



**DEPT. COMM. NO. 242**  
**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

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December 26, 2019

The Honorable Ronald D. Kouchi,  
President and Members  
of the Senate  
Thirtieth State Legislature  
State Capitol, Room 409  
Honolulu, Hawaii 96813

The Honorable Scott K. Saiki,  
Speaker and Members of the  
House of Representatives  
Thirtieth State Legislature  
State Capitol, Room 431  
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Hawaii Technology Development Corporation Annual Report, as required by Section 206M-3.5 and 206M-15.1, Hawaii Revised Statutes, and the Strategic Development Program Annual Report, as required by Section 206M-72, Hawaii Revised Statutes. In accordance with Section 93-16, Hawaii Revised Statutes, I am also informing you that the report may be viewed electronically at: <http://dbedt.hawaii.gov/overview/annual-reports-reports-to-the-legislature/>.

With aloha,

Mike McCartney

Enclosure

c: Legislative Reference Bureau



**HCAAT DESIGNS  
WORLDS FIRST  
PEARL** (page 2)



**INNOVATE BRINGS  
ROBOTS TO HAWAII**  
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**Industry 4.0 -  
Collaborative Robots**

# Hawaii Technology Development Corporation

2019 ANNUAL REPORT | INNOVATION STARTS HERE | HTDC.ORG

## SANDBOX OPENS FOR BUSINESS



PHOTO CREDIT: ANDREA BRIZZI

On October 10, 2019, the state officially opened the Entrepreneurs Sandbox innovation center in Kakaako. The 13,500 square foot facility features an event space with a large projection screen, collaboration areas, coworking, digital media studio, training rooms, conference rooms, phone booths, and small offices.

The Sandbox has quickly established itself as the gathering place for the technology and creative entrepreneurial community. Even before the grand opening, the venue had hosted dozens of events ranging from manufacturing CEO roundtable discussions to demo days for tech accelerators and has been featured in the local news and on Japanese television.

The Sandbox has also been embraced by the Hawaii business community. It is at the center of the Technology Readiness User Evaluation

(TRUE) initiative, a partnership with HTDC, the State of Hawaii, local universities and colleges, and many private companies including Central Pacific Bank, Servco, Pacxa, and Hawaiian Airlines who have based their innovation teams at the Sandbox.

Construction was completed in 10 months with funding from the federal government, the State, and the private sector. It is part of the Governor's effort to promote economic diversification and create a sustainable economy.

*Timeline: May 2018- March 2019*

*Construction funding: \$3 million federal EDA, \$3 million State of Hawaii/HCDA/HTDC, \$1.4 million Stanford Carr Development*

*Operating partners: HTDC, DBEDT Creative Industries Division, the Box Jelly*

## KEEP ON MOVING

Fiscal year 2018-2019 started a transition for HTDC. In December 2018, Len Higashi stepped in as Acting Director. In June 2019 the HSDC statute and mission were merged into HTDC. In July, Martin Zorn was elected as Board Chair and Elijah Yip as Vice Chair. With the Entrepreneurs Sandbox opening in Kakaako, HTDC is moving its headquarters from the Manoa Innovation Center to the Foreign Trade Zone. The move will be completed by the end of calendar year 2019. Through the changes, HTDC continues to adapt and keep innovation moving forward.



*Pictured above: The HTDC team celebrates the grand opening of the Entrepreneurs Sandbox*

## ADDITIONAL FUNDS FOR HAWAII

On top of the 5 year \$2.5 million contract awarded to HTDC's INNOVATE Hawaii program in 2017 and the current 5 year \$30 million contract for the HCAAT program, HTDC secured the following additional federal funds in FY19:

- **\$100,000 (NIST) annual increase**  
INNOVATE Hawaii program
- **\$125,000 (SBA) 1 year**  
SBIR outreach and assistance
- **\$1,000,000 (NIST) 3 years**  
Manufacturing Workforce Development

The additional federal funding was awarded to the INNOVATE Hawaii program. The funding from NIST was increased in recognition of the program's perfect 100 score on the program's performance evaluation scorecard. The other awards were won through competitive applications. HTDC also received:

- **\$1,000,000 (private) investment**  
Entrepreneurs Sandbox

The private investment was provided by Apaman, a Japanese company with a network of coworking spaces around the world. The investment was part of a new partnership extending reciprocal membership privileges for members of the Entrepreneurs Sandbox. Special thanks to Senator Glenn Wakai who brought the opportunity to HTDC.



