



LA-RICS

Los Angeles Regional Interoperable Communications System

First Responders Network Authority

August 13, 2013



Project Profile



The Greater Los Angeles County area encompasses:

- 4,084 Square Miles with terrain rising from 9' below sea level to over 10,000'
- 10,000,000 Residents living in 88 Incorporated Cities and Unincorporated areas of the County
- Public Safety Agencies:
 - 50 Different Police Agencies
 - 31 Different Fire Agencies
 - Operating on 40 Different Radio Systems
- Residents are served by:
 - 34,000 First Responders
 - 17,000 Secondary Responders



Secondary Responders



- JPA Board recognized that Secondary Responders become First Responders in most natural disasters
- Unnecessary costs incurred in maintaining independent radio systems
- The LA-RICS Goal is to design and deploy a system that accommodates all first and secondary responders on both:
 - LMR Subsystem
 - LTE (NPSBN) Subsystem



*West Hollywood Sheriff's Station
LA-RICS LMR & LTE System*

Project Status



- Jan 2012 LA-RICS received two proposals for a joint LMR/LTE project
- Feb 2012 P.L. 112-96 enacted with significant impacts to LA-RICS
- Aug 2012 LA-RICS cancelled LMR/LTE procurement
- Jan 2013 Proposals for LMR System only were received, evaluated and contract negotiated
 - Aug 2013 LMR Contract presented to JPA Board for approval
- Jul 2013 SMLA Executed between FirstNet and LA-RICS
 - Jul 2013 Request for lifting of Suspension and extension of BTOP Grant submitted
- Aug 2013 LTE RFP released



Topanga Peak – LA-RICS Network

P.L. 112-96



- P.L. 112-96 had a significant impact on LA-RICS
 - Requires that T-Band spectrum be vacated by 2023
 - Los Angeles Area First Responders rely on 600+ UHF Channels for Communications
 - T-Band was the basis for our LMR System design
 - Suspension of BTOP Grant program
- LA-RICS LMR System will now be a Hybrid P25 Compliant System
 - Insufficient 700/800 MHz spectrum for immediate migration
 - The Hybrid LMR Solution uses 700 MHz and interim use of UHF channels
 - The lack of 700 MHz channels remains as a substantial constraint
 - **In the future, we will be forced to rely on PTT VoLTE on NPSBN for routine communications**
 - **Without PTT VoLTE, we will not be able to vacate the “T-Band”**
- National Public Safety Broadband Network is an essential component of the LA-RICS Solution

A. B. 1486



- Consultation with NTIA before and after P.L. 112.96 defined a significant impediment to project success - California's CEQA Requirements.
- NTIA requires a completed process CEQA before initiating the NEPA process.
- A.B. 1486 provides LA-RICS a limited CEQA exemption until 2017:
 - Project Site Criteria
 - Located on police, Sheriff or fire station sites
 - Publicly owned transmitter sites
 - Cannot be located in environmentally sensitive areas:
 - » Wetlands
 - » Riparian areas
 - » Habitat of significant value
 - » Historical Significance
 - Monopoles shall not exceed 70 feet
 - LMR towers shall not exceed 180 feet
- All LA-RICS sites meet this criteria.



Broadband (LTE) Status



- Spectrum Manager Lease Agreement executed on July 1, 2013
- Working with FirstNet Consultants to determine direction for infrastructure and equipment deployment
 - Recently visited the LA County Fire Command and Control Facility to determine its suitability to host a FirstNet Core
- LA-RICS notified that Suspension has been lifted and BTOP Grant Performance Period has been extended to September 2015
- Agreed on a Focus (Demonstration) Area of Flexibility in Grade of Service (GoS) for second and third tier subscribers depending on specific response requirements



Stealth LTE Elm Tree

Anticipated LTE Schedule



- It is anticipated that the Authority will procure LTE infrastructure and backhaul components and equipment as follows:
 - RFP Release: August 2013
 - Contract Negotiations: January – February 2014
 - Anticipated Contract Award: March 2014
 - 18 Month Program
 - Phase 1 – System Design (March 2014 – June 2014)
 - Phase 2 – Site Construction (June 2014 – March 2015)
 - Phase 3 – Supply LTE Equipment (August 2014 – March 2015)
 - Phase 4 – System Implementation (October 2014 – August 2015)
 - BTOP funds expire in September 2015 (With Extension)

