



**MEETING MINUTES OF THE
HAWAII TECHNOLOGY DEVELOPMENT CORPORATION (HTDC)
BOARD OF DIRECTORS**

November 8, 2017

Manoa Innovation Center, 2800 Woodlawn Drive, 2nd Floor Board Meeting Room
Honolulu, Hawaii 96822

PRESENT

Derek Lau, Chair
Elijah Yip, 1st Vice Chair
Fred Delse, Secretary/Treasurer
Kelly King
Linda Rosehill, NELHA Representative
Craig Nakanishi, HSDC Representative
Mark Anderson, B& F Alternate Representative

STAFF PRESENT

Robbie Melton, Executive Director
Yvonne Harue
Ray Gomez
Sandy Park
Wayne Inouye
Wayne Layugan
Erin Furuichi

X CUSED

Race Randle
Luis Salaveria, DBEDT Representative
John Morton, UH Representative

GUESTS

Karen Dang, Office of Senator Glenn Wakai
David Cho, Office of Senator Donovan Dela Cruz
Duncan Osorio, Office of Senator Donovan Dela Cruz
Tab Wilkins, National Institute of Standards and
Technology
Dr. Vassilis Syrmos, UH VP for Research and
Innovation

1. Meeting called to order by Chair Derek Lau at 11:30 a.m.
2. Approval of Minutes – September 7, 2017 HTDC regular Board meeting

Motion made by Elijah Yip to approve the September 7, 2017 minutes of the HTDC regular Board meeting and seconded by Fred Delse.

Motion to approve the minutes of the September 7, 2017 HTDC regular Board meeting (Unanimously passed, 7-0). **Motion carried**

3. Guest Speaker: introduced by Chair Lau

Mr. Tab Wilkins, NIST/MEP Account Manager & Senior Technology Advisor provided a NIST/MEP National and Local update:

Mr. Wilkins stated that NIST restructured their grant program under federal legislation passed a year ago. With the redesigned program, an award is given for a 5-year period and at the end of that period it is decided if funding would be renewed for another 5-years. At the end of the 10-year period, states would then have to re-compete to be a designed center. The awards used to be competed on a yearly basis.

Also under the redesigned program, if the center is not performing in its 3rd year they could be put on probation and NIST could end the relationship early.

Mr. Wilkins stated that he met with the Innovate HI team and they had a really good review:

- Budgeting and finance work for this year and future years was really spot on so there was not much revision that needed to be done
- The program scope that had originally been proposed was really on target
- On the NIST scoring of 1-100, Innovate HI scored 90.

In his meeting with Innovate HI they discussed new areas that NIST sees other centers moving into and that the Hawaii center might consider. They discussed how Innovate HI could add assorted products and services to the mix around technologies that companies might be interested in, talked about leveraging other partnerships such as with workforce development, help to support some funding for companies doing additional work.

The MAP grant is unique nationally, it's a real asset that Hawaii has developed.

One of the challenges NIST is dealing with nationally is called technology fusion or technology adoption. NIST is trying to figure out how to create the persuasion inside a company to want to or at least investigate how they could use technology.

Mr. Wilkins stated that a good example is Innovate HI's client, Diamond Bakery. He learned that Diamond Bakery started with a base philosophy that they wanted to change and had to figure out what were they going to do in terms of technology. They utilized the MAP grant to investment in equipment for automation of the packaging of crackers in bags and have really been working on marketing and design functionality as it relates to the younger generation.

The second area discussed with Innovate HI was about the unique position Hawaii has with its SBIR (Small Business Innovation Research) companies, particularly the Phase II grantees. Discussed was, how, and what level of help would manufacturing companies need to scale up, i.e. quality certification and prototyping. To do those in a rapid-fire succession so they can hit some commercialization targets that can help them with capitalization and so forth.

On a national level, the federal funding for the MEP program has a House mark of \$105 million and a Senate mark of \$130 million. MEP traditionally runs their program at \$130 million. NIST is waiting to see what's going to happen on December 8th.

The final item to mention is that in the past couple of years, NIST put out a competition within the MEP system itself where all 51 centers could submit a proposal aimed at how could MEP improve the services that they want to develop with companies. It's a rolling competition so centers can submit a proposal at any time. If NIST likes it they will fund it.

