



BIOENERGY, CLIMATE, AND ENVIRONMENT
FOOD PRODUCTION AND SUSTAINABILITY
YOUTH, FAMILY, AND COMMUNITY
FOOD SAFETY AND NUTRITION
INTERNATIONAL PROGRAMS

NIFA

Writing a Strong USDA SBIR/STTR Application



Agenda

- Introduction to the USDA SBIR/STTR Program
- Preparing Your SBIR/STTR Application
 - Before You Start
 - Building a Strong Application
 - Understanding the Evaluation Criteria
 - Other Key Information
- Resources
- Q&A



Non-Discrimination Statement

<https://www.usda.gov/non-discrimination-statement>

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National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

Introduction to the USDA SBIR/STTR Program



USDA SBIR/STTR Technology Areas

Information
Technology

Electronics

Biotechnology

Nanotechnology

Acoustics

Remote Sensing

Genetic Engineering

Material/Coatings

Biofuels

Machine Vision

Precision
Agriculture

Engineering

Chemistry

Robotics

Physics

Food Safety





Do you have great ideas in these areas?



Forest & Related
Resources



Plant Production &
Protection
(Biology)



Animal Production
& Protection



Conservation of
Natural Resources



Food Science &
Nutrition



Rural & Community
Development



Aquaculture



Biofuels &
Biobased Products



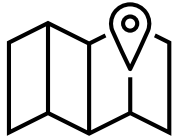
Small & Mid-Sized
Farms



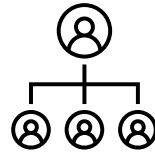
Plant Production &
Protection
(Engineering)



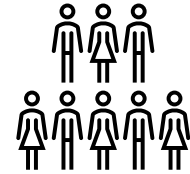
USDA SBIR/STTR Eligibility



For-profit company
operating in the U.S.
+ Research performed
in the U.S.

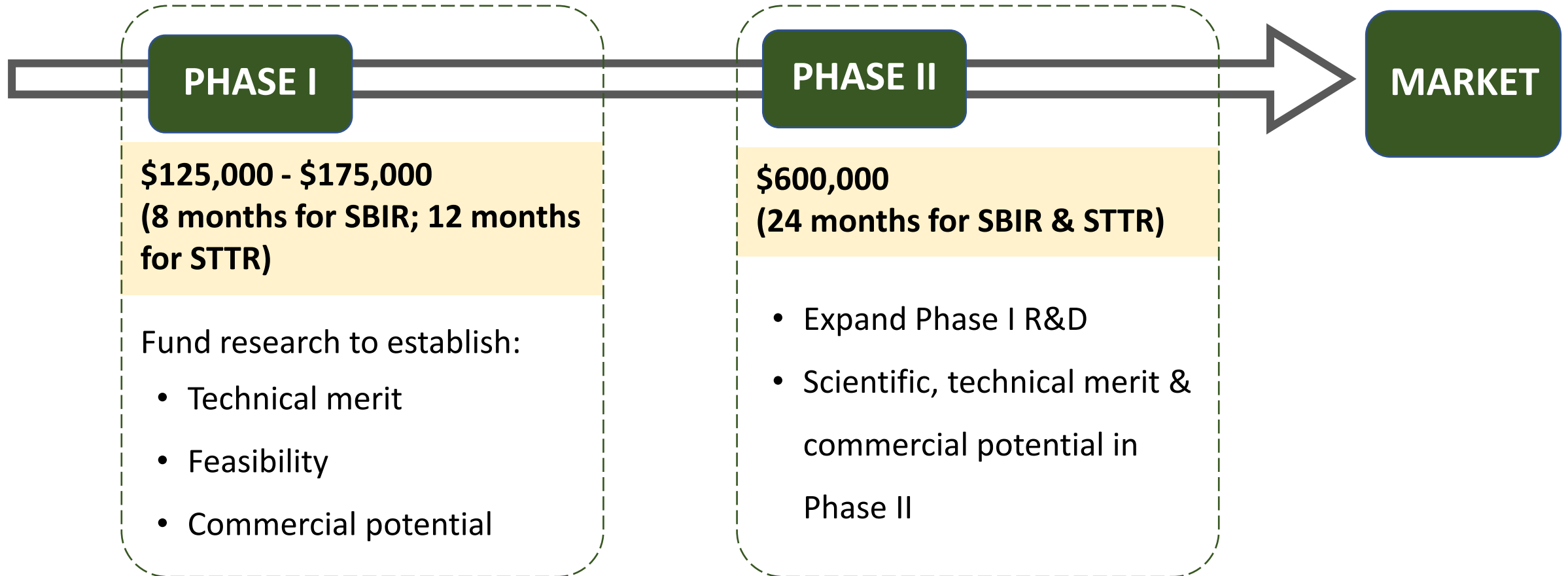


More than 50% owned
and controlled by U.S.
citizen(s) or permanent
resident(s)



No more than 500
employees (including
affiliates)

USDA SBIR/STTR Program





Which Program is Right for Me?

