

Division/Attached Agency: HIGH TECHNOLOGY DEVELOPMENT CORPORATION (HTDC)

Program Name:

HAWAII SBIR/STTR MATCHING GRANT & ASSISTANCE PROGRAM

Program ID: BED 143

I. PROGRAM PLANNING

Problem, issue or opportunity statement: Describe the problem(s), issue(s) and/or opportunity(ies) your program is attempting to respond to. Identify the participants (individuals, companies, industry sectors, etc.) engaged in this problem, issue and/or opportunity.

The State has launched an Innovation-based economic development policy initiative with the objective of diversifying economy, in part through supporting the growth and development of innovative firms. Tech-based innovation companies create high paying jobs in areas where Hawaii has natural advantages to be globally competitive. Studies show that industries with high levels of R&D activity show productivity and profit gains. In Hawaii, tech-based companies are challenged with having less traditional resources to leverage than their mainland counterparts. Additionally, small tech businesses need seed capital to pursue early-stage R&D, but traditional financers do not fund early-stage ideas. This need is especially true in Hawaii, which is acknowledged to be relatively lacking in investment capital. Hawaii's R&D companies can expand more quickly if they are encouraged to grow with government funded assistance. The federal SBIR program provides seed financing to innnovative companies to turn early stage ideas into commercial successes. Each year, the federal government sets aside \$2.5 billion in SBIR funding for small businesses to develop their innovations.

The Hawaii SBIR program, as administered by HTDC, provides local tech firms with matching seed funds to encourage their participation in the federal SBIR program. Local SBIR firms have contributed significantly to the growth of tech research and development firms that are developing high-value products. In concert with HTDC's technical assistance programs available to local companies to improve their chances of winning SBIR awards, the companies also gain from HTDC's administration of the MEP program which leverages the award monies effectively for these companies.

A challenge for the Hawaii SBIR Matching Grant Program is that it has operated with the same annual budget of \$260,000 since the program's inception in 1989, despite the fact that the number of SBIR awards have risen significantly since then, and despite the fact that HTDC now also provides matching awards to companies winning STTR (Small Business Technology Transfer) awards. Other states with similar SBIR support programs provide up to \$100,000 match per award (vs. our limit of up to \$25,000). The 2006 legislature increased the SBIR budget by \$200,000 to enable us to make sufficient awards. The SBIR budget request was denied in 2007, which will make this successful program difficult to efficiently operate this coming year.

Updated HSBIR Success Statistics as of June 2007:

- 67 Hawaii companies awarded to date

- 285 Phase I and II SBIR awards totaling over \$66 million

- The state has awarded \$4.4 million in matching grants since 1989

- Hawaii SBIR companies have attracted over \$58 million in Phase III commercialization funding

- For every State dollar invested in SBIR, Hawaii companies have attracted over \$15 in federal SBIR Ph I and II awards, or \$28 in total SBIR monies



Need and partners: Specify the need for government intervention. Provide supporting evidence. Identify any partners you will be working with to address the problem, issue and/or opportunity.

Small tech firms need seed R&D funding to develop commercializable innovations. Such funding is typically not available at this very early stage. Federal SBIR funds address the need, and local HSBIR matching grants and proposal writing assistance help Hawaii businesses be competitive in getting share of federal funding.

Partners include federal SBIR program managers, local research organizations including UH, HSDC, HTDV and other local economic development organizations for statewide outreach.

Desired results (outputs, outcomes and impacts): Identify desired results, what success will look like, by describing what you expect to achieve near (0-2 years) and long-term (2-6 years).

Last years goals and results: Increase Phase I awards by 30% in the next fiscal year by companies new to SBIR/STTR (five new companies awarded due to training received); maintain Hawaii's 30% conversion rate of Phase I to Ph I awards.

calendar year 2006:

Phase I awards: 27 (compared to 13 in 2005, an increase of 100%)

New first-time SBIR companies: 8 (compared to 4 in 2005, an increase of 100%)

Phase II awards: 5 (compared to 6 in 2005, a decrease of 17%)

Desired Long-term Results: Increase commercial success ratio to 1 commercial success per 15 Phase II awards (currently 1 in 25 projects are known to have achieved successful commercialization sales/investments). To help accelerate commercialization, HTDC-MEP staff have begun working with SBIR awardees on improving the process of innovation (activities that occur before manufacturing), for example: recommending pricing strategies, market potential and manufacturing processing methods. We are also working towards strengthening synergies among participating SBIR companies to collaborate and participate in peer mentoring, and developing greater support among business development organizations.

Influential Factors: List the factors you believe will influence your ability to impact the problem or opportunity. (Things that support success and barriers to success.)

Key support is needed from the federal SBIR program managers in providing local training to our companies, business development organizations on all islands to help promote the program. Barriers to success includes federal SBIR programs' timely receipt of funds to disburse to SBIR awardees; also a barrier is insufficient Hawaii state matching funding to support Hawaii companies' SBIR projects. A shortage of state matching funds lessens the positive impacts of the Hawaii companies' success in SBIR. At the current level of funding (\$260,000 per year), there is not sufficient funding to provide \$25,000 to each awardee (the current maximum amount). The program results would be enhanced by both providing HTDC with sufficient funds to fund all qualified applicants \$25,000 and also by providing HTDC with greater funding so it could raise the matching grant award ceiling to a more significant amount with which the companies could make more substantial impacts.