The centers winning these developmental awards will not impact the traditional Card scoring. And, the original purpose of the MEP program was to move technology out of the NIST labs and into small companies, so that is really where we are headed with that kind of funding.

Q and A:

Is the President going to have any impact on funding?

President's budget zeroed NIST out with a small \$6 million proposal. NIST is waiting to see what will happen on December 8th.

Please tell us about a bill in congress for the MEP centers to work with DOD (Department of Defense)?

In the DOD environment, they've been impressed with NIST's work with the Manufacturing U.S.A. Institutes, which is set of approximately 19 institutes that have been funded to deal with MRL 6-8

levels of technology. We have funded some programs where we placed an MEP staff person at each of the institutes to make that technology available to our field staff across the country and the DOD liked that so in their authorization and hopefully in their appropriation, they put in \$25 million, a portion of which would fund additional embedded staff to do outreach work across the country to manufacturers and to help deal with cybersecurity. There is some good opportunity in Hawaii to leverage that resource as well.

What was different about Diamond Bakery, who accepted the use of technology?

There's a variety of things, a lot of it is a lack of understanding by companies.

Mr. Wilkins thanked the Board for having him.

4. Guest Speaker: introduced by Chair Lau

Dr. Vassilis Syrmos, University of Hawaii, Vice President for Research and Innovation will provide a briefing on the University's innovation bills that passed during the 2017 legislative session and provide updates on new innovation facilities:

Dr. Syrmos began by thanking the Board for inviting him to the meeting to provide an update on the University's innovation bills that passed during the 2017 legislative session. Two bills signed into law became Act 38 and 39 and he also thanked Robbie Melton and her staff for all their support through the whole process as it took three years for the bills to finally become law.

He stated that to give an understanding of the University's operations for research and innovation, there are \$400 million in expenditures annually, and the University employs 8,500 employees with 72% of funding coming from the federal government, 8% is from private companies, and the balance is from the State, of which most of that money comes from the federal government.

One issue that the UH had for decades was that faculty did not have incentives to bring their technologies to their own start-ups, and the most important reason was that the State was steadfast that UH follow the State Ethics Code, Chapter 84. Although it was well written, it was not written for innovation.

With Act 38, UH is now responsible to manage our own processes and monitor conflicts of interest with commercialization of intellectual property created. UH did not ask for an exemption from the Chapter 84 but only to move compliance regulation from the State Ethics Commission to the UH. The UH employees will still be under Chapter 84.

Act 39 gives UH unprecedented authority to function as a private business. With this authority, the UH has created its first LLC (limited liability corporation) called UH Ventures and is now a registered business as of October 3rd and will serve to isolate the UH from any potential conflicts of interest.

The UH Ventures will be able to participate in series A and B investments, can acquire real estate property and equity in certain companies. Act 39 is a tremendous opportunity and thanks go out to the legislature for this legislation. This Act however will be repealed in four years.

The UH aims to show what they can accomplish with the opportunity given and as a public institution is very cognizant that it serves the taxpayers of the State of Hawaii. As part of its process, the UH insulated the decision making from operational decisions. A faculty member cannot be the CEO of the start-up and make decisions on one side and on the other side as this would be unacceptable whether it's with the State Ethics Commission or within the UH. There will be independent due diligence and faculty members have been asked to get completely out of the process because it's so complicated that mitigating the conflict of interest may not be feasible.

The UH Ventures is a limited partner with XLR8UH, and is a general partner to Sultan Ventures who invests in target companies and technologies that come from within the university, whether they are

from students or faculty, or alumni or staff. This is extremely important in trying to invigorate our start-ups to participate in the SBIR and STTR programs.

UH Ventures first investment is with the UH program, Pacific Disaster Center on Maui, that has a very interesting technology on national disaster management mitigation and they have a joint venture with a Silicon Valley start-up company with their biggest investors being Fedex and United Parcel Served (UPS).

The UH has been lucky to recruit C. David Ai for its director position with the UH Office of Innovation and Commercialization. Mr. Ai served as director of knowledge transfer at the City University of Hong Kong and served as associate director of Tech Transfer Office at Stanford University for 15 years. Mr. Ai will join UH in February and will be taking over the tech transfer office and the UH Ventures.