Details	SBIR	STTR	BOTH
Nonprofit research institution or federally funded R&D center participation	May	Must	Must
% participation of nonprofit research institution or federally funded R&D center	33% or less (Phase I) up to 50% (Phase II)	30 to 60% (Phase I and Phase II)	30 to 33% (Phase I) 30 to 50% (Phase II)
Primary employment of the principal investigator	Must be employed with small business	May be employed with either small business or non-profit research institution	Must be employed with small business
Formal cooperative agreement required outlining intellectual property rights	Not required	Required	Required



SBIR/STTR = Small Business Funding

Applicant must be a **small business**,
not research institution or individual.

Award also goes to **small business**,
not research institution or individual.



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Preparing Your SBIR/STTR Application - Before You Start



Before You Start Your Application

1

Review Solicitation

Read the **Request for Application (RFA)** thoroughly! It has all pertinent information, from the deadlines to evaluation criteria.

2

Determine Topic Area

You cannot use one application for multiple topic areas. Select the topic area that aligns best with your project.

3

Registrations

Prior to submission, it is required that you register your business on SAM.gov, Grants.gov and SBIR.gov. Do this early to prevent last minute panic!



Registration 1/3: SAM.GOV

Get Started with Registration and the Unique Entity ID

Submitting a registration and getting a Unique Entity ID are FREE.

Before You Get Started

Review these steps to choose which option is right for you. You can register to bid and apply for federal awards or you can request a Unique Entity ID only without having to complete a registration.

- 1 About Registration
- 2 Set up a SAM.gov Account
- 3 Prepare Your Data
- 4 Get Started

1 About Registration

If you want to apply for federal awards as a prime awardee, you need a **registration**. A registration allows you to bid on government contracts and apply for federal assistance. As part of registration, we will assign you a Unique Entity ID.

To see comprehensive instructions and checklist for entity registration, download our [Entity Registration Checklist](#).

If you do not want to apply directly for awards, then you do not need a registration. If you only conduct certain types of transactions, such as reporting as a sub-awardee, you may not need to complete a registration. You may only need a **Unique Entity ID**.

Get Started

Already Registered?

You must renew your registration every 365 days to keep it active. You can make updates to your registration anytime or during renewal. If you're already registered, you already have a Unique Entity ID.

- Set up SAM.gov account
- Entity registration
 - Obtain a **Unique Entity Identifier (UEI) number**
 - 12-digit alphanumeric identifier required to do business with the federal government
 - Annual updates are needed

<https://sam.gov/content/entity-registration>



Registration 2/3: GRANTS.GOV

The screenshot shows the Grants.gov website interface. At the top, there is a navigation menu with tabs: HOME, LEARN GRANTS, SEARCH GRANTS, APPLICANTS (highlighted with a yellow arrow), GRANTORS, SYSTEM-TO-SYSTEM, FORMS, CONNECT, and SUPPORT. Below the navigation menu is a large banner image of the U.S. Capitol building with the text 'FOR APPLICANTS' overlaid. A second yellow arrow points to the 'Get Registered' link in the 'FOR APPLICANTS' section. The 'Get Registered' link is highlighted with a red box. Below the banner, there are several tiles for user actions: 'Check Your Eligibility', 'Get Registered' (highlighted), 'Apply for Grants', 'Track Your Application', 'Adobe Compatibility', 'Applicant Training', 'Applicant FAQs', and 'Manage Subscriptions'. The footer contains links for 'CONNECT WITH US' (Blog, Twitter, YouTube, Alerts, RSS, XML Extract, Get Adobe Reader) and 'HEALTH & HUMAN SERVICES' (HHS.gov, EEOC / No Fear Act, Accessibility, Privacy, Disclaimers, Site Map). It also includes 'COMMUNITY' links (USA.gov, WhiteHouse.gov, USAspending.gov, SBA.gov, SAM.gov, Report Fraud) and a 'Frequently Asked Questions' link.

