



**Testimony to the Senate Committee on Ways and Means
Monday, April 6, 2015 at 9:05 A.M.
Conference Room 211, State Capitol**

RE: HOUSE BILL 1069 HD1 SD1 RELATING TO TECHNOLOGY

Chair Tokuda, Vice Chair Kouchi, and Members of the Committee:

The Chamber of Commerce of Hawaii ("The Chamber") **strongly supports** HB 1069 HD1 SD1, which authorizes and appropriates funds for HTDC to provide grants to businesses with a federal small business innovation research phase II or III award. Also establishes and appropriates funds for the Hawaii manufacturing capital grant program.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 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 members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

The Chamber supports both parts of the bill as it appropriates funds to provide grants for Hawaii's businesses. The High Technology Development Corporation (HTDC) has offered assistance to Phase I SBIR awarded companies since 1989; as a result, Hawaii companies have attracted 20 federal dollars in return to the state plus commercialization funding for every dollar invested through this program. Although the federal SBIR grant program has increased efforts to move companies through grant awards to commercial product sales, funds have not been dedicated towards these efforts. HB 1069 HD1 SD1 would allow HTDC to provide the necessary support of a commercialization assistance program.

Additionally, the bill appropriates funds to establish a manufacturing capital grant program. The Chamber recognizes that there is a wealth of potential in Hawaii's manufacturing industry. In order to create a vibrant, sustainable economic future and to provide opportunities for growth in this industry, it is crucial to offer support and resources to local companies. HB 1069 HD1 SD1 provides much-needed support for Hawaii's local manufacturing industry to start and grow their business and to keep it in Hawaii. The grant program is similar to a credit program, but allows the legislature more control and oversight on the amount of funds distributed and what the projected effects will be.

According to the National Association of Manufacturers, every new manufacturing job created adds another 1.6 jobs to the local service economy, and for every dollar in manufacturing sales, another \$1.34 is added to the economy. Investments in manufacturing have a stronger impact than investments in most other economic sectors. This program will allow the state to provide direct support to manufacturing companies in Hawaii to help grow the industry. On



Chamber of Commerce HAWAII

The Voice of Business

average, manufacturing companies have higher compensation over other private sector non-farm jobs at about \$6,000 more per year.

The Chamber is committed to working together with others in the business and innovation community to grow Hawaii's manufacturing sector and the economy.

Thank you for the opportunity to testify.



THE SENATE
THE TWENTY-EIGHTH LEGISLATURE
REGULAR SESSION OF 2015

COMMITTEE ON WAYS AND MEANS

Senator Jill N. Tokuda, Chair
Senator Ronald D. Kouchi, Vice Chair

DATE: Monday, April 06, 2015
TIME: 9:05am
PLACE: Conference Room 211
State Capitol
415 South Beretania Street

Aloha Chair Tokuda, Vice Chair Kouchi, Committee Members:

The Hawaii Aquaculture and Aquaponic Association (HAAA) strongly supports HB 1069 HD1 SD 1 Relating to Technology.

Hawaii's aquaculture companies operating at the Natural Energy Laboratory of Hawaii (NELHA), and on Oahu, have been quite successful in obtaining Federal SBIR Phase I awards. However, they have sometimes been less successful than aquaculture companies in other states in their pursuit or completion of Phase II R&D and Phase III commercialization efforts, likely due in part to Hawaii's physical remoteness and the high costs associated with doing R&D and business in Hawaii.

This situation is exacerbated by the strict limitations placed on the use of Federal SBIR funds, which:

1. Do not cover the costs associated with the protection of intellectual property developed under the SBIR program, such as preparing non-disclosure agreements and obtaining critical patents;
2. May not cover the purchase of essential research equipment necessary to successfully carry-out the R&D effort; and
3. May only cover limited travel expenses, not repeated trans-Pacific travel expenses.