Q and A:

Is the profit required to go into the General Fund?

No, profit will go into the UH Special Fund.

Are the entities formed considered government or private entities?

They are private entities and not subject to collective bargaining, procurement rules or the Sunshine Law.

5. Finance Committee Report on HTDC FY18 Budget

Fred Delse provided an update that the committee met a week ago and reviewed two scenarios on a 5-year projection with occupancy rates at the Maui Research and Technology Center (MRTC). A 70% occupancy rate showed cash flow with even balance and a 50% occupancy rate showed a deficit.

Robbie Melton stated that the Finance Committee would be meeting again and be able to present a report at the next meeting.

6. Federal Projects Committee (decision making)

A. Hawaii Small Business Innovation Research (HSBIR) Matching Grant Phase I

Member Yip reported that the Committee met in October and are now submitting 8 applicants to the board for funding.

a. HSBIR Budget report: FY 2017 total budget was \$520,000 and requested funding amounts totaled \$756,000.

b. HSBIR Matching Grant Phase I awards recommendations: Total of \$416,050.40

First two applicants were awarded 100% and the rest were awarded a percentage.

Discussion

	Company Names:	Amounts:
1)	Premier Solutions: Integrated Barcode and Inventory Management System	\$61,795
2)	Navatek: ACV Autonomous Sled Technologies	\$75,000

3)	Math Nimbus/Algorith Hub: Cloud-based Application for the Joint Analysis of Multiple Big Data Types	\$63,750
4)	Nalu Scientific: Design and fabrication of the SiREAD Silicon Photomultiplier Readout	\$63,495
5)	Forever Oceans: CERBERUS (Camera-based Examination of Risk via Behavioral Evaluation with Remote Underwater Surveillance)	\$47,710.40
6)	Hawaii Fish: Innovative Manufactured Aquaponic Raft for Commercial Farms	\$35,000
7)	Oceanit Laboratories: In-Situ Applied Omniphobic Coatings for Pipeline Repair and Retrofitting	\$35,000
8)	Hnu Photonics: Color Holographic Quick Response code for Counterfeit Avoidance	\$34,300

Motion made by Elijah Yip to approve the recommendations of the Federal Projects Committee to award the eight applicants and seconded by Fred Delse.

Motion to approve the recommendations of the Federal Projects Committee to award the eight applicants (Unanimously passed, 7-0). **Motion carried**

7. Tech Parks (decision making)

Robbie Melton began by speaking about tech parks in general.

A. First Responder Tech Campus

- a. Update: HTDC purchased the land for the project in August, and HTDC found out that they will also be the project manager. HTDC has released an RFP to hire a project manager to oversee the full development of the project. The goal is to have a project manager by mid-December. Funding will come from the planning and design money. The boundary survey is in progress and markers to stake the property line will be placed. "No Trespassing" signs will be ordered and placed throughout the property. HTDC worked with its Deputy Attorney General on the proper language to use on the signs. HTDC is working to get the current road cleared and graded for access to develop.

HTDC will be requesting \$900,000 of funds to be transferred from the Department of Accounting and General Services (DAGS) for planning and design.

Discussion:

Member Yip mentioned that he recalled that there was a thought of having HCDA (Hawaii Community Development Authority) being the project manager.

Ms. Melton stated that HTDC looked into HCDA being the project manager but according to their statutes, they are only allowed to do project management in authorized community development areas. And because the Mililani Tech Park II is not an authorized area HCDA is unable to do the work.

- b. Working Group Members: List of Members is included in the meeting packet.

Ms. Melton stated that the Working Group was formed at the beginning of the project and the Working Group has been meeting for the past two years. She stated that in review of the HTDC statutes 206M 2.e., it states that the Board shall appoint a 5-member advisory committee for each industrial park and related projects. The working groups consists of more than 5 members.

Discussion

Board Members read the 206M 2.e. statute and requested that Ms. Melton check with Dawn Apuna, Deputy Attorney General to get her advice on whether the advisory committee can be more than 5 members.

