

Welcome to the U.S. DOT Small Business Innovation Research (SBIR) Webinar

- ❑ The webinar will begin shortly.
- ❑ This webinar will be view and listen only.
- ❑ Solicitation process questions may be typed in the chat pod.
- ❑ The Government will answer chat pod questions as time allows.
- ❑ Unanswered questions may be submitted to DOTSBIR@dot.gov after the webinar.
- ❑ To listen, please call in using the telephone number and passcode that was emailed to you when you registered.
- ❑ **Please mute your phone.**

Pre-Offer Webinar

U.S. DOT Small Business Innovation Research (SBIR) Program

Solicitation No. 6913G620QSBIR1

February 11, 2020



Volpe The National Transportation Systems Center

Advancing transportation innovation for the public good



U.S. Department of Transportation
John A. Volpe National Transportation Systems Center

Today's Agenda

- ❑ Ground Rules and Logistics
- ❑ SBIR Overview
- ❑ Eligibility & Requirements
- ❑ Offer Preparation
- ❑ Solicitation Appendices
- ❑ Evaluation Factors & Award Information
- ❑ U.S. DOT/OIG Fraud Awareness
- ❑ SBIR FY 2020 Topics
- ❑ Important Dates and Reminders

Presenters

Rachael Sack

Chief, Innovative Research Program
Office, Volpe Center and
U.S. DOT SBIR Program Director

Melissa Wong

U.S. DOT SBIR Program Manager

Tammy Ann Taylor

U.S. DOT SBIR Contracting Officer

Ground Rules and Logistics

- ❑ This webinar is being recorded and will be posted to the U.S. DOT SBIR website.
- ❑ No verbal or written questions regarding the solicitation topics will be accepted.
- ❑ Any statements or remarks made during the webinar shall not alter the terms of the solicitation.
- ❑ The terms and conditions of the solicitation remain unchanged unless an amendment is issued that incorporates any changes discussed or alluded to during the webinar.

Ground Rules and Logistics (cont'd)

- ❑ Questions about the solicitation process can be submitted via the chat pod and may be responded to during the webinar and will be posted on our website following the webinar.
- ❑ Administrative and Appendix C questions will be accepted through March 2, 2020 at 5:00 PM ET.
- ❑ Answers to all questions will be posted in the “Solicitations” section of the U.S. DOT SBIR Program website:
[http://www.volpe.dot.gov/work-with-us/small-business-innovation-research/solicitations.](http://www.volpe.dot.gov/work-with-us/small-business-innovation-research/solicitations)



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SBIR Overview

SBIR Overview

- Congress established the SBIR Program to:
 - stimulate technological innovation,
 - utilize small business to meet federal research and development needs,
 - encourage participation by minority and disadvantaged businesses in technological innovation and,
 - increase private sector commercialization of innovations derived from federal R&D

How SBIR Supports the Mission of U.S. DOT

- The mission of the U.S. DOT is to ensure a fast, safe, efficient, accessible and convenient transportation system that meets vital national interests and enhances the quality of life of the American people.
- SBIR addresses high priority research gaps within U.S. DOT's R&D Program.
- Topics are developed to align with Secretary's strategic priorities, specific modal priorities, and SBA goals.

