

# **BROADBAND ASSISTANCE ADVISORY COUNCIL MEETING (BAAC)**

## **DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS (DCCA) STATE OF HAWAII**

### **MINUTES OF MEETING**

Date: Friday, November 16, 2018  
Time: 1:00 p.m.  
Place: 335 Merchant Street, Honolulu, Hawaii

Present: Catherine Awakuni Colón (Chair), DCCA  
BAAC Members Gregg Fujimoto, Charter  
Bryan Ito, AT&T  
Jules Ung, County of Hawaii  
Tony Velasco, City & County of Honolulu (City)  
Mary Alice Evans (for Luis Salaveria) Dept. of Business,  
Economic Development & Tourism (DBEDT)

Other Participants Arnold Kishi, Enterprise Technology Services  
Burt Lum, DBEDT  
Lois Tambola, Office of Representative Kyle Yamashita  
Heath Williams, Office of Senator Rosalyn Baker  
Daniel Masutomi, Hawaiian Telcom  
Kiman Wong, Charter  
Mindy Hartstein, Hawaiian Electric Company (HECO)  
Christian Whitney, HECO

DCCA - Cable Television Division Ji Sook "Lisa" Kim (Cable Administrator); Cathy Takase; and  
Jeremy Aoyagi

#### **I. Call to Order**

The Chair called the meeting to order at 1:02 p.m.

#### **II. DCCA Activities**

##### **A. Report on Fixed Wireline Broadband Speeds in Hawaii (June 2018)**

The Chair noted that DCCA's Report on Fixed Wireline Broadband Speeds in Hawaii in June 2018 (the Report), which compiled data from consumer-initiated speed tests through Ookla's speedtest.net, was provided to BAAC members and stakeholders at the time of issuance and is also available on DCCA's broadband webpage. The Report includes speed test data for 2016, 2017, and Q1 of 2018, including summarized data showing average download speeds for the State at 102 Mbps, the County of Hawaii at

69 Mbps, the City and County of Honolulu at 112 Mbps, the County of Kauai at 75 Mbps, and the County of Maui at 83 Mbps.

More granular data for specific locations and an interactive map is also available on the DCCA Broadband webpage, which will be updated to the extent possible. The Chair asked for comments or suggestions on the type of information that would be helpful to the BAAC. Mr. Gregg Fujimoto asked if Ookla provided a ranking by states. DCCA staff was unaware of Ookla state-level rankings, but Cable Administrator Lisa Kim noted that the Federal Communications Commission (FCC) provides annual rankings and recently showed that Hawaii ranked 7<sup>th</sup> among a comparison of all states and other countries. A link to the FCC report is provided on the DCCA broadband webpage.

**B. State Designated Spectrum WiFi Hotspots**

Pursuant to the Time Warner Cable and Charter merger proceeding, Spectrum is to deploy 1,000 WiFi hotspots across the State, with 100 hotspot locations designated by DCCA. DCCA has been working with Charter on potential sites, focusing on rural areas that may not merit the highest “business case” priority. A list of DCCA designated hotspots can be found on the DCCA Broadband webpage. Designations to date include 14 hotspots on Kauai; 7 in Hana, Maui; 5 in Wailuku, Maui; 10 in Kalaupapa, Molokai; 6 in Kaunakakai, Molokai; and 2 on Oahu for the courtyards fronting the Department of Taxation and the Department of Labor and Industrial Relations offices to assist consumers in conducting business with those departments. The Chair noted that a visit was made to Kalaupapa to speak with residents and Department of Health staff, and that all were appreciative of the interest shown in providing broadband access in Kalaupapa. DCCA is working with Charter on additional locations on Lanai, Oahu, and Hawaii Island.

Mr. Kiman Wong provided the following data on hotspot usage for the previous 30 days (noting for comparison that the City’s Waikiki WiFi hotspots had 88,000 sessions in the same timeframe):

Kaunakakai	27,000 sessions	(approx. 19 days)
Kalaupapa	7,200 sessions	
Hana	5,700 sessions	
Wailuku	12,000 sessions	
Kauai	46,000 sessions	

The Chair noted that the designation process was ongoing and invited members’ suggestions on places of need.

C. Hi-WiFi Pilot Project

Hi-WiFi is a DCCA pilot project to evaluate the feasibility and cost of providing residents with free internet access at government locations. The Chair thanked the County of Hawaii and its Department of Information Technology Director Jules Ung for providing support for the project. DCCA, with the County of Hawaii's assistance, is focusing on rural areas with more limited broadband access, such as Honokaa, Pepeekeo, Volcano, Naalehu, and Hawaiian Beaches. The Chair invited comments and suggestions. A memorandum of understanding is currently pending approval by the Hawaii County Council. The BAAC will be updated as the project progresses.