These Federal programmatic limitations often place Hawaii companies at a clear disadvantage in:

1. Being able to meet with Federal agencies, National Program Leaders, and Federal Laboratory and University researchers;

2. In developing and carrying-out critical R&D collaborations; and
3. In pursuing and maintaining critical national and international business relationships and partnerships.

Such grant-related activities are often essential to the successful completion of a technology R&D effort, and the commercialization of novel technologies in our global economy.

These Federal programmatic limitations can also place Hawaii's technology companies at a particular disadvantage during the proposal review process as they are evaluated in comparison with companies from other states that do not have Hawaii's geographic challenges and our limited access to collaborative research support and equipment.

HB 1069 HD1 SD1 provides the opportunity for HTDC to help level the playing field for Hawaii's technology companies, enabling them to compete on more even footing with mainland companies for these increasingly scarce and competitive Federal SBIR Phase II research dollars and Phase III commercialization investments, and thereby be more successful in their Phase II R&D and Phase III commercialization efforts.

HB 1069 HD1 SD1 also provides important support for Hawaii's manufacturing sector to help offset Hawaii's high level of imported manufactured goods, and the high costs of upgrading or planning and starting a manufacturing project in Hawaii.

In summary, HAAA strongly supports this important measure and urges its passage this session to help ensure the long term growth of Hawaii's technology and manufacturing sectors, including, the development of cutting-edge aquacultural and aquaponic technologies to help support increased local food production and manufacture.

Hawaii Evolutionary Development, LLC
2221 Seaview Avenue
Honolulu, HI 96822

Written Statement of Dr. Takashi Sugimura

Before the

COMMITTEE ON WAYS AND MEANS

April 6, 2015

9:05 am

State Capitol, Conference room 308

In Support of

HB 1069 RELATING TO TECHNOLOGY

TO: Honorable Chair Jill N. Tokuda and Vice-Chair Ronald D. Kouchi

FROM: Dr. Tak Sugimura, Hawaii Evolutionary Development, LLC

RE: Testimony in Support of HB1069

Thank you for the opportunity to submit testimony in STRONG SUPPORT of HB1069. I am one of the founders of Hawaii Evolutionary Development, LLC a local high technology start up. We have competed and won Air Force contracts for SBIR Phase I and SBIR Phase II worth over \$1million. We were assisted by a State of Hawaii HSDC grant for \$25,000 that allowed us to write our SBIR Phase II proposal which we competed and won over intense competition. We are in the process of completing our SBIR Phase II contract and have been asked by the Air Force to submit a SBIR Phase III proposal which is the terminal commercialization component of the SBIR program. The funding provided to successful local candidates under HB1069 will provide the “gap funding” to allow Hawaii companies to compete for SBIR Phase III.

HAWAII FISH COMPANY INC

North Shore AquaFarm

Est. 1978

P. O. Box 740
Waiialua, HI 96791, USA
Contact: 808-429-3147
E-mail: hawaiiifish@gmail.com

City Bank TIGR Award
US SBA Tibbitts Award
US SBA Small Business Award
Special Congressional Recognition

THE SENATE
THE TWENTY-EIGHTH LEGISLATURE
REGULAR SESSION OF 2015

COMMITTEE ON WAYS AND MEANS

Senator Jill N. Tokuda, Chair
Senator Ronald D. Kouchi, Vice Chair

DATE: Monday, April 06, 2015
TIME: 9:05am
PLACE: Conference Room 211
State Capitol
415 South Beretania Street

Aloha Chair Tokuda, Vice Chair Kouchi, Committee Members:

Hawaii Fish Company Inc strongly supports HB 1069 HD1 SD 1 Relating to Technology.

Hawaii Fish Company (HFC) has been actively involved in the Federal SBIR program since 1993, during which time we have been awarded five USDA/SBIR Phase I feasibility study awards and four Phase II R&D awards. Our 80 % success rate in converting Federal Phase I awards into Phase II awards has been significantly enhanced by the Hawaii SBIR Phase I matching grant program which has enabled HFC to conduct more rigorous research and prepare more competitive Phase II proposals.

