LA-RICS

Los Angeles Regional Interoperable Communications System

Los Angeles County Regional Planning Cluster Area Review

August 26, 2013

Overview

- Emergency Communications Needs
- Program History
- Current Status
- Sites & Compatibility
- Benefits to the Public Safety Community
- Stewardship

Mt. Lee – LA-RICS LMR Network Site

Need For Interoperability

LA-RICS

- Risk to high profile attractions (e.g. Universal Studios, Airports, Harbors) and critical infrastructure
- Multi-jurisdictional responses to small and large scale events
- 81 public safety agencies
- 34,000 first responders, 17,000 secondary responders
- Multiple localized public safety communications systems
- Lack of communications across jurisdictional lines compromises response effectiveness

Project History

January 2009	Joint Powers Authority formed
May 2010	LA-RICS received FCC Waiver to establish 700MHz Interoperable Public Safety Broadband Network and a $154.6 million BTOP grant.
July 2011	LA-RICS cancels initial procurement – California Public Contracts Code
October 2011	Assembly Bill 946 (Lowenthal) Enabled LA-RICS to proceed with a turn-key procurement
November 2011	New Request for Proposals released for single LTE and LMR contract
January 2012	Proposals received in response to dual LTE/LMR procurement

Project History (cont.)

February 2012	Congress passed the Middle Class Tax Relief and Job Creation Initiative of 2012 (H.R. 3630)
April 2012	LA-RICS placed procurement on hold to further analyze impacts resulting from H.R. 3630
August 2012	LA-RICS Board of Directors voted to cancel RFP and issue two separate RFPs for LMR and LTE
September 2012	Assembly Bill 1486 (Lara) enacted allowing limited CEQA exemption
October 2012	New RFP for LMR released
January 2013	LMR Proposals received
June 2013	LOI Issued to LMR Contractor
August 2013	New RFP for LTE Network released
August 2013	LMR Contract approved by JPA (anticipated)
May 2014	LTE Contract approved by JPA (anticipated)

H.R. 3630

- In February 2012, Congress passed the Middle Class Tax Relief and Jobs Creation Bill
- NTIA established FirstNet Board to oversee National Public Safety Broadband Network (NPSBN)
- Requires that T-Band spectrum be vacated by 2023, in exchange for D-Block
  - Eleven major metropolitan areas affected:
    - Los Angeles, New York, Houston, Philadelphia, San Francisco, Boston, Chicago, Pittsburg, Washington, DC, Miami, Dallas
- H.R. 3630 provides for funding and spectrum assistance in moving public safety communications off T-Band

A. B. 1486

- A.B. 1486 (Lara) 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
- Does not exempt project sites from NEPA clearance

Spectrum Feasibility Study

- H. R. 3630 introduced considerable risk to a T-Band only deployment
  - Per FCC: Build at your own risk
- Consideration was given for using existing available spectrum in the 700 MHz spectrum and gradual migration off T-Band
- Hybrid Feasibility Study conducted in May-June 2012
  - Minimum of 70 Channels needed in 700 MHz spectrum
  - Minimum of 160 Channels needed in T-Band spectrum

LMR System Description

- There are 55 lattice tower sites and 33 monopole sites
  - Eventual site count will be determined by LMR System Contractor's final design
- Voice and data network is a hybrid UHF T-Band and 700 MHz design
- Single P25 controller used for both spectrums
  - Users talk from one spectrum to the other seamlessly
- Dual spectrum will allow use of existing equipment and user agency migration over 9 years
- Radio-to-radio communication between spectrums

San Vicente Peak – LA-RICS LMR System

LMR Current Status

- RFP Released: October 25, 2012
- Contract Negotiations: April – June, 2013
- LOI submission to the JPA Board: June 19, 2013
- Anticipated Contact Award: August, 2013
- Five Year Program deployed in five Phases:
  - Phase 1 – System Design (August 2013 – January 2015)
  - Phase 2 – Site Construction (October 2014 – March 2016)
  - Phase 3 – Supply Telecommunications System (February 2015 – November 2015)
  - Phase 4 – System Implementation (November 2015 – October 2017)
  - Phase 5 – System Maintenance (May 2018)

Secondary Responders

- Secondary Responder needs are a strong consideration
- Unnecessary costs incurred in maintaining independent systems
- JPA Board is committed to support all agencies
- The Digital Trunked Voice Radio Subsystem (DTVRS) will be designed and deployed to accommodate all first and secondary responders

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

Broadband (LTE) Issues

- NTIA suspended approval of use of funds for LTE equipment pending direction from FirstNet
- FirstNet to determine direction for infrastructure and equipment deployment
  - Spectrum Manager Lease Agreement to LA-RICS finalized on June 17, 2013
  - FirstNet must consult on the LTE technical specifications
- Previously issued “suspension” imposed on all BTOP recipients has been lifted by NTIA for LA-RICS allowing LA-RICS to release the LTE RFP
- Federal BTOP and local matching funds are sufficient to deploy the LA-RICS system

