To: Bay Area UASI Approval Authority

From: Barry Fraser, BayWEB Project Manager

Date: March 8, 2012

Re: Agenda Item #10 BayRICS Authority Update for March 2012

Action or Discussion Item:

Discussion Only

Staff Recommendation:

Discussion Only

BayRICS Authority Update:

With the approval of the Systems Funding Plan and BOOM agreement at the January 19 meeting, staff has been very busy making the transition from planning and negotiations to implementing the BayWEB project. Staff activities in a number of key areas are described below.

1.   BayRICS Authority Administration

The Authority held its monthly Board meeting on Thursday March 1, 2012. Staff prepared a financial report and a proposed administrative policy for reimbursement of incidental and travel expenses for the Board's review. Staff also provided a summary of Middle Class Tax Relief and Job Creation Act of 2012 (HR 3630), legislation that allocates additional spectrum and funding for a nationwide public safety broadband network, and a report on the potential costs and benefits of a proposal that the Authority pay the costs of eight sites in Santa Clara County to allow these sites to be included in the BayWEB site list. The Authority's General Counsel provided an informational workshop on the Brown Act

Staff is also working on upgrades to the Authority's web site, hosted by Oakland, and on the development of a budget for Fiscal Year 2101-2013.

2.   Site Use Agreements

Staff continues to work with Motorola and site owning jurisdictions to finalize the site configuration for BayWEB. To date, the following jurisdictions have executed or authorized the execution of site agreements with Motorola:

- Sonoma County
- Contra Costa County
- Alameda County
- San Mateo County
- City and County of San Francisco
- EBRCSA
- City of Concord
- City of Sunnyvale
- City of Santa Clara

In addition, several jurisdictions are actively negotiating site agreements or in process of obtaining approvals. Staff estimates approximately 135 sites are now available or will be secured in the next two weeks. In addition, another 33 sites are still in play, but more work needs to be done to verify that those sites can be secured. BayRICS staff are working with the jurisdictions yet to finalize site agreements in an effort to ensure the greatest number of sites can be built out using BTOP/Motorola funds. As a reminder, the BOOM agreement allows for the substitution of sites without penalty or costs to the Authority up until May 31, 2012.

Staff is also working with Motorola to begin site remediation planning, which will involve extensive interaction and significant contribution of staff time from site owning jurisdictions. We view the Authority as the "go-between" to facilitate the fast and efficient completion of the site evaluation and remediation phase of work. Do not hesitate to reach out to us if you have questions or concerns about your sites.

3. Fiber and Backhaul
     a. BART

Staff has coordinated three meetings with BART in the past month, and we are making good progress in the development of that agreement. The draft agreement should go to the Authority's legal counsel for review this week, then provided to Motorola to finalize the agreement. Staff intends to bring both agreements to the Board for approval at the April meeting.

     b. BayLoop

Staff and members of the TAC met with Aviat to discuss the costs of extended warranty, preventative and corrective maintenance and network monitoring services. Currently, jurisdictions operating BayLoop sites pay for the operation and maintenance only for their sites, and there is no system-wide network monitoring service. In order to use BayLoop for the BayWEB project, a maintenance and monitoring solution must be developed. The Authority's Systems Funding Plan identified minimum costs of $265,000 to provide the necessary enhancements to BayLoop, but the plan also anticipated that some jurisdictions already use BayLoop extensively and would prefer to support their own portions of the system.

The TAC and BayLoop Working Group are in the process of developing proposed solutions to the BayLoop challenge. Staff has also investigated seeking UASI grant funding, as the identified costs of BayLoop would be eligible for sustainment funding under the federal grant guidelines.

    c.   San Francisco Fiber and Evolved Packet Core (EPC)

Staff has been meeting with representatives of the City and County of San Francisco to develop a fiber use agreement to allow fiber connectivity to the enhanced packet core (EPC) to be located at Twin Peaks in San Francisco. These discussions are still in the early stages, but staff anticipates negotiating a fiber agreement with San Francisco for Board approval in the next two months.

4.   <u>Technical Advisory Committee (TAC) and Working Group Meetings</u>

The transition from BayWEB project planning to project implementation will create extensive work for the TAC over the next several months. The TAC met on February 9th, and several important planning and organizational items were discussed, including setting regular TAC meetings on the third Thursday of each month at 1:30 PM, developing the specs for an RFQ to select a BayRICS Technical Consultant, expanding the scope of the BayLoop Ad-Hoc Working Group, and establishing additional ad-hoc groups to deal with issues such as PLMN ID, internetworking architecture, network implementation and testing, interface with commercial LTE networks, etc. The BayLoop Advisory Committee held a conference call on February 23rd to discuss planning for system maintenance and monitoring, as described above.