Hawaii's technology companies have been among the most successful in the nation in obtaining Federal Phase I awards. However, they have not been as successful in their pursuit or completion of Phase II R&D and Phase III commercialization efforts as have technology companies in some other states, due at least in part to Hawaii's physical remoteness and the high costs associated with doing R&D and business in Hawaii.

This situation is exacerbated by the limitations placed on the use of Federal SBIR funds, which:

1. Do not cover the costs associated with the protection of intellectual property developed under the SBIR program, such as preparing non-disclosure agreements and obtaining critical patents;
2. May not cover the purchase of essential research equipment necessary to successfully carry-out the R&D effort; and
3. May only cover limited travel expenses, not repeated trans-Pacific travel expenses.

These Federal programmatic limitations often place Hawaii companies at a clear disadvantage in:

1. Being able to meet with Federal agencies, National Program Leaders, and Federal Laboratory and University researchers;
2. In developing and carrying-out critical R&D collaborations; and
3. In pursuing and maintaining critical national and international business relationships and partnerships.

Such grant-related activities are often essential to the successful completion of a technology R&D effort and the commercialization of novel technologies in our global economy.

These Federal programmatic limitations can also place Hawaii's technology companies at a disadvantage during the proposal review process as they are evaluated in comparison with companies from other states that do not have Hawaii's geographic challenges and limited access to collaborative research support and equipment.

HB 1069 HD1 SD1 provides the opportunity for HTDC to help level the playing field for Hawaii's technology companies, enabling them to compete on more even footing for these increasingly scarce and competitive Federal SBIR Phase II research dollars, and be more successful in their Phase II R&D and Phase III commercialization efforts.

HB 1069 HD1 SD1 also provides important support for Hawaii's manufacturing sector to help offset Hawaii's high level of imported manufactured goods, and the high costs of upgrading or planning and starting a manufacturing project in Hawaii.

In summary, HFC strongly supports this important measure and urges its passage this session to help ensure the long term growth of Hawaii's technology and manufacturing sectors, including, the development of cutting-edge agricultural and aquacultural technologies to help support increased local food production and manufacture.

Written Statement of
ROBBIE MELTON
Executive Director & CEO
High Technology Development Corporation
before the
SENATE COMMITTEE ON WAYS AND MEANS
Monday, April 6, 2015
9:05 a.m.
State Capitol, Conference Room 211
In consideration of

HB1069 HD1 SD1 RELATING TO TECHNOLOGY.

Chair Tokuda, Vice Chair Kouchi, and Members of the Committee Ways and Means.

The High Technology Development Corporation (HTDC) **strongly supports** HB 1069 HD1 SD1 expanding the Hawaii SBIR matching grant program to phase 2 and 3 and establishes the Hawaii manufacturing capital grant program.

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 20 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. HB1069 HD1 SD1 allows HTDC the opportunity to further assist these companies in the SBIR path to getting their product to market. Matching funds for companies who receive SBIR Phase 2 and phase 3 funding would help companies get their products out in to the market faster, create jobs and also increase the sustainability of the business. HTDC suggests that \$2,000,000 would be an appropriate amount for the program.

HTDC supports local manufacturers through our INNOVATE Hawaii program which annually receives \$500,000 of federal funds from the Department of Commerce National Institutes for Standards and Technology. The Hawaii manufacturing industry receives limited support from the state. There are approximately 1,000 manufacturers in Hawaii. The grant would allow them to purchase necessary equipment, reduce energy costs or train employees to expand their business and be competitive. The industry provides export and import substitution opportunities to improve our economy and has been identified nationally as a key driver for innovation.

HTDC supports incentives for manufacturers to improve their capacity to reduce imports and increase exports.

Thank you for the opportunity to offer these comments.



