



# Environmental Protection Agency's Small Business Innovation Research (**SBIR**) Program

April Richards, Program Manager  
Informational Webinar  
June 6, 2019

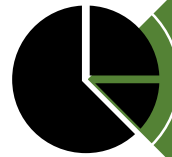
- All participants microphones are muted, no need to unmute, we will take all questions through the chat box (bottom left) at the end
- Slides will be sent out after the webinar and posted on our website



**Set-aside program  
for small businesses  
to engage in federal  
R&D**



Promotes commercialization



SBIR Budget = 3.2% of Federal  
Extramural R&D Budget



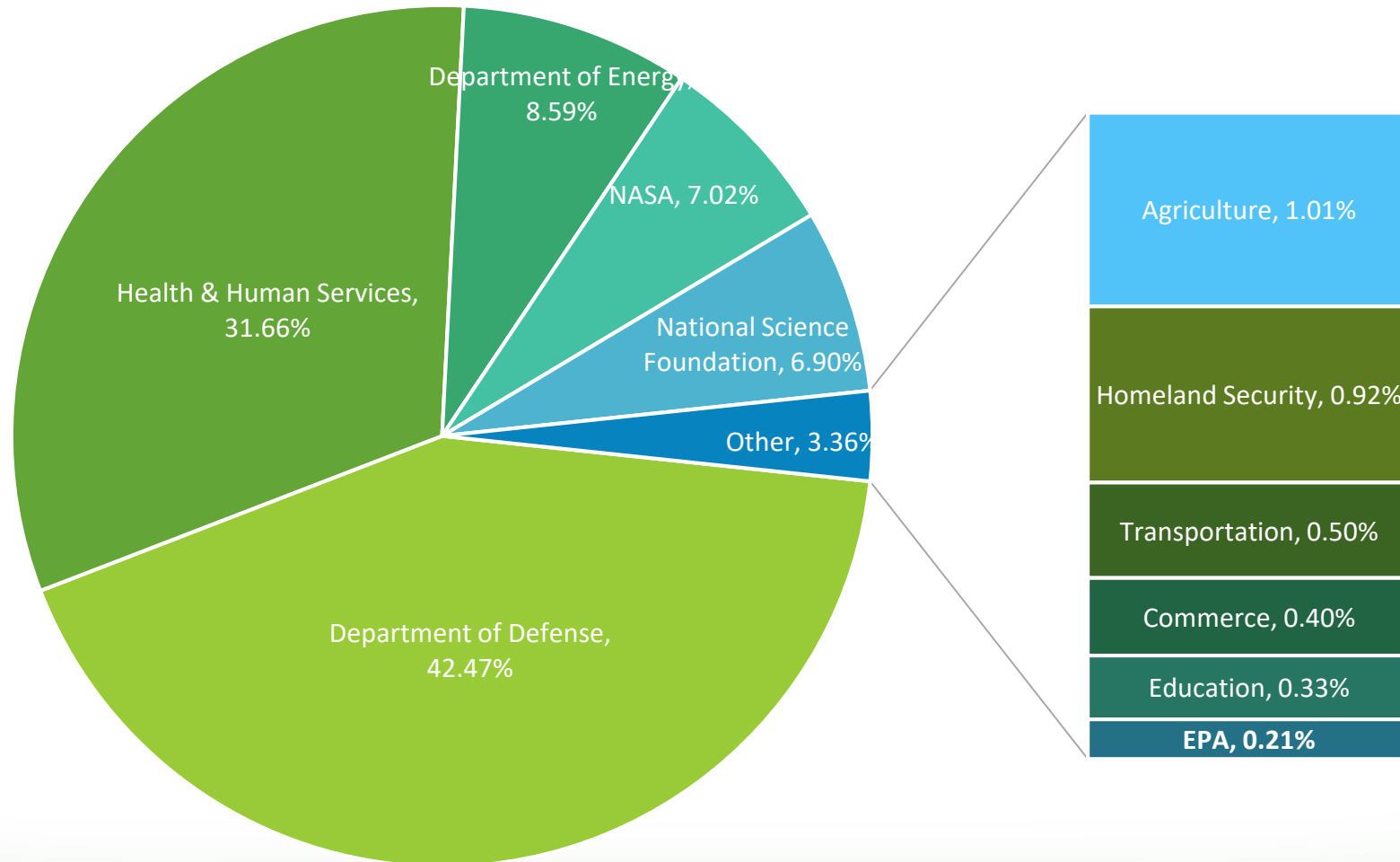
Approximately \$2.5 Billion



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



# 11 Federal SBIR Programs





# EPA-SBIR Mission

## EPA

Protect human health  
and the environment

## EPA SBIR

Support development and  
commercialization of innovative  
technologies to meet Agency's  
mission