Ms. Ung emphasized the need for high speed access to rural areas, citing as an example a technology industry worker who teleworks from his home in Hawaiian Paradise Park, but lacks broadband level service. Because other residents in his census block have service, his home, like many other similarly isolated pockets of homes, is not eligible for connection under the Connect American Fund (CAF). The Chair acknowledged the challenge in connecting these homes that are expensive to reach and do not qualify for CAF funding, thereby presenting a difficult business case for providers. Mr. Daniel Masutomi commented that Hawaiian Telcom (HT) tries to service these homes as they extend infrastructure to CAF buildout areas, but it is not always feasible. He added that the 5G initiatives may also help once these deployments roll out. The Chair also noted that the Hi-WiFi project is one way in which DCCA is attempting to help residents in these areas by providing some access to WiFi hotspots in their community.

D. "No Internet Service" Mapping Tool

To provide more information to stakeholders on unserved areas, DCCA has developed a "No Internet Service" mapping tool to allow residents to directly report areas around the State that lack access to wireline internet service. Data collected with the mapping tool, added to other data available on DCCA's broadband webpage including FCC data and DCCA's Report on Fixed Wireline Broadband Speeds in Hawaii, will help to provide a more comprehensive picture of internet service in the State.

Mr. Jeremy Aoyagi provided an overview of the mapping tool, which was built in-house with help from ESRI and DBEDT, and that:

- Keeps survey questions short to improve user-experience, asking only for e-mail, indication of lack of internet service, and the user's geolocation (users may also provide comments);
- Provides granular geographic data on areas that lack internet access;
- May be adapted depending on usage and user feedback;

- Relies on consumer-reported data and thus notes that this may impact its accuracy; and
- Will be available on DCCA's broadband webpage in the near future.

Mr. Bryan Ito asked how people would be directed to the mapping tool and about further analysis of collected data. Mr. Aoyagi responded that DCCA will be working on methods of outreach. He further explained that the mapping tool has several built-in analysis functions, such as user count, a log of repeat users, and that more customized analysis could also be performed through the ArcGIS platform. Mr. Masutomi asked whether data could be tied to census blocks. Mr. Aoyagi responded that data may be sorted by census block; that the mapping tool also provides demographic information by geographic bounds; and that DCCA would be assessing this type of functionality based on user response. Ms. Mindy Hartstein suggested the addition of a question on whether wireless access is available, which would help to identify those areas most in need.

### III. Updates

#### A. Connect American Fund Phase II

Mr. Masutomi provided a PowerPoint update of HT's CAF Phase II (CAF II) projects for which HT was awarded funding to provision approximately 11,000 sites with broadband service, with approximately 75% of the total sites being provisioned with fiber to the home (FTTH). Now in its fourth year of CAF II, HT has provisioned 5,342 sites and is on track to reach its 60% site completion target by the end of 2018. Approximately 69% of the builds have been FTTH with a take rate of about 25%.

Under the CAF II auction, HT was just awarded funding for an additional 3,937 sites, to be provisioned by 2024. Mr. Masutomi shared the CAF II locations provisioned in 2018, noting that HT earlier provisioned large, rural subdivisions and are now targeting smaller areas, including Wood Valley (Pahala), Kaloko Mauka (Kaloa area of Kona), Kalapana, Huelo, and Hawaiian Ocean View Estates. HT did lose some sites in Pahoia due to the lava flow and has not yet identified replacement sites. He added that over 95% of the CAF II sites are on Hawaii Island and a few sites are on Kauai, Molokai, and Maui.

#### B. Hawaii Island Fiber Gap

This ongoing project to close the gap in Hawaii Island's fiber communications infrastructure ring relies on Hawaiian Electric Light Company's (HELCO) line rebuild project, which will allow providers to attach their fiber to HELCO's replacement poles. The Chair relayed an update provided by Dave Okamura at HELCO: HELCO has made progress with the Hawaii Volcanoes National

Park (HVNP) and hopes to have an approved Environmental Assessment early in Q1 2019. HELCO will then work with the HVNP rights-of-way managers. Currently, the projects to rebuild the pole line from the south end of the national park to the golf course road are forecasted to be completed at the end of 2020. The cable and telephone companies may then connect their existing infrastructure to close the loop.

Ms. Hartstein explained that this involved pole infrastructure, and that it would be part of her role to reach out to all carriers (wireline and wireless) entitled to attach to the poles and to facilitate that attachment. She recommended that they all work together to get that accomplished. She noted that HELCO also lost approximately 700 poles to the recent lava activity, which are in the process of being restored.

