

SB 2832

Amends section 206M-15, Hawaii Revised Statutes, to add Phase II or III Small Business Innovation Research grants to qualifying criteria. Increases the ceiling on transfers from the Hawaii Capital Loan Revolving Fund from \$100,000 to \$500,000.



NEIL ABERCROMBIE
GOVERNOR

EXECUTIVE CHAMBERS
HONOLULU



Testimony in **support** of SB2832
Relating to High Technology

Committee on Economic Development, Government Operations, and Housing
Senator Donovan M. Dela Cruz, Chair
Senator Sam Slom, Vice Chair

Committee on Technology and the Arts
Senator Glenn Wakai, Chair
Senator Clarence K. Nishihara, Vice Chair

February 10, 2014
2:50 pm Room 016

Chair Dela Cruz, Chair Wakai, Vice-Chair Slom, Vice-Chair Nishihara, and members of the Committee on Economic Development, Government Operations, and Housing and the Committee on Technology and the Arts:

The Office of the Governor submits **written** testimony in **support** of Senate Bill 2832, relating to High Technology. This measure amends Section 206M-15, HRS to add Phase II or Phase III Small Business Innovation Research (SBIR) grants to qualifying criteria. It also increases the ceiling on transfers from the Hawaii Capital Loan Revolving Fund from \$100,000 to \$500,000.

Broadening the existing SBIR program to include Phase II or Phase III stages will support a high technology transfer bridge to manufacturing which will support our local tech industry and diversify Hawaii's economy. Ultimately, we feel that this will result in the growth of the high technology industry and the launch of new economic sources and intellectual property and innovation in Hawaii.

We defer to the High Technology Development Corporation for any additional technical expertise they may be able to provide.

Thank you for the opportunity to submit testimony.

Statement of
ROBBIE MELTON
Executive Director & CEO
High Technology Development Corporation
before the
SENATE COMMITTEES ON
ECONOMIC DEVELOPMENT, GOVERNMENT OPERATIONS AND HOUSING
AND
TECHNOLOGY AND THE ARTS

Monday, February 10, 2014
2:50 p.m.
State Capitol, Conference Room 16
In consideration of

SB 2832 RELATING TO HIGH TECHNOLOGY.

Chairs Dela Cruz and Wakai, Vice Chairs Slom and Nishihara, and Members of the Committees on Economic Development, Government Operations and Housing and Technology and the Arts.

The High Technology Development Corporation (HTDC) **supports** SB 2832 relating to High Technology. HTDC has been assisting Phase I SBIR awarded companies since 1989 and continues to do so each year. For every dollar invested through this program, Hawaii companies have attracted 16 federal dollars in return to the state, plus commercialization funding. The federal SBIR grant program has increased their efforts to move companies through grant awards to commercial product sales. However, the federal SBIR program has not dedicated additional funds towards these efforts. SB 2832 allows HTDC the opportunity to further assist these companies in the SBIR path to commercialization. Along with the matching grant funding, HTDC comments that companies require the support of a commercialization assistance program.

Thank you for the opportunity to offer these comments.



Written Statement of
DR. PATRICK K. SULLIVAN
PRESIDENT/CEO OCEANIT

Before the
COMMITTEE ON ECONOMIC DEVELOPMENT, GOVERNMENT AND HOUSING
And
COMMITTEE ON TECHNOLOGY AND THE ARTS
February 10, 2014
2:50 p.m.
State Capitol, Conference Room 16
In Support of
SB 2832 RELATING TO HIGH TECHNOLOGY

To: Chair Donovan Dela Cruz, Vice Chair Sam Slom and Members of the Committee
Chair Glenn Wakai, Vice Chair Clarence Nishihara and Members of the
Committee

From: Dr. Patrick K. Sullivan, President/CEO

Re: Testimony in Support of SB2832

Honorable Chairs Vice-Chairs and Committee Members:

Thank you for the opportunity to submit testimony **in support of SB2832**

As a local diversified science and engineering company with capabilities/facilities in advanced technology, life sciences, information systems, aerospace and energy Oceanit supports SB2832 and the White Paper attached hereto.

Particularly we support the objectives of this bill which:

- Acts as a bridge across the "valley of death" and to assist in commercializing research discoveries for societal benefit;
- Supports economic growth and the diversification of our economy;
- Will allow companies to launch new ventures based on technology innovations; and
- Supports the growth of the tech industry and the creation jobs and innovation in the State of Hawaii.

