I. **Call to Order**
Chair Catherine Awakuni Colón called the meeting to order at 2:00 p.m.

II. **Minutes of November 12, 2014**
Chair Awakuni Colón noted that the Minutes of the November 12, 2014 BAAC Meeting had been distributed to the members and posted on the DCCA website.

III. **City & County of Honolulu Broadband Plan**
Mark Wong, Director of Information Technology for the City & County of Honolulu (City), presented the City & County of Honolulu Broadband Plan:

The City’s broadband policy is to treat broadband as a core public infrastructure component like roads, water, and utilities. The City sees its
role not in deploying broadband but as a facilitator of high speed wired and wireless networks (i.e., WiFi, Mobile and Fiber). The City's strategy is to use broadband as a catalyst for development in the City. To enable broadband deployment, the City is reviewing permitting and other regulatory means, such as the allowance of microtrenching, fiber conduit requirement standards for large developments, and public utility coordination and requirements for the installation of conduit.

The City's WiFi strategy is to deploy free WiFi networks on City properties for the public and to avoid competing with carriers and private owners, such as hotels that offer WiFi to guests for a fee.

City WiFi is already available as Honolulu HotZone, operated by the City in City facilities such as City Hall, the Blaisdell, McCoy Pavilion, and some of the beaches; and operated by Kokua Wireless in Chinatown and some parks. The City is working to deploy WiFi in major tourist destinations, particularly Waikiki, and is also planning for WiFi as a component of the City's rail system, both for riders and operations. The City does not currently plan to offer WiFi on buses because of the technological challenges presented. The City has been working on its Waikiki WiFi project that will be operated by Oceanic Time Warner Cable, and it should be launched in a few weeks. The City has contacted hotel owners to determine their interest in participating in its Waikiki WiFi program.

In conjunction with the rail project, the City has been working on its Transit Oriented Development (TOD) strategy for TOD zones. TOD zones are areas within a half-mile radius around transit/rail stations, which will cover much of the surrounding population and business and educational districts. The likely model will be to have a free Wi-Fi network on the rail and in the TOD zones, operated by one or more existing carriers in exchange for development rights and right-of-way easements. The City will use the Wi-Fi to promote development and to enable dissemination of information and wayfinding. A new website called HNL.info will be launched to promote the City, and will be tied into the TOD zones with wayfinding to help people discover and find nearby businesses and events via Wi-Fi.

Mr. Wong provided tentative details on the Waikiki Wi-Fi project roll out that will be announced shortly. The City has been working on this project for about two years and the permitting process is near completion. The current plan is to provide free Wi-Fi to the public for up to one hour per day per device. Internet service subscribers will have unlimited Wi-Fi access by signing into their subscriber accounts. Coverage will extend from the Waikiki Police Station to the Diamond Head end of Kapiolani Park. Coverage is geared toward the beach areas away from hotel areas. Kapiolani Park is currently not included because of conservancy/trust policies regarding commercial activity. The Waikiki Aquarium is not
included because it is a State facility, but the State could opt to join in the project.

The City’s mobile strategy includes the following:

- Install Distributed Amplifier Systems (DAS) in critical areas where signals are weak to ensure mobile access for the public.
- Establish right-of-way policies to allow cell carriers to place their equipment on street light and traffic signal poles. Mr. Wong noted that challenges include addressing the need for constant electrical power for seamless access. Because of the size of the DAS, current plans are to provide a small number of approvals in the Kapahulu and Diamond Head areas to gauge public response. Projected time frame for deployment of the initial small cell sites is within the next six months.
- Encourage coverage in areas where the City has access needs for The Bus, HandiVan services and public safety.
- Facilitate carrier installation of mobile antennas with Waikiki hotels.
- Ensure coverage in TOD zones.
- Encourage Honolulu Authority for Rapid Transportation (HART) to plan early for rail stations and guideway to improve coverage in the metropolitan core.
- Establish a subsurface easements task force and right-of-way task force consisting of the City agencies necessary for broadband projects. These task forces now meet regularly.

The City’s fiber strategy is to limit its infrastructure investments to projects that carriers cannot implement on their own; to enable deployment through regulation rather than to provide municipal broadband; and to leave operations to the carriers. The City’s fiber projects include the following:

- New rules and standards, such as “Complete Street” standards, that require fiber installation under the sidewalks. (This standard will be tested with smaller fiber installation projects.)
- Inclusion of fiber and conduit in new right-of-way/easement communication projects.
- Review of challenges to an existing City initiative to lay conduit when rebuilding roads.
- Substantial investment in infrastructure phased over the life of the rail project, including the placement of a fiber backbone in the 20-mile rail hollow concrete guideway.

The City’s rail fiber project will also include 100 fiber pairs for community (public) use, and 100 fiber pairs each for the City, for State agencies, and for rail operations. There is abundant space in the guideway for additional fiber pairs to be added in the future. The City’s separately funded design plans, which are close to final, were developed in consultation with
Oceanic Time Warner Cable, Hawaiian Telcom, Sandwich Isles Communications, HART, the State Department of Transportation, and the University of Hawaii. The City is currently working on interagency agreements.

Fiber designated for community use will be made available to broadband operators. The City has several proposed scenarios for multi-carrier shared access to the Community fiber. Plans are being developed in consultation with the various operators regarding the entity to manage the community fiber infrastructure.

