

Written Statement of
YUKA NAGASHIMA
Executive Director & CEO
High Technology Development Corporation
before the
SENATE COMMITTEE ON ECONOMIC DEVELOPMENT AND TECHNOLOGY
Wednesday, January 27, 2010
1:15 PM
State Capitol, Conference Room 016

In consideration of
SB 2293 RELATING TO HIGH TECHNOLOGY.

Chair Fukunaga, Vice Chair Baker, and Members of the Senate Committee on Economic Development and Technology.

The High Technology Development Corporation (HTDC) supports Section Two of SB 2293 to extend the tax credit for research activities for an additional year.

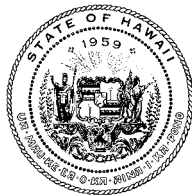
HTDC supports the intent of Section Three of SB 2293 to establish a high technology research and development task force. It is not clear if Sunshine Law applies to a task force such as the one proposed within this bill. To accommodate qualified members of the committee, it would be prudent to allow for teleconference, virtual meetings (Internet forums, etc.) and other means of interaction as long as they are noticed in advanced to the public and remain open. Such a provision would allow for the committee to invite a national expert, as well as accommodating other members' busy schedules. It would also be less of a financial burden to the Department of Business, Economic Development and Tourism (DBEDT) as it is held responsible for reimbursing reasonable expenses incurred for this project, as it would need to pay for travel expenses should a committee member from a neighbor island is chosen.

HTDC also recommends that such a task force be given a larger context that frame the overall economic development goal, rather consider programs only on revenue impacts to the State and explore economic development goals already identified in past innovation economy related reports.

Thank you for the opportunity to submit testimony in support of Section Two and to provide comments for Section Three.

LINDA LINGLE
GOVERNOR

JAMES R. AIONA, JR.
LT. GOVERNOR



KURT KAWAFUCHI
DIRECTOR OF TAXATION

SANDRA L. YAHIRO
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF TAXATION
P.O. BOX 259
HONOLULU, HAWAII 96809

PHONE NO: (808) 587-1510
FAX NO: (808) 587-1560

**SENATE COMMITTEE ON ECONOMIC DEVELOPMENT & TECHNOLOGY
TESTIMONY REGARDING SB 2293
RELATING TO TAXATION**

*****WRITTEN TESTIMONY ONLY*****

TESTIFIER: KURT KAWAFUCHI, DIRECTOR OF TAXATION (OR DESIGNEE)

DATE: JANUARY 27, 2010

TIME: 1:15PM

ROOM: 016

This measure creates a High Technology Research & Development Tax Force and extends the tax credit for research activities until 2011.

The Department of Taxation (Department) **opposes extending the tax credit due to unbudgeted revenue loss.**

I. STRONG SUPPORT FOR HIGH TECH BUSINESSES

The Department and the Administration support the use of tax incentives to assist with the development of Hawaii's high tech industry. Act 221 has been effective in encouraging local and out-of-state investment in Hawaii's high tech businesses, as well as investing in research activities, which makes Hawaii a high-tech community.

The importance of promoting innovation and research-based activities was recognized with the enactment of several ground-breaking tax credits and programs intended to promote growth in technology and other innovation-related sectors. Beginning with Act 178, Session Laws of Hawaii 1999, the State vigorously encouraged the development of high technology businesses in order to further diversify its economy, attract former residents to return home, and develop business sectors with better paying jobs.

Act 178 was followed by Act 221, Session Laws of Hawaii 2001, which provided for what is believed to be the only one hundred percent tax credit available for investments into businesses conducting high technology research-related activities. Act 221 provided financial backing for these companies by attracting capital from both local and out-of-state sources through government incentives. Recognizing the amount the State has invested in these companies through tax incentives

to date, coupled with the viability these companies demonstrate as promising profitable ventures, it is important that the State maintain its commitment to making Hawaii a high technology hub of the future for the sake of its overall economy, which is overly tourism- and real estate-based. Along with the 100% investment tax credit, Hawaii also provides a very generous tax credit for research activities, which is much more competitive than its counterpart federally and in other states. For example, Hawaii's research credit is 20% of costs without any requirement to "increase" research activities. Also, Hawaii's credit is refundable, which means the excess is paid to the taxpayer. As a general matter, Hawaii's research credit has been successful. Though in the eyes of the Department there was initial abuse by taxpayers, the Department and taxpayers have developed an efficiently administered tax credit program that helps Hawaii R & D companies.

