M	Department of Homeland Security	
~\$13M	Department of Education	
~\$7M	Department of Commerce	
~\$4M	Environmental Protection Agency	
~\$8M	Department of Transportation	

**FY  
2018  
~\$2.5B**

# Agencies with Renewable Research Funding

## **Department of Defense**

Specific and directed research efforts to support national defense. Too broad to describe.

## **National Science Foundation:**

<https://www.nsf.gov/eng/iip/sbir/topics/Combined.pdf>

## **Department of Energy**

<http://science.energy.gov/sbir/>

## **United States Department of Agriculture**

<https://nifa.usda.gov/program/small-business-innovation-research-program-sbir>

# Benefits

- Seed money to fund high risk, high payoff projects
- **NOT A LOAN**
- Intellectual property rights are retained by the small business
- Recognition, verification and visibility by large companies, investors, etc.
- Maintain control of the company
- Potential leveraging tool to attract other investments (state funding, angel, early stage and venture capital)
- Potential for sole-source federal government contracts with any federal buying office

# Phase I – Technical Feasibility

The objective of Phase I is to establish the technical/scientific merit and feasibility of the proposed R/R&D efforts. Preliminary data may be included but are not required. The application should concentrate on R/R&D efforts that will significantly contribute to proving the scientific or technical feasibility of the approach or concept that would be a prerequisite to further support in Phase II.

## SBIR

\$100K - \$225K per award

generally up to 6-9 months

66% - **min.** % work performed by the small business (dollars)

33% - **max.** % work performed by subcontractors/consultants

## STTR

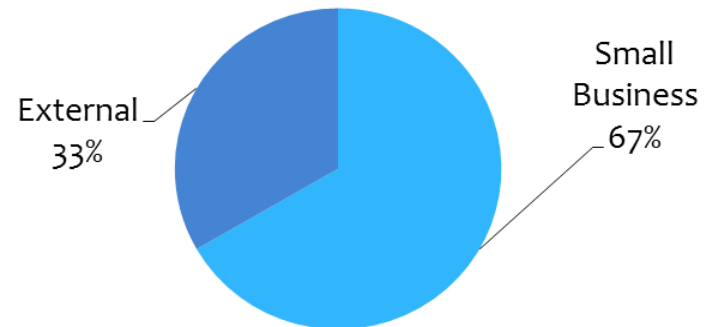
\$100K - \$225K– generally 12 months

40% - **min.** % work performed by the small business (dollars)

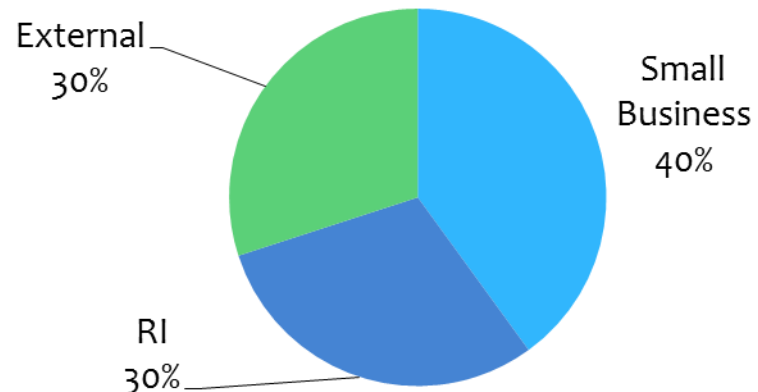
30% - **min.** % work performed by the research institution (dollars)

30% - others (if needed)

## SBIR Percent of Effort



## STTR Percent of Effort



# Phase II – Prototype Development

The objective of Phase II is to continue the research or R&D efforts initiated in Phase I. Funding shall be based on the results of Phase I and the scientific and technical merit and commercial potential of the Phase II application.

## SBIR

\$450K - \$1M per award generally up to 24 months

50% - **min.** % work performed by the small business (dollars)

50% - **max.** % work performed by subcontractors/consultants

## STTR

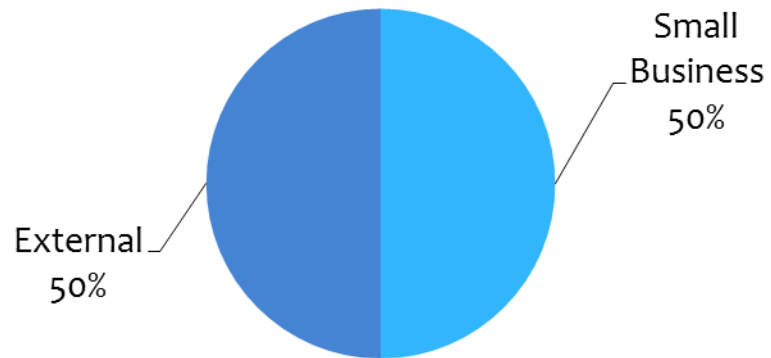
\$450K-\$1.5M – generally 24 months

40% - **min.** % work performed by the small business (dollars)

