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.
 - All questions must be emailed to
 <u>DOTSBIR@dot.gov</u> and will be responded to
 following 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-Proposal Webinar

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

Solicitation No. DTRT57-17-R-SBIR1

October 24, 2016





Today's Agenda

- ☐ Ground Rules and Logistics
- □ SBIR Overview
- □ Eligibility and Requirements
- Proposal Preparation
- Solicitation Appendices
- Evaluation Factors for Award
- DOT/OIG Fraud Awareness
- □ SBIR Topics
- Important Dates and Reminders

Presenters and SBIR Staff

- □ Rachael Sack, Chief, Innovative Research Program Office
- □ Melissa Wong, SBIR Program Manager
- □ Jamie Mazzone, USDOT/OIG, Assistant Special Agent-in-Charge
- ☐ Linda Duck, SBIR Program Assistant
- Tammy Ann Taylor, Contracting Officer
- Darren Shaffer, Contracting Officer

Ground Rules and Logistics

- ☐ This webinar will be recorded and posted to the DOT SBIR website.
- No verbal or written questions will be answered relative to the solicitation topics during the pre-proposal webinar.
- □ 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)

- □ Technical questions pertaining to the FY17.1 U.S. DOT SBIR solicitation research topics must be submitted to the U.S. DOT SBIR Program Office via email at dotsbir@dot.gov.
- Technical questions will be accepted through December 6, 2016 at 11:59 pm ET.
- Answers to technical 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.



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

SBIR Reauthorization

- □ National Defense Reauthorization Act of 2012 (Defense Reauthorization Act), P.L. 112-81 signed into law December 31, 2011.
- □ Division E of the Act contains the SBIR/STTR Reauthorization Act of 2011 which extends both the SBIR and STTR programs through September 30, 2017.
- □ Section 5102 of the statute states that for FY 2017, agencies must expend not less than 3.2% of their extramural budgets for research and research and development on small business concerns in the SBIR Program.

How SBIR Supports the Mission of DOT

- The mission of the 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 DOT's R&D Program
- SBIR 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 | 2014 | 2015 | 2016 | 2017 |
|---|------|------|------|------|
| Federal Aviation Administration | X | | | |
| Federal Highway Administration/ ITS Joint Program Office | x | X | X | X |
| Federal Railroad Administration | X | X | | X |
| Federal Transit Administration | X | X | X | X |
| Federal Motor Carrier Safety Administration | | | | |
| National Highway Traffic Safety Administration | X | X | | X |
| Office of the Secretary | X | | | X |
| Pipeline and Hazardous Materials Safety Administration | X | | | |

Administering the DOT's SBIR Program

- □ Secretary of Transportation chose the Volpe Center to direct the Department's SBIR Program in November 1982
- □ SBIR Program Office, located at the Volpe Center, directs all activities required under the SBIR law and executes the policy established by the Small Business Administration
 - Coordinates with eight DOT Operating Administrations
 - Solicits, awards and administers contracts



Eligibility & Requirements

Section I of Solicitation

Eligibility & Requirements

- □ See 13 C.F.R. § 121.701-705 for SBA's definition for the term "small business concern".
- □ The U.S. DOT elects at this time <u>not to use the authority</u> that would allow venture capital operating companies (VCOCs), hedge funds or private equity firms to participate in the SBIR Program. Proposals submitted by these parties will not be considered for award.
- □ The primary employment of the principal investigator must be with the small business firm at the time of contract award and during the conduct of the proposed research. Primary employment means that more than one-half of the principal investigator's time is spent working for the small business.

Eligibility & Requirements (cont'd)

- □ For Phase I, a minimum of <u>two-thirds</u> of the research or analytical effort, measured in labor hours, must be performed by the awardee.
- □ For Phase II, a minimum of <u>one-half</u> of the research or analytical effort, measured in labor hours, must be performed by the awardee.
- □ Additionally, for Phase I, Phase II and IIB, the R/R&D work must be performed in the United States.