II. ANTICIPATED REVENUE LOSS

This measure will result in a revenue loss of approximately \$20 million in FY 2012 for the additional extension. This cost has not been factored into the Executive Budget and is not a priority this session when the Executive and Legislative branches are both struggling to balance the budget. Quite simply, extending this credit this year is not a priority when education cuts and loss of other services are competing for the same revenues.

THE CHAMBER OF COMMERCE OF HAWAII

1132 Bishop Street, Suite 402

Honolulu, HI 96813

Testimony to the Senate Committee on Economic Development and Technology

Thursday, January 27, 2010

1:15 PM

Conference Room 016

RE: SENATE BILL NO. 2293, RELATING TO HIGH TECHNOLOGY

Chair Fukunaga, Vice Chair Baker, and members of the committee.

My name is Charles Ota and I am the Vice President for Military Affairs at The Chamber of Commerce of Hawaii (The Chamber). I am here to state The Chamber's strong support of Senate Bill 2293, Relating To Technology.

The Chamber's Military Affairs Council (MAC) serves as the liaison for the state in matters relating to the US military and its civilian workforce and families, and has provided oversight for the state's multi-billion dollar defense industry since 1985.

The measure proposes to extend the tax credit for Research Activities from 2010 to 2011; creates a High Technology Research and Development Task Force to draft legislation to improve the tax credit or establish alternatives to the tax credit.

This measure will allow sufficient time to complete a more in-depth study of the research and development (R&D) sector and develop recommendations that would ensure long term growth and expansion of technology companies.

The large presence of all of the Nation's military services in Hawaii has attracted the top defense prime contractors to establish operations in the state. This has served as a source of funding and contracting opportunities for Hawaii's growing R&D sector, and there is considerable opportunity for even greater growth.

This bill will provide a means for the legislature to become better informed on the impediments hindering growth in this important high technology sector. There are literally millions of dollars that could be directed to Hawaii R&D businesses via military channels or through the prime defense contractors.

We do have one recommendation with regard to Section 3 (b).

The Chamber of Commerce of Hawaii is in the process of establishing a Defense Dual Technology Committee that will include representatives of prime defense contractors and local R&D businesses. The purpose of this committee would be similar to that of the Hawaii Science and Technology Council, except that it will focus only on enhancing growth opportunities for local R&D businesses.

This committee will work in parallel with the Chamber's Military Affairs Council (MAC), which meets regularly with senior military commanders and defense officials in Hawaii and Washington, DC in matters relating to the military.

We recommend that Section 3 (b) be revised to add a representative of the Chamber's Defense Dual Technology Committee as a member of the High Technology Research and Development Task Force.

For these reasons, we respectfully request that the proposed measure be approved for further review and adoption.

Thank you for the opportunity to testify.



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
Web site: www.hawaii.gov/dbedt

Telephone: (808) 586-2355
Fax: (808) 586-2377

Statement of
THEODORE E. LIU
Director
Department of Business, Economic Development, and Tourism
before the
SENATE COMMITTEE ON ECONOMIC DEVELOPMENT & TECHNOLOGY

Wednesday, January 27, 2010
1:15 PM
State Capitol, Conference Room 016

In consideration of

SB2293

Relating to High Technology

Chair Fukunaga, Vice Chair Baker, and Committee Members.

DBEDT supports the intent of this bill with caveat that the Legislature be able to accommodate the anticipated costs of this program together with the other important initiatives the Legislature is pursuing.

Thank you for the opportunity to submit testimony.

ALAN S. HAYASHI
207-4 Kawaihae Street
Honolulu, Hawaii 96825

January 26, 2010

Senator Carol Fukunaga
Hawaii State Legislature
Chair, Economic Development and Technology Committee
Rosalyn H. Baker, Vice Chair
Members of the Committee

SUBJECT: SB 2293 “Relating to high technology”

Chair Fukunaga, Vice Chair Baker, and Members of the Committee:

Thank you for the opportunity to provide comments on SB 2293. My name is Alan Hayashi and I am testifying as an individual employed by a large local defense company.

