

U.S. Department of Energy SBIR/STTR Programs

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Acting Director

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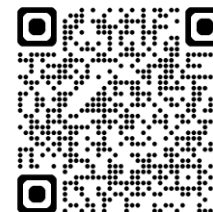
SBIR – Small Business Innovation Research (Est. 1982)

STTR – Small business Technology TransfeR (Est. 1992)



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<https://science.osti.gov/sbir>

DOE SBIR/STTR Programs Office



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Eileen Chant

National Academies
SBIR/STTR Evaluation

Cybersecurity Specialist
Florence Carr

Program Coordinator
Carl Hebron

GSC
Support Staff

Program Support Specialist
Zina Alyoussif

Omnisync
Partnering Website

ORISE
vP3, Workshops

AST
Phase Shift

These programs are still in effect but future operation is uncertain



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SBIR and STTR Extension Act of 2022



- Requires Federal agencies to establish due diligence programs to address risks of illicit foreign acquisition of SBIR/STTR technologies
 - “Assess, using a risk-based approach as appropriate, the **cybersecurity practices, patent analysis, personnel analysis, and foreign ownership** of a small business concern seeking an award, including the financial ties and obligations (which shall include surety, equity, and debt obligations) of the small business concern and its personnel to a foreign country, foreign person, or foreign entity”
- Requires small business applicants to disclose their foreign relationships as part of a Phase I or II application
 - If selected for award, the awardee must update the disclosure if there any changes during the award period within 30 days of the change
 - Awardees may be required to repay the amount of the award, if they have failed to disclose these relationships
- Current and Pending Support for key personnel is required



Foreign Relationships

What foreign relationships?

- “(A) the identity of all owners and covered individuals of the small business concern who are a party to any foreign talent recruitment program of any foreign country of concern, including the People’s Republic of China;
- “(B) the existence of any joint venture or subsidiary of the small business concern that is based in, funded by, or affiliated with any foreign country of concern, including the People’s Republic of China;
- “(C) any current or pending [or occurring during the 5-year period preceding submission of the proposal] contractual or financial obligation or other agreement specific to a business arrangement, or joint venture-like arrangement with an enterprise owned by a foreign state or any foreign entity;
- “(D) the percentage, if any, of venture capital or institutional investment by an entity that has a general partner or individual holding a leadership role in such entity who is affiliated with any foreign country of concern, including the People’s Republic of China;
- “(E) any technology licensing or intellectual property sales to a foreign country of concern, including the People’s Republic of China, during the 5-year period preceding submission of the proposal;
- “(F) any foreign business entity, offshore entity, or entity outside the United States related to the small business concern; and
- “(G) if the small business concern is wholly owned in the People’s Republic of China or another foreign country”



Small Business Due Diligence

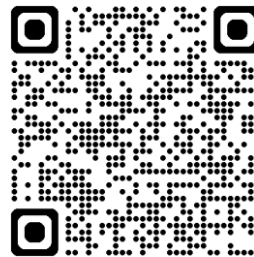
- Foreign countries of concern are actively seeking to acquire U.S. technology
- Small businesses should ensure they understand the ownership and relationships of investors, customers, manufacturers, or other business partners
 - In addition to potential loss of technology, such relationships may hinder your ability to receive Federal awards

Companies Resources (downloadable documents)



1. Security Advice for Emerging Technology Companies (PDF)
2. Scenarios and Mitigating Actions (PDF)
3. Travel Guidance (PDF)
4. Due Diligence Guidance (PDF)
5. Companies Summary (PDF)

<https://www.dni.gov/index.php/ncsc-what-we-do/secure-innovation>



Before investing...

In 2018, the U.S. Trade Representative warned that the **People's Republic of China (PRC) government directs the investment in, and acquisition of, U.S. companies by China-based firms** to obtain technologies and Intellectual Property (IP), and to facilitate technology transfer to support PRC state plans. VC investment from China has focused on U.S. emerging technology sectors like Artificial Intelligence and other PRC government priorities. Recent developments have heightened these concerns:

- In January 2024, the U.S. Department of Defense (DOD) added IDG Capital, a China-based VC/private equity firm, to its list of "Chinese military companies" operating directly or indirectly in the U.S. The firm has invested in more than 1,600 companies, including several in the U.S.
- Last year, the CEO of a U.S. startup (which is suing defendants in China for trade secret theft) told U.S. Congress that **some China-based VC firms may target and pay employees of U.S. startups to acquire technology**, then fund competitors in China who try to monetize the stolen technology.
- Some U.S. and European firms have alleged **China-based investors offered them investments, then withdrew the offers** after obtaining their proprietary data in the due diligence process.
- One U.K. firm, after agreeing to a takeover by an investor in China, began transferring technology to its would-be acquirer in exchange for part of the firm's sales price. The investor in China later abandoned the acquisition. **The U.K. firm was left facing bankruptcy after sharing its IP.**



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DOE Due Diligence Process



Research, Technology & Economic Security

Office of International Affairs

- DOE has an Office of Research, Technology & Economic Security to address risks associated with its financial assistance awards and loan programs
- The RTES-led foreign risk due diligence process has led to delays in issuing awards on the mandated 90-day schedule.



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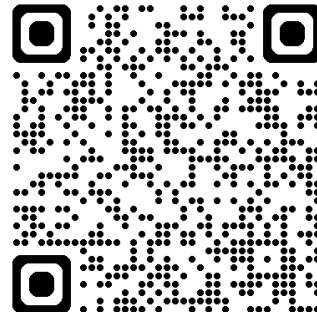
Research Security Training

- Covered individuals are required to certify that they have taken research security trainings consistent with Section 10634 of the CHIPS and Science Act of 2022.
- Applicants must maintain sufficient records of their compliance with this requirement for covered individuals at the recipient organization and they must extend this requirement to any and all subrecipients.
- To fulfill this requirement, applicants may utilize the four training modules developed by the National Science Foundation at <https://new.nsf.gov/research-security/training> or develop and implement their own research security training program aligned with the requirements in Section 10634 of the CHIPS and Science Act of 2022.
- The submission of an application to this NOFO constitutes the applicant's acceptance of this requirement.



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Take the research security training

Take the training directly from your browser. Visit the four training modules at the links below.

- Each module should take about 60 minutes to complete.
- You can leave a module and return without losing progress from this browser.
- When you complete the module, you can download or print a completion certificate, but the module **will not save a record** of your training.



Module 1: What is Research Security?

Learn key concepts of research security and how to recognize situations that may indicate undue foreign influence. Understand the regulatory landscape that shapes research security and discover what you can do to safeguard the core values that underpin U.S. academic research.

Start module 1



Module 2: Disclosure

Learn about federal funding agency disclosure requirements, including types of information that must be disclosed, how that information is used, and why such disclosures are fundamental to safeguarding the U.S. research enterprise from foreign government interference and exploitation.

Start module 2



Module 3: Manage and Mitigate Risk

Learn to identify types of international collaborative research and professional activities, associated potential risks, and strategies and best practices for managing and mitigating such risk. Learner experience will be customized based on their role as either a researcher or administrator.

Start module 3



Module 4: International Collaboration

Learn about the role of principled international collaboration in U.S. science, innovation and economic competitiveness. Discover how to balance principled international collaboration with research security concerns, as well as how to foster an open, welcoming research environment that fulfills research security needs.

Start module 4

Cybersecurity (CS) Due Diligence

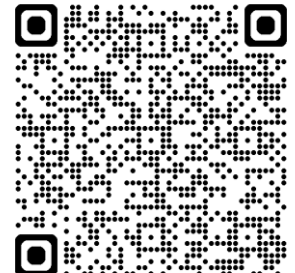


- All applicants are required to complete the CS self-assessment
- Phase II applicants must disclose the state of implementation of their CS best practices
- Applicants should implement the prioritized 'Critical CPGs'
- Applicants should visit the [CS Due Diligence webpage](#) to learn about the CS Self-Assessment
- Additionally, review the educational resources available online, such as, the [Cybersecurity Performance Goal \(CPG\) Implementation Guide](#).
- A risk assessment will be provided to the applicant based on the self-assessment.
- All applicants are expected to fully implement the CPGs prior to application submission.
- Note: If selected for an award, all responses provided on the self-assessment are subject to review and audit per award terms and conditions.
- Any changes that increase CS risk should be reported during an award.