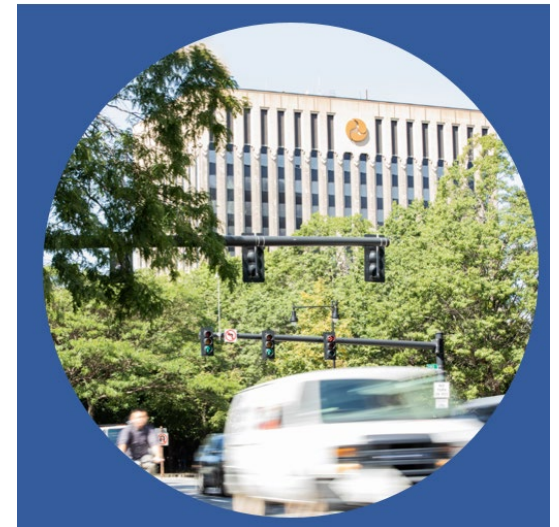


Snapshot of Phase I Participation in DOT's SBIR Program by Agency

DOT Operating Administration	2016	2017	2018	2019	2020
Federal Aviation Administration	Voluntary Participation				
Federal Highway Administration/ ITS Joint Program Office	x	x	x	x	x
Federal Railroad Administration		x	x	x	x
Federal Transit Administration	x	x	x	x	
Federal Motor Carrier Safety Administration				x	
National Highway Traffic Safety Administration		x	x	x	x
Office of the Secretary		x			
Pipeline and Hazardous Materials Safety Administration			x	x	x

Administering the DOT's SBIR Program

- ❑ The Secretary of Transportation chose the Volpe Center to direct the Department's SBIR Program in November 1982.
- ❑ SBIR Program Office:
 - Directs all activities required under the SBIR law
 - Executes the policy established by the Small Business Administration
 - Coordinates with eight DOT Operating Administrations
 - Solicits, awards and administers contracts





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Eligibility & Requirements

Section I of Solicitation

Eligibility & Requirements

- ❑ Who Qualifies as a “small business concern” (SBC) for a SBIR for Phase I & II?
 - Organized as for-profit U.S. business
 - 500 or fewer employees including affiliates
 - Greater than 50% U.S.-owned by individuals and independently operated (with few exceptions)

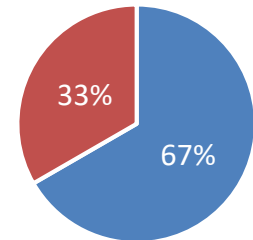
- ❑ See 13 CFR § 121.702 for SBA’s definition for the term “small business concern”.



Eligibility & Requirements (cont'd)

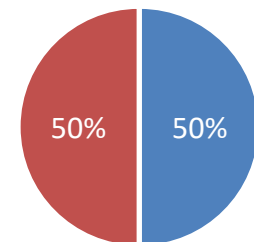
- ❑ For Phase I, a minimum of **two-thirds** of the research or analytical effort, measured in total contract dollars using simple math (67%), must be performed by the awardee.
- ❑ For Phase II, a minimum of **one-half** of the research or analytical effort, measured in costs incurred for personnel, must be performed by the awardee.

Minimum Requirement Phase I



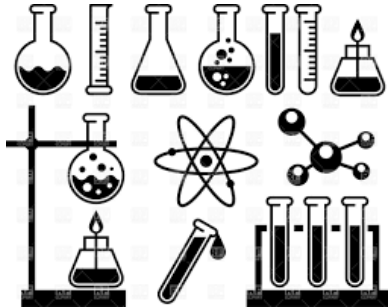
■ Awardee ■ Subcontracts

Minimum Requirement Phase II



■ Awardee ■ Subcontracts

Eligibility & Requirements (cont'd)



- ❑ More than one-half of the principal investigator's employment time is spent working for the small business. This typically precludes full-time employment with another organization.



- ❑ The R/R&D work must be performed in the United States (with few exceptions) for Phase I, II and IIB.

Eligibility & Requirements (cont'd)

- The U.S. DOT elects at this time not to use the authority that would allow venture capital operating companies (VCOCs), hedge funds or private equity firms to participate in the SBIR Program. Offers submitted by these parties will not be considered for award.



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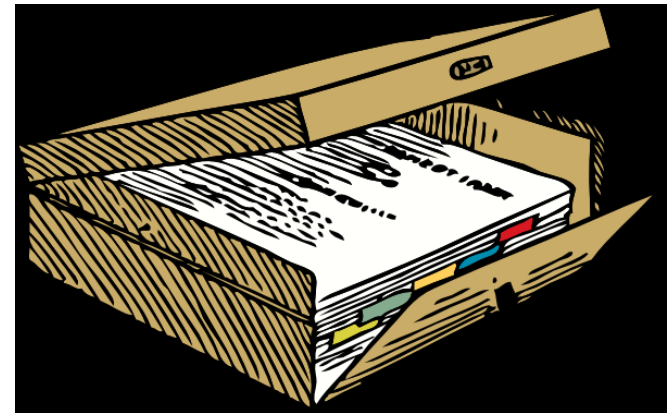
Offer Preparation

Offer Layout – Initial Offer

See Section II(B)(2) for detailed instructions!