Stealth LTE Elm Tree

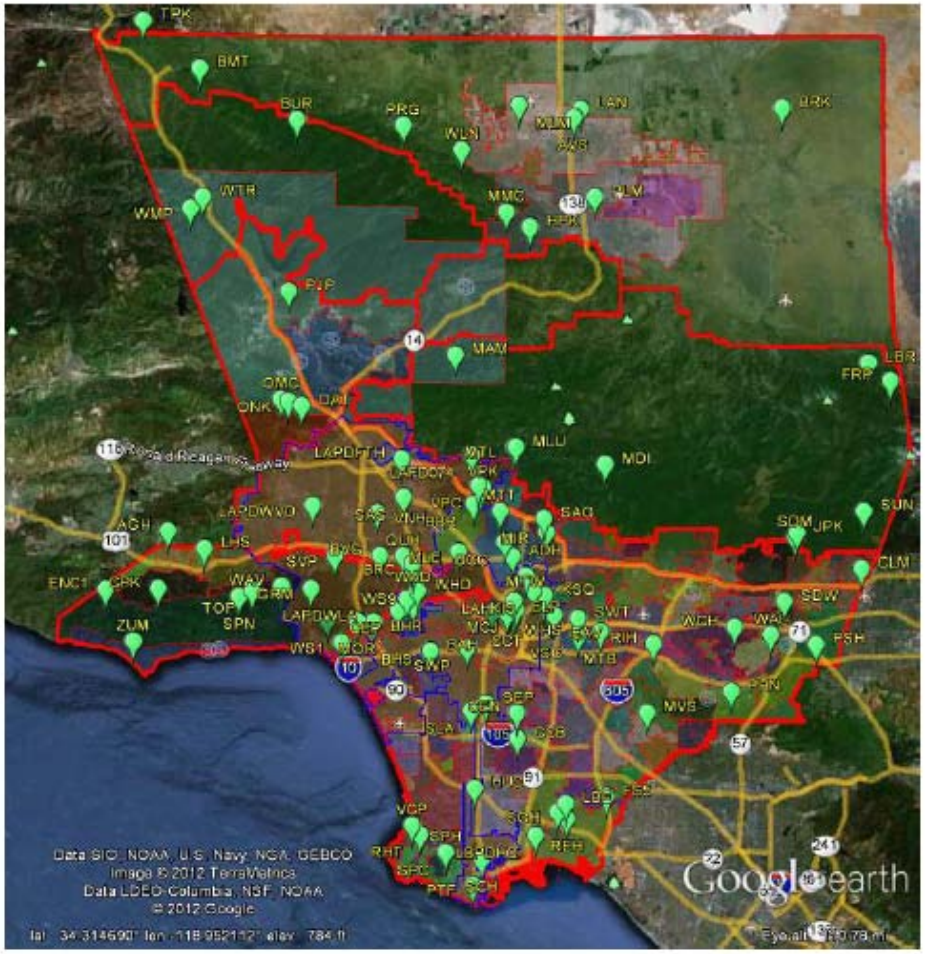
Anticipated LTE Schedule

- 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 Contact Award: May 2014
  - 18 Month Program
    - Phase 1 – System Design (May 2014 – August 2014)
    - Phase 2 – Site Construction (August 2014 – May 2015)
    - Phase 3 – Supply LTE Equipment (September 2014 – January 2015)
    - Phase 4 – System Implementation (October 2014 – August 2015)
    - Phase 5 – System Warranty (August 2015 – August 2016)
  - BTOP funds expire in September 2015

