## Army SBIR Innovation Framework: Synopsis

The U.S. Army Applied Small Business Innovation Research (SBIR) Program *Innovation Framework* codifies the culture and approach to bring small business talent and technologies into the Army modernization enterprise to help overcome military technology challenges. The purpose of this framework is to shape the program's innovation leadership model and inform its role as an important Army interface with the **innovation economy** (i.e., the emerging technology sector).

The *Innovation Framework* presents the thinking and modalities underpinning the Applied SBIR innovation leadership model. As a participating department within the U.S. Small Business Administration administered "America's Seed Fund," the Army Applied SBIR Program smartly leverages small amounts of capital for innovative research and development (R&D) efforts to buy-down risk for the Army's larger, more scalable acquisitions and research. The urgency of these efforts is based on two facts. One, the innovation economy is the primary source of military technological advantage; and two, starting in 1988, U.S. government R&D spending dipped below that of similar domestic private sector investment and has precipitously declined since resulting in a diminution of the relevance of government customers in the national and global technology marketplace.

The Army Applied SBIR approach recognizes financial capital as the program's primary resource and, therefore, the **program's core competency** must be its decision-making on how to best allocate its assigned capital. Applying its core competency, the program's **investment thesis** is to fund R&D to identify and then develop commercially available technologies into solutions for Army technology challenges. These are the core elements of the investor mindset Applied SBIR uses to articulate its thesis:

- <u>Well-Formulated Demand Signal</u>: Employ cross-organizational design and processes
- <u>Other People's Money</u>: Leverage co-investors to maximize effects, learn, and distribute risk
- <u>Buy-Down Risk</u>: Assess what is practical and feasible prior to larger investments or acquisitions
- Measures: Monitor what works and what doesn't to drive technical and organizational innovation

Transition Broker Teams (TBT) are the mechanism by which the Applied SBIR Program incubates both problem and solution discovery to improve the likelihood of technology transition. TBTs are a cross-organizational team of acquisition experts, technologists, and business analysts poised for effective information sharing among team members to first, improve mutual understanding of Army needs along with industry capabilities, and second, maximize SBIR fund allocation decision-making for the benefit of both the Army and the small businesses of the innovation economy. TBT functions:

- Share information to improve common understanding of technologies and challenges
- Assess risk dynamically and periodically using the criteria: Technical, Programmatic, Business
- Allocate SBIR funds to optimize outcomes across the portfolio and SBIR lifecycle
- Transition SBIR-facilitated technologies to an acquisition program or further R&D effort

The *Innovation Framework* synchronizes the approach of the Applied SBIR Program and its partners to improve mutual understanding of Army technology problems and the innovation context within which solutions are most likely found. Treating SBIR awards as investments managed by a stabilized team creates a unity of effort around consistent objectives and enables both risk mitigation and opportunity exploitation during the entire one-to-four-year SBIR investment lifecycle. Fine-tuning the approach over time, with valuable contributions from our partners' diverse, iconoclastic thinking, will foster an Army in sync with the innovation economy and is essential to fulfilling the Army's mission.