The technology and defense Industry clearly understands the economic and fiscal challenges facing the state. For this reason industry has been working collaboratively with members of the legislature and stakeholders to craft workable proposals which address the state’s budget needs while ensuring that we preserve jobs and companies in Hawaii’s science and technology sectors. The result of this collaborative effort is **SB 2293 which industry supports.**

The impact of SB 2293 in its current form will be to create a taskforce to study the impacts of the R&D credit and to formulate a more permanent proposal for the 2011 session. Some facts to consider:

- 1) R&D credits are calculated from funds already prepaid by the technology companies. The labor cost (on which the credits are based) are prepaid to employees (salaries), and to the state of Hawaii (labor / employment taxes).
- 2) These R&D credits are returned directly to these companies who pay the wages.... not to a third party.

Is it worth the return on an annual investment of approximately \$14M (DoTax figures)? To have a high technology industry that can provide clean, high paying, jobs where Hawaii’s STEM graduates can be employed, I say the answer is yes! The STEM educational program that the legislature supports and has helped fund is definitely developing high quality graduates who can compete with the best on the mainland. Do we want them to move to the mainland with this valuable expertise when our economy is in need of their talent? Unless we create an environment where high technology can survive and thrive, we will educate our bright young folks for employment elsewhere. We must develop our technology sector for the benefit of future generations. In this time of economic gloom, I ask you to be bold and to plant the seeds for the growth of an industry that can become a leader for Hawaii and the Pacific area. This is not the

first years, but it does take time and the critical mass is now in place. Technology is the sector that can lead us into the future with capability to diversify and to expand our economy.

In my opinion, it is critical to keep the technology sector of Hawaii's economy alive during the current economic downturn. Most R&D projects cannot be turned off and restarted with out loss of critical time, and personnel with specific skill sets. As the technology sector degrades, many will relocate to the mainland, or elsewhere to seek employment. It is true that all firms are suffering, not just research and development (R&D) firms. However, R&D has a higher risk and funding profile that companies alone have difficulty bearing with out supplemental support from government. After all they are developing products that have never been developed before! There are some failures in R&D...that is the price for exploring the unknown. Without this willingness, or capability to risk, there are no new inventions! The government must be a partner with the technology sector. The return will far outweigh the investment of \$14M.

Thank you for the opportunity to provide this information. I would be glad to answer should you have any questions.

Sincerely,

Alan S. Hayashi

Testimony of

John A. Chock

before the

COMMITTEE ON ECONOMIC DEVELOPMENT AND TECHNOLOGY

Senator Carol Fukunaga, Chair
Senator Rosalyn H. Baker, Vice Chair

SB 2293 RELATING TO HIGH TECHNOLOGY

DATE: Wednesday, January 27, 2010
TIME: 1:15 P.M.
PLACE: Conference Room 016
State Capitol
415 South Beretania Street

Chair Fukunaga, Vice Chair Baker, and Committee Members:

It has been said that if we're going to invest in educating our young people, we need to invest in good, high-paying jobs for them in the future as well.

SB 2293 Relating to High Technology will stimulate continued Research & Development, which is what drives innovation within the economy. R&D is the early stage of company growth that occurs after the "What if?" moment, when testing, proof of concepts, and prototypes are being developed out in garages and laboratories. This is the nucleus of future business growth.

Along with at least 32 other states and the federal government, Hawaii currently provides support for research by qualified research companies in the form of an R&D credit. This credit is utilized by tech companies across all sectors, from biotech, to software, to small and large defense/dual-use by companies, and by renewable energy firms, all contributing to innovation, high skilled jobs and growing our economy.

As important as R&D is, we also need to emphasize that as a state we must look at a long-term integrated capital formation policy which includes R&D, entrepreneurship, venture capital, and expansion/follow-on financing, all of which are needed to grow successful businesses

With respect to R&D legislation, we are not asking for anything new. The legislature has established an R&D credit that parallels the Internal Revenue Code, providing support for scientific experimentation at 20% of the cost of the qualified research. That program cost to the state has averaged about \$11 million per year over the last 9 years, and in the last year for which data is available, 2006, provided funding to over 400 companies.