# ACCELERATOR REPORT

Accelerator programs provide startup companies funding, mentorship, and network to grow. HTDC funded 5 accelerator programs a total of \$1.425M in FY19. Each program is required to have at least a 1:1 match to receive funding from the State. The accelerator landscape in Hawaii is changing with 2 new programs. Mana Up is a product accelerator helping Hawaii companies become global companies. HATCH is an aquaculture accelerator based at NELHA (funded by HSDC in FY19). GVS will be discontinuing operations in 2019.

## Blue Startups

*\$125M follow on capitol (overall)*

## Elemental Exclerator

*\$18M for Hawaii projects (overall)*

*\$3M for Hawaii projects (FY19)*

## GVS Transmedia Accelerator

*\$3M private investment (FY19)*

## ManaUp

*\$27K private investment (FY19)*

## XLR8UH

*\$37M+ follow on capitol (overall)*



# MATCHING GRANTS

In FY19, HTDC continued with its MAP and HSBIR matching grant programs. These 2 core HTDC programs not only provide critical funding for innovative Hawaii companies, they include wrap around support services to help them grow. The funding is also used as federal match for the INNOVATE Hawaii program. A complete breakdown is provided in the section below. In FY19 HTDC also established a new R&D Tax Credit grant program, awarding 7 companies a total of \$950,000 and re-established the HONR grant program, funding 3 companies a total of \$950,000.

# HCATT DESIGNS MICROGRID FOR JBPHH

The Hawaii Center for Advanced Transportation Technologies (HCATT) program recently awarded an \$8.3 million contract for the first of a series of microgrids at Joint Base Pearl Harbor-Hickam (JBPHH) in a multi-year project that will demonstrate the reliability and resiliency of renewable energy. Hawaii-based engineering, architecture, construction, environ-

mental and consulting solutions firm, Burns & McDonnell, will design-build up to six renewable energy microgrids. The project will support an Air Force Research Laboratory (AFRL) initiative using the Pacific Energy Assurance and Renewables Laboratory (PEARL) located at the Hawaii Air National Guard's 154th Wing.

# COBOTS HELPING MANUFACTURERS

INNOVATE Hawaii and the Chamber of Commerce Hawaii partnered on Industry 4.0. The event brought collaborative robots (cobots) to the Entrepreneurs Sandbox to help educate Hawaii manufacturers on the costs, benefits, and limitations of this new tool that is being adopted throughout the country. Cobots are robotic arms that are good for tasks that require precision, are dangerous, or are hard to fill.

# ALOHA WWW, NI3

With a tight budget in FY19, HTDC programs had to make adjustments. After 8 years of building a stronger tech community in Hawaii, HTDC put its WetWare Wednesday program on hold indefinitely. The monthly networking event has sparked new businesses, programs, and connections. The event has been primarily funded through sponsorships with HTDC providing planning, marketing, and logistics support. HTDC also put its sponsorship of tech events on hold and in FY20 plans to restart with a modest budget. The team is redirected toward leveraging new programs at the Sandbox and pursuing grant opportunities.

HTDC also scaled back its Neighbor Island Initiative program. The program has provided innovative companies free direct mentorship since 2017. To offset some of the impact of the reduction, the neighbor island mentors are providing support to companies with SBIR potential, funded by a federal grant secured by HTDC in FY19.

