BROADBAND ASSISTANCE ADVISORY COUNCIL MEETING (BAAC)

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

MINUTES OF MEETING

Date: Friday, March 24, 2017 Time: 12:00 p.m. – 1:30 p.m.

Place: Hawaii State Capitol, Room 225

415 S. Beretania Street Honolulu, Hawaii 96813

Present: Chair Catherine Awakuni Colón (Chair), DCCA

BAAC Members Senator Rosalyn Baker, State Senate

Mary Alice Evans (for Luis Salaveria), Dept. of Business,

Economic Development & Tourism (DBEDT)

Arnold Kishi (for Todd Nacapuy), Enterprise Technology

Services (ETS)

Tony Velasco, City & County of Honolulu (City)

Garret Yoshimi, University of Hawaii

Gregg Fujimoto, Oceanic Time Warner Cable (OTWC)

Sharene Urakami-Oyama, AT&T

Jason Fujita (for Scott Barber), Hawaiian Telcom (HT)

Other Participants Jade Butay, Department of Transportation (DOT)

Paul Nakagawa, Hawaiian Electric Company (HECO)

Steve Nagata, HECO Tracy Nishibun, HECO Kiman Wong, OTWC

Ken Hiraki, HT Mark Wong, City

Kathy Sio (for Representative Kyle Yamashita)

DCCA Ji Sook "Lisa" Kim (Cable Administrator); Cathy Takase; Debby

Shin; and Jeremy Aoyagi

I. Call to Order

The Chair called the meeting to order at 12:05 p.m.

II. 2017 Legislative Session Update

The Chair highlighted the following broadband-related bills introduced this session.

A. Bills introduced related to the siting of small wireless facilities (H.B. No. 625, S.B. No. 1201)

1. H.B. No. 625, H.D. 3, S.D. 1 - Relating to Infrastructure

The Chair noted that the amendments made by Senate Draft 1 include various changes to the application process, as well as various conditions and restrictions on the collocation of small wireless facilities on state and county property, including: (1) establishing conditions where wireless providers pay for de-commissioning, damage to poles, and pole replacements; (2) creating an exception for state-owned airport properties; (3) amending fee calculations; and (4) specifying that batch permitting must be within a 3 square mile area.

The Chair invited those present to share any concerns. DOT Deputy Director Jade Butay noted DOT's concern that the bill could adversely impact existing concessions at the State airports. The Chair asked for further comment, but there was none.

2. S.B. No. 1201, S.D. 2, H.D. 2 - Relating to Technology

The Chair noted that the House Draft 2, which creates a broadband task force, chaired by DBEDT and that includes private and public entities, only takes effect upon the passage of other siting measures. The task force is to submit a report to the Legislature prior to the next session regarding future funding for public, education, and government access (PEG) organizations, with which DCCA contracts through its Cable Television Division; reasonable and fair fees for broadband implementation; whether DBEDT should be a single point of contact for broadband; and how best to address advancements in technology. The Chair noted that it will be heard next by the House Committee on Consumer Protection & Commerce, and invited any discussion. There was none.

B. Other broadband related legislation (H.B. No. 597, H.B. No. 100)

The Chair also noted the following broadband-related legislation.

1. H.B. No. 597, H.D. 1, Relating to Economic Development

This bill proposes to establish a broadband coordinator position in DBEDT, and requires DBEDT to create a broadband plan and legislation to establish a broadband review panel. The Chair noted DCCA's willingness to assist DBEDT.

2. H.B. No. 100, H.D. 1, Relating to the State Budget

The Chair noted that DCCA had worked with the INET Partners (DCCA, ETS, UH and the Department of Education (DOE)) and the Hawaii State Public Library System on an INET project proposal to separate the INET network infrastructure from one pair to two pairs of fiber, on Hawaii Island and on Maui. The House Draft 1 of H.B. No. 100 does not include monies for this INET project.

The Chair asked those present if there was any other notable legislation related to broadband that they believed should be monitored. No comments were made.

III. Updates

A. Hawaii Broadband Initiative (Transpacific Fiber Optic Cable Landing Project) - DBEDT

DBEDT Deputy Director Mary Alice Evans stated that the Request for Proposals (RFP) for the transpacific fiber optic cable landing station project was issued in January, and solicitation closed in February. She reported that there were responsive and responsible offers submitted, and that the Evaluation Committee is in the review process so further detail on the offers could not be provided at this time. The goal is to complete the evaluation process within a month, and to then begin negotiating a project agreement with the successful offeror. The project goal is to have a single landing station that is fully permitted, constructed, and operated to allow transpacific fiber optic cables to land in Hawaii with no permitting requirements, thus reducing the final costs and risks to the cable operators.

