



**Statement  
of  
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Before The

**United States House of Representatives  
Committee on Small Business**

**Full Committee Hearing on “Legislation to Reauthorize  
the Small Business Innovation Research Program”**

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## **Madam Chair, Ranking Member, and Members of the Committee on Small Business:**

Thank you for the opportunity to appear today to present the views of the State Science & Technology Institute (SSTI) on the importance of reauthorizing the Small Business Innovation Research Program (SBIR) program and the Federal and State Technology Partnership (FAST).

### **What is SSTI?**

Before I begin, unlike the distinguished organizations with which I'm sharing the panel today, I presume SSTI may require a little introduction. I serve as vice president of a national nonprofit organization based outside Columbus, OH, that is dedicated to leading, supporting, and strengthening public-private efforts to improve regional economies through science, technology and innovation. SSTI was created with funding from the Carnegie Corporation of New York 12 years ago to serve as a clearinghouse of best practices in state and local technology-based economic development and as the professional development arm of the then-emerging field of tech-based economic development. Our membership consists of the 39 leading science & technology organizations and agencies within 35 states as well as 150+ additional regional, university and non-profit tech-based economic development organizations.

For the broader public, SSTI publishes a free e-newsletter entitled the *SSTI Weekly Digest*, which has a readership of approximately 75,000 individuals across the globe. The *Digest* reviews the top state, local, federal and international news for the tech-based economic development community. Subscription information and the complete 12-year archives of the newsletter are available on our website: [ssti.org](http://ssti.org).

Part of SSTI's mission is to serve as a neutral convener for discussion and advancement of key issues to further state and federal cooperation on science and technology. It is this role that led SSTI to be chosen to prepare a report in 1999 on *State and Federal Perspectives on the SBIR Program* for the U.S. Innovation Partnership, a task force of the now-defunct Technology Administration within the Department of Commerce. For *Perspectives*, SSTI conducted extensive interviews with the SBIR program managers at all of the participating federal agencies as well as 51 state-level officials who managed state SBIR programs in 46 states. Many of the findings of that report helped frame the original design of FAST.

With the reauthorization of SBIR required for the highly successful program to continue, our state members asked SSTI to explore ways to support the program's continuation and to improve and reauthorize FAST.

### **Who Am I?**

Personally, my experience with SBIR extends over two-and-one-half decades. I was the designing manager of Ohio's SBIR Program for its first six years. We had a budget of \$2.4 million and provided grant writing assistance and bridge funding directly to small tech firms in the state. With SSTI, I was a lead author with Marianne Clarke on *State and Federal Perspectives on the SBIR Program* and helped draft the initial FAST program legislation. In addition, more recently I served on the Committee of Visitors for the National Science Foundation SBIR Program. That experience provided me a behind-the-scenes understanding of some of the challenges federal agencies face in implementing the SBIR program – even an agency with as efficient and effective an operation as NSF's SBIR shop under the very capable direction of Kesh Narayanan.

### **The Importance of SBIR to State Innovation Strategies**

SBIR over the past 25 years has evolved into a state-federal-industry partnership in ways that I do not believe are fully realized by the federal agencies and perhaps even Congress. I will spend the balance of my testimony explaining why SSTI holds this position and exploring the opportunity to strengthen the state-federal element of the partnership through the important piece of legislation under consideration today – reauthorization of SBIR and FAST.

### **States Have Been SBIR Partners since Nearly Day One**

Two of the greatest barriers to growth for small technology companies are 1) access to early stage capital and 2) adequate technical and managerial expertise to carry an innovation into commercial success. Over the past 25 years, the SBIR program has proven to be a valuable financial tool for small technology firms during the high risk stages of research feasibility and proof of concept.

Recognizing this and hoping to ensure successful SBIR participation by more of their local technology companies, within a year of SBIR's first government-wide implementation in FY 1983, states began developing programs to provide outreach and technical assistance to current and prospective SBIR award recipients. I was part of Ohio's initial efforts, beginning in early 1985 through the Ohio Department of Development. Similar activities were underway in the mid-Eighties in Michigan, New Jersey, New York, North Carolina, Oklahoma, and Pennsylvania, to name just a few of the early SBIR partners.