We strongly urge you to support of SB2832 and we appreciate your continued support of the technology industry.

WHITE PAPER
High Technology Transfer Bridge
(HTTB)
11/6/13 ver.

Background

The technology industry in Hawaii has grown over the past 10 years and has made strides towards achieving the goal of diversifying Hawaii's economy and in establishing the feasibility and desirability of growing this industry to become the "third pillar" (with tourism and the military) of our economy.

Early stage support has been made available to "start up" companies, through state support of "accelerators". These accelerators provide mentoring and modest financial support to kick start a business.

Other companies that are developing cutting edge technologies rely on federal support through the Small Business Innovation Research ("SBIR") grant program, which encourages and funds early stage ideas and innovations. The technology risk level for these programs are often high and untested. Great ideas emerge from this early stage funding, and these ideas and technologies are vetted and competed at a national level. However, with the level of funding that is provided in a SBIR Phase I grant, there is barely enough money to demonstrate proof-of-concept for a technology. The follow-on funding that is required is essential to move the technology towards prototyping, customer interface and development.

HTTB would fill this critical "gap" in funding by supplementing the SBIR program, a program that has been tested by time. This funding gap (aka known as the "valley of death") is an acute problem in Hawaii due to our immature capital market support. Investment capital for technology in Hawaii faces critical challenges because this industry is still in the early stages of development in Hawaii, and there is a general lack of historical investment into this arena. This creates tremendous hurdles to the evolution of this industry.

Over the last several years, much attention was given to the development of software start-ups and social media as an industry. This has been an attractive industry as it requires little to no start-up capital and has low barriers to entry. Today, the leading tech arenas in the nation have found that the need to support "hard tech" is still required in order to maintain a vital, stable and critical part of the economic infrastructure. This industry is in flux, and most in Silicon Valley would agree that the days of these easy start-ups are gone. The focus is once again on developing cutting edge technology – development that requires longer timeframes, and significantly more capital investment.

Proposed Solution

The proposed solution leverages the Hawaii Technology Development Corporation's (HTDC) grant program, which has been in place since 1983. The purpose of the program has been to match SBIR Phase I grants. Phase I grants cover early stage ideas and technology

development. Proposal topics are developed by agencies to address areas of national need. Proposals are vetted nationally and are extremely competitive. Ideally, a successful Phase I project will be able to show “proof of concept”. More often than not - this usually means proof on paper – there is not enough funding in these early stage grants to actually develop or test a prototype.

This proposal would broaden the existing program by adding a matching grant component to mid- to later- stage funding at the SBIR Phase 2 or Phase 3 stages to support the development of working prototypes that stem out of these technologies. This would fill a large gap in the technology development process and would promote the maturation and commercialization of novel technologies.

The objectives of HTTPB are:

- To act as a bridge across the “valley of death” and to assist in commercializing research discoveries for societal benefit;
- To support economic growth and the diversification of our economy, launching new ventures based on technology innovations;
- To support the growth of the tech industry, the launching of new economic sources and the creation of intellectual property and innovation in the State.



Chamber of Commerce HAWAII
The Voice of Business

**Testimony to the Senate Committee on
Economic Development, Government Operations and Housing and
Committee on Technology and the Arts
Monday, February 10, 2014 at 2:50 P.M.
State Capitol - Conference Room 016**

RE: SENATE BILL NO. 2832 RELATING TO HIGH TECHNOLOGY

Chairs Dela Cruz and Wakai, and Vice Chairs Slom and Nishihara, and members of the committees:

The Chamber of Commerce of Hawaii **supports** SB 2832 Relating to High Technology.

The Chamber is the largest business organization in Hawaii, representing more than 1,000 businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of its members, which employ more than 200,000 individuals, to improve the state's economic climate and to foster positive action on issues of common concern.

The Chamber supports continuing efforts to develop the innovation sector of our economy. A diversified economy is important to Hawaii's economic long term viability. This bill will help provide much needed funding to a wider spectrum of small businesses as well as create opportunities for investments in a booming and diverse economy.

Thank you for this opportunity to express our views.

Testimony in Support of SB2832



To: Senate Committee on Economic Development, Government Operations and Housing
Senate Committee on Technology and the Arts

Dear Chair Dela Cruz, Vice Chair Slom, Chair Wakai, Vice Chair Nishihara, and Members of the Committees:

This letter is to provide our support for SB2832 regarding increasing the scope of the Hawaii Technology Development Corporation's SBIR matching program to include phase 2 and 3.