C. Hawaii Broadband Initiative – Transpacific Fiber Optic Cable Landing Project

DBEDT Deputy Director Mary Alice Evans reported that the environmental assessment is being done by Wilson Okamoto for two potential landing sites in Kakaako located on Hawaii Community Development Authority land. Once that is done, permits may be sought and next steps taken.

D. HECO-HT Public Utilities Commission (PUC) Pole Application

Ms. Hartstein provided a presentation on the HECO-HT PUC Pole Application that included the following information:

Utility distribution poles are the foundation for building smart, resilient, sustainable communities by supporting smart grid technology, smart city technology, broadband deployment, and the internet of things. Joint pole ownership resulted in complications, disputes, inconsistent processes, and delays. HECO collaborated with others to create a new ownership model, resulting in the establishment of HECO's pole infrastructure enterprise (PIE) department; an agreement with HT; and the HECO-HT application filed with the PUC on April 4, 2018, seeking approval of, among other things, the transfer of HT's ownership in 120,000 electric distribution poles that had been jointly owned with HECO (representing 75% of HECO's poles), including 51,000 poles on Oahu, 24,000 poles on Maui, and 46,000 poles on Hawaii Island. Ms. Hartstein emphasized that the transfer only impacted jointly-owned poles with HT, and that HECO also owns approximately 50,000 other poles (10% of HECO poles include city, county or state ownership). Ms. Hartstein and Mr. Masutomi further explained that HT retains ownership of approximately 20,000 solely-owned non-electric distribution poles on Oahu, Maui, and Hawaii Island, as well as poles on Kauai.

The effective date of the transfer of ownership from HT to HECO through PUC approval was October 16, 2018. HECO previously managed

approximately 10,000 attachments outside of the communication space, and with the transfer will now manage over 500,000 additional attachments in the communication space. HECO is working closely with HT and Spectrum to identify providers in that space. Since July, the PIE Department has met with the providers weekly on standards and processes and to collect data on the parties and the infrastructure on the poles to ensure a smooth transition.

The PIE Department was tasked to standardize all new processes and procedures across all islands and HECO companies, with operations centralized under the PIE department. Specific tasks include:

- Managing the transition period;
- Establishing a new customer-friendly pole attachment process that includes:
  - Use of a template Master License Agreement (MLA) for all parties to attach infrastructure to HECO distribution poles, street lights in Maui, transmission towers, transmission poles, and land. This will facilitate a 30-day approval timeframe for PUC approval of future attachments, if needed. HECO is working on completing negotiations with the parties to allow it to file the MLA template with the PUC by year end. The template includes new attachment processes and engineering guidelines, many to facilitate 5G attachments, which may be installed above the electric distribution space.
  - An outlined pole attachment process that includes a search ring walk, pole confirmation, a design walk, a standard pole attachment request, and a one touch make ready construction option for the communication space.
  - Power connection and Unmetered Tariffs. HECO has filed with the PUC for approval of power connection and unmetered tariffs (flat rate metering) for attachments.

HECO and HT's approved transfer included a shared double pole remediation plan to eliminate approximately 12,000 double poles within 10 years. A double-pole audit is in progress to determine parties with attachments (audit already conducted for 4,000 of approximately 12-14,000 poles that may need to be removed). Poles with standard attachments will be removed by HECO and poles with non-standard attachments (that require additional work such as splicing) will be removed by HT. HECO is finalizing an RFP for the removal of double poles. Priority will be given to double poles that may pose a safety concern or that have been the subject of multiple complaints. HECO has, however, already removed 433 double poles and 3,028 street lights.

E. HECO Online Project Notification System

Ms. Hartstein explained that HECO's new PIE database and online portal will span across all three companies (HECO, Maui Electric Company, and Hawaii Electric Light Company). The new database will create efficiencies with the inclusion of process workflows and automated communications, timeline trackers, and by improving data quality. Deployment has been delayed because of security issues encountered with their contractor, but HECO expects the back-end database to be ready for use at the end of Q1 or the beginning of Q2 2019, with deployment of the online portal and additional upgrades at the end of Q2 or the beginning of Q3. Data will continue to be updated over the next three years by incorporating data obtained through a visual inspection of each pole. Ms. Hartstein noted, however, that the backbone has been laid out detailing the process, and that the PIE database will be integrated into the SAP enterprise platform for all three companies by Q1 2020.