Today nearly every state has some form of SBIR-related outreach or assistance on its books, has localized SBIR assistance programs, or both. In fact, as has been the case for more than a decade, SBIR assistance remains one of the most widely applied state strategies to encourage technology-based economic development. I've attached a list of many state and local SBIR efforts as evidence.

As a result of states seeing such economic development value in the federal SBIR program, states now:

- **Serve as *de facto* marketing and outreach partners for the federal SBIR programs.**

The dozens of state and local SBIR outreach efforts in place around the country are serving as the *de facto* marketing arms of the federal SBIR programs. And rightly so, as these state initiatives are on the ground and in the trenches with the small tech firms, the university researchers and the individual innovators on a daily basis. State and local technology-based economic development programs are positioned to identify the right firms to compete for federal SBIR funding and the right SBIR research topics for their client bioscience and technology companies to exploit.

- **Filter potential applicants for appropriateness and likelihood of Phase I success.**

State and local technology-based economic development organizations interact with thousands of industry and university researchers across the country each day. As they work with their client firms, tech-based economic development initiatives are able to assess the company and technology strengths – most often using the technical and market skills of private and academic experts – to outline individualized strategies that increase the likelihood of commercial success. Alternately these customized paths toward entrepreneurship can be beneficial by avoiding unnecessary failures and wasted resources. SBIR is just one of the financial tools available to firms, but is not the right fit for all technologies or companies. By this triage service, states are reducing the number of unqualified and ineligible SBIR Phase I proposals submitted to the federal agencies and the administrative costs for the federal agencies.

- **Move SBIR technologies closer to commercialization.**

Nearly every state invests significant funding toward other technology-based economic development initiatives to ensure greater success of small technology and life science businesses – including more than \$1 billion in new commitments made by states legislatures last year alone. State portfolios to support small tech businesses include direct financial assistance, research financing, entrepreneurship services, incubator facilities, and linkages to private equity and manufacturing sources research financing, entrepreneurship assistance and public/private equity partnerships. These programs are so valuable and numerous that BIO regularly publishes a directory of state programs, incentives and tax policies that support

life science and medical device R&D to the tune of several billion dollars annually (see: <http://bio.org/local/battelle2006/>).

States are not spending millions of dollars, collectively, toward furthering the goals of the federal SBIR program out of philanthropic sympathy for the R&D missions of the federal agencies. It is solely because states recognize SBIR serves an important and vital economic development function for knowledge-based economic prosperity. It must be continued. It must be reauthorized.

A seldom recognized benefit of such intense state interest in SBIR has been to help broaden the geographic and demographic reach of the federal SBIR program – explicit goals of the legislation under consideration by the Committee today. Because so many states engage in SBIR outreach and Phase I assistance, ranging from simply broadcasting the solicitation openings and annual conference to Phase Zero grants for proposal, more companies are aware of the opportunities presented through SBIR.

### **Strengthening the Partnership: Reauthorizing and Improving FAST**

Better linkages between the federal SBIR program and the cadre of state and local tech-based economic development programs are vital for maintaining the greatest flow of research-based innovations through America's small businesses and into the global marketplace. In SSTI's 1999 interviews with the federal program managers, SBIR outreach and commercialization were viewed as the most fruitful areas of state-federal cooperation. They remain so. Fortunately those are the two areas that are most fruitful for state economic development goals as well.

I respectfully recommend the Committee consider including language in the reauthorization bill that leads to the timely release of information regarding federal SBIR program applicants and award recipients. The result would be more small businesses receiving technical and financial assistance at earlier stages in developing SBIR-funded research and future SBIR applications, increasing the likelihood of commercial success.