- Click on the **Applicants** tab
- Click on “Get Registered”
 - Detailed instructions are available on Grants.gov

<https://www.grants.gov/web/grants/applicants/registration.html>



Registration 3/3: SBIR.GOV

Home » Registration

Company Registration

[Company Registration Guide](#)

Company registration is meant for small businesses to register and gain access to the SBIR.gov system. Completed registrations will receive a unique SBC Control ID to be used for submissions at any of the 11 participating agencies in the SBIR or STTR programs.

- 1 Certification Tool** [Next >>](#)
- 2 UEI/Email Check
- 3 SBC Information
- 4 Points of Contact

The SBIR certification tool is for informational purposes only. Ineligibility does not prohibit registration.

Type of Firm

Is your business organized as a for-profit company?

Yes No

Is your principal place of business located in the United States?

Yes No

Ownership and Control

Fill out 5 step registration using the following information

- UEI
- Email address
- SAM.gov Points of Contact
- Company Name, Address
- Ownership and Contact information
- Number of employees
- Points of Contact

<https://www.sbir.gov/registration>



Points to Remember for Registration

- SAM.gov entity registration can take time, especially if there are issues with your registration that may affect your ability to apply before the funding opportunity close date.
- If your entity is already registered, [ensure your registration has been renewed or updated per SAM.gov requirements](#)



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Preparing Your SBIR/STTR Application - Building a Strong Application



What USDA SBIR/STTR Program is Looking for

Innovative Ideas

Are you developing a novel technology or an improvement to currently available technology? USDA welcomes high-risk, high-reward projects!

Commercial Impact

Does your technology have potential to reach the market and/or to provide benefits to the society?

Budget/Duration Limits

Phase I awards must stay within budget and duration (\$125,000 or \$175,000 depending on topic area; 8 or 12 months for SBIR and STTR, respectively).

Focus on Research

Phase I projects should focus on proof of concept and consider potential market fit. Please note that Phase I award is a prerequisite for a Phase II.



Key Factors for Success

Innovative Ideas

High scientific/technical merit and commercial potential

Market knowledge
Clear understanding of entry
and sustainability in the market



Strong agreements
Good consultants or federal
lab partners (CRADA)

Letters of support
Strong letters of support from
Phase III partners, end-users,
consumers, and investors



Business expertise
If not available within company,
consider hiring consultants



Application Fundamentals

- What is SBIR/STTR?
- What is included in an USDA SBIR/STTR award (funds, duration, etc)?
- When are applications due?
- Who is eligible?
- How can I prepare and submit a funding application?
- What are the key components of an application?
- How will the award be issued and managed?
- Who can I talk to about this solicitation?
- What do these words mean?

You will find answers to all these questions within the **RFA!**



Request for Application (RFA)

- Become a “student” of the RFA
 - Understand the main goals of the program
 - Attend technical assistance webinars or watch the recordings
 - Understand the instructions outlined in the RFA on how to assemble the proposal
 - **Read the RFA!!!**
 - RFA is the most important; but be sure to read the NIFA Grant Application Guide, too!

USDA United States Department of Agriculture National Institute of Food and Agriculture www.nifa.usda.gov @USDA.NIFA NIFA

REQUEST FOR APPLICATIONS
Small Business Innovation Research and
Small Business Technology Transfer Programs
Phase I

MODIFICATIONS: Pages 1, 2, 9, 10, 11, 13, 14, 16, 18, 20, 22, 23, 26, 28, 44, and 59

FUNDING YEAR: Fiscal Year 2023

APPLICATION DEADLINES: FY 2023: October 25, 2022

LETTER OF INTENT DEADLINE: Not Required

FUNDING AVAILABILITY: \$13,000,000 for SBIR/\$2,500,000 for STTR

ASSISTANCE LISTING NUMBER: 10.212

FUNDING OPPORTUNITY NUMBER: USDA-NIFA-SBIR-009301



Structure of a Competitive RFA

Eight (8) Main Parts

Executive Summary

+

Part I-Funding Opportunity Description

Part II-Award Information

Part III-Eligibility Information

Part IV-Application and Submission Information

Part V-Application Review Requirements

Part VI-Award Administration

Part VII-Other Information



Key Elements of SBIR/STTR Application

Required

Summary/Abstract

Project Narrative

Budget

Disclosure Form

Other Necessary Items

Key Personnel Bio Sketches

Justification

Conflict of Interest (COI)

Current & Pending Support (C&P)