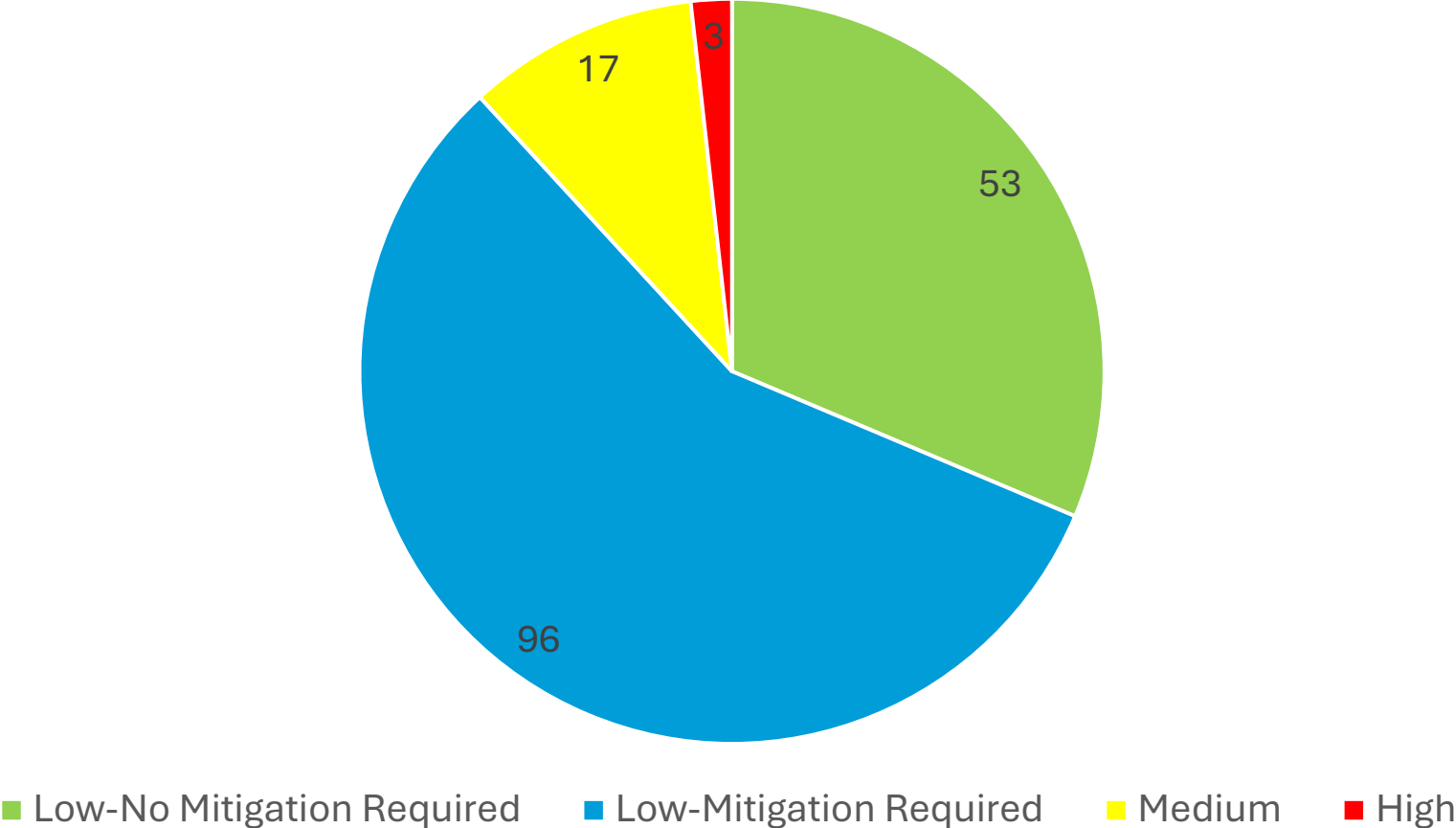
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Applicant Cybersecurity Risk Profile

FY 2025 Phase II Release 1 Applicants



SBIR Program Reauthorization

- The SBIR/STTR Programs were established in 1982 and 1992, respectively.
- They are not permanent
- SBIR/STTR Programs expire on September 30, 2025 and require reauthorization
- INNOVATE Act has been proposed by Senate Majority. Proposed provisions (***not final***):
 - Strengthening of due diligence
 - Some limitations proposed for applicants, multiple SBIR/STTR awards
 - Note that the Phase IIC program future is uncertain