Another suggestion is the development and implementation of an intensive training and certification program for state and regional SBIR assistance efforts. The training program would address the skills that federal agencies desire in state SBIR efforts and the educational needs identified by small technology businesses and state SBIR assistance providers. The result will be more unified and higher quality technical assistance being provided everywhere in the country, helping to level the playing field for small tech firms located in areas and within populations that do not perform as well historically in the SBIR program. Participation of the federal SBIR program managers and SBA in an advisory and coordinating council would be valuable in designing and implementing the training program.

The Federal and State Technology Partnership can prove a useful vehicle for implementing these suggestions. However, simply renewing FAST as it was originally structured would miss a great opportunity to improve the program's impact.

To prepare its recommendations for improving FAST, SSTI convened two conference calls of the lead science & technology organizations for the states. Representatives of 25 of the 35 member states were able to participate on calls – a strong indication of the states' enthusiasm for SBIR reauthorization and improving FAST. Several were multiple-time FAST recipients.

Participants on the calls shared stories regarding how FAST was originally implemented, identified challenges that impeded service delivery to client small businesses, and suggested solutions for inclusion in the SBIR reauthorization bill. I developed and circulated a consensus email for the group's revision and approval. The recommendations below flowed from this process.

### **Recommendations for Improving FAST**

- The Reauthorization level should be increased to \$20 million per year to allow more useful multi-year grants to a greater number of states - increasing the opportunity to expand SBIR participation and speed the commercialization of SBIR developed technologies. The previous authorization level was \$10 million.
- A FAST Advisory/Oversight Council should be established to insure the FAST program is reaching its goals. Representation should include:
  - The Small Business Administration (chair of council)
  - Each of the federal agencies required to participate in the SBIR program
  - Small businesses who are current or past SBIR recipients or their representative organizations
  - SBIR outreach and assistance service providers or their representative organizations
- The current requirement should remain that each state is limited to submitting only one FAST proposal per year. While the services to be performed through a FAST proposal may be provided by public, private and/or nonprofit organizations, the proposal is to include written endorsement by the governor of the state to help to ensure the FAST effort is integrated with the balance of the state's portfolio of investments to help companies commercialize technology.
- FAST should include a requirement that proposals from states address one or more of the following goals for FAST:
  - Increasing applications and awards from underperforming geographic regions (measured by the number of SBIR awards);
  - Increasing applications and awards from underrepresented population groups, such as women- and minority-owned firms (measured by the number of SBIR awards); and
  - Improving commercialization success for technologies developed with SBIR funding.
- Multi-state proposals should be acceptable but must include endorsement letters from each participating state governor. States should not be able to simultaneously submit an individual proposal and be part of a multi-state proposal.
- FAST awards should be for multi-year periods of no less than three years. Milestones or performance goals should be reviewed prior to disbursement of year 2 and year 3 funds.
- Awards should be selected competitively through peer review. Reviewers should include federal SBIR program managers as well as private individuals and organizations knowledgeable of SBIR, the innovation process, technology commercialization, and state and regional technology-based economic development programs.
- To ensure the FAST Partnership is of optimum value for the federal SBIR agencies and the state TBED programs, FAST should include educational, training and networking initiatives developed cooperatively among the federal SBIR agencies and state TBED programs.
- Strong consideration should be given for the FAST Partnership to be administered by the Office of Industrial Innovation and Partnerships within the Directorate of Engineering at the National Science Foundation (NSF).
- In development of the FAST selection criteria, NSF and the FAST Advisory/Oversight Council should consider requiring applicants to convincingly demonstrate the following:
  - That the proposed services and activities will reach either an underperforming geographic area or underrepresented population group (measured by number of SBIR awards) AND/OR improve the commercialization success of technologies developed with federal SBIR funds;
  - How the services to be offered complement and are integrated into the existing public-private innovation support system for the targeted region or population; and

- How the applicant will measure the effectiveness and impact of the proposed services and activities.

I know these final recommendations will cause some consternation and will require involvement of additional committees in the House and Senate with oversight of NSF programs. Nevertheless, I believe strongly, based on the experiences of the vast number of FAST recipients during its initial and only three funding cycles, that moving FAST from SBA and to NSF would ensure the partnership is of greatest value for the states, the federal SBIR agencies and, most importantly, the small technology businesses SBIR is intended to serve.