Bibliography

TABA Request

Valid SBC #



What to Include in Project Summary

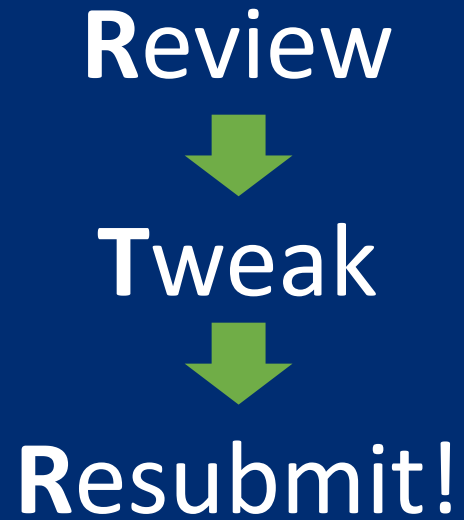
- Must be 250 words or less
- Think about how to capture the reviewer's attention
 - Include description of the problem or opportunity, Project objectives, and a description of the effort
 - One paragraph on anticipated results and potential commercial applications of the proposed research
 - Succinct summary of your project, with key information highlighted
- Do not include confidential information
- Template available:
<https://www.nifa.usda.gov/application-support-templates>



What to Include in Project Narrative

- Must keep it at 17 pages
- Key questions to answer:
 - How does your project align with USDA SBIR/STTR program's priorities?
 - What is the problem/opportunity and why is it important?
 - What are the background, technical approach, and market needs?
 - What results are expected? What are the benefits, the estimated cost, and policy issues that might stand in the way of your success?
 - Is the project scientifically/technically feasible? How?
 - What is your work plan? (Should be detailed)
 - Are there any research efforts that are directly related to your project? How does your project help the impact of the research area?
 - Does your project have market potential? Who are your customers and competitors?

Resubmission



- Trying SBIR/STTR again?
 - Resubmissions should provide response to reviewer feedback from previous application
 - Take the reviewer comments and improve your application
 - Do NOT exceed the ONE-page limit for your resubmission response.
 - This does not count towards the 17-page Project Narrative page limit.



Tips for Project Narrative

- Provide comprehensive information
- Write the proposal logically and clearly
 - Organize proposal according to outline in RFA or evaluation criteria, whichever is most logical
 - Following the prescribed format helps reviewers find information more easily
- Use tables and figures to help illustrate important points
- Remember the 4 Cs—**C**ompelling, **C**lear, **C**oncise, and **C**omplete
- Second set of eyes helps! Ask someone else to review your Project Narrative before submitting



What to Include in Budget

Prepare budget with a strong justification

- Keep in mind the budget and performance period limits
 - Budget: \$125,000 or \$175,000, depending on topic area
 - Period of performance: 8 or 12 months for SBIR and STTR, respectively
- Project work outsourcing
 - SBIR: maximum 33% of the project
 - STTR: at least 30% of the project, up to 60%
 - Both: 30 to 33% of the project
- Salaries require name and title of each person and how the requested salary was determined
- Include fringe benefits, equipment, materials & supplies, consultants, etc.
- Fee for profit allowable (not to exceed 7%)



What to Include in Additional Forms

- Letters of support
- Facilities and instrumentation
- Key personnel bio sketches
- Budget justification
- Subcontract information if needed
- Conflict of Interest List
- Current and Pending

Fill out forms completely and correctly!



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Preparing Your SBIR/STTR Application - Understanding the Evaluation Criteria



SBIR/STTR Evaluation Criteria

1. Phase I Scientific and Technical Feasibility
2. Market Potential
3. Importance of the Problem
4. Investigator and Resource Qualification
5. Budget
6. Duplication

Tip!

Understanding these review criteria will help you craft a stronger funding application!



SBIR/STTR Evaluation Criteria

Demonstrate your project's fit in your application. Below are some questions to address when preparing your SBIR/STTR funding application.

1. Phase I Scientific and Technical Feasibility

- Do you clearly describe the project objectives and outcomes?
- Is your approach innovative, original, suitable, and feasible?
- Do you clearly state the expected results in a SMART (Specific, Measurable, Achievable, Relevant, Time-bound) way?
- Does your project fill critical knowledge gaps?
- Have you done background research and performed literature reviews?
- Do you have access to facilities, equipment, or expertise?



SBIR/STTR Evaluation Criteria

Demonstrate your project's fit in your application. Below are some questions to address when preparing your SBIR/STTR funding application.

2. Market Potential

- Why should USDA SBIR/STTR support your project? What type of marketable outcome will your project yield?
- Do you have a thorough understanding of your target market?
- Does your team have the technical and business skills to go to market?
- Have you successfully commercialized a product before?
- Have you started talking to relevant stakeholders? Can they provide letters of support? If not, can you provide a justification?



