

**BayRICS
JOINT POWERS AUTHORITY
BOARD OF DIRECTORS MEETING**

STAFF REPORT

DATE: November 14, 2014

TO: BayRICS Board of Directors

FROM: Barry Fraser, General Manager

RE: General Manager's Report for August – October 2014

This report summarizes staff activities conducted during August through October, 2014 for each of the four BayRICS strategic initiative areas. Links to blog posts and additional information have been provided where available.

Strategy 1: Realistic & Stable Funding Plan

Budget Reports. The Alameda County Auditor/Controller (BayRICS Treasurer), has developed additional reporting and recordkeeping tools for budget tracking. Staff has attached a new year-to-date budget vs. actuals report for tracking BayRICS financial activity.

BayRICS revenue and expenses are on track to meet budget goals for the year. Both revenues and expenses have decreased significantly from this point last year. Expenses are running about \$15,000 below year to date budget projections, and revenues are about \$21,000 below forecasts. The income shortfall is due to late member fees due from three members. Staff has taken steps to ensure that these accounts are paid.

Audit. BayRICS Treasurer is in the process of finalizing the audit for Fiscal Year 2013-2014. This audit should be completed within the next 30 days. Final audit documents will be distributed to the Board when they are available.

Grants. All invoices for BayLoop maintenance and network monitoring services have been processed in time to meet UASI 2013 deadlines to ensure reimbursement. Staff and BayLoop Advisory Group are currently assessing BayLoop to determine the best path for continuing BayLoop support in future years. More details on the activities of the BayLoop advisory group are provided below.

Funding Opportunities. Staff and CalOES are still finalizing the SLIGP grant funding for BayWEB lessons learned and next steps. Staff will advise the Board when this funding is available. Staff also submitted a proposal for UASI 2015 funding to continue BayRICS regional broadband planning through 2016. We have included flexibility in this proposal to allow the amount of funding to be reduced if other funding opportunities are found. This proposal will be reviewed by the UASI Advisory Group in January 2015.

Planning for 2015. Staff has begun developing several alternative operating plans and budgets to provide the Board with multiple options for BayRICS for Fiscal Year 2015-2016. Staff will provide these options to the Board for review at its January 2015 meeting, tentatively scheduled for 1:30 PM on Thursday January 8, 2015.

Strategy 2: Lead State Planning for FirstNet

FirstNet Comments to Public Notice and RFI. On October 27, BayRICS, along with over 65 other entities, provided written comments to help FirstNet interpret several provisions of the Middle Class Tax Relief and Job Creation Act of 2012, the federal legislation that created FirstNet. Comments were also filed by the State of California and other local and states, public safety associations and commercial entities.

BayRICS staff and TAC members worked closely with the State of California and other public safety associations, which resulted in a consistent message from many commenters regarding several interpretations proposed by FirstNet, including:

- Definitions proposed by FirstNet of the “Core” and “Radio Access Network (RAN)” should be clarified as to whether they included certain elements, such as backhaul connectivity and law enforcement databases controlled by local or state agencies;
- States and localities should have discretion to develop reasonable user definitions within their jurisdictions, consistent with their responsibilities as public safety agencies;
- Areas that should be designated as “rural” for establishing FirstNet’s rural coverage milestones must be determined for each state during that state’s consultation process;
- The “economic desirability” of using state and local infrastructure (radio sites and microwave or fiber for backhaul) should also be a topic for discussion during the state and local consultation process.

FirstNet also received over 120 responses to its Request for Information (RFI) for Comprehensive Network Solutions, but those responses have not been released to the public. BayRICS submitted a brief response urging FirstNet to consider alternative network solutions, such as working with high-risk, urban areas to quickly build regional networks (similar to the current projects in Los Angeles, California and Adams County, Colorado built with BTOP grants, and the Harris County, Texas project). For more information on the results of the RFI and Public Notice, visit this [Blog Post](#).

For [BayRICS comments click here](#).

For [The State of California comments click here](#).

[Links to all comments are available here](#).

NPSTC Local Control Working Group. BayRICS GM Barry Fraser was invited to participate on a work group set up by the National Public Safety Telecommunications Council (NPSTC) to develop a White Paper on local control of the FirstNet nationwide broadband network. Managing local control functions across multiple agencies with competing interests will be critically important to FirstNet’s success. Fraser has proposed that the local control solutions must be developed across two parallel tracks (1) Technical Control, i.e., what is possible with the technology and what intelligence can be built into the system to avoid disputes among overlapping agencies, and (2) Operational Control, i.e., what procedures and agreements can

be developed for overlapping agencies to implement amongst themselves to avoid confusion and conflict. Any acquisition solution considered by FirstNet must include both technical and operational local control capabilities for device and user management, priority and preemption. The NPSTC White Paper will be published in early 2015.