SBIR Legislation Updates

- Section 174 of the Tax Cuts and Jobs Act (TCJA) in 2017 mandated capitalization and amortization over five years for domestic research starting in 2022.
- One Big Beautiful Bill Act (OBBA) signed into law (PL 119-21) 7/4/25 under Section 174A allows immediate expensing of domestic R&E expenditures for tax years after 12/31/24, restoring option for businesses to fully deduct these costs in the year incurred. Also reinstates option to amortize domestic R&D for 60 or 120 months.
- Eligible small businesses with capitalized domestic R&D expenses from 2022-2024 may elect a catch-up deduction, or retroactively apply full expensing to tax years beginning after 2021, enabling them to amend previous returns and recover costs previously amortized.



Improving Commercialization Outcomes



- Technical and Business Assistance (TABA)
 - \$6,500 for Phase I (new! must use own vendor)
 - \$50,000 for Phase II (must use own vendor)



Improving Commercialization Outcomes



- Phase Shift I: Customer Discovery during Phase I (formerly Energy I-Corps for SBIR/STTR)
 - Has grown from 25 teams in FY 2020 to 106 teams in FY 2023
 - 6-week training course requiring 30 customer interviews
 - Extremely positive small business feedback
- Phase Shift II: Business Model Discovery during Phase II
 - Deeper dive on financial models, cash flow and customer sales cycles
 - 4-month training, lower intensity
 - Leveraging curriculum developed from NSF I-Corps GO Program



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Improving Commercialization Outcomes

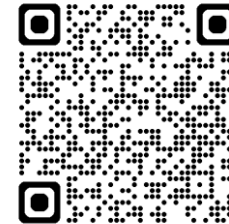
- Commercialization Workshops
 - focus on topics that are typical areas of weakness for SBIR awardees, [recordings are posted](#):
 - FY22 Q4 - *Commercialization and the Power of Partnering*
 - FY23 Q1 - *Preparing to Pitch*
 - FY23 Q2 - *Financial Modeling*
 - FY23 Q3 - *Navigating Phase III Contracting*
 - FY23 Q4 – *Licensing*
 - FY24 Q1 – *Preparing to Manufacture*
 - FY24 Q2 - *Financial Modeling based on Cash Flow*
 - FY24 Q3 – *Preparing for Product Launch*
 - FY24 Q4 – *Developing a Strategic Cap Table*
 - FY 25 Q1 - *IP Strategies: Creating and Maintaining Sustainable Competitive Advantage*



Improving Commercialization Outcomes



- SBIR Partnering Website
 - A public facing, self-supporting searchable website launched in November 2023. <https://sbirpartnering.org>
 - Objective: provide a repository where SBIR/STTR applicants/awardees can find potential partners and partners can access 1000+ vetted technologies
 - Partners and Innovators register independently
 - AI used for search/matchmaking
 - Platform includes confidential messaging
- Market Research Studies, <https://science.osti.gov/sbir/Commercialization-Resources/Market-Research>, Check to see if there is something there of interest.

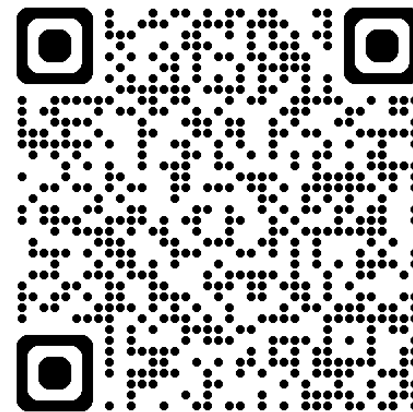


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Phase III Guidance

- DOE General Counsel recently made a determination that Phase III awards are exempt from EPact cost share requirements (20% for R&D, 50% for demonstration)
 - The Office of SBIR/STTR has issued Phase III Guidance for small businesses
 - Available here: <https://science.osti.gov/sbir/Phase-III-Guidance>
 - One of our recent commercialization workshops covered Phase III in more detail: <https://vimeo.com/869686647/6e464c2cd4?share=copy>



Tracking Commercialization Outcomes

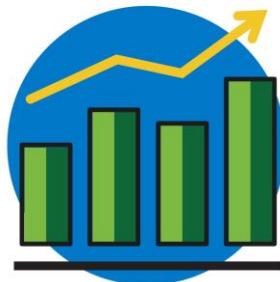
- Historically, DOE relied on the evaluations by the National Academies of Science, Engineering and Medicine (NASEM) to track commercialization outcomes
 - The example data shown are from the 2016 NASEM evaluation in which past Phase II awardees were surveyed
 - The most recent NASEM evaluation (2020) changed its study methodology and did not survey our awardees or collect commercialization data. It recommended that DOE collect this information.

