



# Current Report

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## Small Business Innovation Research Programs: An Opportunity for Small Businesses in Oklahoma

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Small Business Innovation Research Programs (SBIR) were created by the Small Business Development Act of 1982 to assist small businesses in participating in federally-funded research and development (R&D). The legislation requires all federal agencies with external R&D budgets in excess of \$100 million to award a portion of those funds to small businesses. The total amount of awards nationally has increased from \$45 million (800 awards) in 1983 to \$508 million (3,500 awards) in 1992. The objectives of this Current Report are to provide an introduction to SBIR programs and assist Oklahoma small businesses in obtaining additional information and assistance. This is a revision of an earlier current report by David Park and Mike Woods.

### What are the objectives of SBIR programs?

The primary intent of SBIR programs is to assist small businesses in participating in federally-funded research and development activities. Specifically, the objectives of SBIR programs are:

- To stimulate technological innovation in the private sector.
- To increase the opportunities for small businesses to participate in federally funded research.
- To foster and encourage minority and disadvantaged small business firms in technological innovation.
- To encourage private sector commercialization of innovations derived from federally-supported research and development efforts.

### How might a small business benefit from participation in SBIR programs?

Firms which are awarded SBIR grants are provided with up to \$100,000 for up to six months of feasibility related research under phase I (idea stage) of the program. Phase II awards (product stage) provides up to \$750,000 for up to 24 months of continued research and development of those projects found most promising after Phase I. All Phase I and Phase II awards are issued as research grants. Phase III consists of commercializing the new technologies developed by government-funded research and development in Phases I and II. Phase III (business stage) funding comes from the private sector and/or regular government procurement contracts.

### Who owns the patent rights to inventions developed with SBIR funds?

Small businesses normally may retain the principal worldwide patent rights to any invention developed with SBIR funds. The government receives a royalty-free license for its own use (not commercial application), and requires that anyone exclusively licensed to sell the invention in the United States must normally manufacture it domestically.

### What businesses qualify for SBIR?

A company is eligible for SBIR funding if at the time of the award:

- It is a U.S. corporation.
- It is organized for profit.
- It is independently owned or operated.
- It is not dominant in the field in which it is proposing to work.

- It has 500 or fewer employees (full-time, part-time, temporary, or other).
- It is the primary source of employment of the principal investigator of the proposed effort **at the time of the award** and during the conduct of the proposed research.

### What Federal agencies participate in SBIR programs?

The following federal agencies have participated or are participating in SBIR programs:

Department of Agriculture (DOA)  
 Department of Commerce (DOC)  
 Department of Defense (DOD)  
 Department of Education (DOED)  
 Department of Energy (DOE)  
 Environmental Protection Agency (EPA)  
 Department of Health and Human Services (DHHS)  
 National Aeronautics and Space Administration (NASA)  
 National Science Foundation (NSF)  
 Nuclear Regulatory Commission (NRC)  
 Department of Transportation (DOT)

Participating agencies are subject to change from year-to-year depending on levels of funding for research and development.

### What are the selection and evaluation criteria for SBIR proposals?

SBIR proposals are judged competitively in a two-stage process, based primarily upon scientific or technical merit. First, each agency prescreens the proposal to ensure that it meets stated requirements and is in response to a research topic area outlined in the solicitation. In the second stage, the technical merits of the proposal are evaluated by both internal and external reviewers. Evaluations are kept confidential to the extent permitted by law.

Final decisions are made by each agency based upon ratings assigned by reviewers and consideration of the **potential commercial application** of the proposal and other factors, including the scientific/technical quality of the research plan, the importance of the problem or opportunity and anticipated benefits of the proposed research, the adequacy of the research objectives to show feasibility of the approach, and the qualifications of the principal investigator(s).

### When should SBIR proposals be submitted for consideration?

Each federal agency specifies the period in which proposals may be submitted. The release dates and closing dates for fiscal 1995 are presented below.

<i>Agency</i>	<i>Release Date</i>	<i>Closing Date</i>
DOA	June 1, 1995	September 1, 1995
DOC	October 3, 1994	January 11, 1995
DOD	October 17, 1994	January 13, 1995
DOD	May 1, 1995	July 7, 1995
DOED	January 9, 1995	March 13, 1995
DOED	December 1, 1994	March 1, 1995
DHHS		
1.HCFA	October 3, 1994	December 9, 1994
2.PHS	January 15, 1994	December 15, 1994
3.PHS	October 1, 1994	December 5, 1994
4.PHS	January 15, 1995	April 15, 1995
		August 15, 1995
		December 15, 1995
5.AOA	March 1, 1995	May 31, 1995
DOT	February 15, 1995	May 2, 1995
EPA	March 23, 1995	June 6, 1995
NASA	March 23, 1995	June 6, 1995
NSF	April 3, 1995	June 12, 1995
NRC	October 11, 1994	January 6, 1995

HCFA=Health Care Financing Administration  
 PHS=Public Health Service

The above dates are subject to change by the participating agencies. Agency abbreviations are defined earlier. Some dates may have already expired for fiscal 1995 but interested small businesses should anticipate similar dates for fiscal 1996.

### What is OCAST and how does it benefit a firm interested in competing for a SBIR Phase I award?

#### OCAST SBIR Phase I Incentive Funding Program

State legislation in 1987 authorized the Oklahoma Center for the Advancement of Science and Technology (OCAST) to initiate state SBIR-related programs which would complement the federal SBIR program.