FirstNet Public Safety Advisory Committee (PSAC):

- September 10, via conference call. PSAC was briefed two major topics to be discussed by FirstNet Board: release of a Public Notice and Request for Comments on questions and legal interpretation of several RFP-related topics; and release of a focused Request for Information (RFI) as a precursor to a comprehensive Request for Proposals (RFP) for the network. The PSAC also heard updates on FirstNet assignments by Chair Harlin McEwen, including the Use Cases Document (submitted to FirstNet Board for review on July 21) and Potential Network Users Document (submitted July 22), and status of the PSAC Early Builders and Tribal Working Groups. PSAC also heard brief reports on progress on state consultation and outreach. For more details visit this [Blog Post](#).
- December 2, Norman, Oklahoma. PSAC will receive updates from FirstNet on review of Public Notice and RFI comments, timeline for release of draft Request for Proposals for network solutions, and status of state consultation activities.

First Responder Network Authority (FirstNet):

- On Wednesday September 17, the FirstNet Board held its regular quarterly meeting at its headquarters in Reston Virginia. The Board heard reports from its four committees, and discussed three key agenda items: (1) the release of a Request for Information (RFI) and 15-point statement of objectives (SOO) for network technical and business elements; (2) the release of a Public Notice and Request for Comments to solicit comments on various legal and policy interpretations; and (3) proposed budget for 2015. For more details visit the [Blog Post](#).
- FirstNet Board and Committees will meet on December 9-10 in Salt Lake City, UT.

California First Responder Network Authority (CalFRN):

- On August 26, the California First Responder Network (CalFRN) Board of Directors met at the California Department of Technology Offices in Rancho Cordova, CA. The meeting was held in conjunction with a “Broadband Consultation Prep Workshop” conducted by the Department of Homeland Security Office of Emergency Communications (OEC) [See [DHS/OEC Broadband Prep Workshop Highlights](#) blog post].
- On October 1, CalFRN held a Board meeting and an a second Broadband Consultation Prep Workshop in Diamond Bar, CA.
- “FirstNet in California” Town Hall Meetings:
 - Lakeport – July 16 (GM Fraser spoke on the panel)
 - Bakersfield – August 13
 - Fairfield – September 24 (GM Fraser spoke on the panel)
 - Santa Ana -- September 30

- Sacramento -- November 20
- Additional Town Halls scheduled in Humboldt and elsewhere in 2015
- CalOES also has [posted several videos from the town halls](#) on the [CalOES Public Safety Communications \(PSC\) YouTube channel](#) for interested stakeholders.
- Earlier this year, CalFRN established a Technical Advisory Committee to support CalFRN State Consultation efforts. TAC Chair Michelle Geddes serves on the CalFRN Technical Advisory Committee. The State Committee has held meetings and participated in California's Public Notice and RFI submissions to FirstNet, and is currently reviewing the results of CalFRN's public safety survey, conducted the past summer. Ms. Geddes is one of only two local agency representatives on the State Committee.

Other FirstNet Planning Meetings:

- Sept 29-30: National Association of Telecommunications Officers and Advisors Annual Conference, Minneapolis MN. More details on the [Blog Post](#)
- November 4-5: Association of Public-Safety Communications Officers (APCO) International, Emerging Technology Forum, Burlingame, CA. More at this [Blog Post](#).

Strategy 3: Communicate the Value of Interoperability

BayRICS Blog – Since April 2014, BayRICS GM has published over 72 articles on the BayRICS Blog and sent weekly summaries via email to over 60 BayRICS members and friends. The blog is available at <http://www.bayrics.net/news-and-notes-blog>.

Web Resources and Tools – Staff have developed an interactive online tool to make submitting comments to BayRICS quick and easy. The web form can be used to gather specific information requested by state and federal partners, and can also be used for general feedback about BayRICS and Bay Area public safety communications. The form is available [at this link](#).

Broadband Pilots and Demonstrations -- Staff is working with three locally-based, commercial manufacturers to develop pilot demonstrations of wireless broadband devices and technology:

- **Hardened Smart Phone for Public Safety** – San Mateo-based Sonim Technologies is working with several Bay Area public safety agencies to test a “hardened” handheld device that currently operates on commercial LTE networks and will operate on the FirstNet network when available. Staff will share the results of these tests for members to use in evaluating similar smartphone devices for broadband data usage.
- **Small Cell LTE for FirstNet** - Staff has repeatedly encouraged FirstNet to consider small cell technology as a cost saving solution for expanding capacity, resiliency and redundancy in dense urban settings. Public Wireless, a San José-based firm, recently received an experimental license from the FCC to operate up to 40 base stations on FirstNet spectrum (Band Class 14) to test small cell functionality. This 12-month test will help demonstrate the benefits for small cell deployments over “macro” cells, such as lower capital and operating costs, quicker site development and install times, and smaller space requirements for equipment. The compact size and low power

consumption of a small cell are also a good fit for temporary deployment such as cell-on-wheels, mobile command and control vehicles, and even backpacks. Public Wireless will showcase the pilot network in the first quarter of 2015, and BayRICS Directors and TAC members will be invited to view the test network at that time.