SBIR/STTR Evaluation Criteria

Demonstrate your project's fit in your application. Below are some questions to address when preparing your SBIR/STTR funding application.

3. Importance of the Problem

- Why is the problem that your project is addressing important?
- What type of public interest can your project offer?
- Does your project address or achieve any of the following goals?
 - Develop sustainable agricultural production systems
 - Protect natural resources and the environment
 - Create a safe, nutritious and affordable food supply
 - Develop value-added food and non-food products from agricultural materials
 - Enhance global competitiveness
 - Enhance economic opportunity and quality of life, especially for people in rural areas



SBIR/STTR Evaluation Criteria

Demonstrate your project's fit in your application. Below are some questions to address when preparing your SBIR/STTR funding application.

4. Investigator and Resource Qualifications

- Who are the key members and what are their roles?
- Do your team members have the right expertise (scientific/business)?
- Do you have the Project Director resumes with work experience?
- Do you have sufficient personnel, facilities, and instruments?
- How do you plan to manage your project?
- If you have consultants or CRADA cooperators, have they given you a written confirmation to participate in your project?



Work with Federal Research Partner

CRADA

Cooperative Research and
Development Agreement

- Develop a CRADA with a Federal Lab or Federal License innovation
- CRADA is a factor considered in the application review process
 - If two or more applications are of equal merit, CRADA will be an important consideration.



SBIR/STTR Evaluation Criteria

Demonstrate your project's fit in your application. Below are some questions to address when preparing your SBIR/STTR funding application.

5. Budget

- Is your budget within limit? (\$125,000-\$175,000)
- Do you provide detailed breakdown on how you plan on using the funds?



SBIR/STTR Evaluation Criteria

Demonstrate your project's fit in your application. Below are some questions to address when preparing your SBIR/STTR funding application.

6. Duplication

- Is your project original and has not been conducted by you or a different entity?
- What makes your project unique from others?



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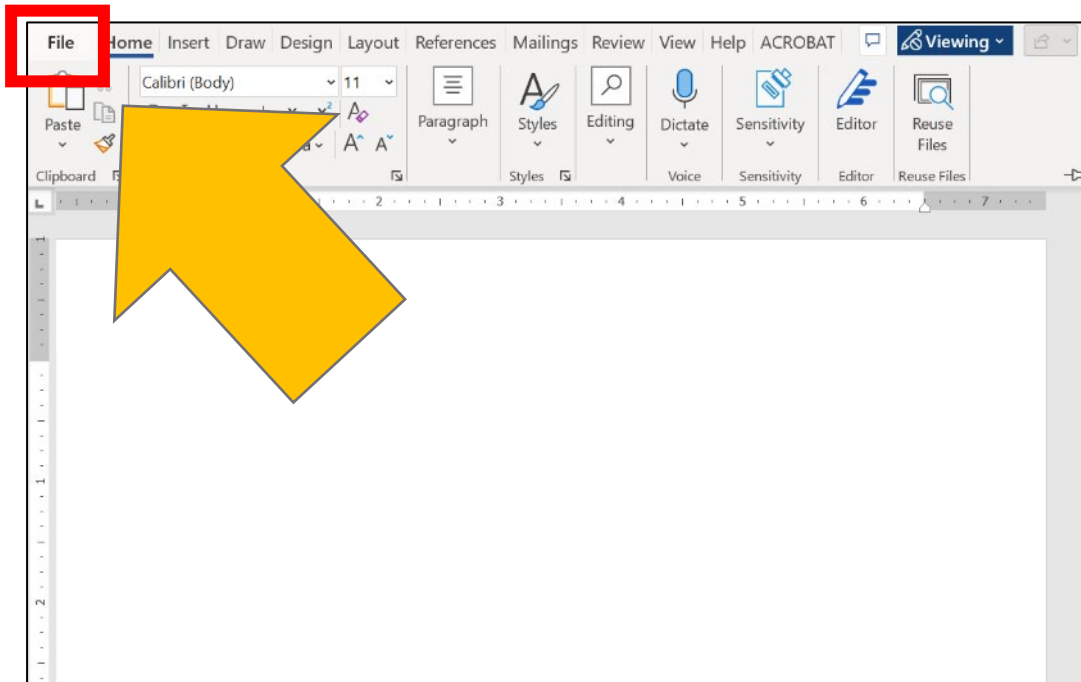
Preparing Your SBIR/STTR Application - Other Key Information

Formatting is IMPORTANT!