50%

of DOE SBIR/STTR award recipients that responded **reported sales** and an additional

23%

anticipate future sales



78%

of DOE SBIR/STTR unique small business awardees that responded received **additional investment funding** for their surveyed project

71%

Reported that the **DOE SBIR/STTR Program is "critically needed"**

45%

Innovative small business companies started entirely or in part because of participating in the DOE SBIR/STTR Program

61%

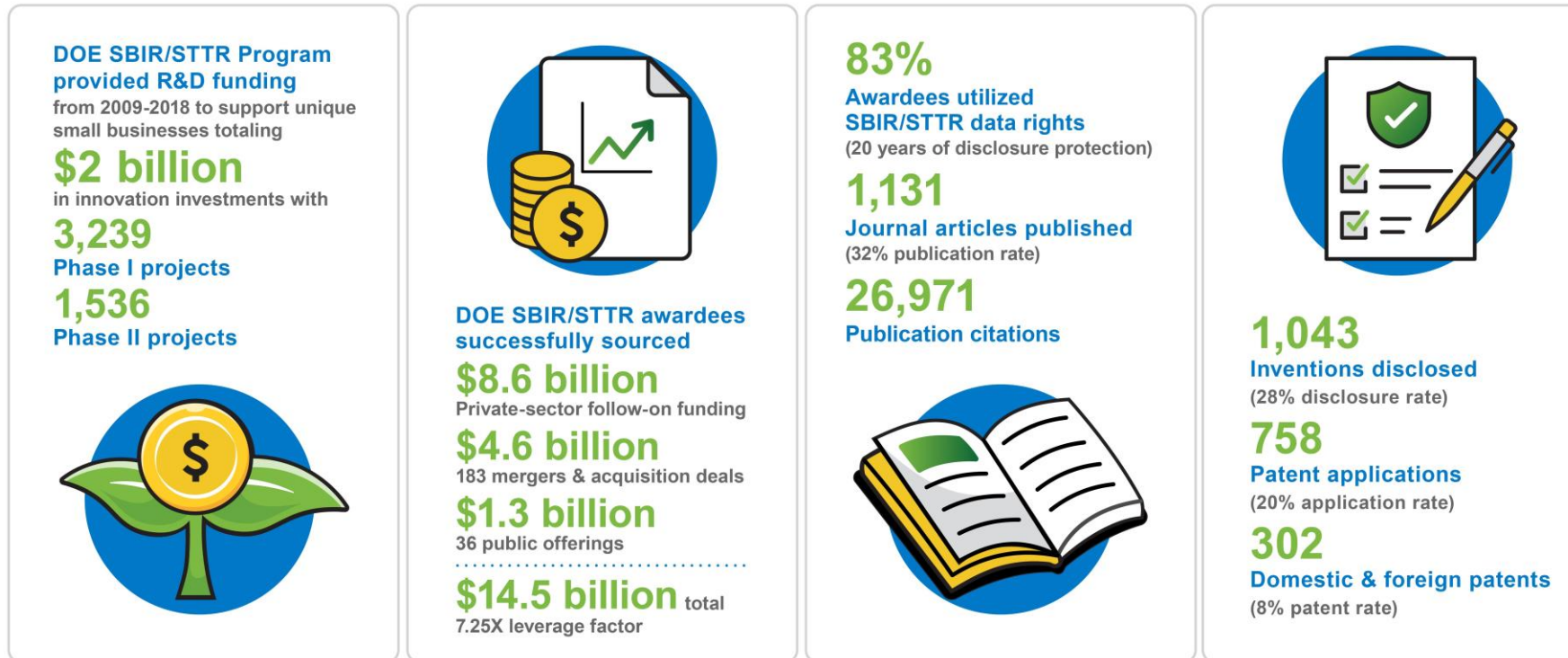
Awardees responded that the DOE SBIR/STTR Program had a **"highly positive or transformative effect"** on their small business