LMR Sites in LA County

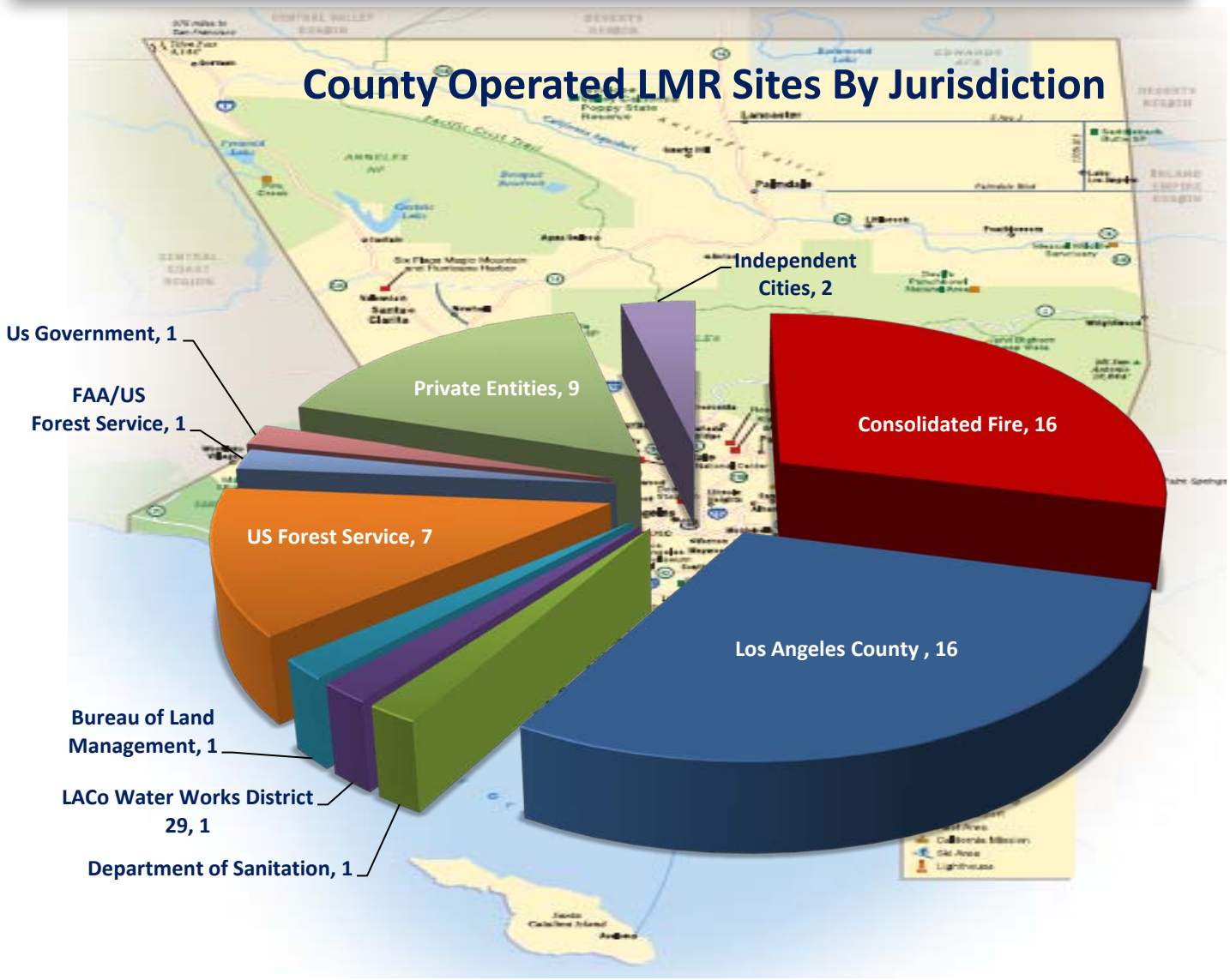
- There are 88 LMR sites identified for the LMR network in Los Angeles County
  - 55 lattice tower sites
  - 33 monopole sites
- Of the 88 LMR sites, 55 sites are County operated sites
  - Combination of lattice tower sites and monopole sites
- Of the 55 County operated sites, 37 sites are located in unincorporated areas
- CEQA & NEPA clearance is required for all sites
- 25 County operated sites will be used for both the LMR and LTE systems designs

LA-RICS: Potential LMR Sites



(* 3 potential communications sites on Santa Catalina Island not shown on map)