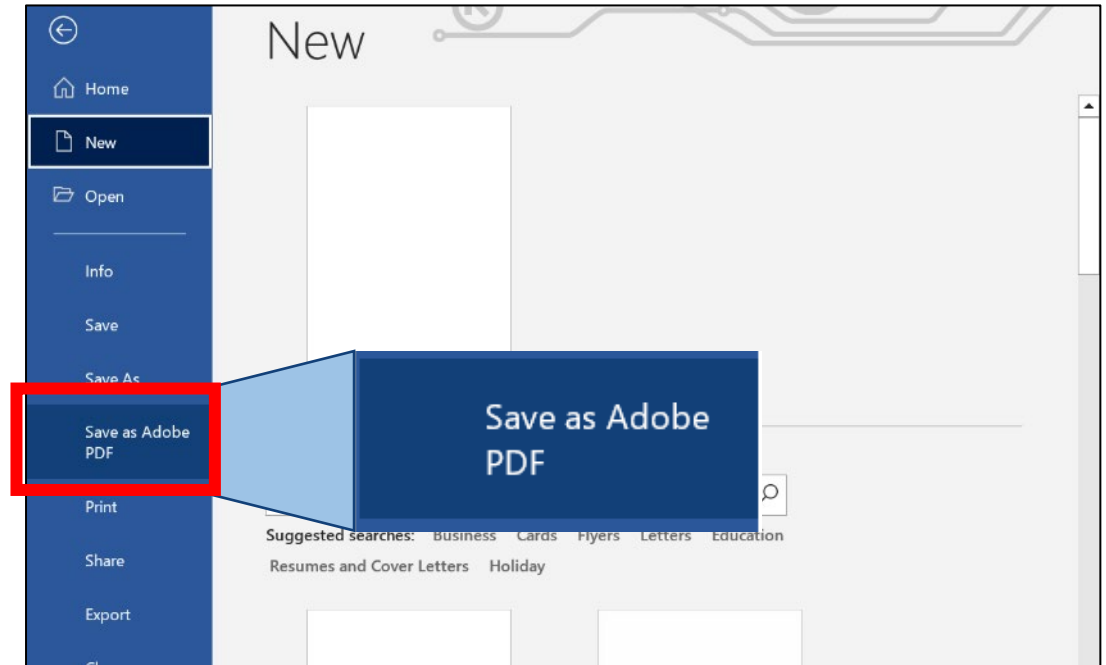
All forms must be in **PDF** format.

- Margins: 1 inch
- Font: no less than 12 point (Times New Roman)
 - Table and Figure Fonts: no less than 11 point (Times New Roman)
- Line spacing: 1.5
- Format: PDF (no other file format allowed)
- Page Limits: 17 pages for Project Narrative

How to Create a PDF



1 Go to “File” in the Microsoft Word top menu (Upper left corner of your document)



2 Click on “Save as Adobe PDF”



Sample Application Prep Timeline

A vertical graphic on the left side of the page consisting of five downward-pointing chevrons of varying shades of green, from lightest at the top to darkest at the bottom.

1 year to deadline

Start preparation and finish all registrations. Read previous RFA to build an understanding of what USDA SBIR/STTR is looking for.

6 months to deadline

Reach out to USDA SBIR/STTR team and talk to a National Program Leader to discuss your project fit to a topic area.

4 months to deadline

Secure partners, contractors, and consultants. Get letters of support to include in the application.

2 months to deadline

Thoroughly review this year's RFA and start writing your application.

1 week to deadline

Submit application to avoid any last-minute technical issues.



Application to Award Timeline (Phase I)

July



Solicitation Released

Check NIFA SBIR website for the Request for Application (RFA)