Thank you again for the opportunity to appear today. I hope as the Committee considers SBIR and FAST reauthorization, these suggestions may be taken into consideration. SSTI will be happy to assist the committee further as it works through reauthorization issues.

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# *State Initiatives Supporting SBIR*

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<i>State</i>	<i>Program</i>
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## *Alabama*

Procurement Technical Assistance Program of Alabama, Alabama SBDC  
<http://www.asbdc.org/program.htm>  
SBIR advising

University of Alabama Huntsville SBDC  
<http://nearsbdc.uah.edu/counseling.htm>  
SBIR advising

## *Alaska*

trend Phase 0, Alaska SBDC  
<http://trendalaska.org/node/1>  
Phase 0 financial and technical assistance, SBIR advising

## *Arizona*

Arizona Technology Enterprises  
<http://www.azte.com/ForFaculty/Startups/Startupservices/tabid/87/Default.aspx>  
SBIR advising

AZFAST Grants, AZ Dept of Commerce  
<http://www.azcommerce.com/BusAsst/Technology/AZFAST.htm>  
Grant for preparing applications

SBIR Phase I & II Workshops, ASU Technopolis  
[http://www.asutechnopolis.org/programs\\_details.cfm?program\\_id=43](http://www.asutechnopolis.org/programs_details.cfm?program_id=43)  
Phase I & II Proposal Writing Workshops

## *Arkansas*

Arkansas Science and Tech Authority - Technology Transfer Assistance Awards (TTAA)  
[http://www.asta.arkansas.gov/ttagp\\_guidelines.html](http://www.asta.arkansas.gov/ttagp_guidelines.html)  
up to \$5,000 to offset costs of SBIR Phase I applications, including travel

## *California*

SBIR Workshops, Office of Technology Licensing, USC  
<http://www.usc.edu/academe/otl/events.htm>  
SBIR workshops

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<i>State</i>	<i>Program</i>
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*Colorado*

SBIR Colorado  
<http://www.sbircolorado.org>  
SBIR advising

*Connecticut*

ctsbir.com - Connecticut Center for Advanced Technology, Inc.  
<http://www.ccat.us/sbir/>  
coaching, reviews Phase I and Phase II proposals

*Delaware*

Delware EPSCoR - Phase 0 Seed Grants  
<http://www.epscor.dbi.udel.edu/funding.php>  
up to \$10,000 to offset costs of SBIR Phase I applications

*Florida*

Enterprise Florida Phase 0 SBIR/STTR Program  
<http://www.eflorida.com/ContentSubpage.aspx?id=872>  
up to \$3,000 to offset costs of SBIR Phase I applications

*Georgia*

SBIR Assistance Program for the State of Georgia  
<http://innovate.gatech.edu/Default.aspx?tabid=1717>  
consulting/advisement for companies looking for SBIR assistance

*Hawaii*

SBIR Matching Grant and Assistance  
<http://www.htdc.org/sbir/matching.asp>  
SBIR financial and technical assistance, matching grant for Phase I

*Idaho*

Idaho Small Business Assistance Fund, Idaho Dept. of Commerce  
<http://technology.idaho.gov/Portals/33/documents/SBIR%20brochure%20Feb2007.pdf>  
up to \$4,000 to offset costs of SBIR Phase I applications, SBIR advising

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<i>State</i>	<i>Program</i>
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*Illinois*

DECO Innovation Challenge Grant & Matching Grant Programs

<http://www.commerce.state.il.us/dceo/Bureaus/Technology/Technology+Grants+Programs>

SBIR advising, up to 50% of the funds awarded through the federal SBIR Phase I award

*Indiana*

21st Century Fund Program, Indiana Economic Development Corporation

<http://www.in.gov/iedc/166.htm>

SBIR financial and technical assistance, matching grant for Phase I

*Iowa*

Iowa State University Research Foundation

[http://www.techtransfer.iastate.edu/en/sbir\\_sttr\\_assistance/](http://www.techtransfer.iastate.edu/en/sbir_sttr_assistance/)