Submit three files:

1. Technical (PDF)
2. Cost (Appendix C) (PDF)
3. Appendices A and B (PDF)



Phase I Offer Submission Process DO's & DON'T's

DO...

- ❑ Read the Solicitation and follow all the instructions for submission
- ❑ Review the Q&A Page on research topics
- ❑ Check to ensure completed appendices are included
- ❑ Double check all cost figures and calculations; align to supporting documentation
- ❑ Sign Appendix A



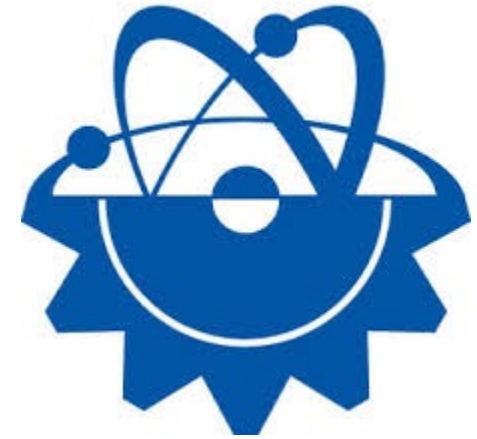
DO NOT ...

- ❑ Send offers via email
- ❑ Submit duplicate offers
- ❑ Ask the Program Office for guidance on whether or not your company should submit an offer.
- ❑ Create arbitrary overhead, indirect, or profit/fee rates
- ❑ Wait until the deadline to submit your offer



Technical Section

See Section II(B)(2) for detailed instructions!

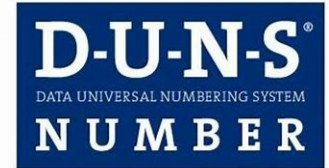


Ensure that:

- ❑ Layout guidance and section organization instructions are followed
- ❑ The offer aligns with the scope of the research topic
- ❑ Qualifications for key personnel in addition to PI are provided
- ❑ A detailed and well-organized work plan is provided.

Required Registrations

- ❑ Register for a DUNS Number
<https://iupdate.dnb.com/iUpdate/companylookup.htm>



- ❑ Register in System for Award Management (SAM)
<https://www.sam.gov/portal/SAM/>



- ❑ Register for a Small Business Administration Small Business Concern ID Number (SBA SBC ID)
<https://www.sbir.gov/registration>





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Solicitation Appendices

Required Appendices

Available on U.S. DOT SBIR website

Download Format:

- ❑ Signature Page (Appendix A) – MS Word
- ❑ Project Summary (Appendix B) – MS Word
- ❑ Contract Pricing Worksheet (Appendix C) - Excel



Upload Format:

- ❑ All offer documents shall be submitted in Adobe pdf format



Appendix C - Pricing Information




- ❑ Carefully read the SBIR Phase I Price Instructions for Appendix C (Contract Pricing Worksheet)







A LOOK
at the
BUDGET

- ❑ Provide supporting information for all costs proposed so that the Government may award your contract promptly.
- ❑ Any cost that is not supported may cause the offer amount to be reduced.

Appendix C - Price Information

Schedule	Appendix C - Element	Guidance
<p>A</p> 	Indirect Costs	Provide DCAA Indirect Rate Agreements to support indirect rates proposed. If not available, provide detailed cost elements of indirect rates to support rate(s) proposed.
<p>B</p> 	Labor	Provide supporting documentation such as payroll data, online comparisons, Dept. of Labor information
<p>C - D</p> 	Material Costs / Equipment / Test Equipment / Special Tooling	Provide internet quote or other backup to support unit price.