The first of these—the SBIR Phase I Incentive Funding Program—is designed to increase the number of federal Phase I applications submitted by small businesses in Oklahoma.

The OCAST program reimburses qualifying Oklahoma firms for 50% but does not exceed \$2,500 of the cost of preparing a federal SBIR Phase I proposal.

#### OCAST SBIR Matching Funds Program

This OCAST program is designed to encourage Oklahoma businesses which have won SBIR Phase I awards to apply for Phase II and to help sustain companies through the funding

gap occurring between the conclusion of Phase I and the notification of Phase II federal SBIR awards.

Through the SBIR Matching Funds Program, OCAST will match an award at a rate of \$.50 for each dollar, up to \$25,000 for an eligible Oklahoma firm's Phase I SBIR award from the federal government, after that firm submits a qualified Phase II proposal. For more information contact:

Director of Technology Development  
OCAST  
301 NW 63rd, Suite 110  
Oklahoma City, OK 73116-7906  
(405) 848-2633

### **What are the suggested steps to follow in submitting a SBIR funding proposal?**

- Identify technical qualifications and research interests.
- Obtain copies of SBIR solicitations from the agencies of interest.
- Determine if research interests coincide with any of the topic descriptions contained in the solicitations.
- Contact the federal agency in question to determine if any changes in the SBIR program have been made since the solicitation was published.
- Prepare the SBIR proposal according to the requirements outlined in the solicitation. (Proposals not meeting the screening criteria will be returned to the proposing small business without review and will not be resubmitted under the current solicitation).
- Submit the proposal by the stated deadline following guidelines on number of copies, binding, and packaging.

### **Where can one obtain additional information on SBIR programs?**

Additional information on SBIR programs can be obtained by contacting participating federal agencies directly. Specifically, each participating agency publishes an SBIR program solicitation which provides detailed information on the program and instructions for submitting proposals. A directory of participating federal agencies is provided below.

Dr. Charles F. Cleland  
Director, SBIR Program  
U.S. Department of Agriculture  
Cooperative State Research Service  
Ag. P.O. Box 2243  
Washington, DC 20250-2243  
(202) 401-4002

Dr. Joseph Bishop  
U.S. Department of Commerce  
SBIR Program Office  
1315 East-West Highway  
Room 15342  
Silver Spring, MD 20910  
(301) 713-3565

Mr. James P. Maruca  
Director, Office of Small and  
Disadvantaged Business Utilization  
U.S. Department of Commerce  
14th and Constitution Avenue, N.W.  
HCHB, Room 6411  
Washington, DC 20230  
(202) 482-1472

Mr. Norman Taylor  
SBIR Program, NIST  
U.S. Department of Commerce  
Physics Building, Room A343  
Gaithersburg, MD 20899  
(301) 975-4517

Mr. Robert Wrenn  
SBIR Program Manager  
OSD/SADBU  
U.S. Department of Defense  
The Pentagon-Room 2A340  
Washington, DC 20301-3061  
(703) 697-1481

Mr. John Christensen  
SBIR Program Coordinator  
U.S. Department of Education  
Room 602D  
555 New Jersey Avenue, N.W.  
Washington, DC 20208  
(202) 219-2065

Dr. Samuel J. Barish  
SBIR Program Manager-ER-16  
U.S. Department of Energy  
Washington, DC 20585  
(301) 903-3054

Mr. Verl Zanders  
SBIR Program Manager  
Office of the Secretary  
U.S. Department of Health and  
Human Services  
Washington, DC 20201  
(202) 690-7300

Dr. George Kovatch  
DOT SBIR Program Director, DTS-22  
U.S. Department of Transportation  
Research and Special Programs Administration  
Volpe National Transportation Systems Center  
55 Broadway, Kendall Square  
Cambridge, MA 02142-1093  
(617) 494-2051

Mr. Donald F. Carey  
SBIR Program Manager  
Research Grants Staff (8701)  
Office of Research and Development  
U.S. Environmental Protection Agency  
401 M. Street, S.W.  
Washington, DC 20460  
(202) 260-7899

Mr. Harry Johnson  
Manager, SBIR Office-Code CR  
U.S. National Aeronautics and Space  
Administration Headquarters  
300 E. Street, S.W.  
Washington, DC 20546-0001  
(202) 358-0691

Mr. Roland Tibbetts  
Mr. Ritchie Coryell  
Mr. Darryl G. Gorman  
Mr. Charles Hauer  
Dr. Sara Nerlove  
SBIR Program Managers  
U.S. National Science Foundation  
4201 Wilson Blvd. Room 590  
Arlington, VA 22230  
(703) 306-1391

Ms. Marianne M. Riggs  
SBIR Program Representative  
Financial Management, Procurement and  
Administrative Staff  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
(301) 492-3625

Information on federal agency participation, agency solicitation announcements and proposal deadlines, can also be obtained by contacting the Small Business Administration (SBA), 409 Third St. S.W., 8th Floor, Washington, DC 20416. For on-line access: 1 (800) 697-INFO (1200, 2400, 2800, 9600 BAUD) In Oklahoma, the SBA can be reached at (405) 231-5197.

### **How does the Oklahoma Cooperative Extension Service provide assistance in preparing SBIR proposals?**

The Oklahoma Cooperative Extension Service can provide assistance in a number of ways.

- Evaluation of SBIR proposals prior to submission.
- Information on closing dates, current agency submission requirements, etc.

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