The state R&D credit has been a great source of support for local companies, and is seen as helping to level the playing field of our high cost state, as Hawaii companies compete with national and international competition. Further, the refundable element is helping to attract new technology companies to Hawaii.

The existing credit would stay in place for another year during which time we will have elections and opportunities for fresh ideas on R&D. This is a running in place strategy, not a growth initiative, and certainly is not requesting new tax dollars in this environment. What the bill asks is to keep the spark of R&D alive. This is the ember that will lead to future innovation, commercialization, and growth as the economy rebounds. It allows a thorough review of the best ways to provide R&D support at the state level, and it helps hundreds of tech firms get through the rough patch over the next year.

To conclude, I have been involved in economic diversification, technology development, and capital formation for a long time in both the public and private sectors and I early on learned that it's tough to convince people to invest in diversification when the economy's strong, and there is no need for diversification. It's equally tough to promote diversification when the economy's down and it's not affordable, so a long-term vision clearly is needed. Right now is no different, and SB 2293 provides that vision.

Thank you for the opportunity to provide testimony on SB 2293.



**HAWAII
STRATEGIC
DEVELOPMENT
CORPORATION**

No. 1 Capitol District Building
250 South Hotel Street, Suite 508
P.O. Box 2359
Honolulu, Hawaii 96804
Telephone: (808) 587-3830

Written Statement of
Karl Fooks
President
Hawaii Strategic Development Corporation

Before the
SENATE COMMITTEE ON ECONOMIC DEVELOPMENT AND TECHNOLOGY

Wednesday, January 27, 2010
1:15 PM
State Capitol, Conference Room 016

In consideration of

SB 2293 RELATING TO HIGH TECHNOLOGY

Chair Fukunaga, Vice Chair Baker and Members of the Committee:

HSDC supports the extension of the R&D tax credit for an additional year to support the research and development efforts of Hawaii's high technology companies during the time the taskforce created by this bill develops recommendations to improve this credit or establish alternatives to this credit.

I would like to second the recommendation submitted by the High Technology Development Corporation to allow flexibility in how the meetings of the taskforce are constituted in order to increase participation and lower the financial burden of the meetings.

Thank you for the opportunity to submit testimony.

TESTIMONY OF WILLIAM G. MEYER, III

HEARING DATE/TIME: Wednesday, January 27, 2010
1:15 p.m. in Conference Room 016

TO: Senate Committee on Economic Development and Technology

RE: Testimony in Support of SB 2293

Dear Chair, Vice-Chair and Committee Members:

My name is William G. Meyer, III. I am an intellectual property attorney who has been practicing law in Honolulu for over 30 years. I represent both locally based and national and international motion picture and television production companies and high technology businesses.

I support passage of SB 2293.

Respectfully submitted,

/s/ William G. Meyer, III

William G. Meyer, III

TAXBILLSERVICE

126 Queen Street, Suite 304

TAX FOUNDATION OF HAWAII

Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: INCOME, Tax credit for research activities; task force

BILL NUMBER: SB 2293

INTRODUCED BY: Fukunaga, Baker, 3 Democrats and 1 Republican

BRIEF SUMMARY: Amends HRS section 235-110.91 to extend the expiration of the tax credit for research activities from December 31, 2010 to December 31, 2011.

Establishes a high technology research and development task force in the department of business, economic development and tourism. The task force is to develop initiatives to increase the research activities of high technology businesses in Hawaii, move these businesses into production mode, and increase the high technology business workforce. Requires the task force to submit its report to the 2011 legislative session.

EFFECTIVE DATE: Upon approval

STAFF COMMENTS: The legislature by Act 178, SLH 1999, and Act 221, SLH 2001, enacted various tax incentives to encourage the development of high technology businesses in the state. The acts provided investment and research credits, as well as income exclusions, providing tax relief to high tech businesses and individuals associated with high tech businesses. While this measure proposes to extend the expiration of the tax credit for research activities from December 31, 2010 to December 31, 2011, it perpetuates the financial drain on the state's revenues.