LA County Operated LMR Sites By Jurisdiction

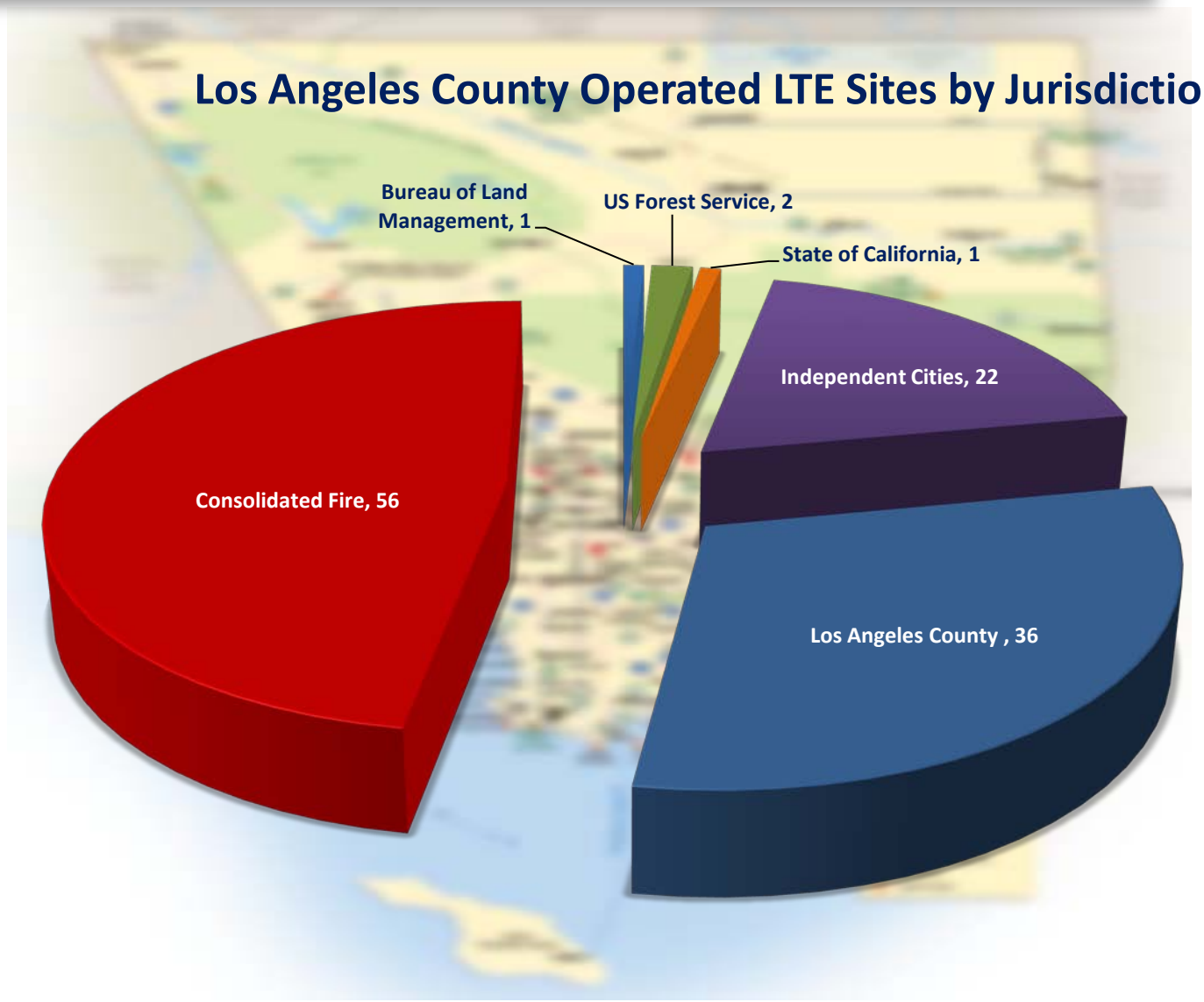


LTE Sites in LA County

- There are 232 monopole sites identified for the LTE network in all of Los Angeles County
  - All 232 sites are CEQA exempt qualified sites
  - NEPA clearance required for all sites
  - Heights will vary from 28’ – 70’ depending on community
  - Stealth and standard monopoles will be deployed
- Of the 232 LTE sites, 118 sites are County operated sites
- Of the 118 County operated sites, 43 sites are located in unincorporated areas
- 25 sites will have both LMR and LTE monopoles

213 CEQA exempt LTE Site Design

LA County Operated LTE Sites By Jurisdiction



LA-RICS Benefits to Public Safety

- Provides interoperable communications and shared data for multi-jurisdictional responses to small and large scale events
- Eliminates localized public safety communications systems and brings responders under a single interoperable system
- Improves responsive effectiveness by eliminating lack of communications across jurisdictional lines
- Supports County Strategic Plan Goal #1 (Operational Effectiveness) to provide the public with services that are both beneficial and responsive

The 1966 fire near Loop Canyon

LA-RICS Benefits to Public Safety cont.

- LTE provides a secure private data network for public safety using Long-Term Evolution (4G) technology to provide high-speed video and data access to all local first and secondary responders in the region
- LTE will be built to integrate with the nationwide, high-speed, public safety data communications network
- LMR and LTE improve operational efficiency of services by first and secondary responders
- LMR and LTE protect first and secondary responders who service the residents and businesses of their communities

Topanga Peak – LA-RICS LMR Network

Stewardship

- Provides opportunity to enhance safety and environmental stewardship to the community
- Saves lives and protects property
- Defends and protects the natural resources
- Minimal environmental impact by focusing on re-using or upgrading existing sites
- Sensitive to individual community requirements
- Improves the quality of life and enriches the community

Questions?

Bill Fujioka
County of Los Angeles
Chair, LA-RICS Board of Directors
BFujioka@ceo.lacounty.gov

Pat Mallon
Executive Director
Pat.Mallon@la-rics.org

www.la-rics.org