Ms. Evans, noting DBEDT's concern for technology's impact on the economy and residents and to bring costs down for users, asked about the impact PIE would have on costs for wireline customers. Ms. Hartstein stated that she could not speak to the impact on the final down-end user charges. She noted that HECO is able to set fixed costs for HT in their agreement, but that charges for other attachers would be set under the FCC's rate parameters. She noted that because the cost of the PIE database, which was needed to streamline deployment of attachments, must be included in the rate calculation, there is a resulting increase in attachment rates, which ranges from approximately \$13 per pole per year for Maui and slightly more for Oahu and Hawaii Island. This revenue is returned to the ratepayers. Ms. Evans asked if HECO's charges would be lower than those charged by the City for 5G installations. Ms. Hartstein responded that HECO's charges are lower, but noted that they are not subject to, and are approximately double, the FCC's recently established rate. She said that their companies understand that many of their areas are more rural, and also noted that higher rates are more likely in Honolulu where utilities are underground because only streetlights are available for attachment. She noted that more competition is possible if utilities are not placed underground. She also said that the use of standardized agreements would further promote competition by providing all attachers with the same agreement.

F. Lokahi Infrastructure Project Notice Database

Mr. Walter Kuong of the City, Department of Information Technology, provided an update on and demonstrated several features of the City's Lokahi Smart City/Enterprise Platform (Lokahi). (A handout on Lokahi was provided.) Lokahi was developed to integrate the management, workflows, and data of the City's agencies into a single platform to foster coordination

and collaboration, and is customizable to the user's needs. (A full presentation on Lokahi was provided to the BAAC at its March 24, 2017 meeting).

Information on approximately 90% of the City's construction projects are available through Lokahi. The platform's search functionality allows users to define a physical area and to determine projects occurring in that specified area, including one call information, parcel ownership, street views, and involved City agencies. Other highlighted features include:

- 200+ internal data sources
- State (e.g. one call) and federal data sources (e.g. weather, census)
- 3D/LIDAR modeling view for certain projects such as rail and emergency management projects
- Assets and infrastructure tracking
- Updates every four hours
- Policy and research tools
- Adaptive tools based on user needs

Mr. Ito asked if this was meant to be for City use only, noting its benefit for the private entities. Mr. Kuong said that is currently only available to certain City employees, but that they are working on their security infrastructure to allow for third-party access, such as the PUC, public utilities, and providers through a separate portal. HECO does, however, have strong security concerns regarding the sharing of electric infrastructure information.

Ms. Hartstein noted that their online portal project will give out certain information in an applicant's search ring that the applicant would be able to use for their application, but not full access to information on all electric facilities. Mr. Kuong said that the City is interested in getting information from HECO that would not be considered sensitive, such as pole locations. Ms. Hartstein suggested that they meet to facilitate such discussions.

Mr. Arnold Kishi asked about development of the subterranean view for identification of underground infrastructure. Mr. Kuong said that no data had been submitted yet that would allow such modeling, and noted that the City is still working on making 2D records for water and sewer infrastructure more user friendly. He asked whether the providers had 3D data for their infrastructure. Ms. Hartstein responded that they did not yet have underground data for PIE and that they would have similar issues converting from paper records on locations.

Mr. Kuong was asked about access to permit information submitted to the City. He responded that this type of information is generally shared among the private companies participating in the monthly Government and Public Utilities Task Force Meeting for coordination purposes, but that Lokahi's



construction projects function and goal is to provide online sharing of such information (including detailed information such as blueprints). He added that it is dependent upon parties participating in the data sharing (who will then be given access) and advising the City on specific sharing permissions to be given to address confidentiality concerns.

#### **IV. Other/Announcements**

The Chair announced the departure of BAAC members Garret Yoshimi and Ian Kitajima because of their appointments to another state board, and she expressed appreciation for their long service. She noted that DCCA would be in contact with the Legislature regarding their replacements.

With respect to Act 49, passed during the 2018 regular session, the Chair noted that DCCA may solicit comments from providers and county members and participants on their experiences with implementation and usage of the act for a future BAAC meeting.

The Chair asked the members and participants if there are any other items that the BAAC should consider going forward. Ms. Hartstein noted that draft dark fiber legislation was considered by the BAAC last year, but was not introduced. She asked whether the BAAC would be interested in working with HECO on and supporting this type of legislation. Ms. Hartstein said that, although this may seem to put HECO in a competitive position with providers, in actuality, there are limited areas where they have fiber available and, in many instances, it is in locations where it may provide the only path to the area, such as their utility access to and structures on military bases, thereby allowing providers access to places they currently cannot access. She said that legislation would be a good way to establish viability for dark fiber leasing, but acknowledged that implementation details would then need to be addressed, including safety concerns and PUC approval.

#### **V. Adjournment**

The meeting was adjourned at approximately 2:30 p.m.