Performance Benchmarks

Phase I to Phase II Transition Rate

For all U.S. DOT SBIR Program Phase I applicants that have received 20 or more SBIR Phase I awards over the 5-year period, the ratio of Phase II awards received to Phase I awards received must be at least 0.25.

Commercialization Benchmark

The Commercialization Rate is not a requirement for this Solicitation. It is expected to be introduced in the future by SBA and will apply only to SBIR Phase I applicants that have received more than 15 (16 or more) Phase II awards over the past 10 fiscal years, excluding the last two years.

For more information on these performance benchmarks, visit http://www.sbir.gov/performance-benchmarks.



Proposal Preparation

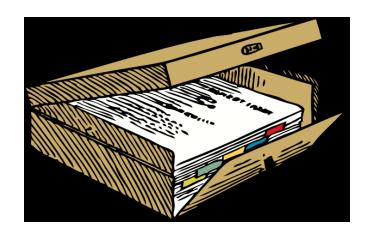
Section III of Solicitation

Proposal Layout

See Section III for detailed instructions!

Submit three files:

- Technical Proposal (PDF)
- Cost Proposal (Appendix C) (Excel or PDF)
- 3. Appendices A, B, and D (PDF)



Don't Forget ...

- □ SBA Company Registry Database Each small business applying to the program is required to complete its registration in the SBA's Company Registry (http://sbir.gov/registration) prior to submitting its application, and should include a copy in the proposal.
- Obtain a Data Universal Numbering System (DUNS)
 Identification Number.
- Register (or update) in the System for Award Management (SAM) before being awarded a contract.
- □ Follow layout guidance and section organization instructions.

Phase I Proposal Submission Process DO'S

- Read the Solicitation and follow <u>all</u> the instructions for submission
- Ensure your proposal aligns with the scope of the research topic
- Obtain DUNS number prior to proposal submission
- Register in System for Award Management (SAM)
- Provide a detailed and wellorganized work plan

- □ Follow the procedures for requesting clarifications/ questions on research topics
- Provide qualifications for key personnel in addition to PI
- Check to ensure completed appendices are all included
- Double check all cost figures and calculations
- □ Sign Appendix A

Phase I Proposal Submission Process DON'TS

DO NOT...

- Send proposals via email
- □ Send duplicate proposals
- Ask the Program Office for guidance on whether or not your company should submit a proposal
- Create arbitrary overhead, indirect or profit rates
- Wait until the deadline to submit your proposal





Solicitation Appendices

Required Appendices

Available on U.S. DOT SBIR website

- □ Proposal Signature Page (Appendix A) Ms Word
- □ Project Summary (Appendix B) Ms Word
- □ Contract Pricing Proposal (Appendix C) Excel
- □ SBIR Funding Agreement Certification (Appendix D) – MS Word

Appendix C - Cost Information

- □ Carefully read the SBIR Phase I Cost and Pricing Proposal Instructions
- Provide supporting information for all costs proposed so that we may award your contract promptly.
- □ Any cost that is not supported may cause the proposal amount to be reduced.

Appendix C - Cost Information

Schedule A - 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.

□ Schedule C - Material Costs

Provide internet quote or other backup to support unit price.

□ Schedule F – Subcontracts and Consultants

Participant must provide complete cost detail for subcontract amount and include letter of commitment from subcontractor.

Schedule I - Narrative Explanation

Provide detailed explanation for all costs which will allow your proposal to be analyzed quicker and your contract to be awarded sooner!