SBIR advising

*Kansas*

Kansas Bioscience Matching Fund for Phase I & II Grants

[http://www.kansasbioauthority.org/how\\_we\\_can\\_help/Matching.aspx](http://www.kansasbioauthority.org/how_we_can_help/Matching.aspx)

up to 50%, for a maximum of \$50,000 for Phase I; up to 50%, for a maximum of \$375,000 for Phase II

*Kentucky*

SBIR Matching Funds Program, Kentucky Science and Technology Corporation

<http://www.thinkkentucky.com/dci/sbir/>

Matching grant for Phase I & II, Phase 0 grant

*Louisiana*

Louisiana SBIR/STTR Phase 0 Part I Program (through LSU)

<http://www.bus.lsu.edu/research/lbtc/CapAccess/Phase0PartI.htm>

up to \$3,000 to offset costs of SBIR Phase I applications

*Maine*

Maine Technology Institute - SBIR/STTR Phase 0 Proposal Assistance Program

[http://www.mainetechnology.org/content/306/SBIRSTTR\\_Phase\\_0/](http://www.mainetechnology.org/content/306/SBIRSTTR_Phase_0/)

up to \$5,000 to offset costs of SBIR Phase I applications, SBIR advising

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<i>State</i>	<i>Program</i>
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### *Maryland*

Maryland Minority R&D Initiative & Rural Business Incubation Initiative, TEDCO  
<http://www.marylandtedco.org/tedcoprograms/>  
SBIR advising

### *Michigan*

SBIR Emerging Business Fund  
<http://michigan.org/medc/ttc/sbir.asp>  
SBIR financial and technical assistance, matching grants for Phase I

### *Minnesota*

Minnesota SBIR/STTR Assistance Program (through DEED)  
<http://www.deed.state.mn.us/sbir/MNAssistancePgm.htm>  
consulting/advisement in preparing and evaluating applications

### *Mississippi*

Mississippi Phase 0 Program & MS-Fast, Mississippi Technology Alliance  
<http://www.technologyalliance.ms/MSFast/services.php>  
up to \$3,000 to offset costs of SBIR Phase I applications, notification of SBIR program news

### *Missouri*

CET SBIR Training Program  
<http://www.emergingtech.org/services.html>  
hosts two-day grant workshops, consulting/advisement in preparing applications

Missouri Federal and State Technology Partnership (MoFAST)  
<http://www.missouribusiness.net/fast/about.asp>  
consulting/advisement in preparing and evaluating applications

Missouri Univ. of S&T SBIR/STTR Program  
[http://ecodevo.mst.edu/info/ceo\\_es\\_sbir.html](http://ecodevo.mst.edu/info/ceo_es_sbir.html)  
consulting/advisement/connect to univ. researchers in preparing applications

### *Montana*

Montana SBIR, MT Dept of Commerce  
<http://sbir.state.mt.us/>  
SBIR advising, Phase 0 grants

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<i>State</i>	<i>Program</i>
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*Nebraska*

SBIR/STTR Counseling through Nebraska Small Business Centers (NSBC)  
<http://www.nbdc.unomaha.edu/SBIR/consulting/advisement> in preparing and evaluating applications

*New Hampshire*

New Hampshire SBDC  
<http://www.nhsbdc.org/service/OEI.html>  
SBIR workshops

*New Jersey*

SBIR Bridge Grant Program, Commission on Science & Technology  
<http://www.state.nj.us/scitech/entassist/sbir/>  
Bridge grant, SBIR advising

*New Mexico*

SBIR Outreach Center at Technology Ventures Corporation (TVC)  
<http://techventures.org/news/index.php?releaseID=047>  
grant writing assistance and instruction

*New York*

NYSTAR New York SBIR Outreach Program  
<http://www.nystar.state.ny.us/sbir/outreach.htm>  
consulting/advisement in preparing and evaluating applications

*North Carolina*

One North Carolina SBIR Matching Funds & Phase I Incentive Program  
<http://www.ncscienceandtechnology.com/>  
Matching funds for Phase I & II, SBIR advising, Phase 0 grants