September



Proposal Deadline

Submit your application by 5 p.m. Eastern Time

**December -
February**



Reviews & Award Notifications

NIFA peer-review process

July

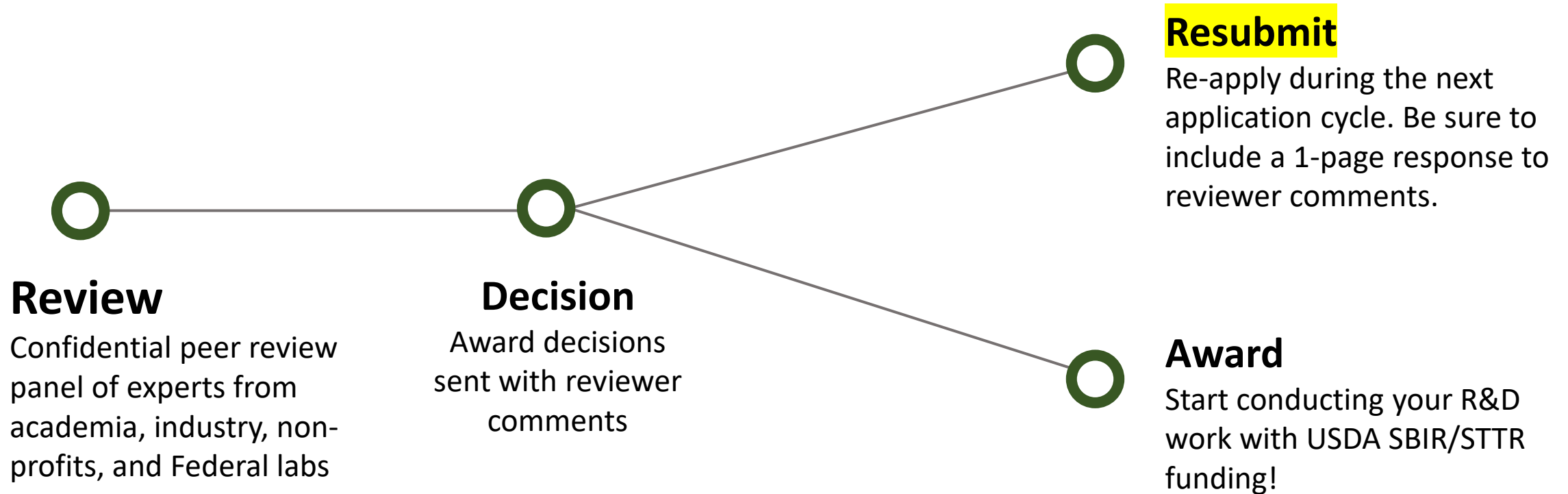


Award State Date

Begin your SBIR- or STTR-funded projects!



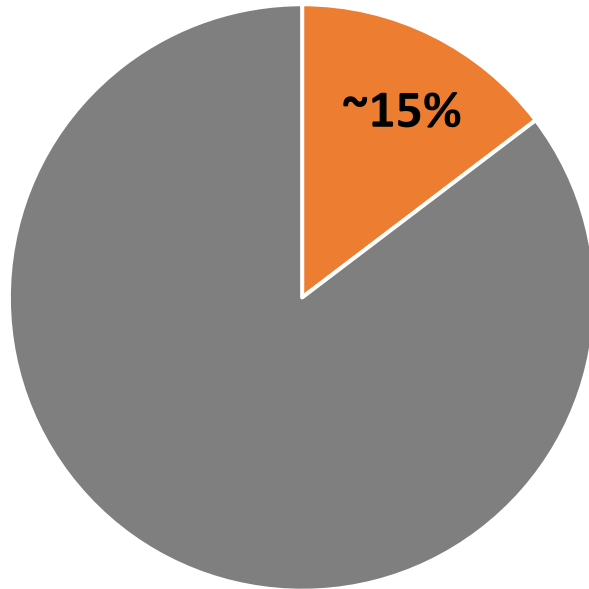
SBIR/STTR Review Process



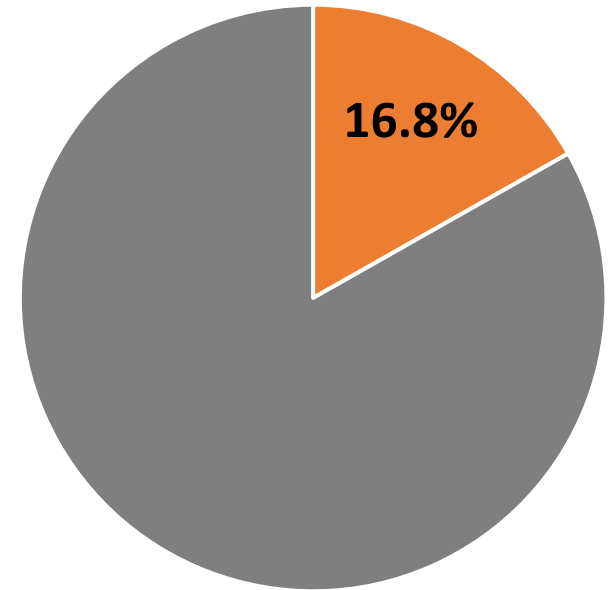




SBIR/STTR Success Rate (Phase I)

FY22



FY23



-  Awarded
-  Not awarded



Things to Remember

- ✓ Provide a **vision**: What is the market opportunity?
- ✓ Sell the **importance** of your project and alignment to USDA priorities.
- ✓ Provide a **detailed** experimental plan.
- ✓ Provide insight into **commercial potential**.
- ✓ Show connectivity with the **communities**.

