



FirstNet in California Applications, Governance, and Next Steps

September 30, 2014

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- **Vision**
- **FirstNet for Law Enforcement**
- **Governance**
- **Next Steps for California**



VISION:

To provide emergency responders with the first nationwide, high-speed, wireless broadband network dedicated to public safety

“FirstNet will be a force multiplier, enabling collaboration to help save more lives, solve more crimes and keep communities safer.”

Jeffrey D. Johnson, Chief (Ret.)
Chief Executive Officer — Western Fire Chiefs Association
FirstNet Board Member

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FirstNet will Offer Public Safety Users:



Communication

- Video
- Voice (non-mission critical)
- Messaging
- SMS/Text
- Data (Internet)



Applications

- CAD, RMS, NLETS
- FirstNet applications (e.g., AVL)
- Syndicated applications
- Currently used Agency applications

Services

- Records management
- Data storage
- Audio storage
- Database inquiries



Capabilities

- Network monitoring and status
- Integrated solution and services
- Priority
- Hardened and secure
- Provisioning



An Information Explosion of Field Data

- Audio, e.g., ShotSpotter
- License plate readers
- Video cameras
- Crime reporting apps
- Text to 9-1-1
- + more...

70 Percent of U.S. Police Departments Use License Plate Readers

San Jose police can tap into volunteer residents' cameras under newly-approved program

By Mike Rosenberg | mrosen

POSTED: 09/09/2014 02:47:06 PM PDT

Antioch Police Announce Launch of Free Smart Phone Application

By [EastCountyToday](#) • September 10, 2014 • [Print-Friendly](#)

Posted: 7:30 p.m. Friday, May 2, 2014

More Bay Area officers sporting body camera

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By Paul Chamberlain
KTVU.com

WALNUT CREEK — A growing trend for police departments throughout the Bay Area, Walnut Creek Police and the City of San Rosa law enforcement are the latest to adopt body-worn cameras.

"Keeps people on task and in control of behavior. It's a great tool for the distribution of information to the office for prosecution."



officer body cameras



Crime Push app helps report crime

By Ben Eisler | February 1, 2012 - 06:55 pm



During Tuesday night's community search meeting, the Antioch Police Department announced and demonstrated a free Smart Phone Application. The application is available for free download on iTunes and GooglePlay where people can stay connected wherever they are with mobile access wherever they are.

FirstNet will enable Law Enforcement Applications

- Live one- and two-way video in vehicles or via handhelds
- Large file transfer/download (floor plans, high res photos, heat maps, evacuation plans)
- Multimedia Command & Control (incl. video)
- Situational Awareness (incl. asset, vehicle, personnel tracking)
- Remote control of robotic devices
- Dynamic mapping, weather, traffic
- Next Generation (NG) 9-1-1 texts, photos, data
- Database queries
- Field reporting
- Non-Mission Critical Voice



FirstNet's high speed data network can dramatically improve situational awareness

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Governance

Governance – Federal Level

- **Federal Communications Commission**
 - 700 MHz public safety spectrum frequency holder
- **National Telecommunications and Information Administration (NTIA)**
 - Part of the Department of Commerce
 - Selected FirstNet Board of Directors

- **First Responder Network Authority (FirstNet)**
 - Managing entity for the public safety spectrum
 - Governing authority for the Nationwide Public Safety Network (NPSBN)