KYD, Inc. dba k. yamada distributors

An independent leader in packaging and wholesale distribution

P.O. BOX 29669, Honolulu, Hawaii 96820 Phone: (808) 836-3221 Fax: (808) 833-8995

HB1069sd1, Relating to Technology
Sen WAM Committee Decision Making Hearing
Monday, April 6, 2015
9:05 am - Room 211
Written Testimony by: Dexter Yamada
Position: Support

Chair Tokuda and Members of the Sen WAM Committee:

I am Dexter Yamada, President of KYD, Inc. dba: K. Yamada Distributors. KYD, Inc. is a local family run business that originated in the 1940's as a florist and florist supply distributor, and in 1958, evolved into a packaging company. Today, KYD, Inc and its sister company, Hawaii Foam Products, LLC, employ about 90 to 100 employees and contribute to Hawaii's economy through taxes and payroll. Our companies manufacture packaging materials such as food-grade EPS (Expanded Polystyrene) food containers, and distribute a variety of supplies, to include compostable containers, for food processors, food establishments, supermarkets, hotels hospitals and other institutions.

We appreciate the continued discussion about manufacturing companies in Hawaii which many do not realize exists. Support is expressed for HB1069sd1 which proposes a grant program as well as support for SB1001sd2,hd1 which proposes a temporary tax credit to support Hawaii's manufacturing industry. Either program will help local manufacturers offset some of the costs of manufacturing products that replace imports, create jobs and add to Hawaii's self-sufficiency.

We ask that consideration be given, perhaps in the administrative rules, to include equipment modification as a qualified expense as it will help established manufacturers with needed upgrades for local manufacturing. It will help local manufacturers offset some of the costs of manufacturing products that replace imports, create jobs and add to Hawaii's self-sufficiency.

Thank you for the opportunity to testify.





Written Statement of Duke Hartman, Vice President of Business Development,
Makai Ocean Engineering, Inc.

before the

COMMITTEE ON WAYS AND MEANS

April 6, 2015

9:05 a.m

State Capitol, Conference Room 211

In Support of

HB1069 RELATING TO TECHNOLOGY

TO: Senator Jill Tokuda, Senator Ronald Kouchi, and Members of the Committee.

FROM: Duke Hartman, Vice President, Makai Ocean Engineering, Inc.

RE: Testimony in Support of HB1069

Thank you for the opportunity to submit testimony in **STRONG SUPPORT** of **HB1069**.

Makai Ocean Engineering, Inc. is a locally-owned and operated technology company based in Hawaii for over 40 years and an active participant in the Small Business Innovation Research (SBIR) grant program. The SBIR program consists of three phases that encourages early stage investment and innovation in technology. Phase 1 provides a very small amount of money that is barely enough for “proof of concept” research. However, it is the Phase 2 and 3 funding stages that provide a “bridge” for companies to survive the “valley of death” between the idea and research stages of development, through prototyping to commercialization.

In 2012, the State of Hawaii matched an SBIR Phase I grant to Makai from the US Navy with \$20k in State funds. This Phase 1 and State matching grant led to a partnership between Makai and the University of Hawaii (UH) for our current work on an innovative new concept for an underwater vehicle for the Navy’s anti-submarine warfare surveillance efforts. The State’s matching grant enabled Makai to win Phases 2 and 2.5 and bring over \$4 million in Navy research and development (R&D) money to the State to date. This money is currently supporting several highly-paid, highly-skilled engineers, including a professor and two students from UH. While this highly leveraged investment already has a multiplier of about 200X for the State, Makai is struggling to find funding to commercialize the technology, even though it has the promise to escalate into many more years and into the tens of millions of dollars for high tech R&D in the State.

While the Phase 1 matching grants are critical to support early stage ideas, the Phase 2 and 3 SBIR grants assist companies with a difficult, but more commercially-promising stage of development than Phase 1. Carefully selected Phase 2 and 3 matching grants represent more of a “sure bet” in terms of the technology becoming a successful and highly leveraged investment in economic development for the State.