# HTDC COMPANIES

# \$1,000,000,000

## Total Economic Impact

**\$560.53M Total Revenue**  
**104 Companies**

**\$48.88M State Taxes Generated**  
**3,870 Jobs**

**\$277.13M Income Generated**  
**3,065 Jobs in Hawaii**



## MANUFACTURING ASSISTANCE PROGRAM

**\$13,462,279**  
Total Company Investment

**69 Total Applications Received**  
**37 Total Applications Funded**  
**25 Total First-time Applicants Funded**  
**\$1,326,404 Total Match Requested**  
**\$898,790 Total Matching Grants Awarded**  
**465 New Full-time Employees**  
**980 Jobs Saved**



## HSBIR PHASE 0 & 1

**\$2,015,917**  
Federal Grants Awarded

**19 Total Applications Received**  
**16 Total Applications Funded**  
**4 Total First-time Applicants Funded**  
**\$911,681 Total Match Requested**  
**\$520,000 Total Matching Grants Awarded**  
**239 New Full-time Employees Over 5 Years**  
**73 Jobs Saved Over 5 Years**



## HSBIR PHASE 2 & 3

**\$10,985,890**  
Federal Grants Awarded

**12 Total Applications Received**  
**6 Total Applications Funded**  
**1 Total First-time Applicants Funded**  
**\$4,500,840 Total Match Requested**  
**\$1,425,000 Total Matching Grants Awarded**  
**135 New Full-time Employees Over 5 Years**  
**34 Jobs Saved Over 5 Years**



The grant metrics reported were prepared in accordance with Hawaii Revised Statute 206M-3.5 and 206M-15.1 and the HiGrowth report per 206M-72. The annual report required by each of these statutes have been combined into this single comprehensive report.

## HTDC Strategic Development Program Report

This report was prepared in accordance with Hawaii Revised Statutes §206M-72, Act 056 SLH 2019 §12, and Act 170 SLH 2012 §2(e). Act 056 SLH 2019 merged the Hawaii Strategic Development Corporation into the Hawaii Technology Development Corporation as the Strategic Development Program. HTDC is currently maintaining the HSDC portfolio while it plans for the future of the merged agencies. The annual reports required by each of these statutes have been combined into this single, comprehensive report.

### HSDC Obligated and Proposed Use of Funds

June 26, 2019

	State		Federal	Total
	LAVA	HI Growth	SSBCI	
<b>Beginning Balance</b>	<b>\$2,000,000</b>	<b>\$6,000,000</b>	<b>\$13,227,911</b>	<b>\$21,227,911</b>
<b>Existing Obligations:</b>				
Blue Startups	\$1,100,000			\$1,100,000
Blue Ventures			\$520,000	\$520,000
Blue Ventures II		\$120,000	\$650,000	\$770,000
Blue Ventures III		\$265,000	\$635,000	\$900,000
Reef Fund I & II/IBIS		\$1,313,189	\$1,718,746	\$3,031,935
Startup Capital		\$1,000,000	\$3,500,000	\$4,500,000
GVS Transmedia Accelerator	\$700,000			\$700,000
GTA Development Fund		\$173,707	\$326,293	\$500,000
GTA Development Follow-on Fund		\$1,600,000	\$150,000	\$1,750,000
GVS Connect		\$390,500		\$390,500
Hatch Accelerator Fund		\$1,850,000		\$1,850,000
UPSIDE/Kineticor			\$2,550,000	\$2,550,000
Energy Excelerator	\$150,000			\$150,000
Energy Excelerator Follow-on Fund		\$275,000	\$1,224,998	\$1,499,998
Mana Loa Ventures		\$100,000	\$1,750,000	\$1,850,000
CAN Program		\$119,100		\$119,100
CAN Program II		\$211,000		\$211,000
CAN Program III		\$114,139		\$114,139
<b>Total Obligated Funds</b>	<b>\$1,950,000</b>	<b>\$7,531,635</b>	<b>\$13,025,037</b>	<b>\$22,506,673</b>
<b>Admin Expenditures</b>	<b>\$32,416</b>	<b>\$84,779</b>	<b>\$202,873</b>	<b>\$320,068</b>
<b>Remaining Unobligated Funds</b>	<b>\$17,584</b>	<b>(\$1,616,414)</b>	<b>\$0</b>	<b>(\$1,598,830)</b>
<b>Cash Balances</b>		\$957,888		\$957,888
<b>Unused Lava Funds</b>	(\$17,584)	\$17,584		\$0
<b>SSBCI Investment Returns</b>		\$655,167		\$655,167
<b>Total Available Funds</b>	<b>\$0</b>	<b>\$14,224</b>	<b>\$0</b>	<b>\$14,224</b>
<b>Obligations Completed:</b>				
<b>Balance</b>	<b>\$0</b>	<b>\$14,224</b>	<b>(\$0)</b>	<b>\$14,224</b>