Governance – State Level

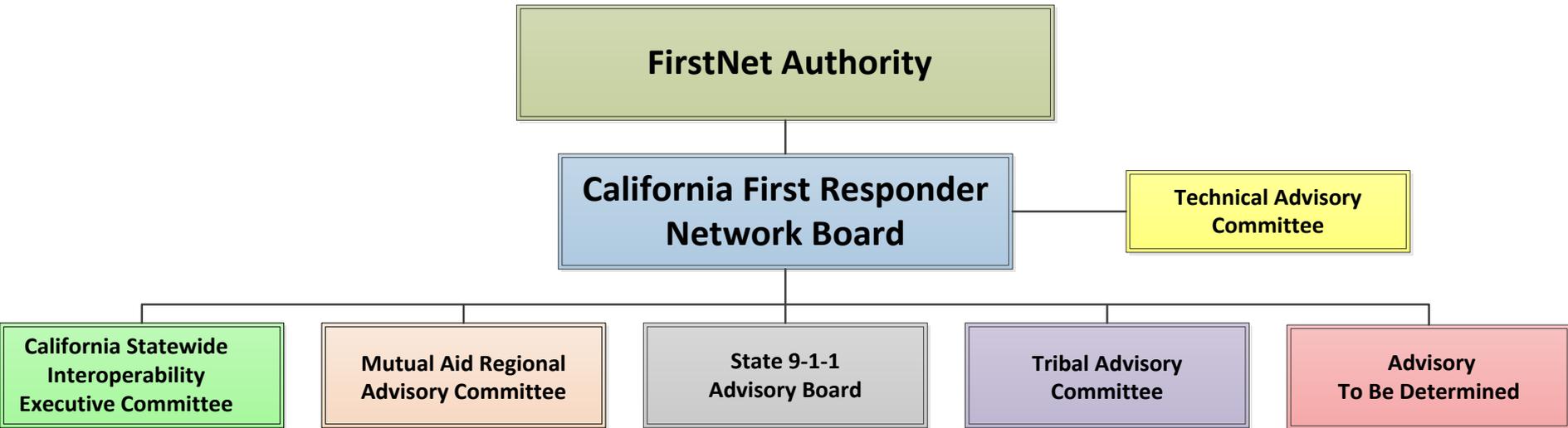
- **State of California Governor’s Office**
 - Per the Act, designates single officer or governmental body to coordinate with FirstNet
 - Makes the Opt-In/Opt-Out decision
- **California First Responder Network Board (CalFRN)**
 - State’s governing body for FirstNet
 - Engages key public safety stakeholders across California
 - Works with Cal OES
- **California Office of Emergency Services (Cal OES)**
 - Designated state point of contact (SPOC) to coordinate with FirstNet
 - Chairs the CalFRN Board
 - Acts as administrator and financial manager

California First Responder Network

Board includes representatives from:

- Public Safety Communications
- California Governor's Office of Emergency Services
- Department of Technology
- California Department Finance
- California Department of Forestry and Fire Protection
- California Highway Patrol (CHP)
- Emergency Medical Services Authority
- Bay Area Regional Interoperability Communications System (BayRICS)
- Los Angeles Regional Interoperability Communications System (LA-RICS)
- California Police Chiefs Association
- California Fire Chiefs Association
- California State Sheriffs Association
- Tribal, Governor's Office Tribal Advisor