The Chair noted the encouraging response to the RFP and thanked Deputy Director Evans for the update. Deputy Director Evans was asked if there was a projected date for operation of the cable landing station. She stated that there was an estimated timeline included in the RFP, but that she did not have the RFP available. She noted that DBEDT was not seeking to eliminate any of the environmental assessments and permits.

B. National Joint Utilities Notification System (NJUNS)

Mr. Paul Nakagawa reported that NJUNS was discussed at the last Oahu joint pole meeting on December 14, 2016. Since that time, two members of the joint pole committee from HT and the City have retired, so they have not yet had a follow-up meeting. One concern raised was the division of the payment of the one-time fee of \$12,000 and the annual membership

fees of \$21,000 between the participants, and whether a fee would be charged to pole attachers who use the system. They do see benefits in having the system and will continue to learn more about the system.

The Chair noted that the system would be a unified system that would allow for better tracking in the pole attachment process. Senator Rosalyn Baker asked about the impact of the system on small wireless facilities deployment. Mr. Nakagawa commented that this is one of the considerations because the NJUNS system would be able to provide a source of information. For wireless providers, it would provide an easier way to identify the pole owner or owners with whom they would need to enter into a pole attachment agreement.

C. Hawaii Island Fiber Gap Project

DCCA has continued to follow up with stakeholders on this ongoing project to close the existing gap in Hawaii Island's fiber communications infrastructure ring (Fiber Gap Project). The DCCA team travelled to Hawaii Island to meet with officials from Kamehameha Schools Bishop Estate as well as new leadership at the Hawaii Volcanoes National Park (HVNP) to ensure awareness of the needed Fiber Gap Project and its reliance on HELCO's line rebuild project through HVNP. At the meeting with HVNP, HVNP representatives asked that the providers meet with them early and noted their strong preference that the providers collocate on the same poles because of the importance of view planes for the park. They also noted that rights-of-way (ROW) permits are required not only from HELCO, but also HT, OTWC, and any other providers who want to be on the poles. They stated that the approval process takes about 8-10 months, and that there is a recurring charge for the ROWs. The Chair noted that DCCA continues to look at ways to assist in closing the gaps on the various islands.

The Chair also provided an update on HELCO's line rebuild project that includes the replacement of poles that may be used by providers to close the fiber gap. The HELCO project has been separated into four phases, the first two of which will allow providers to bridge the gap. Phase 1 starts at the most southwest portion of the project, beginning at the edge of HVNP and stretching inward about 9 miles to an area near Namakani Paio Campground. HELCO has received verbal approval from HVNP after restaking every pole position for Phase 1 and Phase 2. The draft environmental assessment can now be finalized and published for public review. HELCO has submitted an application to be in the federal ROW, and expects to submit for DOT plan review before the end of this month. HELCO expects to start tree trimming, hole digging, and construction around May of 2017.

Phase 2 of the HELCO project covers a shorter length from the end of Phase 1 to the Volcano Golf and Country Club. HELCO has also obtained verbal approval from HVNP for Phase 2. This phase is scheduled to begin in 2018.

D. Connect America Fund (CAF II Funding)

Mr. Jason Fujita provided a list of CAF II funded locations. HT has completed building infrastructure for broadband service delivery in the first 10 listed locations, and stated that approximately 500 homes are being served in those locations. The remaining 14 areas listed are those planned for 2017 that will serve approximately 4,000 homes. The minimum broadband service to be delivered through CAF II funded projects is 10 megabits per second download and 1 megabit per second upload. These locations were eligible for CAF II funding because they were unserved. In response to an inquiry made about the Keahole Airport location, Mr. Fujita clarified that the CAF II funded locations would be the homes in the area around the airport.

The Chair thanked DOT Deputy Director Jade Butay for his assistance in expediting processes for permits needed for the CAF II projects because of the short time frame that HT has to complete the projects. Mr. Fujita also expressed HT's appreciation, noting that timing is critical to meet the CAF II funding requirements.

