



**TESTIMONY OF
THE DEPARTMENT OF THE ATTORNEY GENERAL
THIRTIETH LEGISLATURE, 2019**

ON THE FOLLOWING MEASURE:

S.B. NO. 990, S.D. 2, RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION.

BEFORE THE:

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT AND BUSINESS

DATE: Wednesday, March 13, 2019 **TIME:** 10:00 a.m.

LOCATION: State Capitol, Room 309

TESTIFIER(S): Clare E. Connors, Attorney General, or
Dawn T. Apuna, Deputy Attorney General

Chair McKelvey and Members of the Committee:

The Department of the Attorney General provides the following legal concerns regarding the sufficiency of the bill's title.

This bill could be challenged on the grounds that the title is too narrow to encompass the subject matter of the bill. Article III, section 14, of the Constitution of the State of Hawaii, provides in part: Each law shall embrace but one subject, which shall be expressed in its title.

The title of this bill, "A BILL FOR AN ACT RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION," is too narrow, given that the bill encompasses and affects agencies and policies beyond the Hawaii Technology Development Corporation (HTDC). The bill requires DBEDT to conduct a study to evaluate and recommend policies and organizational changes needed within DBEDT, specifically related to not just HTDC, but also the Hawaii Strategic Development Corporation, Pacific International Space Center for Exploration Systems, Aerospace Advisory Committee, and Natural Energy Laboratory of Hawaii Authority.

We therefore recommend that the Committee either find another legislative vehicle with a broader title or narrow the study to HTDC alone.

The Department appreciates the opportunity to provide comments on this measure.



NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

An Authority of the State of Hawaii attached to the Department of Business, Economic Development & Tourism

Written Only

Statement of
Gregory P. Barbour
Executive Director
Natural Energy Laboratory of Hawaii Authority
before the

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS

Wednesday, March 13, 2019
10:00 am
State Capitol, Conference Room 309

in consideration of
S.B. 990 S.D.2
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION.

The Natural Energy Laboratory of Hawaii Authority (NELHA) supports S.B. 990 S.D. 2 which appropriates funds to the Department of Business, Economic Development, and Tourism (DBEDT) to conduct a study to evaluate policies and organizational changes that will facilitate a technology-based economic development strategy as long as it does not replace or impact the Administration's priorities.

This issue has been the topic of significant dialogue over the years during discussions to combine DBEDT's three attached agencies related to technology development: Hawaii Technology Development Corporation, Hawaii Strategic Development Corporation and the Hawaii Natural Energy Laboratory of Hawaii Authority. The results of those discussions led to the current situation in which each agency is provides a representative to the Board of

Directors of the other agencies. This has worked well and has led to increased coordination and less duplication of services.

For example, HTDC has assisted NELHA with providing services for the operation of its new incubator; HTDC's HCATT is working with NELHA on the establishment of a microgrid at NELHA; NELHA, HSDC, and UH recently signed a memorandum of understanding to establish an aquaculture accelerator at NELHA; and, NELHA and PISCES recently signed a memorandum of understanding to establish an international robotics competition for missions to the moon and Mars to be held at NELHA early next year.

It is always important to re-evaluate our missions and how we can better work together towards a common goal of technology-based economic development. This may be an appropriate juncture for this review especially in light of the recent establishment of PISCES and renewed efforts to grow our aerospace sector.

Thank you for the opportunity to offer these comments.



**HAWAII
STRATEGIC
DEVELOPMENT
CORPORATION**

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Statement of
Karl Fooks
President

Hawaii Strategic Development Corporation
before the

COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS

Wednesday, March 13, 2019

10:00 AM

State Capitol, Conference Room 309

In consideration of

SB990 SD2

RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION

Chair McKelvey, Vice Chair Kitagawa and members of the EDB Committee. The Hawaii Strategic Development Corporation (HSDC) supports SB 990 SD2 a bill that requires the Department of Business, Economic Development, and Tourism (DBEDT) to engage a consulting firm to conduct a study to evaluate policies and organizational changes needed within DBEDT that will enable the State to successfully execute a technology-based economic development strategy and appropriates funds for DBEDT to engage the consulting firm to conduct the study.

It is imperative that the State commit to a long-term, comprehensive, technology-based economic development (TBED) strategy to support sustainable economic growth. TBED is the only development effort that can create high wage opportunities for our citizens. Most of the jobs in our economy are relatively lower paying service sector jobs. With the emphasis on STEM education in our educational system, if we do not undertake a sustained effort to create jobs that use these skills, the trend of rising domestic outmigration will continue. A recommended TBED strategy is presented below.

Thank you for the opportunity to testify.

What is Technology-based Economic Development? *

Over the last several years, the U.S. economy has been undergoing a dramatic transformation as the nation moves to an economy driven by technology and innovation—through the creation of new industries and the application of technology in traditional industries. Competing in a global economy, regions must have an economic base composed of firms that constantly innovate and maximize the use of technology in the workplace. Technology-based economic development, or TBED, is the approach used to help create a climate where this economic base can thrive.

What is Required for a Technology-based Economy?