*North Dakota*

North Dakota SBIR/STTR (NDSS)  
<http://www.techconnectnd.com/>  
consulting/advisement in preparing and evaluating applications

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**State****Program**

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*Ohio*

Ohio SBIR/STTR Office through Ohio Dept. of Development  
<http://www.odod.state.oh.us/tech/SmallBusinessInnovationResearch.htm>  
consult/advise/connect university researchers in preparing applications

*Oklahoma*

OCAST SBIR Program  
<http://www.ocast.state.ok.us/Programs/SBIRSTTR/tabid/58/Default.aspx>  
SBIR financial and technical assistance, Phase 0 grants, Bridge grants

*Oregon*

Oregon SBIR State Summit  
<http://www.oregonsbir.org/>  
held in Portland, March 2008

Oregon SBIR/STTR Matching Grant Program through OECDD  
<http://www.bizcenter.org/Services/7530/6198/7572>  
up to \$3,000 for writing consultant; up to \$500 for travel; of to \$500 for proposal review

*Pennsylvania*

Innovation Partnership's MicroVoucher, MicroGrant, Travel & Training program  
<http://www.innovationpartnership.net/microvoucher.html>  
up to 50% for proposal assistance and travel

*South Carolina*

SC EPSCoR/IDEA Phase 0 Program  
<http://www.scepscor.org/solic/home.html>  
up to \$6,000 to offset costs of SBIR Phase I applications

SC Launch Phase I Matching Grant Program  
[http://www.sclaunch.org/apply\\_sbir\\_sttr.shtml](http://www.sclaunch.org/apply_sbir_sttr.shtml)  
100% of the Federal SBIR/STTR Program Phase I award, not to exceed \$100,000.

*South Dakota*

SBIR Workshops, Dakota State University  
<http://www.sbir.dsu.edu/>  
SBIR workshops

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<i>State</i>	<i>Program</i>
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*Tennessee*

Phase I Proposal Writing Workshops through Univ. of Tenn.  
[http://www.cis.tennessee.edu/government/research\\_grants/sbir\\_news.shtml](http://www.cis.tennessee.edu/government/research_grants/sbir_news.shtml)  
training for preparing SBIR applications

Tennessee Technology Development Corporation Phase 0 Program  
<http://www.tntechology.org/sbirsttr.html>  
up to 50% of costs, for a maximum of \$4,000

*Texas*

SBIR Conference, Texas Office of the Governor, Economic Development and Tourism  
[http://www.texasone.us/site/PageServer?pagename=nat\\_conference](http://www.texasone.us/site/PageServer?pagename=nat_conference)  
SBIR conferences

*Utah*

Technology Commercialization Office, USU  
<http://research.usu.edu/>  
SBIR workshops

*Vermont*

Vermont SBDC  
<http://www.vtsbdc.org/technology.cfm>  
SBIR advising

*Virginia*

CIT SBIR Workshops and Phase I and Phase II Assistance  
[http://www.cit.org/programs/entrepreneur/federal\\_funding-04.html](http://www.cit.org/programs/entrepreneur/federal_funding-04.html)  
suite of programs, including funding assistance and patent review, SBIR workshops

*Washington*

Washington Technology Center's Business Consulting Services  
<http://www.watechcenter.org/index.php?p=SBIR+Program&s=376>  
offers 4 free hours to help with SBIR/STTR consulting

*West Virginia*

WWSBDC Research and Commercialization Assistance Grant Program  
<http://www.sbdcwv.org/research.php>  
Grant for preparing applications

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***State******Program***

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***Wisconsin***

Wisconsin SBIR-Fast One on One Assistance

<http://www.wisconsinsbir.org/onetoone.cfm>

consulting/advisement in preparing and evaluating applications

***Wyoming***

Wyoming SBIR/STTR Initiative (WSSI)

<http://uwadmnweb.uwyo.edu/sbir/news.html>

offers state SBIR conferences, up to \$5,000 to offset costs of SBIR Phase I applications