Mr. Wong explained that, along the proposed rail route, fiber pairs will be peeled off with the intent of providing more capacity to areas that have insufficient capacity. Fiber drops will be made at every other station for the City, at every station for Hart, and at points to be determined for the community fiber.

The HART fiber routing is part of the rail transit’s original plans. It will be paid for by HART, but will be turned over to the City, which will be managing all fare collection activities. The HART fiber routing includes dual paths for redundancy. HART and City fibers terminate in the Train Control and Communications Room, which is a secured location. The Community fiber terminates in separate locations outside of the rail facilities. These locations were determined with input from the stakeholders.

Mr. Wong announced that sample transit information screens will be installed within a few weeks in the Fasi Municipal Building lobby and near the back door of Honolulu Hale. Initially, the transit information screens will only have transit arrival information for the bus, but the City is working with a company to be the first City to also incorporate wayfinding and the TOD information. The City developed the HNL.Info project to provide supplemental information to that provided through the transit information screens.

Mr. Wong is the point of contact for inquiries regarding HNL.Info and other City broadband projects.

IV. Reports to Legislature – 2016 Legislative Session

A. HCR 189
Chair Awakuni Colón provided a summary overview of House Concurrent Resolution Number 189 (HCR 189), which requests that the BAAC and additional participants assist in the development of a broadband Master Plan for access in resort areas and other important areas including the Honolulu International airport and Hawaii public schools. DCCA has already reached out to the participants identified in the resolution as well
as relevant State agencies with a role in broadband planning for assistance. DCCA anticipates holding regular meetings and will contact the BAAC members and named additional participants shortly regarding the first meeting date.

B. **Act 151 (2011)**
Act 151 requires that DCCA report to the legislature by January 2016 on whether to extend the broadband permit exemption provided by the Act. DCCA will reach out to broadband service providers to get input regarding the potential use of the exemption to assist in preparation of the report to the legislature.

V. **Updates and Announcements**

A. **BAAC Membership**
All existing BAAC members’ terms will expire near the end of July 2015. Chair Awakuni Colón reached out to the Senate President and the Speaker of the House to request reappointment of the BAAC members willing to serve a second term. The Chair also expressed DCCA’s gratitude to the members for their willingness to assist DCCA on broadband matters.

B. **Wireless Technologies Report**
Chair Awakuni Colón provided a summary of DCCA’s partnership with Hawaii County on a project utilizing DCCA’s federal grant funds that produced the Wireless Technologies Report. This report was provided to members and posted on DCCA’s website. The intent of the report is to provide a resource for any interested parties who may want to provide Internet access in rural areas. The report includes coverage map models for a number of rural areas around Hawaii Island for three wireless technologies (900 MHz, 3.65 GHz, and TV White Space (TVWS)), as well as test data from field tests of 900 MHz and TVWS products by DCCA staff, Hawaii County staff, and an engineering consulting firm.

C. **Other**
The following additional updates were provided:

1. **Hawaii Island Fiber Gap Project.** Chair Awakuni Colón provided a status update on this project, involving all relevant stakeholders, to close the island’s telecommunications fiber optic cable gap between Volcano and Naalehu. Hawaii Electric Light Company (HELCO) has completed its draft of the Environmental Impact Statement for a project that will install new utility poles and lines within the Hawaii Volcanoes National Park. HELCO will be presenting this draft to the National Park Service shortly to request its approval. HELCO currently anticipates completion of (1) Phase 1 of its project that spans from the south side of the National Park to the substation near the Observatory in March 2016; and (2) Phase 2 that spans from the Observatory to the Hilo side of the National Park at
the end of 2016. The Chair noted that HELCO’s project will not close the existing fiber gap completely and that DCCA will likely re-engage with the stakeholders regarding any additional work that needs to be done.

2. **DCCA Digital Learning Web Page.** Chair Awakuni Colón noted that the DCCA Digital Learning web page was launched earlier this year. It provides content and links primarily to other government agency resources that help to promote interest in and use of broadband services and Internet access.

3. **Measuring Broadband Hawaii Initiative.** Chair Awakuni Colón provided a summary of DCCA’s Measuring Broadband Hawaii (MBH) program. DCCA partnered with the Federal Communications Commission to extend its Measuring Broadband America program that measures consumer broadband service performance. Utilizing federal grant funds, DCCA purchased the customized broadband measuring devices (referred to as whiteboxes) for use by volunteer panelists across the State.

The Chair noted that DCCA is still seeking more panelists, particularly in the counties of Kauai and Maui, and asked for the assistance of Senator Baker and Representative Kawakami for those areas. DCCA is seeking approximately 30 additional panelists.

4. **Broadband Utilities and Project Coordinator Position.** DCCA is continuing discussions with the Department of Transportation (DOT) regarding the creation of a Broadband Utilities and Project Coordinator position as a means to expedite deployment of broadband infrastructure. Among other things, the Coordinator would monitor all broadband projects and DOT projects and could then assist in coordinating the installation of fiber optic cable with other scheduled projects.

5. **Hamakua Community Broadband Assessment.** Chair Awakuni Colón reported on DCCA’s partnership with Hawaii County on this project that sought to understand the market potential in the Hamakua area and to determine how to support and incent broadband infrastructure investment in this underserved area. The assessment report generated will be made available shortly.

### VI. Adjournment

Chair Awakuni Colón thanked the members for their participation on the BAAC and invited members to raise possible broadband issues or ideas for the Department’s consideration.

The meeting was adjourned at 2:52 p.m.