IV. Lokahi Smart City/Enterprise Platform Demonstration - C&C of Honolulu

Mark Wong, Director of Information Technology (DIT) for the City, provided a presentation on the City's Lokahi Smart City/Enterprise Platform (Lokahi). DIT began work on Lokahi at the end of December 2016. Lokahi was developed to replace the hundreds of systems used to manage the work of the City. DIT created an architecture to place all City information and systems (except for Enterprise Resource Planning & payroll) on a common, single platform to handle the day-to-day operations of the various City agencies as well as City emergency operations and management. All City employees will have access to this tool, although features will be enabled depending on their job roles.

Mr. Wong then demonstrated many of the functions of Lokahi, and highlighted that it provides everyone with access to the same real time data. Information is created in the system rather than imported so that it is very time aware. The search function allows user to define a physical area and to determine events in that specified area, including City road projects, one call construction projects, community events, etc., and to link to detailed information related to these events. A handout on Lokahi was provided on its different features.

Lokahi is currently only available internally for the City, but DIT is working on developing data governance rules for the sharing of the information. Other system highlights include the following:

- Lokahi currently includes all transportation permits, facilities and maintenance permits, design and construction permits, and planning permits.
- Lokahi was developed in-house using compiled open source materials, thus no contracts or licensing was required. This allows the City to deploy the system to 10,000 employees at no cost, and to maintain and extend the system at no cost.
- Lokahi allows the user to easily layer multiple data sets.
- Lokahi can track buses and will be able to access video on the bus when the City upgrades to 4G connectivity. The system can also track fire trucks, police vehicles, and aircraft.
- Lokahi includes all maps, plans and aerial images available to the City.
 Lokahi has various base maps for the State, including base maps from google, esri, and bing, and the City's own community sourced base map that has more recent data.
- Lokahi includes all utility locations (gas, electric substations), broadband WiFi information, cell tower locations (4G vs. 3G), microwave towers, and specific provider antennas.
- Lokahi could help facilitate and coordinate broadband deployment projects because it manages all construction projects in the public realm and includes data such as locations of radio towers, operating frequencies, location of microwave backhaul, fiber plant connection used, WiFi coverage, and broadband coverage.
- Utilities will be given access to Lokahi. The City is working first with HECO. More sophisticated security and coordination with the utilities is required to provide limited access to parts of the City network. However, equipment is in place so this should be happening soon.
- Lokahi includes a very large number of detailed demographic layers.
- For storage, Lokahi will use the City's two data centers, one located at the Fasi Municipal Building and one in Kapolei, and also one enterprise storage system. The city will have another data center when the Joint Traffic Management Center across Alapai Street is completed.
- Currently, the system is only being used by DIT and the City Departments
 of Transportation Services, Facilities & Maintenance, Design &
 Construction; and Emergency Management. They will work next on some
 of the smaller City offices because they must implement features as they
 build.

V. Announcements

A. Designated Oceanic WiFi Hotspots

The Chair informed the BAAC that as part of the merger proceeding between Time Warner Cable and Charter, OTWC will be deploying over 1,000 new public WiFi access points throughout the State over four years from the date of approval of the merger, with DCCA designating 100 of these access points (for public parks, civic or other community centers, and other public gathering places). DCCA designated the first 14 locations in the County of Kauai. These locations are bus stops where WiFi access was desired by the County. For these designated locations, Oceanic is providing one hour of free public WiFi service per device per day.

The Chair asked Mr. Kiman Wong to provide use information. Mr. Wong noted that, based upon the three months of data collected, use of the 14 designated hotspots is steadily growing. In January, without any marketing of the hotspots, there were approximately 26,000 sessions used by about 10,000 devices, and 467 Gigabytes of data was used. In addition to those 14 designated WiFi hotspots, OTWC has added about 50 hotspots on Kauai. OTWC has also added 65 WiFi hotspots on Maui, and currently has about 3,100 hotspots across the State.

Mr. Wong also reported on seven public WiFi hotspots placed in Hana. In January, these hotspots had about 3,800 sessions initiated by approximately 1,500 devices. Use is also growing there by about 1,000 sessions a month. In response to an inquiry regarding the speed of the hotspots, Mr. Wong said that users could get up to 50 megabits per second speed depending on the distance from the hotspot and the number of simultaneous users.

The Chair asked for any other announcements and for future items for consideration by the BAAC. There were none. The Chair also invited members and participants to provide DCCA with suggestions for known locations that could benefit from public OTWC WiFi hotspots.

VI. Adjournment

The Chair thanked all for their attendance, and Mr. Wong and DIT for their presentation on the City's Lokahi system.

The meeting was adjourned at 1:35 p.m.