While the focus on high technology in the last few years is commendable, it fails to recognize that investments are made with the prospect that the venture will yield a profit. If the prospects for making a profit are absent, no amount of tax credits will attract investment from outside Hawaii's capital short environment. People do not invest to lose money. It should be remembered that until Hawaii's high cost of living can be addressed, all the tax incentives in the world will not make a difference in attracting new investment to Hawaii. The only attractive aspect for resident investors to plough money into such activities is the fact that the credit provides a way to avoid paying state taxes especially if the return of the credit is 100% of money invested as the current tax credit is designed to do.

As one former Hawaii resident who has been a success in the field of high technology pointed out recently what will make Hawaii conducive to high tech businesses and they are: (1) entrepreneurs, not capital, that comes first; (2) entrepreneurs coming from engineering schools and technology companies; (3) building a world class engineering school in Hawaii; (4) supporting internships at technology companies; (5) allowing our best children to go away to get a worldwide perspective; (6) not broadband passing through Hawaii that is a selling point; (7) that people fly direct and therefore is Hawaii's location in the middle of the Pacific an advantage?; (8) learning the rules of the game; (9) looking at Israel and learn from them; and (10) doing your own thing, being a copy cat does not work. At the heart of his remarks was the fact that in order to produce a high technology industry in Hawaii, those companies need

to have access to institutions of higher education which are producing the people needed by the high technology industry. Without the academic synergy, Hawaii will never become a center for high technology activity. Thus, all of the tax incentives like this measure embodies will fall short of luring high technology firms to Hawaii.

Further, the tremendous tax burden, the draconian regulatory environment, and the dramatic increase in fees that go with the permitting process make Hawaii an unattractive place to do business. It should be remembered that while the high technology credits may look like a good incentive or enticement to undertake research activities in Hawaii, those who would conduct this research must live in the same high cost-of-living environment with which other taxpayers continue to struggle. Thus, the cost of maintaining those researchers will be higher than to do so where the cost of living is much lower. Let's not bet the farm on high technology without really understanding what makes this industry tick.

Obviously the authors of this proposal would like to ignore the evaluation of these tax incentives done by UHERO last year which basically condemned the credits as a waste of state resources as there is little evidence that the current program of tax credits has created substantial new employment or on-going enterprises. It is truly amazing that given the dire condition of the state's financial condition, that lawmakers would continue to support unbridled drains of resources while at the same time proposing that the tax burden be increased on all other taxpayers. With declining revenues, every program from education to corrections to health services will be severely curtailed. If the state doesn't have the money to put textbooks in the schools why then do we need the highly touted, high-paying jobs the advocates for the industry promise? The next generation may not even know how to read given the cuts to the education budget.

Again, lawmakers must ask themselves whether or not this incentive is appropriate in these dire financial times. Given that there are many other proposals in the legislature to hike tax rates for either the general excise or net income taxes, taxpayers will find the continuance of these targeted business tax credits frightening. Frightening because these very lawmakers are supposed to represent the best interest of their constituents. Raising taxes on constituents while still handing out money to favored groups will engender the ire of constituents. The finger of blame for these potential increases in tax burden should not stop at lawmakers but be placed squarely on those in the community who continue to push for these targeted tax credits. Perhaps those proponents should be asked to pick up the tab for this reckless expenditure of precious tax dollars.

Digested 1/26/10



SB2293 - Relating to High Technology

LATE

DATE: January 27, 2010

TIME: 1:15 P.M.

PLACE: Room 016

TO: Senate Committee on Economic Development and Technology

Senator Carol Fukunaga, Chair

Senator Rosalyn H. Baker, Vice Chair

FROM: James P. Karins

President and CEO

Puko'a Scientific

Re: Testimony in Strong Support to SB2293

Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony in strong support to SB2293. My name is Jim Karins and I am the President of Puko'a Scientific. Puko'a Scientific is a 17 person company started in 2004 specializing in the interpretation of image and signal data to identify objects, threats or targets for military, security, medical and industrial applications. Puko'a Scientific is in the dual use sector which has proven to be one of the fastest growing technology sectors. Even during the trying year of 2009 we were able to grow to 17 employees; 13 of our 17 employees are full time and 16 of those 17 reside in Hawaii. Of the 12 full time staff in Hawaii, 8 graduated from high schools in Hawaii, 11 graduated from the University of Hawaii or Hawaii Pacific University and at least 4 worked on the mainland prior to finding work in Hawaii. We currently generate more than \$2.5M in revenue and pay over \$1.5M in compensation.