Strategies: List the general successful strategies or "best practices" that have helped other programs achieve the kind of results your program promises.

Organize program conferences statewide to educate and train; coordinate and procure various levels of one-on-one technical assistance support ranging from general support to writing a competitive technical proposal that may involve market research, sourcing strategic partners. Formalize outreach program by regularly convening an SBIR support group comprised of experienced SBIR firms, SBIR consultants and companies new to the program. Support local commercialization training. Provide SBIR and STTR matching grants at a higher funding level that enables SBIR companies to conduct more substantial work with the additional funds.



Assumptions: State the assumptions behind *how* and *why* the change strategies you have identified will work.

HTDC has gradually built a successful assistance program based upon similar models that are nationally recognized successes. For its SBIR assistance and outreach work in supporting SBIR companies in Hawaii, HTDC received a Tibbetts award in 2002 from the US SBA to acknowledge a model success in the program, and which showed SBA's confidence that these are good activities for the small businesses. Each year, HTDC evaluates the program and makes refinements based upon client feedback.

II. PROGRAM IMPLEMENTATION

Resources: Describe the resources or influential factors available to support your program.

U.S. Congress and State Legislature; local economic development organizations for outreach; HTDV for DOD-related commercialization assistance; University of Hawaii OTTED for tech transfer, campus outreach, assisting firms locate university resources, assist university researchers with IP filing and management.

Activities: Describe each of the activities you plan to conduct within your program.

- 1) Information and training activites at the 10th Biennial Hawaii SBIR conference and workshops with federal SBIR managers and SBIR experts;
- 2) facilitate one on one counseling with SBIR federal managers;
- 3) contract proposal preparation and review assistance;
- 4) promote HSBIR program successes through e-newsletters and emails;
- 5) manage HSBIR/HSTTR matching grant application reviews, with recommendation to the HTDC board and processing the grant awards.

Outputs: For each program activity, identify what outputs you aim to produce

For activities #1-4 listed above, the following are the desired outputs:

- To increase the number of trainees attending SBIR conference/workshops;
- To increase the number of of new SBIR companies applying and participating in SBIR,
- To increase the number of of companies winning Phase I awards and the value of the Phase I awards;
- To increase the number of of Phase II conversions and their value; value of Phase III commercialization dollars attracted to the State.

Outcomes: Identify the short-term (0-2 years) and long-term (2-6 years) outcomes you expect to achieve.

Short-term: increase the of companies that are educated in the SBIR process and are able to successfully apply on their own; encourage the creation of an SBIR peer group where successful awardees can serve as resources to firms applying to SBIR for the first time.

Impact: Describe the lasting impact you anticipate.

Increased high-value R&D conducted in the State; Hawaii companies' SBIR successes puts Hawaii on the high-tech map; increased success of local high tech firms (revenue generation, high paying jobs); critical mass of SBIR companies in Hawaii that can serve as resources to each other.



III. PROGRAM EVALUATION

Focus Area: From your program logic model, list the components of the most important aspects of your program.

1) Promotion, education and training via statewide outreach activities.

2) Comprehensive training of companies new to SBIR to assist them in submitting a competitive SBIR proposal.

3) Commercialization assistance for SBIR companies to speed their products to market.

Audience: Identify the key audiences for each focus area. Who has an interest in your program?

For focus areas listed above: the audiences are small firms with early-stage commercializable innovations that need seed funding to validate and test their ideas.

Questions: For each focus area and audience, list the questions they may have about your program.

For focus areas listed above: Determining whether the federal agencies are interested in funding the firm's innovation; how can HTDC help commercialize their SBIR prototype products?

Information Use: For each audience and question you have identified, identify the ways you will use the evaluation information.

To continuously improve upon our service delivery, specifically: selection of trainers (contracted and volunteer), determining workshop content and training methodology (i.e., lecture, active participation), optimal length of workshops, general public vs targeted industry sectors, etc.

Indicators: Describe what information can be collected that would convey the status of your program.

of new SBIR awardees

of Phase II conversions and value of the Phase II awards

of Phase III commercial successes and their value

Feedback from SBIR trainees

IV. ALIGNMENT

How is your program linked to DBEDT's six strategic objectives?		
1.		Workforce Housing
2.	x	Workforce Development (e.g., creation of tech jobs by SBIR awardees)
3.	x	"Energy For Tomorrow" (e.g., support 1 Dept. of Energy SBIR award)
4.	x	"Global Links/Export of Goods and Services" (e.g., successful SBIR commercialized products are exported)



5.	x	The Creation Of An "Innovation Infrastructure" (e.g., company participation in SBIR increases innovative activities in Hawaii)
6.		Improve Hawaii's Small Business Environment

If your program is not linked to any of the six objectives, explain why it is still important.