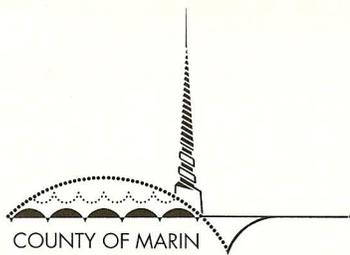


**BayRICS Authority Regional Proposal:  
BayLoop Regional Loop Upgrades  
UASI Approval Authority April 9, 2015**

- BayLoop is a **digital microwave network linking 18 sites across seven Bay Area Counties & Sacramento County**. The first phase of BayLoop, completed in 2006, connected sites in Marin, San Francisco, San Mateo and Santa Clara Counties. The second phase, completed in 2011, added Alameda, Contra Costa and Solano County sites. In May 2014, a link with Sacramento County was completed.
- BayLoop was **built with UASI grants at a total cost of \$4.98 million**. Over the past three years, BayRICS has received about \$600,000 in UASI funding to conduct maintenance and network monitoring of the BayLoop regional capacity.
- The **eight BayLoop Counties initially signed MOUs** with the Bay Area UASI to purchase, install and operate BayLoop equipment within their respective jurisdictions, and continue to own, operate and (in some cases) maintain BayLoop facilities within their jurisdictions.
- About 50% of BayLoop's capacity was granted to the Counties for local uses, with the **remaining 50% capacity reserved for regional public safety use**. This regional capacity was originally designed to interconnect regional, digital voice sub-systems (P25 trunked), but in 2012 was reserved for use as a backhaul ring for the BayWEB broadband data project.
- After BayWEB ended in December 2013, BayRICS established a work group of BayLoop County representatives to find new uses for the unused regional capacity. The work group **identified and tested several public safety applications** that could operate more efficiently via BayLoop. The group also **identified potential future uses** for BayLoop.
- However, the group also determined that **additional equipment and engineering upgrades are required to support these applications regionally**. The cost of these upgrades is approximately \$50,000 for each participating County, plus an additional \$50,000 for network engineering.
- This request, for \$202,316, will be used to complete the first phase of this upgrade, **to allow three Counties--Marin, San Mateo and Santa Clara--to begin using BayLoop to roll-out regional data applications**. As these Counties demonstrate the value and benefits of the network, additional Counties will be connected to the regional ring.
- Please see attached **letters of support** from Marin, San Mateo and Santa Clara Counties.
- **Benefits** of awarding this grant:
  - Potential cost savings by eliminating recurring cost of T1 lines for agencies that need to access law enforcement data or other public safety applications (e.g., ARIES)
  - Allows low-cost, redundant voice/data connectivity between County EOCs and dispatch centers during regional incidents, when commercial services may be impacted
  - Potential future transport for P25 voice sub-system interconnection (to achieve fully interoperable regional communications)
- **Consequences** if the grant is not awarded:
  - Potential loss of \$5+ million in regional assets
  - Counties may abandon parts of the loop or appropriate equipment for local use
  - Missed opportunity to utilize broadband link with Sacramento



# DEPARTMENT OF PUBLIC WORKS

Quality, Excellence, Innovation

Raul M. Rojas  
DIRECTOR

January 20, 2015

Administration  
PO Box 4186  
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415 473 6528 T  
415 473 3799 F  
415 473 3232 TTY  
CRS Dial 711  
[www.marincounty.org/pw](http://www.marincounty.org/pw)

BayRICS Authority  
Attn: Barry Fraser, General Manager  
4985 Broder Blvd  
Dublin CA 94568

Dear UASI Approval Authority:

I write to express the support of Marin County for the BayRICS Authority's UASI 15 funding request for \$50,772 in regional funding to Marin County to purchase equipment to complete the BayLoop regional microwave network. This funding will allow BayLoop to achieve full functionality as a data network "ring" supporting interoperability among seven Bay Area Counties, and now extending to the Sacramento Region. If the funding is awarded, Marin County will coordinate with BayRICS to facilitate the installation and operation of the specified equipment on behalf of the region.

Although the system was built several years ago using UASI grant funding, the regional data portion of the network had been reserved for use as backhaul for the BayWEB wireless data network. That project ended in December 2014, and now additional equipment is required to complete the regional network.

When complete, BayLoop will provide a redundant, secure and low cost alternative to support a wide variety of regional voice and data applications including:

- Connectivity with information sharing services (CopLink, ARIES, etc.)
- WebEOC, connecting Emergency Operations Centers (EOCs)
- Redundant phone connectivity between dispatch centers, Public Safety Answering Points (PSAPs) and EOCs
- Inter-Sub System Interface (ISSI) between the Bay Area's P25 systems

The requested equipment is urgently needed to complete the network and support these critical regional applications.

Therefore, Marin County asks the UASI Authority to consider BayRICS Authority's proposal for off-the-top funding from UASI 15 to complete these essential upgrades. The Bay Area has made an investment of millions of dollars in the BayLoop network—it only makes sense to commit this additional UASI funding to ensure that network attains full functionality to better serve the needs of Bay Area Public Safety.

Sincerely,

Shelly Nelson  
Communications Services Manager  
Department of Public Works

Accounting

Airport

Building Maintenance

Capital Projects

Certified Unified Program  
Agency (CUPA)

Communications  
Maintenance

County Garage

Disability Access

Engineering & Survey

Flood Control &  
Water Resources

Land Development

Purchasing

Real Estate

Reprographic Services

Road Maintenance

Stormwater Program

Transportation &  
Traffic Operations

Waste Management



20 Jan 2015

Dear UASI Approval Authority:

I write to express the support of San Mateo County for the BayRICS Authority's UASI 15 funding request for \$50,772 in regional funding to San Mateo County to purchase equipment to complete the BayLoop regional microwave network. This funding will allow BayLoop to achieve full functionality as a data network "ring" supporting interoperability among seven Bay Area Counties, and now extending to the Sacramento Region. If the funding is awarded, San Mateo County will coordinate with BayRICS to facilitate the installation and operation of the specified equipment on behalf of the region.