Research and development is a highly critical component to a sustainable economy. R&D provides high-paying jobs to highly educated employees. These employees pay significant taxes back to the state and spend significant amounts of their income within the state for goods and services. Additionally as the R&D matures it creates product companies that increase the number of jobs and tax base significantly.

Some important facts related to R&D tax credits are:

- (1) R&D is so important to the economy of the United States that the federal government is considering making the federal R&D tax credit permanent,
- (2) R&D is so important to the economy of states, that approximately 33 states provide R&D tax credits of various kinds and of the 17 that don't, 4 have no corporate income taxes,
- (3) R&D is becoming more competitive world-wide. Some countries are offering vastly larger tax credits to lure R&D companies, for example small companies in Quebec are eligible for a 37.5% tax credit in addition to the Canadian tax credits. Additionally, for the first time, China has increased its R&D at a rate higher than the United States,
- (4) A tax credit of 20% on wages and supplies amounts to about 10-15% of the cost of doing R&D,
- (5) The cost of the R&D tax credit is between \$13 and \$14 million per year, but R&D employees are highly paid and pay income taxes at high rates and generate significant other economic activity within the state,
- (6) The tax credits for R&D are comparable or less than those given to other critical industries to economic diversity such as Act 88 (15% credit on costs not just salaries and supplies) for the movie industry or 35% tax credits on renewable energy,
- (7) R&D funds are highly leveraged by imported monies, thus generating more economic activity than economic activities that just move money from one in-state entity to another,
- (8) R&D tax credits are only received after the company has expended the funding, generating tax revenues to the state first,
- (9) R&D tax credits typically go back into additional R&D through additional salaries,
- (10) Studies have shown that for every \$1 in tax credits or lower costs of operation, R&D increases by approximately \$2-\$3.

While these positive aspects are fairly defined, there have been some people who have expressed concerns about the competitiveness of Hawaii's R&D tax credit levels and their refundability. But several factors that are not considered in those concerns include:

- (1) Comparisons are only made to other states and not to other countries. R&D is becoming an economic driver worldwide and Hawaii companies compete worldwide,
- (2) Hawaii's tax credits have been defined to a very small but high payoff group of high technology companies defined as QHTBs while most states provide their tax credits to any company that can qualify under federal tax credit laws,
- (3) The entire cost of doing R&D is the most important factor. Hawaii has a number of competitive disadvantages such as high income tax rates, high cost of living, high unemployment insurance costs, and high transportation costs, and
- (4) R&D returns are highest after several years when R&D turns into products, resulting in significant growth in job opportunities, increased intellectual property owned by Hawaii residents, and increased travel to the state by customers and technology related conferences

It is important that there not be a gap in the R&D tax credit while the 2011 legislature addresses the longer term impact of R&D on the state. Companies need to make long term plans when doing R&D. It is critical to the industry that the tax credit be in place long enough for a task force to address the best path forward for encouraging R&D and its commiserate high paying jobs, potential job growth, and its impact on the sustainability of the states economy.

I therefore strongly encourage the committee to pass this bill.

Thank you for the opportunity to testify.

James P. Karins
President and CEO
Pukoa Scientific
karins@pukoa.com



SB2293 - Relating to High Technology

LATE

DATE: February 3, 2010

TIME: 1:30 P.M.

PLACE: Room 016

TO: Senate Committee on Economic Development and Technology

Senator Carol Fukunaga, Chair

Senator Rosalyn H. Baker, Vice Chair

FROM: James P. Karins

President and CEO

Puko'a Scientific

Re: Response to questions from January 27, 2010 1:15PM hearing

Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to respond to questions posed at the end of testimony to SB2293 on January 27, 2010 at the 1:15PM hearing.