Appendix C - Price Information (cont'd)

Schedule	Appendix C - Element	Guidance
E 	Subcontracts & Consultants	Participant must provide complete cost details for subcontract amount and include a letter of commitment from subcontractor.
F 	Travel	Travel is allowable, however it is unusual for Phase I projects.
G 	Other Direct Costs (ODC)	Provide internet quote or other backup to support ODC proposed.
H 	Narrative Explanation	Provide a detailed explanation for all costs proposed which will allow your offer to be analyzed quicker and your contract to be awarded sooner!



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Evaluation Factors, Award Information & Submission of Offers

Section III, IV & V of Solicitation

Evaluation Factors for Phase I

1. **Technical Merit and Feasibility**

Demonstration of understanding of the problem and solution alignment with the topic description; innovative approach; scientific feasibility

2. **Experience, Qualifications, and Facilities**

Description of technical personnel; equipment and facilities; and partnerships/subcontracts (when applicable)

3. **Effectiveness of Proposed Work Plan**

Clarity of technical plan and timeline

4. **Commercial Potential**

Market understanding and awareness of regulatory, compliance, or legal issues

5. **Offer Quality**

Quality of narrative and supporting evidence



Evaluation Process for Phase I

Initial Evaluation

All offers will be screened to determine responsiveness to the solicitation instructions.

Responsive offers will be evaluated by topic experts.

The highest rated offerors will be invited to attend Pitch Day.

Pitch Day Information

- ❑ Pitch Day will be on or around May 21, 2020 in Washington, D.C.
- ❑ Offerors are **strongly encouraged** to present in-person (virtual option is available)
- ❑ 15 minutes (timed) to present Pitch Decks
- ❑ 15 minutes (timed) for evaluators to ask questions



Pitch Day: Evaluation Factors & Requirements

- ❑ Same evaluation factors as initial offer
- ❑ See Section II(B)(7) for detailed instructions!
- ❑ Invitation only and separate from the initial submission.
- ❑ Invited offerors must submit a Pitch Deck in MS PowerPoint.
- ❑ There is neither a set format for the slides nor required content
- ❑ Slides will only be accepted from Offerors invited to Pitch Day by the Government



Evaluation & Recommendation Process for Phase I - Pitch Day Offers

Offerors invited to Pitch Day will receive notice from the SBIR Program Office.

Offers will have 15 min to make the pitch, followed by 15 minutes of Q&A with Gov't.

Pitches will be evaluated by topic experts on Pitch Day.

Award recommendations are expected to be issued within 10 calendar days.

Award Information



- ❑ All Phase I awards will be Firm-Fixed-Price bilateral purchase orders.
- ❑ The period of performance for a Phase I award shall be 6 months.
- ❑ Under Phase I SBIR awards, three reports will be required, consisting of two interim narrative reports, and a comprehensive final report.
- ❑ Payments for Phase I efforts will be made in three equal installments upon submission of invoices, in accordance with instructions in the award document.

Submitting an Offer and Appendices

Offers must be received no later than 5:00 PM ET on Monday, March 9, 2020 through the U.S. DOT's automated proposal website at:

https://usg.valideval.com/teams/USDOTSBIR_FY20/signup

- ❑ Offers received after that time will be automatically rejected; no exceptions will be permitted.
- ❑ Requires answering several questions and is multi-step process.
- ❑ Allow ample time to complete the process.
- ❑ Offers will not be considered received until the process is complete.
- ❑ Submit offers as early as possible.
- ❑ All documents must be in pdf. format.



FRAUD AWARENESS



U. S. Department of Transportation Office of Inspector General Office of Investigations

The DOT-OIG conducts criminal, civil and administrative investigations of allegations of fraud, waste and abuse.

DOT-OIG Special Agents are criminal investigators authorized to independently investigate allegations involving a person or entity that has engaged in fraudulent or other criminal activity relating to the programs and operations of the U.S. DOT



FRAUD AWARENESS DOT/OIG Investigations

Areas of investigative focus include:

False Statements/False Claims:

Any Statement/Claim for reimbursement containing False, Fictitious, Fraudulent representations (invoices, statements of work, technical representations, material overcharging).