An example is Makai's subsea cable laying software, which began as a Phase 1 SBIR (matched by State for \$20k in the year 2000) and then went on to become the world's #1 commercial cable laying software, with over \$20 million in commercial revenues and high tech jobs for Hawaii over the last 14 years. This is a direct multiplier of 1,000X for the State's investment, not counting the indirect benefits of retaining some of the world's best engineers in Hawaii and the additional technologies they have generated during this time. Imagine a return like that on an investment more substantial than \$20k.

This is why we **STRONGLY SUPPORT HB1069**, which would provide the state matching funds for Phases 2 and 3 of the federal SBIR program to enable companies like ours to commercialize new technologies more effectively. Not only would this expansion of funding enable our tech industry to compete and win more Federal monies for technology development, it would provide highly-skilled professional jobs for our keiki here at home.

Again, thank you for the opportunity to testify.

Sincerely,

A handwritten signature in black ink, appearing to read 'Duke Hartman', with a long horizontal line extending to the right.

Duke Hartman



Meadow Gold Dairies



HB1069hd1,sd1, Relating to Technology
Decision-Making Senate WAM Committee
Monday, April 6, 2015
9:05 am, Room 211
Written Testimony By: Glenn Muranaka

Position: Support

Chair Tokuda and Members of the Senate WAM Committee:

My name is Glenn Muranaka, President and General Manager of Meadow Gold Dairies. Our company has been in Hawaii since 1897—118 years, providing Hawaii consumers with a variety of milk products and juices. Meadow Gold's long history has not come without effort. We continually adapt to our customers' and consumers' ever-changing needs, and we constantly evolve along with our industry, our community and our market. Over the years, this has required that we struggle, tighten our belts, innovate and work extremely hard, making us a better company in the process. The foundation of this work rests with the 330 employees that are committed to providing superior quality products.

There are approximately 1000 active manufacturers in the state that employ almost 17,000 people at an average compensation rate of \$42,896 or over \$6,000 more than the average private non-farm employee. Manufacturers helped Hawaii's economy by contributing nearly \$570 million in manufactured goods exported in 2012.

Appreciation is expressed for the SD1 amendment and continued efforts to help local manufacturers. The proposed HTDC grant program of \$2 million for each year of the biennium is for the specific purposes of purchasing manufacturing equipment, employee training of manufacturing equipment, improving business practices involving use of existing manufacturing equipment or purchase of improved energy efficient equipment involved in the manufacturing process, or studies or plans for the planning of a new manufacturing facility.

We note that each grant received by a company is capped at 20% of costs, up to \$100,000 in any given year. From a manufacturing business perspective, the concept of a temporary tax credit is seen as a better alternative. However, there appears to be concern about how tax credits would be qualified and validated.

Ultimately, a grant program or temporary tax credit will assist some companies in Hawaii to start or grow their operations.

Your support of either concept will help local manufacturing businesses. Thank you for the opportunity to present testimony.



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

Before the
SENATE COMMITTEE ON WAYS AND MEANS

April 6, 2015

9:05 a.m.

State Capitol, Conference Room 211

In Support of

HB1069 RELATING TO HIGH TECHNOLOGY

To: Chair Jill N. Tokuda, Vice Chair Ronald D. Kouchi and Members of the Committee

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

Re: Testimony in Support of HB1069

Honorable Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony **in support of HB1069**

The technology industry in Hawaii has grown over the past 10 years and has made significant strides towards achieving the goal of diversifying and stimulating Hawaii's 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.

HB1069 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.

HB1069 will leverage 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.

HB1069 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 this bill 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;
- To launch new ventures based on technology innovations; and
- To support the growth of the tech industry and the creation of intellectual property and innovation in the State.

We strongly urge you to support of HB1069 and we appreciate your continued support of the technology industry.