- (1) How does the revenue generated to the state by R&D companies compare to the expenses of the R&D tax credit? The table below demonstrates a fairly simple model of the tax revenue generated by the R&D efforts and supporting structure of the companies. In 2008 \$13.4M in tax credits was claimed. Since the credit is 20% of qualified expenses, the qualified expenses are 5 times the credit (\$67M). Typically about half of an R&D companies expenses are qualified, yielding expenses of about \$134M by companies relating to qualified R&D. Wages are about 60% of those expenses and 40% goes to a variety of expenses including rent. I used a 6% income tax rate and a 4.5% GET rate to estimate the taxes directly paid by these companies. An economic multiplier of 2 was used since most of the wages and most the other expenses are recycled in the economy. Total revenue of about \$14.4M is calculated to be attributable to the R&D efforts of the companies receiving \$13.4M in R&D tax credits.

2008		Income Tax	GET
R&D Tax Credit	\$13.4 M		
Qualified Expenses	\$67 M		
Total R&D Related Expenses	\$134 M		
Wages	\$80.4 M	\$4.8 M	
Other Expenses	\$53.6 M		\$2.4 M
Economic Multiplier Effect		\$9.6 M	\$4.8 M
TOTAL REVENUE	\$14.4 M		

(2) How does the Hawaii R&D tax credit compare to other states? In some respects Hawaii's tax credit is very good. In a couple it lags other states. For example the credit rate is the best in Hawaii, however only a few states such as Hawaii restrict it to certain companies or R&D areas.

R&D Credit Topic		Notes
R&D Tax Credits	33 States	Of the 17 that do not 4 have no income taxes
Non-incremental	3 States	HI, CT, WV
Credit Refundable	8 States	
Limited Availability	2 States	HI, AR
Taxes the Credit Received	1	HI
Tax Credit	2.5-20%	Average rate is 6.5%

(3) How does the Hawaii, US tax credits compare to other countries? The table below is a summary of some of the tax credits offered by competing nations. A direct comparison is difficult since the incentives are in various forms such as tax abatements or enhanced deductions. One noteworthy example is Quebec Province in Canada where overall tax credits can reach 72.5%.

Country	R&D Tax Incentive
Australia	• Allows a 125% deduction for R&D expenses • Plus a 175% deduction for R&D expenditures exceeding a base amount of prior-year spending.
Canada	• Offers a permanent 20% flat (i.e., first-dollar) R&D tax credit for large companies Small companies receive 35% flat R&D tax credit Quebec province offers an additional 37.5% for small companies Other provinces offer other incentives
China	• Offers foreign investment enterprises a 150% deduction for R&D expenditures, provided that R&D spending has increased by 10% from the prior year.
France	• Allows a 50% R&D credit, includes a 10% flat credit and a 40% credit for R&D expenditures in excess of average R&D spending over the two previous years.
India	• Companies carrying on scientific research and development are entitled to a 100% deduction of profits for 10 years. • Automobile industry also is entitled to a 150% deduction for expenditures on in-house R&D facilities.
Ireland	• Offers a 20% R&D tax credit, plus a full deduction, as well as a low generally applicable 12.5% corporate income tax rate. • Capital expenditures may also qualify for a separate flat credit.
Japan	• Offers a flat 10% R&D tax credit (a 15% flat credit is provided for small companies), in addition to other incentives.
Korea	• Tax holidays, up to 7 years, are provided for high-technology businesses. • In addition, a variety of tax credits are provided for R&D type expenditures.
Singapore	• "R&D and Intellectual Property Management Hub Scheme" offers U.S. companies a 5-year tax holiday for foreign income earned with respect to Singapore-based R&D.
United Kingdom	• Allows a 125% deduction for R&D expenses Plus a 175% deduction for R&D expenditures exceeding a base amount of prior-year R&D spending.

In summary the Hawaii R&D tax credit has been effective in generating new taxes, generating new companies and employing approximately 1100 residents. The most effective tax credit is very complicated to determine. Multiple issues such as competing tax incentives, differing costs of doing business, and availability of capital are contributing factors. This complexity needs to be assessed by a task force to identify the best overall policy for Hawaii for long term economic development.

Thank you for the opportunity to submit this response.

/s/James P. Karins

James P. Karins
President and CEO
Pukoa Scientific
karins@pukoa.com