Evaluation Factors & Award Information

Section IV of Solicitation

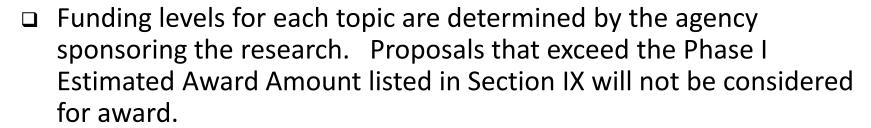
Evaluation Factors for Phase I

- Scientific and technical merit and the feasibility of the proposal's commercial potential
- 2. The work plan and approach to achieving specified work tasks and stated objectives of the proposed effort
- 3. Qualifications of the proposed principal/key investigator(s)
- 4. The supporting staff, facilities, and equipment.



Award Information

- All Phase I awards will be firm fixed price contracts.
- The period of performance for a Phase I contract shall be 6 months.



- Under Phase I SBIR contracts, three reports will be required, consisting of two interim narrative reports, and a comprehensive final report.
- Payments for Phase I contracts will be made in three equal installments upon submission of invoices, in accordance with instructions in contract award document.





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:

<u>False Statements/False Claims</u>:

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 (617) 494-2701



Cambridge, MA (617) 494-2701

New York, NY (212) 337-1250

Washington, DC (202) 260-8580

Atlanta, GA (404) 562-3850

Chicago, IL (312) 353-0106

Ft. Worth, TX (817) 978-3236

San Francisco, CA (415) 744-3090



U.S. DOT SBIR 17.1 Topics

Section IX of Solicitation

17.1 Topics

| | | Estimated Award Amount |
|--|-----------|------------------------|
| Topic number & Title | Phase I | Phase II |
| 17.1-FH1 Accurate and Rapid Measurement of Adsorption Capacity of Fly Ash in Concrete Mixtures | \$100,000 | \$750,000 |
| 17.1-FH2 Rapid Assessment of Air Void System in Fresh Concrete | \$100,000 | \$850,000 |
| 17.1-FR1 Methods for Remanufacturing Creosote- Railroad Ties | \$150,00 | \$500,000 |
| 17.1-FR2 Broken Rail Detection from Flashing Rear End Device | \$150,000 | \$300,000 |

17.1 Topics

| | | Estimated Award Amount |
|--|-----------|------------------------|
| Topic number & Title | Phase I | Phase II |
| 17.1-FR3 Resilient Wayside Structures to Reduce Severity of Passenger Equipment Collisions and Derailments | \$150,000 | \$300,000 |
| 17.1-FR4 Smart Phone Application for Onboard Railroad Passenger Information System | \$150,000 | \$250,000 |
| 17.1-FT1 Train Crowding and information dissemination for transit users | \$150,000 | \$750,000 |
| 17.1-NH1 Detection of THC use in Drivers | \$150,000 | \$500,000 |
| 17.1-OS1 System and Supply Chain for Recycling Lithiumion batteries in the Transportation System | \$100,000 | \$200,000 |

Topic Funding Considerations

Proposals 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 after the completion of the Phase I project.

Suggest a Topic

Have an idea for a future DOT SBIR topic?

Visit http://www.volpe.dot.gov/work-with-us/small-business-innovation-research/suggest-topic and submit an idea for future consideration.



Important Dates and Reminders

2017.1 Solicitation Schedule

| Milestone | Date |
|-----------------------------------|--|
| 2017.1 Solicitation Opens | October 19, 2016 |
| Pre-Proposal Webinar | October 24, 2016 @ 1:30pm ET |
| Technical Questions | December 6, 2016 @ 11:59 pm ET |
| Appendix C Questions | December 14, 2016 @ 5:00 pm ET |
| 2017.1 Solicitation Closes | December 21, 2016 @ 5:00 pm ET |
| Recommendations for Award | No later than March 2017 (90 days from solicitation close) |
| Awards Processed | No later than June 2017 (180 days from solicitation close) |

REMEMBER ...

Please be sure to submit your proposals before the deadline.

The submittal process may take several minutes to complete due to a multi-step process. Applicants are encouraged to submit their proposals as early as possible

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

Please submit all questions to DOTSBIR@dot.gov.