Collecting Commercialization Outcomes

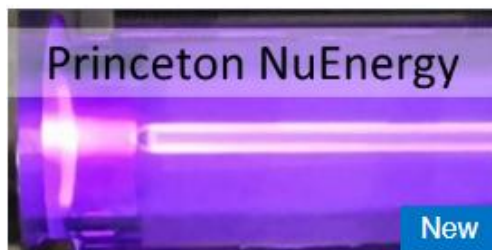


- The Office of Science consulted with ARPA-E and other agencies that collect commercialization data from public and private sources
 - Preliminary outcome metrics are shown below for FY 2009-2018 awardees and will be published on our website later this year



Tracking Private Sector Commercialization

- Phase III Success Stories
 - Outcome metrics fail to capture the mission impact of the SBIR/STTR programs
 - SC has developed detailed stories of commercialization success for individual awardees that are published on the SBIR/STTR website:
<https://science.osti.gov/sbir/Success-Story-Listing-Page>



Princeton NuEnergy is Redefining the Battery Recycling Supply Chain 

Program(s): Energy Efficiency and Renewable Energy (EERE)



FY23 Updates - Advancing Communications for Harsh Environments 

Program(s): Nuclear Energy (NE); National Nuclear Security Administration (NNSA)



Luna Innovations Shines Light on SBIR Opportunities 

Program(s): Nuclear Physics (NP)



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National Academies Study



- The National Academies of Sciences, Engineering and Medicine is conducting an evaluation of the DOE SBIR/STTR programs.
 - One area that they will be investigating is collaborations between small businesses and research institutions
 - How do these collaborations originate?
 - How can DOE foster further collaborations?
 - If you are contacted as a DOE applicant/awardee, please answer questions to assist with the study

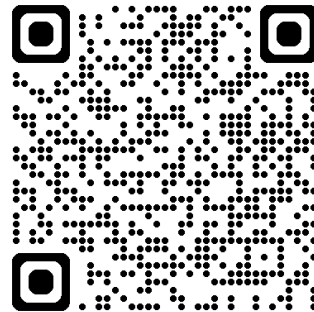


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FY 2026 Solicitations

- We have experienced many changes
- Support programs that are in operation are subject to change
- Our solicitations have been delayed due to new requirements
- Check our [funding opportunities page](#) for updates
- Thank you for your patience!



Programs Questions?

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Phase I	Release 1	Release 2
Topics Issued	Monday, July 7, 2025 (Delayed)	Monday, November 10, 2025
Document		
Topic Webinar, week of	Monday, July 14, 2025 (Delayed)	Monday, November 17, 2025
FOA Issued	Monday, August 4, 2025 (Delayed)	Monday, December 15, 2025
Document		
FOA Webinar	Friday, August 8, 2025 (Delayed)	Friday, December 19, 2025
Letters of Intent (LOI) Due	Tuesday, August 26, 2025 5:00pm ET	Tuesday, January 6, 2026 5:00pm ET
Non-responsive LOI Feedback Provided	Monday, September 15, 2025	Monday, January 26, 2026
Full Applications Due	Tuesday, October 7, 2025 11:59pm ET	Wednesday, February 25, 2026 1:59pm ET
Award Notification	Monday, January 5, 2026	Tuesday, May 26, 2026
Projected Grant Start Date	Tuesday, February 17, 2026	Tuesday, July 7, 2026
Awardee Webinar, week of	March 9, 2026	July 27, 2026
Phase Shift I Kick-off (formerly I-Corps)	April 2026	September 2026
*Registration link will be posted here, one week prior to the webinars. To receive this link automatically via email, please join our Mail List.		
All dates are subject to change		

Phase II	Release 1	Release 2
FOA Issued	Tuesday, October 21, 2025	Monday, March 2, 2026
Document		
Webinar(s)	Friday, October 24, 2025	Friday, March 6, 2026
LOI (All Phase II applications) Due	Wednesday, November 12, 2025 5:00pm ET	Wednesday, April 1, 2026 5:00pm ET
Applications Due	Tuesday, December 9, 2025 11:59pm ET	Tuesday, April 21, 2026 11:59pm ET
Award Notification	Monday, March 9, 2026	Monday, July 20, 2026
Projected Grant Start Date	Monday, April 20, 2026	Monday, August 31, 2026
All dates are subject to change		