# EPA SBIR Budget & Awards

Award Budget for FY19 = ~\$4.2 M

## PHASE I:

*Proof Of Concept*

\$100,000

6 Months

Awards  
=  
Contracts

## PHASE II:

*Develop & Commercialize  
Technology*

\$400,000

2 Years

Commercialization Option = \$100,000

# EPA'S SBIR Program



One of the small SBIR Programs



Provide awardees with EPA technical connection



Focus on commercialization: \$6,500 & \$100,000



Communicate successful projects



Help to protect the planet



Next Solicitation Opens:

June 2019

(closes ~45 days later)



Information at: [www.epa.gov/sbir](http://www.epa.gov/sbir)

Apply at: FedConnect

Subscribe to SBIR listserv:

<https://www.epa.gov/sbir/sbir-listserv>





- Clean & Safe Water



- Air Quality



- Land Revitalization



- Homeland Security



- Sustainable Materials Management



- Safer Chemicals

# Solicitation Topics

## Clean & Safe Water



- Sampling devices for microplastics
- Rehabilitation of water infrastructure
- Technologies for the destruction of PFAS in water and wastewater
- POU treatment for opportunistic pathogens
- Rapid detection and treatment of antibiotic resistant bacteria in wastewater
- Treatment for cyanobacteria and cyanotoxins in drinking water
- Resource Recovery for Decentralized Wastewater Systems

# Solicitation Topics

## Air Quality



Innovative Air Monitoring Technologies:

- ethylene oxide (EtO)
- sulfur dioxide (SO<sub>2</sub>)





# Solicitation Topics

## Land Revitalization



- Mining site characterization and remediation



# Solicitation Topics

## Homeland Security



- 3-D Gamma Camera to Map Radiological Contamination
- Novel water distribution and stormwater system sensors





## Sustainable Materials Management



- New Applications for Industrial Non-Hazardous Secondary Materials
- Preventing Food Waste



# Solicitation Topics

## Safer Chemicals



- Safer paint and coating removal products





# Selecting A Research Topic

- It is the responsibility of the company to select the most appropriate topic
- The topic you select will determine which peer review panel reviews your proposal
- EPA budget is modest so program is competitive
- Proposals must be responsive to specific topics
- Program manager can provide general advice on your proposed technology







# Anticipated Schedule

## PHASE I

Contracts Began: → April 2020

Contracts End: → September 2020

## PHASE II

Solicitation Open:

- September 2020

Proposals Due:

- November 2020

Contracts Awarded:

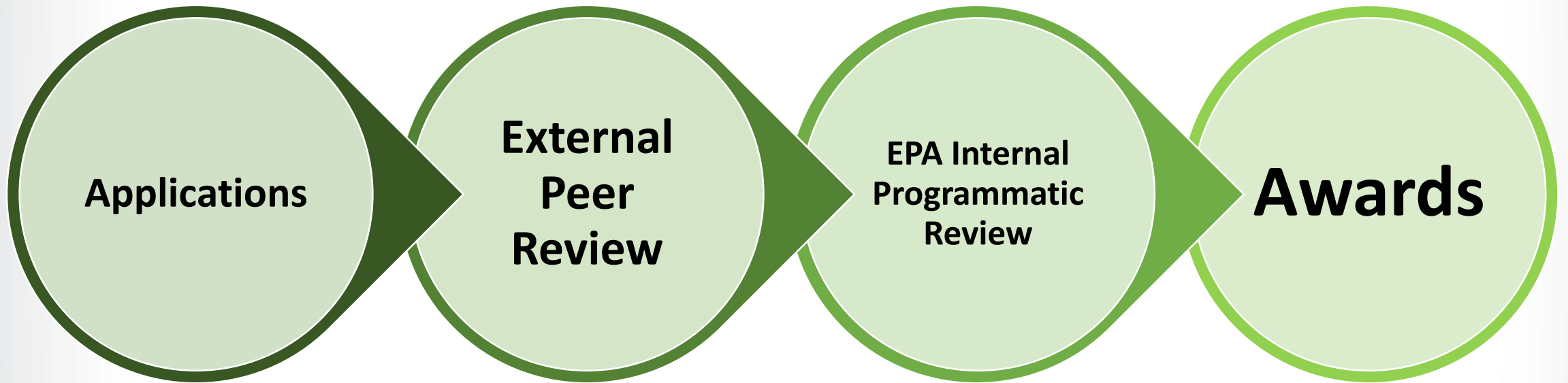
- May 2021

Option  
Documentation Due:

- 90 days before end  
of Phase II contract

Phase II Ends:

- May 2023





# External Peer Review: Phase I

## RATINGS

Highly Recommend

Recommend

Do Not Recommend

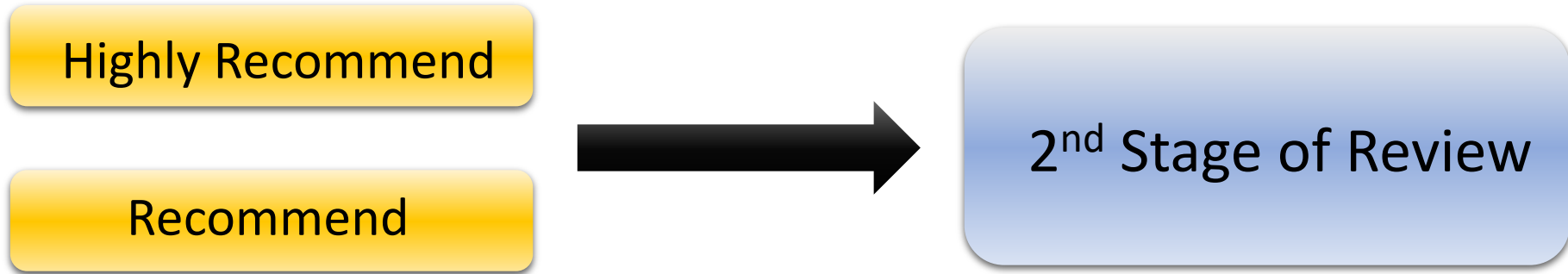
## REVIEW CRITERIA

### Commercialization Criteria

- Market Opportunity
- Company/Team
- Commercialization Approach

### Technical Criteria

- Innovation
- Technical Approach
- Technical Challenges



## EVALUATION CRITERIA

- Relevance to Topics & Agency priorities

- Advance Sustainability   

- Wide use, broad application/impact



# Apply Via FedConnect

- All submissions are electronic
- Using FedConnect
- Please start early to register you company
- Register at: <https://www.fedconnect.net/FedConnect/>





# Required Registrations

## [Dun and Bradstreet Universal Numbering System \(DUNS\)](#)

All registrations require that applicants be issued a DUNS number. After obtaining a DUNS number, applicants can begin both SAM, and SBA Company registry. The same DUNS number must be used for all registrations, as well as on the proposal.

## [SBA Company Registry](#)

See solicitation for instructions on how to register and how to attach proof of registration to your proposal package. Applicants must have a DUNS number to complete this registration. SBA Company registration is **NOT** required before SAM.

## [System for Award Management \(SAM\)](#) (formerly CCR)

Applicants must complete and maintain an active registration, **which requires renewal at least annually**. The renewal process may require as much time as the initial registration. SAM registration includes the assignment of a Commercial and Government Entity (CAGE) Code for domestic organizations which have not already been assigned a CAGE Code.

## [FedConnect](#)

Electronic applications system for EPA SBIR. FedConnect is a web portal that connects agencies and vendors.



# Environmental SBIR Funding



National Science Foundation (NSF)



National Institute of Environmental Health Sciences (NIEHS)



Department of Energy (DOE)



United States Department of Agriculture (USDA)



National Oceanic and Atmospheric Administration (NOAA)

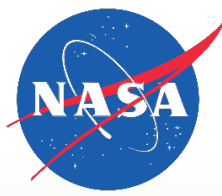


# SBIR Sensors Research Microsite

The Federal government is a significant driver of sensor innovation: investing in low cost, portable, easy-to-use technologies to facilitate the collection of real time, reliable measurement information.

Central web location promotes collaboration across SBIR agencies

Easier for sensor developers to locate relevant SBIR/STTR funding opportunities





Register with SBA and include one-page proof with your proposal

Check your budgets for errors

Submit your proposal well before the deadline



# Advice from Peer Review

Offerors should be sure to select the correct Topic Number.

Be sure to use the forms (Appendices) from the relevant solicitation.

Look at the peer review criteria carefully to make sure you are addressing them.

***If you decide not to send in a proposal, let us know if you want to be a peer reviewer in a particular topic.***

Read solicitation carefully

Develop a strong proposal

- Has an understandable, well-written project summary
- Addresses peer review criteria
  - Both commercial and technical



# Take Home Messages

- Make sure your technology fits the specified topic areas
- Start your registrations early
- Please do not wait until the last minute--submit your proposal before the deadline

**Thank you for helping us protect the planet**





# EPA SBIR Success Stories





Mushroom materials for packaging, insulation, & structural cores



A replacement for Styrofoam



Utilizes fungal mycelium grown on agricultural waste



Renewable, Biodegradable, Compostable

Recently licensed “leather” biomaterial to Bolt Threads (Forbes, 4/2018)





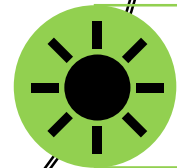
# EP Purification: Champaign, IL



Design/manufacture ozone-producing water disinfection systems



Systems generate any amount of ozone for precise disinfection



Available with solar panel, this allows use in +24 countries

Received the 2014 Wells Fargo Clean Energy Challenge Prize & Entrepreneurial Excellence New Venture Award



# For More Information

## **SBIR Program Manager:**

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**Website:** [www.epa.gov/sbir](http://www.epa.gov/sbir)

**Listserv:** <https://www.epa.gov/sbir/sbir-listserv>

**SBA SBIR website:** [www.SBIR.gov](http://www.SBIR.gov)





# QUESTIONS?

Please Submit in Chat box.  
We will address as many as  
time allows.

