

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 DOTSBIR@dot.gov 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.**

Today's Agenda

- ❑ Ground Rules and Logistics
- ❑ SBIR Overview
- ❑ Eligibility and Requirements
- ❑ Proposal Preparation
- ❑ Solicitation Appendices
- ❑ Evaluation Factors for Award
- ❑ SBIR Topics
- ❑ Important Dates and Reminders

Presenters

| U.S. DOT SBIR Program Office | U.S. DOT/Volpe Center Acquisitions Office |
|-----------------------------------|---|
| Rachael Sack, Program Director | Linda Byrne, Contracting Officer |
| Melissa Wong, Program Manager | Jeanne Rossetsky, 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 FY15.1 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 February 20, 2015 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>.



U.S. Department of Transportation

SBIR

SMALL BUSINESS
INNOVATION RESEARCH
PROGRAM

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 2015, agencies must expend not less than **2.9%** 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



DOT SBIR Participating Operating Administration

| | 2011 | 2012 | 2013 | 2014 |
|---|------|------|------|------|
| Federal Aviation Administration* | -- | X | -- | X |
| Federal Highway Administration/ITS Joint Program Office | X | X | X | X |
| Federal Railroad Administration | X | X | X | X |
| Federal Transit Administration | X | X | X | X |
| Federal Motor Carrier Safety Administration | X | X | X | X |
| National Highway Traffic Safety Administration | X | -- | -- | X |
| Office of the Secretary – Research and Technology | -- | -- | -- | X |
| Pipeline and Hazardous Material Safety Administration | X | X | X | X |
| Maritime Administration | -- | -- | -- | -- |
| St. Lawrence Seaway Development Corporation | -- | -- | -- | -- |

*Excused by Legislation: FAA contributed to the U.S. DOT's SBIR Program from 1985 to 2005.

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 - 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. 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 **two-thirds** of the research or analytical effort, measured in labor hours, must be performed by the awardee.
- ❑ For Phase II, a minimum of **one-half** 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

For all U.S. DOT SBIR Program 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. The awardee applicant must have received, to date, an average of at least \$100,000 of sales and/or investments per Phase II award received, or have received a number of patents resulting from the SBIR work equal to or greater than 15% of the number of Phase II awards received during the period.

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



Proposal Preparation

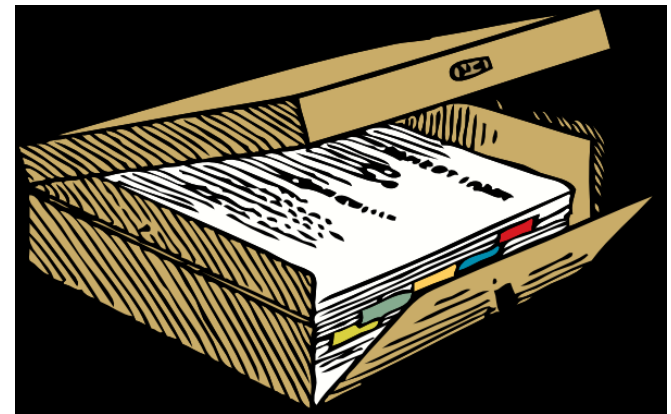
Section III of Solicitation

Proposal Layout

See Section III for detailed instructions!

New Proposal Format – Submit three files:

1. Technical Proposal (PDF)
2. 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 must include copy in 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 all 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 well-organized 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 technical proposal

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 Cover Sheet (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

- ❑ SBIR Phase I Cost and Pricing Proposal Instructions
- ❑ Please read carefully
- ❑ Provide supporting information for **all** costs proposed so that we may award your contract promptly

Appendix C - Cost Information

- ❑ Schedule A - Indirect Costs
 - Be sure to provide detailed cost elements of indirect rates to support rate(s) proposed.
- ❑ Schedule F - Subcontracts
 - Participant must include letter of commitment from subcontractor and breakdown of subcontract costs.
- ❑ 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

1. **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 is 6 months.
- ❑ Funding levels for each topic are determined by the agency sponsoring the research. Proposals that exceed the Phase I Estimated Award Amount listed in Section IX will not be considered for award.
- ❑ 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.