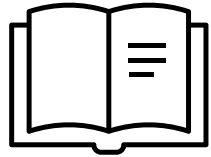


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Application Preparation Resources



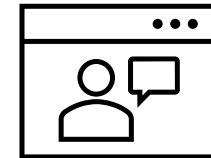
Application Prep Resources



NIFA Grant
Application Guide



USDA SBIR/STTR
Website FAQ

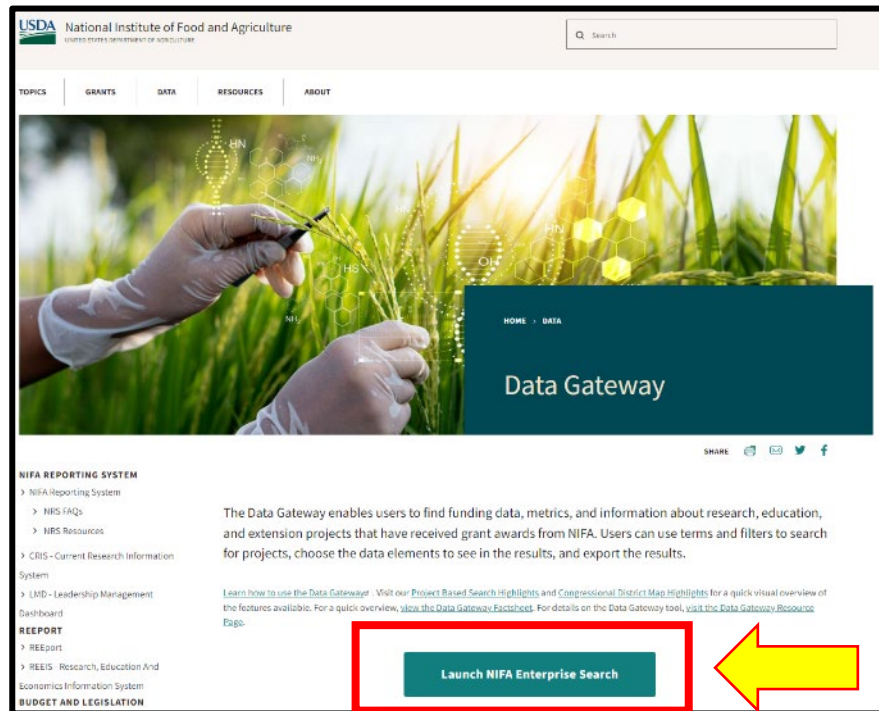


USDA SBIR
Application Tutorial



Check Previously-funded Projects

- NIFA SBIR- and STTR-funded projects from previous years
 - NIFA SBIR/STTR Website: <https://www.nifa.usda.gov/grants/programs/sbir-sttr/sbir-topic-areas>
 - NIFA Data Gateway: <https://www.nifa.usda.gov/data/data-gateway>





Other Additional Resources

- Meet with USDA SBIR/STTR Staff
 - Attend information sessions
 - One-on-one meetings
 - Contact NPL to discuss topic area-project fit
- Local Resources
 - FAST Program (<https://www.sbir.gov/about-fast>)
 - Funding to increase SBIR/STTR awards to women, socially/economically disadvantaged individuals, and small businesses in underrepresented areas - typically rural states
 - Small Business Development Centers (<https://www.sbir.gov/local-assistance>)
 - Provides free business consulting and low-cost training services; at least one per state
 - SCORE (<https://www.score.org/>)
 - Find business mentors in your area or attend entrepreneurship workshops



Contact Us!

USDA SBIR/STTR Program Website

<https://nifa.usda.gov/sbir>

Program Email

SBIR@usda.gov

Researcher-Business Match Inquiry

USDASBIR@icf.com

Melinda Coffman

Program Coordinator

Melinda.Coffman@usda.gov

David Songstad

National Program Leader

David.Songstad@usda.gov

Tammi Neville

Program Specialist

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Nurun Nahar

Program Specialist

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An aerial photograph of a vast, green agricultural field, likely corn, with distinct rows of crops. The field is set against a backdrop of a bright blue sky filled with scattered white and grey clouds. A semi-transparent green horizontal band is overlaid across the middle of the image, serving as a background for the text.

Thank you!

A photograph of a wooden desk with a silver laptop, a spiral-bound notebook, and a pencil. A semi-transparent green horizontal bar is overlaid across the middle of the image, containing the text "Q&A".

Q&A