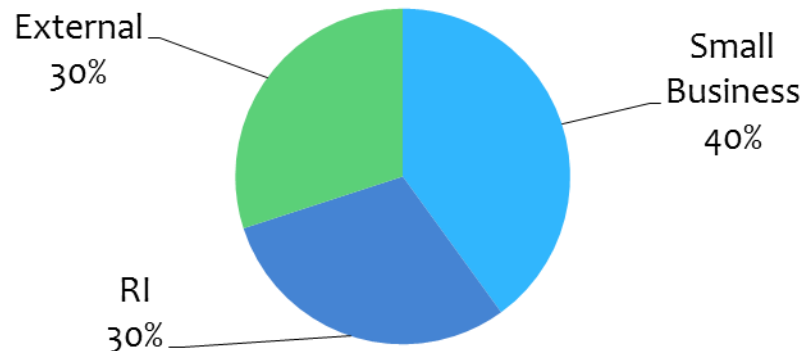
30% - **min.** % work performed by the research institution

30% - others (if needed)

## SBIR Percent of Effort



## STTR Percent of Effort



# Phase III - Commercialization

**An objective of the SBIR/STTR program is to increase private sector commercialization of innovations derived from Federal R/R&D.**

- ✓ Use of non-SBIR/STTR funds
- ✓ Sole-Source FEDERAL contracts
- ✓ SBIR/STTR Phase III is for work that derives from, extends, or logically concludes effort(s) performed under prior SBIR funding agreements and is authorized under 15 U.S.C. § 638(r).
- ✓ Competition for SBIR/STTR Phase I and Phase II awards satisfies any competition requirement of the Armed Services Procurement Act, the Federal Property and Administrative Services Act, and the Competition in Contracting Act.

# PI/PD and Technical Team

## Principal Investigator/Project Direction (PI/PD)

- must have primary employment (51% or more) with the small business at the time of award and during the conduct of the research effort.
- *Primary employment with a small business concern precludes full-time employment at another organization.*

## Technical Team

- Internal personnel
- External personnel and organizations
  - consultants
  - large and small companies
  - research institutions
  - federal labs
  - federally funded R&D centers and
  - non-profit organizations.

### STTR

- PI/PD from either the small business or the research institution.
- PI/PD from the research institution must have a 10% commitment to the small business as evidenced by a formal appointment.

# Technical Proposal

## Phase I

Scholarly document - less than **25 pages** (depends on the agency) that describes the innovation, research and development project (technical objectives/specific aims), project timeline, proposed outcomes, and the commercial potential.

## Phase II

Scholarly document - less than **35 pages** (depends on the agency) that describes the innovation, research and development effort (technical objectives/specific aims), project timeline, proposed outcomes, and the commercial potential.

## Phase II Commercialization Plan (Investor Quality)

Less than **15 pages** covering the company information; customer and competition; market opportunity; intellectual property; revenue projections, equity financing; partnerships, etc.



# Cost Proposal

## Direct Costs

Salaries/Wages  
Travel  
Materials  
Supplies  
Animal Studies  
Human Clinical  
Trials  
Etc.

## Indirect Costs

General & Administrative  
Rent  
Legal  
Accounting  
Etc.

## Profit/Fee

Generally 7%, depends on the  
agency

Phase I Example	
Direct Costs	\$179,250
Indirect Costs	\$30,000
Profit/Fee (7%)	<u>\$15,750</u>
	\$225,000

# What Do You Need?

*Start with the end game in mind – why is this project important and why should US taxpayers, via the agency, fund your research?  
What is the return on investment?*

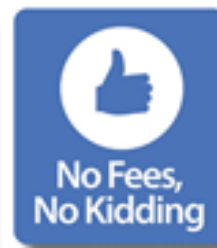
- ✓ Game changing, disruptive, cutting edge idea, concept or project
- ✓ Technological Innovation with commercial/military potential
- ✓ Agency/Solicitation/Topic Fit
- ✓ Project Narrative/Scope of Work/Timeline (Patience)
- ✓ R&D Plan and Strategy
- ✓ Bibliography
- ✓ Scientific and Technical Team (Biographical Sketches, Resumes)
- ✓ Facilities, Equipment and Expertise (Rent, Lease, Buy)
- ✓ Subcontractors/Consultants/Strategic Partnerships
- ✓ Letters of Support
- ✓ Commercialization Strategy

# How to get started?

1. MN-SBIR Self-Assessment to assess your fit with the SBIR/STTR Programs
2. Review [www.SBIR.gov](http://www.SBIR.gov) and review the SBIR Online Tutorials
3. Attend a free SBIR Group Discussion at MHTA (offered monthly)
4. Apply to the Phase 0 Technical Assistance Program – application requires answers to the following questions:
  - (1) The company and team (business, scientific, legal, accounting, etc.);
  - (2) The market opportunity, value proposition, and customers;
  - (3) The technology/innovation;
  - (4) The technical challenges to overcome; and
  - (5) The competition.
5. Approved into the Phase 0 Technical Assistance Program – **this is where the real work begins**
6. Develop SBIR/STTR Roadmap Plan
7. Attend a Proposal Preparation Course based on agency focus
8. Attend Technology Commercialization Courses at the University of Minnesota via Min-Corps
9. Submit proposal for funding, and seek out other funding opportunities
10. Hire an SciTechsperience Intern

# SciTech*s*perience™

a free, statewide, state-funded program  
that connects small, for-profit businesses to talented  
STEM interns and **provides a 50% wage match.**



Contact Becky Siekmeier for more info: [beckys@mhta.org](mailto:beckys@mhta.org) | 952-230-4241 | [SciTechMN.org](http://SciTechMN.org)

# CONTACT MN-SBIR

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**Facebook: MHTA**  
**Linked In: minnesota-high-tech-association**

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# Questions