U.S. DOT SBIR 15.1 Topics

Section IX of Solicitation

Federal Highway Administration (FHWA)

Topics

| Topic Number & Title | Maximum Number of Anticipated Awards | Estimated Award Amount Phase I* | Estimated Award Amount Phase II** |
|--|--------------------------------------|---------------------------------|-----------------------------------|
| 15.1-FH1: Driver Engagement/Status Monitoring Technologies for Vehicle Automation Applications | 1 | \$150,000 | \$1,000,000 |
| 15.1-FH2: Community College – Technical School Intelligent Transportation Systems (ITS) Curricula | 1 | \$125,000 | \$750,000 |
| 15.1-FH3: Roadway Hazard Alert System for Motorcycles | 1 | \$150,000 | \$1,000,000 |
| 15.1-FH4: From Vehicle Performance to Transportation System Performance – System Impacts of Automated Vehicles | 1 | \$150,000 | \$700,000 |

Federal Railroad Administration (FRA)

Topics

| Topic Number & Title | Maximum Number of Anticipated Awards | Estimated Award Amount Phase I* | Estimated Award Amount Phase II** |
|---|--------------------------------------|---------------------------------|-----------------------------------|
| 15.1-FR1: Wireless Compatible Digital Train Line (WiDTL) for Passenger Type Vehicles in a Train Consist | 1 | \$150,000 | \$500,000 |
| 15.1-FR2: Active Personal Safety System for Train Yard and Road Crewworkers | 1 | \$150,000 | \$500,000 |
| 15.1-FR3: Next Generation Freight Truck for Autorack Cars | 1 | \$150,000 | \$500,000 |
| 15.1-FR4: Smart Phone Application for Onboard Railroad Passenger Information System | 1 | \$150,000 | TBD |

FRA Topics (cont'd)

| Topic Number & Title | Maximum Number of Anticipated Awards | Estimated Award Amount Phase I* | Estimated Award Amount Phase II** |
|---|--------------------------------------|---------------------------------|-----------------------------------|
| 15.1-FR5: Browser Based Application for Locomotive Inspection Data Collection | 1 | \$150,000 | TBD |
| 15.1-FR6: Locomotive Flashing Light for Trespassers and Pedestrians Warning | 2 | \$150,000 | \$1,000,000 |
| 15.1-FR7: Long Range ROW Detection and Warning System | 3 | \$150,000 | \$1,000,000 |
| 15.1-FR8: Passive Rail Temperature Control Technology | 1 | \$150,000 | TBD |
| 15.1-FR9: Portable Rail Suspension Displacement Monitoring System | 2 | \$150,000 | \$300,000 |

Federal Transit Administration (FTA) & National Highway Traffic Safety Administration (NHTSA) Topics

| Topic Number & Title | Maximum Number of Anticipated Awards | Estimated Award Amount Phase I* | Estimated Award Amount Phase II** |
|---|--------------------------------------|---------------------------------|-----------------------------------|
| 15.1-FT1: Innovative Transit Technology Devices, Applications, or Solutions Focused on Safety, Mobility, or Energy and Sustainability | 3 | \$150,000 | \$750,000 |
| 15.1-NH1: Improving the Ventilation of Motorcycle Helmets | 2 | \$100,000 | \$300,000 |

Topic Funding Considerations

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

**The Phase II funding level noted above 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

2015.1 Solicitation Schedule

| Milestone | Date |
|----------------------------|---------------------------------|
| 2015.1 Solicitation Opens | January 6, 2015 |
| Pre-Proposal Webinar | January 8, 2015 @ 1:30pm ET |
| Technical Questions | February 20, 2015 @ 11:59 pm ET |
| Appendix C Questions | February 27, 2015 @ 5:00 pm ET |
| 2015.1 Solicitation Closes | March 9, 2015 @ 11:59 pm ET |
| Recommendations for Award | May 2015 |
| Awards Processed | July/ August 2015 |

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

**Please submit all questions to
DOTSBIR@dot.gov**