B. Hilo Multipurpose Processing Facility

An overview summary of the project is included in the Board meeting packet that includes a time-line for the Board's review.

- a. Update: HTDC Met with UH Vassilis Symros and Don Straney and it was agreed to accept the site recommendation of the feasibility study at the Foreign Trade Zone in Hilo. A site visit was conducted with HTDC and FTZ to review the land followed by a meeting with DBEDT Deputy Director Mary Alice Evans to determine how HTDC would partner with FTZ to utilize the land. In the meantime, there was an issue with access to the sewer line that emerged. Working with UH Architect Community Design Center we believe that the issue can be resolved. The first MPPF Working Group meeting will be held on November 9 in Hilo.

Ms. Melton introduced Lauren Hodde, HTDC's new Special Projects Coordinator who was in attendance in the meeting. Ms. Melton stated that Lauren has a construction background and is helping her with the tech park projects.

- b. Working Group Members: List of Members is included in the meeting packet.

8. Innovation Centers update

- A. Maui Research and Technology Center (MRTC)
 - Cohana co-working space continues to bring in people into the facility
 - HTDC is in discussions with potential long-term tenants
- B. Manoa Innovation Center (MIC)
 - Almost 100% occupancy
 - Tenant, Goma Games moved out to locate in the West Coast
- C. Sandbox development progress/timeline

HTDC has a new EDA contract manager and Len Higashi has been working with the EDA manager to get her up to speed. We are waiting for her to approve the development agreement with HCDA and Stanford Carr. The Sandbox development timeline is included in the board packet for review. Anticipated start date of construction is in April 2018. The project must be completed by January 31, 2019. The SHPD approval has been completed.

9. HTDC Staffing update

- A. Innovation Manager
 - Francis Dao, Director of the A.I. Accelerator at NYU has been hired to fill the Innovation Incubator Program Manager position. He has broad experience working with startups and

tech companies in San Francisco, Los Angeles and New York. His start date is December 1st.

B. Accountant

- A potential candidate has been identified to fill the Accountant position and is in the process of having a second interview with the candidate.

C. MEP Project Engineer

- Mark Kanada has been hired to fill the INNOVATE Hawaii program MEP Project Engineer position. His start date is also December 1st.

10. HTDC Reports

A. Chair's Report

No report.

B. Executive Director's Report

- HTDC Financial Report
 - Reasons for Variances are due to timing of receipts and disbursements being posted in a different quarter.
 - HTDC will be dipping into its reserve fund approximately \$300,000
- Excelsior Funding
 - Awarded to three Excelsiors: \$350,000 to GVS Accelerator in Kona and \$275,000 each to Blue Startups and XLR8UH.
- 2018 Legislative Session
 - HTDC is requesting \$1.5 million of funding through the State Budget to fund operations for new accelerators, such as Maui Food, Mana Up that helps manufacturers scale up, and aquaculture at NELHA.
 - \$40,000,000 to build the Cube
- 2017 Legislative Crawl
 - Scheduled for November 14 and will be done differently this year. The tour will be going to Referentia and the Oahu Makerspace.
- NI3 showcases
 - At end of October, went to Kauai to showcase had there were 4 companies that presented.
- Pacific Regenerative Medicine Conference
- Agathon
HTDC received the blessing of the Department of Agriculture to do an Agathon and it will be held in early January before the legislative session starts. It will bring techies and farmers together to do problem solving.

C. Department of Business, Economic Development & Tourism (DBEDT) Report

No report.

D. Natural Energy Laboratory of Hawaii Authority (NELHA) Report

- Aquaculture conference will be held next week.

E. Hawaii Strategic Development Corporation (HSDC) Report

- HSDC has a new strategic group initiative that is shifting its focus away from entrepreneurial accelerators and incubators to target industries in aquaculture, life sciences and aerospace.

F. University of Hawaii (UH) Report

No report.

11. Next HTDC Board Meeting: January 11, 2018

12. Adjournment

Motion by Craig Nakanishi, and seconded by Elijah Yip.

Adjourned the Board meeting at 1:15 p.m. (Unanimously passed 7-0)

Reviewed by: Robbie Melton, Executive Director & CEO

Respectfully submitted, Yvonne Harue, Secretary