

COURSE 2, TUTORIAL 7

DEPARTMENT OF TRANSPORTATION (DOT)

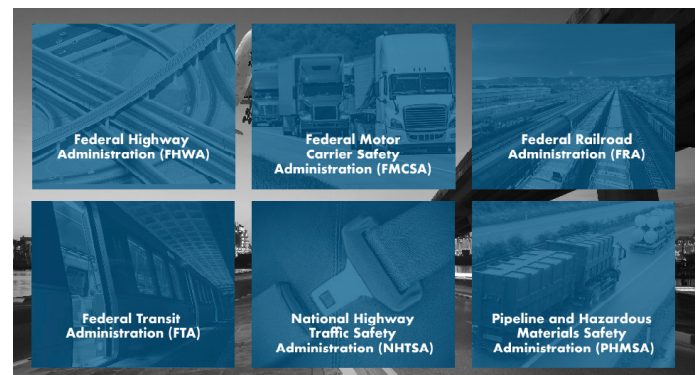


The Department of Transportation's SBIR program is administered by the Volpe Center in Cambridge, Massachusetts. The Volpe Center is part of the DOT's Office of the Secretary for Research and Technology. Volpe is a unique federal agency that is 100 percent funded by sponsor projects. It partners with public and private organizations to assess the needs of the transportation community, evaluate research and development endeavors, assist in the deployment of state-of-the-art transportation technologies, and provide information for decision- and policy-making through its comprehensive analyses. The Volpe Center works closely with the DOT Operating Administrations to administer an SBIR program that meets their research needs.

OPERATING ADMINISTRATIONS

The Department of Transportation's SBIR program is aligned with its Strategic Plan as well as the mission and goals of its operating administrations, also referred to as OAs. In DOT's annual SBIR solicitation, interested parties will find topics that reflect the emerging needs of the OAs that participate in DOT's SBIR program. There are eight OAs that provide SBIR topics. However, not all OAs participate annually in the SBIR program due to varying research needs and funding availability. For example, in the FY19 solicitation there are six participating OAs including the Federal Highway Administration, the Federal Motor Carrier Safety Administration, the Federal Railroad Administration, the Federal Transit Administration, the National Highway Traffic Safety Administration and the Pipeline and Hazardous Materials Safety Administration. On the following page is a list of examples of 2019 topics that includes acronyms that identify the sponsoring OAs. Examples include Secure Motor Carrier Safety

Data Information Exchange Using Blockchain; Automated, Drone-Based Grade Crossing Inspection; and Automated Detection of Broken Spike Fasteners in Wood Tie Railroad Track.

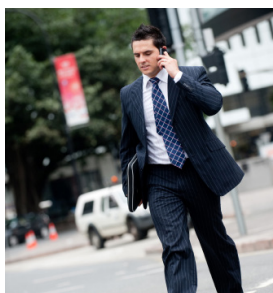


Six OA's participating in FY19 DOT SBIR solicitation



EXAMPLES OF 2019 DOT TOPICS

- Innovative, Low-Cost Methods for Concrete Bridge Deck Assessment (FHWA)
- Secure Motor Carrier Safety Data Information Exchange Using Blockchain (FMCSA)
- Automated, Drone-Based Grade Crossing Inspection (FRA)
- Automated Detection of Broken Spike Fasteners in Wood Tie Railroad Track (FRA)
- Cost Allocation Technology for Non-Emergency Medical Transportation (FTA)
- Automated Driving Systems (ADS) Test Data Interface (NHTSA)
- Inline-Inspection (ILI) Tool for Detecting Coating Defects/ Disbondment of Coating (PHMSA)



SmartCross by Savari



GS Engineering, Inc.

SBIR PHASE I AND PHASE II AWARDS

The Department of Transportation's SBIR program administers contracts, not grants. The budget for its SBIR program is about ten million dollars annually with award funding limits that vary by topic and phase. Phase I awards are for up to \$150K. The ceiling for each topic is specified in the solicitation and can be less than \$150K ceiling. Phase II awards vary in size between \$350,000 and \$1 million dollars. DOT has also taken the opportunity to utilize sequential phase II awards, referred to as Phase IIB awards. A Phase II awardee may receive one sequential Phase II award for a period of up to 24 months. A small business may receive no more than two SBIR Phase II awards for the same project and the awards must be made sequentially. Fifty to sixty percent of DOT's Phase I SBIR awardees receive a Phase II award and about 25% of Phase II awardees go on to receive a second Phase II from DOT.

An example of a break-through application developed with DOT SBIR funding is **SmartCross**, developed by Savari. As drivers and pedestrians alike become increasingly distracted by their smartphones, crossing the street safely is not as straightforward as it used to be. The result is an increase in pedestrian fatalities. What if we could find ways to keep pedestrians safe...even while distracted by their phones? The SmartCross application provides a much needed solution. The app interfaces with traffic signal systems that control the traffic lights and receives information about the pedestrian signal. Sending signals between the pedestrian's phone and the nearest traffic signal box, the app sends an alert to notify pedestrians when they have the signal to cross. Other examples of DOT technologies include **GS Engineering, Inc.** which

The DOT SBIR solicitation

- » One per year
- » Request to be added to notification list
- » Posted on Volpe website and FedBizOpps



Systems Technology, Inc. (STI)

developed and tested a system to make accessing freight locomotives easier and safer for railroad engineers and workers; and new simulation software developed by **Systems Technology, Inc. (STI)** to help pilots combat spatial disorientation.

The Department of Transportation has one SBIR solicitation annually. In order to receive notification from DOT when a solicitation is released, interested parties can sign up for email notification. Solicitations are also posted on the Volpe SBIR site as well as FedBizOpps. Requests for clarification and questions on the topics in the solicitation can be submitted to the DOT program office staff, up to the date specified in the solicitation.

The DOT SBIR program includes a Commercialization Assistance Program offered to Phase I and Phase II awardees. There is also a Pre-proposal conference call for Phase II and improved cost appendices.

**FOR MORE INFORMATION, PLEASE CONTACT
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