LTE Sites in LA County Region



LA-RICS

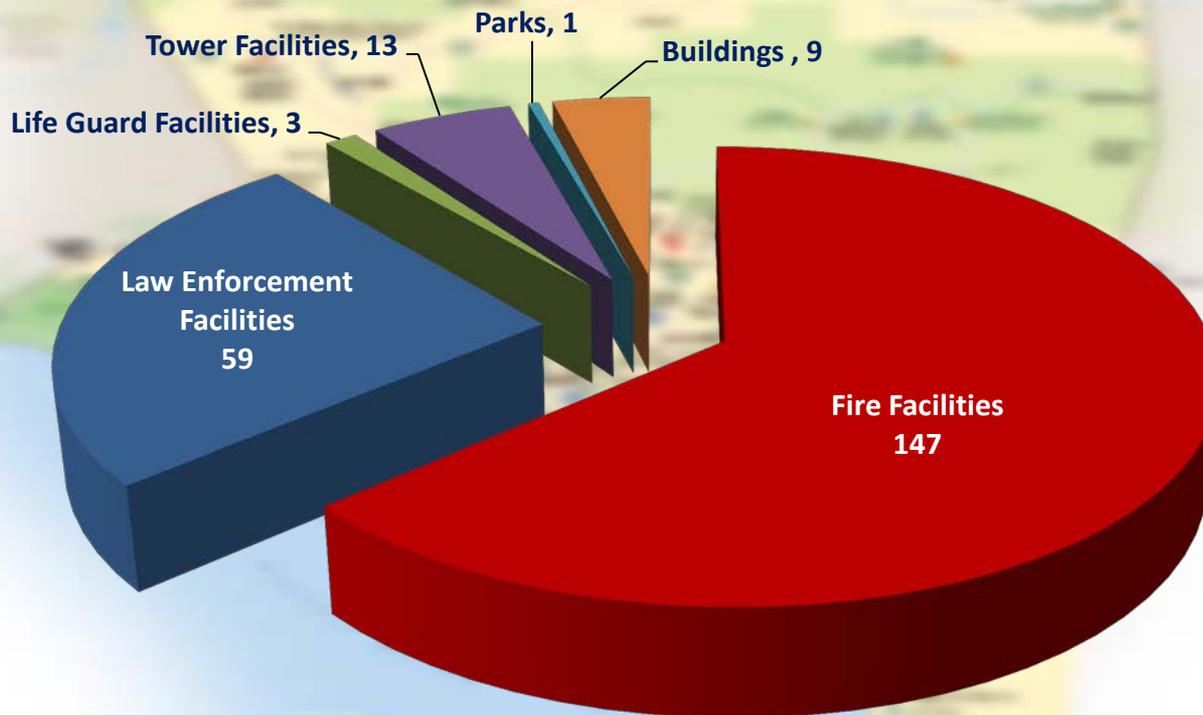
- There are 232 LTE sites identified for the network within Los Angeles County:
 - All sites meet the criteria for the CEQA exemption
 - Allows the Authority to issue a rapid CEQA determination
 - NEPA clearance still is required for all sites through NTIA
 - Heights will vary from 28' – 70' depending on community
 - Stealth and standard monopoles will be deployed
- 40 sites will have both LMR and LTE installations.



232 CEQA exempt LTE Site Design

LTE Sites By Facility Type

LTE Sites Within Los Angeles County By Facility Type (232 total)



LA-RICS Benefits to Public Safety



- Provides interoperable communications and shared data for multi-jurisdictional responses to small and large scale events
- Eliminates the need for redundant communications systems
- Improved operational efficiency and effectiveness of services by First and Secondary Responders
- **NPSBN will provide much needed capacity for non-critical PTT voice communications saving 700 MHz narrow-band spectrum for critical communications**
- The 232 sites are an initial step in addressing the coverage required to transition to voice over LTE
- Additional sites are necessary to meet the coverage requirement



The 1966 fire near Loop Canyon

Questions?



**Thank You
FirstNet**

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