Although the system was built several years ago using UASI grant funding, the regional data portion of the network had been reserved for use as backhaul for the BayWEB wireless data network. That project ended in December 2014, and now additional equipment is required to complete the regional network.

When complete, BayLoop will provide a redundant, secure and low cost alternative to support a wide variety of regional voice and data applications including:

- Connectivity with information sharing services (CopLink, ARIES, etc.)
- WebEOC, connecting Emergency Operations Centers (EOCs)
- Redundant phone connectivity between dispatch centers, Public Safety Answering Points (PSAPs) and EOCs
- Inter-Sub System Interface (ISSI) between the Bay Area's P25 systems

The requested equipment is urgently needed to complete the network and support these critical regional applications.

Therefore, San Mateo County asks the UASI Authority to consider BayRICS Authority's proposal for off-the-top funding from UASI 15 to complete these essential upgrades. The Bay Area has made an investment of millions of dollars in the BayLoop network—it only makes sense to commit this additional UASI funding to ensure that network attains full functionality to better serve the needs of Bay Area Public Safety.

Sincerely,

A handwritten signature in blue ink that reads "TG Meyers". The signature is stylized and includes a long, sweeping underline.

Thomas Meyers  
Wireless Interoperability Manager  
San Mateo County

**From:** [Hildebrand, Bert](#)  
**To:** [Fraser, Barry D., Sheriff](#)  
**Cc:** ["Cardno, Ross A."; "Geddes, Michelle"; Deleforge, Michel, ITD; Hagar, Randall, ITD; "Nelson, Shelly"; Thomas Meyers \(TMeyers@smcgov.org\); applebaumd@saccounty.net; mike.wright@doit.cccounty.us; Heather Plamondon \(http.ms@comcast.net\)](#)  
**Subject:** RE: BayLoop Support Letter Template  
**Date:** Wednesday, October 29, 2014 5:14:18 PM

---

Hello Barry,

Santa Clara County supports the proposed UASI grant fund request and agrees to work directly with BayRICS to install the equipment at our Carol Drive site, if the funding is awarded. The proposed equipment will clearly improve BayLoop connectivity and operational use, and will directly benefit most, if not all of the first responder agencies, the County and local Municipalities that participate and financially support our JPA known as the Silicon Valley Regional Interoperability Authority (SVRIA).

Sincerely,

Bert

Bert Hildebrand, Director  
Santa Clara County Communications Department  
2700 Carol Drive  
San Jose, CA 95125  
Bus: 1-408-977-3200  
Fax: 1-408-279-2666  
[bert.hildebrand@911.sccgov.org](mailto:bert.hildebrand@911.sccgov.org)

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**BayRICS Authority Regional Proposal:  
Regional Broadband/LMR Planning and Governance  
UASI Approval Authority April 9, 2015**

- The U.S. Department of Homeland Security (DHS) encourages grantees to support terrorism preparedness by **investing in planning activities that help States prepare for the deployment of the Nationwide Public Safety Broadband Network** as well as share essential user needs and requirements prior to the State's consultation with FirstNet.
- DHS also encourages grantees to **invest in emergency communications leadership and governance structures for both Land Mobile Radio (LMR) and broadband planning initiatives.**
- Since 2011, the BayRICS Authority has **focused on the development of regional wireless public safety broadband**, initially through a public private partnership and BTOP grant funding for BayWEB, and now by representing the Bay Area's interests in planning for the nationwide network.
- By participating in the FirstNet Public Safety Advisory Committee (PSAC), California First Responder Network Authority (CalFRN) and other national working groups, **BayRICS staff and Technical Advisory Committee (TAC) have influenced FirstNet and State planning**, evaluated proposed technical specifications and business models, and **worked to ensure that the first nationwide network for public safety will serve the needs of Bay Area first responders.**
- BayRICS also maintains an extensive repository of **technical and operational resources that will help all Bay Area agencies make informed decisions** when ultimately choosing to whether to subscribe to the nationwide FirstNet service when it becomes available.
- Additionally, BayRICS has **assumed a key role in coordinating Bay Area voice interoperability**, overseeing the development of regional guidelines and hosting information-sharing workgroups.
- BayRICS has been funded exclusively through annual **member fees**. However, when BayWEB ended, member fees were reduced and **now BayRICS funding reserves are nearly exhausted.**
- BayRICS annual budget for FY 2014-2015 is \$284,359. Staff is now in the process of developing budgets for Fiscal Years 2015-2016 and 2016-2017 that will **allow the JPA to continue operations through the 2017 calendar year** (the earliest that FirstNet deployment is expected).
- Staff is currently **weighing several options to extend the life and viability of BayRICS**. It is entirely possible that other funding sources or cost savings will be identified that minimize the need for UASI grant funding.
- At this time, **we request between \$59,000 and \$109,000 in UASI 2015 regional funding to help cover staffing and administration costs** necessary to continue these critical planning and governance initiatives.
- **Benefits** of awarding the grant:
  - Partial UASI support spreads the costs of BayRICS services among all Bay Area agencies.
  - Support allows BayRICS staff and TAC to continue to collaborate and share creative technical information and lessons learned for both voice and data communications.
  - Support for broadband planning and governance helps meet the stated goals of DHS for homeland security grant program.
- **Consequences** of not awarding the grant:
  - The Bay Area's voice may not be heard in key State and national decision-making forums.
  - Risk of losing an effective regional governing body and pooled technical expertise that will be needed as the FirstNet network is deployed.