Based on the experience of tech-based economies like Silicon Valley, Research Triangle, and Route 128, the following elements are required for a tech-based economy:

- A research base that generates new knowledge;
- Mechanisms for transferring knowledge to the marketplace;
- An entrepreneurial culture;
- Sources of risk capital; and,
- A technically skilled workforce.

What Approaches Can Be Employed to Develop These Elements?

Research Capacity. Initiatives that strengthen the capacity to conduct research in universities, federal labs, or the private sector include: centers of excellence, university-industry partnerships, and initiatives to expand research facilities, recruit eminent scholars, or increase research funding through R&D tax credits.

Commercializing Research. Initiatives that promote the conversion of research into technologies and products with high commercial potential include proof-of-concept funds and centers, entrepreneurs-in-residence to assess commercial potential and develop commercialization strategies, and pilot-scale production and scalability testing.

Promoting Entrepreneurship. Enriching the skills and ability of entrepreneurs, increasing capacity of entrepreneurs to successfully grow and start companies, and improving the environment for entrepreneurial development can be delivered through many forms, including: venture development organizations, mentorship programs, and accelerators and incubators.

Increasing Access to Capital. The availability of capital to support startup and emerging companies is critical. Regions can address needs for capital through angel investor tax credits, investing in technology companies, using public funds to leverage private investment funds, and help companies access capital sources.

Technically Skilled Workforce. Approaches that regions can take to ensure the availability of a technically skilled workforce include encouraging more students to enter STEM fields, STEM internship programs and providing technical training for workers in existing companies.

* From the State Science & Technology Institute

State of Hawaii Efforts to Promote TBED

Area of TBED Focus	Responsible State Entity
Research Capacity	University of Hawaii
Commercializing Research	<ul style="list-style-type: none"> • University of Hawaii for university research (grants) • Hawaii Technology Development Corporation for private research (grants) • Hawaii Strategic Development Corporation (investments)
Promoting Entrepreneurship	Hawaii Technology Development Corporation
Increasing Access to Capital	Hawaii Strategic Development Corporation
Technically Skilled Workforce	University of Hawaii

The state's economic development strategy has emphasized organizational self-sufficiency. As a result, entities have pursued programs that focus on generating revenue to support their operations, like incubator rent revenue and licensing income from research, and not collaborative ecosystem and capacity building efforts.

In addition, too much policy emphasis has been placed on supporting research related activities while ignoring the need to promote entrepreneurship, access to capital and a tech workforce, the drivers of real economic activity and job creation. A successful TBED policy must be comprehensive and support all the elements required for a thriving tech-based economy.

Rather than simply create a new state entity that does not have a well-defined policy mandate it may be prudent to step back and assess:

1. Where does Hawaii stand in comparison to other states that are leading in this field?
2. What opportunities and challenges exist in Hawaii for growth in technology-based industries?
3. How does Hawaii become a leading center of technology-based industries?
4. What policy and organizational recommendations can we provide the Administration and Legislature to improve the capacity of the state to successfully execute a TBED Strategy?

The best way to develop a consensus on the appropriate path forward is to engage a consulting firm with domain expertise in TBED policy and programs. The consulting firm will work with the stakeholders in the state representing the areas of research capacity, research commercialization, entrepreneurship, access to capital and tech workforce development to produce a report that:

1. Sets out the objectives and benchmarks for the next 3-5-10 years that would put Hawaii on a trajectory to become a leading center of technology-based industries;
2. Identify specific programs and policies to implement that will drive economic growth in technology-based industries to achieve those objectives and benchmarks; and
3. Recommend organizational changes in the state to facilitate the successful implementation of those programs and policies.



Written Statement of
Len Higashi
Acting Executive Director
Hawaii Technology Development Corporation
before the
House Committee on Economic Development and Business
Wednesday, March 13, 2019
10:00 a.m.
State Capitol, Conference Room 309

In consideration of
SB990, SD2
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATON

Chair McKelvey, Vice Chair Kitagawa, and Members of the Committee.

The Hawaii Technology Development Corporation (HTDC) offers **comments** on SB990, SD2 that requires the Department of Business, Economic Development, and Tourism (DBEDT) to engage a consulting firm to conduct a study to evaluate policies and organizational changes needed within DBEDT that will enable the State to successfully execute a technology-based economic development strategy.

HTDC understands the intent of this measure is to keep efforts coordinated. HTDC collaborates with DBEDT and HSDC on many initiatives including the HI Growth Initiative and broadband. HTDC looks forward to working together with the legislature and all stakeholders in advancing the technology sector.

Thank you for the opportunity to offer these comments.



DAVID Y. IGE
GOVERNOR

MIKE MCCARTNEY
DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of
MIKE MCCARTNEY
Director

Department of Business, Economic Development, and Tourism
before the

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS

Wednesday, March 13, 2019
10:00 AM
State Capitol, Conference Room 309

In consideration of
SB 990, SD2
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION.

Chair McKelvey, Vice Chair Kitagawa and Members of the Committee.

The Department of Business, Economic Development and Tourism (DBEDT) **supports** SB 990, SD2, which requires DBEDT to engage a consulting firm to conduct a study to evaluate policies and organizational changes needed to successfully execute a technology-based economic development strategy, provided that it does not adversely impact priorities indicated in our Executive Budget.

Thank you for the opportunity to testify.