## Annual Statements

### HSDC Revolving Fund

HSDC funds its operations and investments through the HSDC Revolving Fund and from returns on investment generated through the HSDC Capital Fund, LLC. The annual statement includes the amounts detailed in the LAVA and HI Growth Annual Statements.

	6/30/2018	6/24/2019
Beginning Balance	\$3,425,307	\$2,947,582
Adjustment	\$1,277	\$12
Transfer in from HSDC Capital Fund LLC	\$0	\$587,500
Revenues	\$38,799	\$392,573
Investments	\$247,639	\$3,667,628
Expenditures	\$270,162	\$245,816
Ending Balance	\$2,947,582	\$14,224

### HI Growth Initiative

Act 274 SLH 2013 established the HI Growth Initiative and appropriated \$6 million to HSDC.

	6/30/2018	6/21/2019
Beginning Balance	\$2,550,556	\$2,340,749
Revenues	\$0	\$366,640
Investments	\$197,639	\$3,086,378
Administrative Expenses	\$12,168	\$7,468
Ending Balance	\$2,340,749	(\$386,456)
Funds Obligated and Encumbered	(\$918,488)	(\$1)
Final Balance	\$1,422,261	(\$386,456)

\* Note: Negative balance was funded from other HSDC program funds

### LAVA

Act 170 SLH 2012 established the Launch Akamai Venture Accelerator (LAVA) Program and appropriated \$2 million to HSDC.

	6/30/2018	6/24/2019
Beginning Balance	\$118,061	\$67,584
Investments	\$50,000	\$50,000
Administrative Expenses	\$477	\$0
Ending Balance	\$67,584	\$17,584
Funds Obligated and Encumbered	(\$50,000)	\$0
Final Balance	\$17,584	\$17,584

### State Small Business Credit Initiative

In May 2011, HSDC was awarded a \$13 million allocation from the U.S. Department of Treasury's State Small Business Credit Initiative (SSBCI) for a venture capital fund of funds investment program.

	6/30/2018	6/24/2019
Beginning Balance	\$6,834,552	\$5,932,438
Revenues	\$390,516	\$91,567
Investments	\$1,272,498	\$5,979,203
Administrative Expenses	\$20,132	\$44,802
Ending Balance	\$5,932,438	\$0
Funds Obligated and Encumbered	(\$4,464,845)	(\$0)
Ending Balance	\$1,467,593	\$0

### Hydrogen Capital Investment Special Fund

Act 240, SLH 2006 established the Hydrogen Investment Capital Special Fund within HSDC. \$8.7 million was expended by DBEDT to provide grants to hydrogen related projects and to invest in the Kolohala Hydrogen Fund.

FY Ending (thousands)	6/30/2018	6/30/2019
Beginning Balance	\$19	\$19
Revenues	\$0	\$0
Investments	\$0	\$0
Administrative Expenses	\$7	\$0
Ending Balance	\$12	\$12
Funds Obligated and Encumbered	\$0	\$0
Final Balance	\$12	\$12