Bribery

Offering a government official something of value in exchange for an official act

Product Substitution

Misrepresentation of the quality/quantity/qualifications of the products produced/furnished

***FRAUD AWARENESS
DOT/OIG Investigations***

***U. S. Department of Transportation
Office of Inspector General
Office of Investigations***

DOT-OIG Hotline 1-800-424-9071

Email: hotline@oig.dot.gov

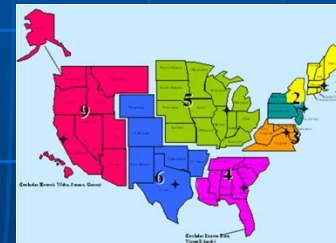
New England Regional Office

Volpe Center

55 Broadway, Cambridge, MA 02142

Special Agent-in-Charge Todd A. Damiani

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(312) 353-0106

Ft. Worth, TX
(817) 978-3236

San Francisco, CA
(415) 744-3090



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U.S. DOT SBIR FY 2020 Topics

Section VIII of Solicitation

FY 2020 Topics

Topic Number & Title	Estimated Award Amount	
	Phase I	Phase II
20-FH1 : Physical Intervention System for Wrong-way Driving on Ramps	\$150,000	\$1,000,000
20-FH2: Innovative Layered Composite Metal Deck System	\$150,000	\$500,000
20-FH3: Real-time Monitoring and Modeling of Scour	\$150,000	\$1,000,000
20-FR1: Autonomous Track Inspection Technology	\$150,000	\$300,000
20-FR2: AI-Aided Machine Vision for Grade Crossing Safety	\$150,000	\$400,000
20-FR3: Platform Edge Proximity Detection to Prevent Inadvertent Passenger Car Door Opening	\$150,000	\$300,000
20-FR4: Crushed Aggregate Gradation Evaluation System	\$150,000	\$500,000

FY 2020 Topics (Continued)

Topic Number & Title	Estimated Award Amount	
	Phase I	Phase II
20-NH1: In-Vehicle Occupant Detection System	\$150,000	\$500,000
20-PH1: Development and Validation of Inline Inspection (ILI) Technologies for Circumferential Anomalies and Bending Stresses	\$150,000	\$1,000,000
20-PH2: Internal Repair of Steel Transmission Pipelines	\$150,000	\$1,000,000
20-PH3: Geohazard Identification and Quantification for Pipeline Risk Models	\$150,000	\$1,000,000
20-PH4: Scaling up of Composite Metal Foam Manufacturing for HazMat Packaging	\$150,000	\$1,000,000

Topic Funding Considerations

Offers that exceed the Phase I Estimated Award Amount will not be considered for award.

The Phase II funding level noted is an estimate only, is subject to the availability of funds and/or the technical requirements to accelerate the development of a commercial product and/or innovation. Any changes to the Phase II estimated funding level listed will be communicated to the small business when instructions on the Phase II process are sent approximately 1 month prior to the end of the Phase I project.



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Important Dates and Reminders

FY 2020 Solicitation Schedule

Milestone	Date
FY 2020 Solicitation Opened	February 6, 2020
Administrative and Appendix C Cost Questions Due	March 2, 2020 @ 5:00 PM ET
FY 2020 Solicitation Closes*	March 9, 2020 @ 5:00 PM ET
Recommendations for Award	Within 90 Days of Solicitation Close
Awards Processed	June 2020

***Please allow sufficient time to submit your offer. The submittal process may take several minutes to complete due to a multi-step process. Applicants are encouraged to submit their offers as early as possible.**

Reminders...

- ❑ Review the offer before submission to ensure:
 - Documents requiring signatures are signed and dated.
 - The research and analytical effort and the PI's employment status meet eligibility requirements
 - Include supporting documentation for prices proposed.
- ❑ Allow sufficient time to submit an offer. The submittal process may take several minutes to complete due to a multi-step process.
- ❑ Double check documents submitted are the correct/final versions.
- ❑ Check FAQs on DOT's SBIR website before submitting questions.

Thank you
for your attendance at
this pre-offer webinar.