TeraSys Technologies has received, to date, almost 40% of our revenue through the Small Business Innovative Research (SBIR) program, totaling \$2.8M over the past 6 years. We have received a total of \$120K through the HTDC SBIR matching grant program. TeraSys has been successful in securing \$2.5M in phase 2 funding, representing a 20X return on investment from the HTDC SBIR matching funds received by TeraSys.

What has proven elusive to us so far, however, is to reach the "holy grail" of the SBIR program which is to secure a phase III large scale commercial order. One of the greatest hurdles in securing a phase 3 contract is the often cited "funding valley of death" which occurs between phase 2 and phase 3. This valley of death is aptly named, since many companies simply "die" attempting to reach phase III because there are very few bona fide sources of funding that can bridge the gap between phase 2 and phase 3.

Typically, the phase 2 results are the first demonstration of a working prototype which provides the customer with the confidence that the research is successful. However, entering into a phase 3 contract requires a working product which is a large step from successful research. Very few funding sources exist for performing the packaging, optimization, and feature development necessary to turn applied scientific research into a fully functional product, hence the phrase funding valley of death. Initiatives such as SB2832 are critical in filling this gap to enable the true commercialization of SBIR funded research.

SB2832 would broaden the existing program by adding a matching grant component to mid- to later- stage funding at the SBIR Phase 2 or Phase 3 stages to support the development of working prototypes that stem out of these technologies. This would fill a large gap in the technology development process and would promote the maturation and commercialization of novel technologies. In addition, the bill will support of the growth of the tech industry and the creation of jobs and innovation in the State of Hawaii.

We strongly urge you to support SB2832 and thank you for your time and attention,

Mahalo Nui Loa,

Kevin Miyashiro
President

Digitally signed by Kevin
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ou=IdenTrust, ou=TERASYS TECHNOLOGIES
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2800 Woodlawn Dr.
STE #150
Honolulu HI 96028

6 February 2014

Growth of the state's technology sector is an important component of any plan to achieve diversification in Hawaii's economy. The most cost-effective method for stimulating growth in the technology sector is through the founding and maturation of Hawaii-based small businesses. The federal government provides early-stage research and development funds for small businesses through the Small Business Innovation Research ("SBIR") program. Implementation of a state-sponsored matching incentive program, designed to augment all three phases of the federal SBIR program, will significantly accelerate the rate at which small businesses can develop and commercialize new technologies.

The highly competitive SBIR program makes non-dilutive seed funds available to small businesses in a purposefully structured, multi-phase programmatic structure aimed at developing and commercializing early stage innovations. Spectrum Photonics has benefitted significantly from this program, with more than \$5,000,000 in federal SBIR funds contracted since 2009. These SBIR funds, in turn, have helped to make our technologies competitive for follow-on federal acquisition programs and commercial transition opportunities such as the Rapid Innovation Fund (RIF) program. Enactment of SB 2832 will greatly accelerate technology development and commercialization activities in the state.

Phase I SBIR awards are generally only sufficient to conduct a paper study or to conduct a primitive proof-of-concept experiment. Phase II project awards, while more substantial, are typically only sufficient to assemble and conduct limited testing of a first generation brassboard capability. Additional follow-on funding is essential to move the technology beyond the initial prototype towards field demonstrations, customer interface, and beta-stage development. From an economic development perspective, the return on State investment may be maximized through the leveraging of federal Phase II and Phase III SBIR program awards with an incentive matching program aimed at increasing the trained labor base and shortening product development cycle times.

The Hawaii Technology Development Corporation's grant program, which has been in place since 1983, has been used to match SBIR Phase I contracts. It has been effective in helping to secure Phase II awards for grant recipients. SB 2832 will fill critical follow-on funding needs by supplementing all three phases of the federal SBIR program. By adding matching funds to Phase II and Phase III SBIR contracts, SB 2832 will significantly enhance the output of the SBIR project deliverables by facilitating critical supporting efforts aimed at maturing and commercial transition of novel technologies. The bill will directly leverage competitively-awarded federal R&D awards, accelerate growth of Hawaii's tech industry, and will help to create new jobs and increased innovation in the State of Hawaii.

We strongly urge you to support of SB 2832.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward T. Knobbe".

Edward T. Knobbe, Ph.D.
President and CEO
Spectrum Photonics, Inc.