- **Broadband Solutions Not Using LTE or FirstNet Spectrum** -- A company called xG Technology, Inc. will set up in the parking lot of the Alameda County OES in Dublin at 1:30 PM on Thursday, November 20 (at the beginning of the BayRICS TAC meeting) to showcase a stand-alone wireless network that combines 900 MHz and 2.4 GHz access points and unlicensed unused spectrum to provide private voice, data and video capabilities for police, firefighters and EMS. According to xG, this technology solution is available now, and can be quickly and cost-effectively deployed for agencies.

Outreach to Stakeholders – GM Fraser met with several stakeholders over the past three months, including providing a presentation about interoperability to UASI staff, update meetings with staff from Sunnyvale, Santa Clara, Alameda County, City and County of San Francisco and California Office of Emergency Services. BayRICS and San Francisco DEM staff also met with officials from German Federal Agency for Public Safety Digital Radios to share information about respective technology and deployment status and differences between German and U.S. public safety radio operations and regulation.

Strategy 4: Bridge the Voice-Data Communications Gap

TAC Support for FirstNet-State Consultation. The TAC has provided key input on responses to CalFRN & FirstNet PSAC requests for information and review of proposed technical documents related to the nationwide broadband network and State consultation with FirstNet. In addition, TAC reviewed and made significant suggestions for improving BayRICS Public Notice comments to FirstNet.

P25 System Operators Advisory Group. P25 Operators met on August 25, September 22 and October 27 to approve and implement minor Fleetmap Channel Guide changes and address questions related to implementation of regional *System Key Exchange* guidelines. The group also began planning for ongoing work in 2015, such as continuing support of the Fleetmap, developing mutual aid communications outreach, adding new agencies, and development of a mutual aid exercise to demonstrate operation across multiple P25 systems.

BayLoop Advisory Group . The group met on August 28, September 25 and October 16 to continue efforts to assess and test applications on the regional digital microwave ring. Applications currently in testing include WebEOC and ARIES Crime Data Information Sharing. In addition, the network is being evaluated for future use to support ISSI connecting P25 systems, as well as FirstNet broadband network when it is deployed. The group is also evaluating capabilities for data exchange with Sacramento and State of California databases, now that a link between the Sacramento Region and the Bay Area has been established.

During the WebEOC application testing, the advisory group determined that additional termination equipment and network engineering will be required before WebEOC (or any other IP-based application) can run over the regional network ring. When BayLoop was reserved for the BayWEB project, Motorola agreed to pay for the necessary equipment to optimize the

network for broadband data traffic. However, the BayWEB project ended before this work was completed.

Ultimately, BayLoop will require additional equipment and network engineering to be fully functional. Staff is exploring various funding scenarios, as well as possible technology alternatives to reduce these costs. However, to date no viable solution has been identified. If no regional solution can be found, BayLoop Counties may have to assume future sustainability costs for the network.

BayRICS Authority

FY 2014-2015 Year to Date Forecast vs. Actuals 10/31/2014

| Revenues | Actual | YTD Forecast | Budget | YTD Variance |
|-----------------------|-----------------|-----------------|-----------------|------------------|
| Interest | \$0 | \$500 | \$1,500 | -\$500 |
| Membership fees | \$52,500 | \$73,500 | \$92,350 | -\$21,000 |
| Total revenues | \$52,500 | \$74,000 | \$93,850 | -\$21,500 |

| Expenses | Actual | YTD Forecast | Budget | YTD Variance |
|-----------------------|-----------------|------------------|------------------|-----------------|
| Administration | \$76,453 | \$76,453 | \$229,359 | \$0 |
| Audit | \$4,800 | \$3,500 | \$3,500 | -\$1,300 |
| Insurance | \$9,432 | \$10,000 | \$10,000 | \$568 |
| Legal | \$0 | \$14,167 | \$34,000 | \$14,167 |
| Miscellaneous | \$984 | \$2,500 | \$7,500 | \$1,516 |
| Total expenses | \$91,669 | \$106,620 | \$284,359 | \$14,951 |

| Grant Expenses | Actual | YTD Forecast | Budget | YTD Variance |
|---------------------------|-----------|--------------|-----------|--------------|
| BayLoop Maintenance | \$205,660 | \$205,660 | \$240,000 | \$0 |
| | | | | |
| Reserve Funds | Actual | YTD Forecast | Budget | YTD Variance |
| Reserve Balance 6/30/2014 | \$405,874 | | | |
| Draw on Reserve | \$39,169 | \$63,503 | \$190,509 | -\$24,334 |
| Reserve Balance | \$366,705 | \$342,371 | | \$24,334 |