5.   <u>Billing and End User Support Functions</u>

Authority and Motorola staff have set up weekly phone calls to better understand and plan for the billing and end user support functions that the Authority has agreed to assume under the BOOM agreement. As a part of these calls, staff has requested Motorola to provide estimated breakdowns of responsibilities and projected annual staff hours that the Authority should include in future planning and budgeting. This work is proceeding well and the staff time projections developed so far are less than the costs estimated in the Systems Funding Plan. However, not all tasks and functions have been fully identified at this time. Staff should have a more detailed report of the anticipated work and cost to the Authority at the April meeting.

6.   <u>700MHz Spectrum Waiver Status</u>
    a.   Waver Petition Update

The Public Comment period for the waiver petition closed on January 30. Few comments were received. The Harris Corporation filed comments asking the FCC to place additional conditions on the Bay Area waiver recipients and the BayWEB network. Staff drafted a brief letter to the Commission pointing out that the that the proper place for addressing the issues raised by Harris was in the Interoperability Showing that the waiver recipients must have approved by the FCC prior to system activation. The Core Cities filed this letter on the Authority's behalf. We are awaiting a proposed order and decision from the FCC on this matter, and we remain confident that the request will be handled in a timely fashion and a decision issued soon.

    b.   Impact of D Block Legislation (HR 3630)

It is unclear at this time what the impact of Middle Class Tax Relief and Job Creation Act of 2012 (H.R. 3630) will have on the waiver petition and the ability of the Core Cities to execute a new lease

with the Public Safety Spectrum Trust (PSST). Under the legislation, a new governance structure will be established and the PSST will no longer be the licensee of either the D Block or the 700MHz public safety broadband spectrum. Therefore, it is uncertain at this time if this will interfere with the FCC process or the spectrum lease process. We are investigating and will provide more information at the April meeting.

7.   PSST Owner-Operator Committee/Waiver Recipient Working Group (OAC/WRWG)

Staff and TAC members participate in weekly conference calls of the OAC/WRWG, in which the twenty-one cities, regions and states who are authorized by the FCC to build public safety wireless broadband networks discuss policy and technical issues that require common solutions among all waiver recipients. Most recently, two issues of high importance have been before the OAC/WRWG.

First, under an Order issued by the FCC's Public Safety and Homeland Security Bureau on January 9th ("PLMN-ID Order"), waiver recipients were required to recommend a PLMN numbering administrator by February 8th, and develop a PLMN numbering schema by March 31, 2012. To meet this very short timeline, the OAC established a PLMN-ID working group, which holds weekly conference calls. BayWEB project manager Barry Fraser and TAC vice-chair Ahsan Baig participate on this working group. On February 8th, at the recommendation of the working group, the twenty-one waiver recipients (including the Bay Area Core Cities) jointly filed with the FCC's Public Safety and Homeland Security Bureau the recommendation that Science Applications International Association (SAIC) be designated as numbering administrator.

The January 9th FCC Order also authorized the waiver jurisdictions to use a single, common high-level network identifier (Public Land Mobile Network Identifier or PLMN-ID) in constructing the nationwide network.   ATIS-IOC, the industry group which assigns PLMN-IDs, has assigned PLMN-ID 313-100 for this purpose.

The second important issue before the OAC/WRWG is the selection of a network interoperability architecture design. The OAC recently established an Interconnectivity Infrastructure Group (IIG) consisting of lead architects from nine organizations, including Motorola. The goal of the IIG was to develop a recommended approach to allow early builders to comply with FCC requirements that regional systems have the technical ability to interconnect and support the movement of a user between the home and a visited networks (*e.g.*, for mutual aid assistance), and the user's ability to access home services through the visited network. BOOM team had in the past referred to this as "roaming" between public safety networks, but this technically not roaming since all public safety networks now will operate under a single PLMN-ID.

This is a highly technical consideration, and for that reason, staff has requested TAC chair Steve Dupre and vice-chair Ahsan Baig to review the work of the IIG and provide guidance to the Authority and the Core Cities. We have also asked Motorola for input. The OAC/WRWG has delayed a proposed vote by waiver recipients whether to support of the IIG's proposal solution until the recipients meet in Boulder, CO on March 6-8. Ahsan Baig and Barry Fraser will attend that meeting, and will report back to the Board at the April meeting.