

Small Business Innovation Research Program

Statement for *Senate Committee on Small Business and Entrepreneurship*
SBIR Roundtable, June 2009

The Small Business Innovation Research (SBIR) program has promoted small business innovation and commercialization since its inception in 1982.

A 2008 review by the National Research Council of the National Academies concludes that the SBIR program is sound in concept and effective in practice, meets its major Congressional objectives, and is a driver of innovation and commercialization for small businesses

Small businesses are a major driver of innovation in America. One study by the SBA Office of Advocacy of firms that produced more than 15 patents over the period 2002-2006 found that the small firms in this group produced 13 – 14 times more patents per employee than did the large firms, and these patents were cited in applications more often than average patents. **The SBIR program’s focus on commercialization turns small business innovation into jobs.**

According to the 2008 National Academies study, SBIR “is increasing innovation, encouraging participation by small companies in federal R&D, providing support for small firms owned by minorities and women, and resolving research questions for mission agencies in a cost-effective manner”. Some highlights of the SBIR program are:

- **Job and Revenue Growth:** SBIR awardees generate four times as many jobs and nearly four times as much revenue as comparable firms that do not receive SBIR funding (Lerner 1996). Lerner’s study, “The Government as Venture Capitalist: The Long-Run Impact of the SBIR Program”, found that on average, firms that are awarded SBIR grants generate \$4 million in additional revenue and hire 26 employees after they receive funding. The study did add that job and revenue growth tended to diminish for multiple award recipients and that a subset of firms located in certain geographic areas exhibited superior performance.
- **Commercialization:** The National Academies found that about half of Phase II awardees responding to its survey reported bringing their innovations to the market place.
- **Innovation:** Based on responses from the aforementioned survey, one-third of NIH SBIR projects generate at least one patent (National Academies). Moreover, from 2002 to 2006, ~25% of *R&D Magazine’s* top 100 annual innovations came from companies that had received SBIR grants.
- **Broad Small Business Reach:** From 1992 to 2005, nearly 15,000 different firms received at least one Phase II SBIR award (National Academies).

Background on Program

Since its inception in 1982, SBIR has disbursed competitive federal R&D grants or contracts to help small businesses develop and eventually commercialize innovations. In FY 2007, SBIR provided ~5,500 Federal R&D awards, totaling nearly \$2 billion. Any agency with over \$100 million in extramural R&D spending must set aside 2.5% of R&D awards for SBIR. (Additional program details can be found in Exhibit 1.)

Program Objectives

The SBIR program has four major objectives:

- **Stimulating technological innovation**
 - 34% of NIH SBIR projects surveyed generated at least 1 patent, and over half published at least one peer-reviewed article (National Academies), based on respondents to the abovementioned survey.
 - From 2002 to 2006, ~25% of *R&D Magazine*'s top 100 annual innovations came from companies that had received SBIR grants.

- **Increasing private-sector commercialization of innovations**
 - ~50% of Phase II SBIR projects reach the market place, according to Phase II recipients responding to a National Academies survey. (About half of Phase I projects move on to Phase II).

- **Using small businesses to meet federal research & development needs**
 - The 2008 National Academies study concludes that flexible program management across agencies has allowed SBIR to meet agency missions effectively
 - According to the same study, SBIR helps small businesses since:
 - More than 14,800 firms received at least 1 SBIR grant from 1992 to 2005
 - Over 30% of all awards go to firms that previously did not receive SBIR funding
 - Over 20% of companies indicated they were founded entirely or partly due to SBIR
 - Over two-thirds of projects would not have taken place without SBIR funding

- **Fostering participation by minority and disadvantaged persons in technological innovation**
 - The share of women-owned firms receiving Phase I SBIR grants has grown from 6.5% in 1998 to over 11% in 2004-2005. However, the percentage of female doctorates and scientists has grown considerably faster (National Academies).
 - Minority-owned firm share has diminished; among Phase I award recipients, 10% were minority-owned from 1992-1998, but only 8% were from 2001-2005. This decline has been especially significant in NIH and DoD (National Academies).

Exhibit 1: SBIR grant program details

Phase	Purpose	Standard size (timing)	Acceptance rate	FY2007 Grants Number	FY2007 Grants Dollars
I	Assess feasibility of idea, proof of concept	\$100,000 (1 year)	~17% accepted	3,909	\$436 M
II	Full R&D to develop prototype (must be Phase I grantee)	\$750,000 (2 years)	~55% accepted	1,615	\$1,342 M
III	Commercialization	\$0	N/A	0	\$0

Planned Improvements

SBA is currently implementing meaningful cross-agency performance measures to further evaluate the program on a systematic and regular basis. Using this performance information, SBA can identify factors that contribute to success, compare results with alternative uses of funds, and take proper measures to improve the program.

SBA will complete development of a database to easily collect data on SBIR awards from participating agencies and improve public access to that information.