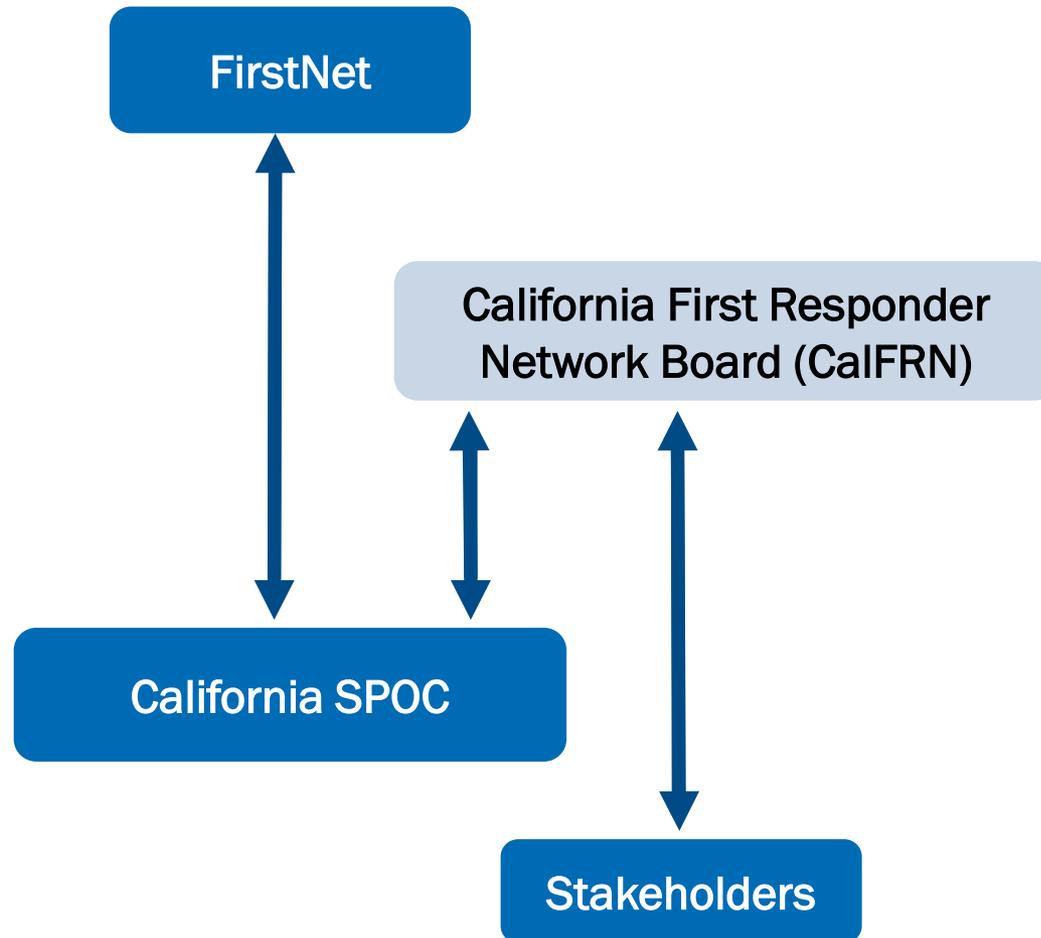
CalFRN Advisory Committees



Advisory committees add to the Board's operational strength



Communicating with FirstNet



Next Steps for California

Cal OES PSBN Education and Outreach

- Governor's Office Cal OES is responsible for representing California public safety at the federal level
- Under the NTIA SLIGP grant, Cal OES is responsible for building NPSBN and FirstNet awareness in California



Cal OES PSBN Education and Outreach

In executing the outreach requirements of the grant, Cal OES has formed a core team

- Hired public safety broadband consultant
- Held team kick-off/planning workshop
- Developed Education and Outreach Plan
- Developing presentations, flyers, and outreach materials
- Conducting town hall meeting webcasts
- Issued FirstNet in California Survey
- Engaged DHS OEC to conduct coverage objectives workshops
- Developing California Roadmap

FirstNet by the Numbers

VISION

To provide emergency responders with the first nationwide, high-speed, wireless broadband network dedicated to public safety



THE LAW
2.22.12
FirstNet becomes Law
PL 112-96

FUNDING

\$7B

authorized to build the FirstNet Network. Funded by spectrum auctions through 2022. The first auction netted



GOVERNANCE



FirstNet Board of Directors' **15** members have backgrounds in police, fire, sheriff, emergency medical, city government, and commercial telecommunications. Governor appoints **1** single Point of Contact and governing body to represent the state's interests to FirstNet. **41** member Public Safety Advisory Committee (PSAC) advises FirstNet on public safety intergovernmental matters.



\$1.6B

20MHz of bandwidth has been dedicated to public safety in the prime **700MHz** frequency range.

WHO WILL USE FIRSTNET

5.4 Million Potential FirstNet public safety users nationwide



3,800,000
Square Miles
60,000
Public Safety Agencies
3,250
Counties
566
Tribes

FirstNet must provide service in all **50** US states, **5** territories, and Washington, DC.

THE COVERAGE CHALLENGE

FirstNet coverage challenge: geography is divided into 5 categories. Dense urban, urban and suburban are where most people live, but make up only **5%** of the US land mass.



FIRSTNET NETWORK

To meet this challenge, FirstNet is considering a 3-in-1 network architecture using land-based cellular, satellite and deployable systems to provide coverage.



4G LTE, 10x faster than 3G wireless service

2014-2016

Business plan
Outreach and awareness
Collect local data and design network
Develop and award supplier RFP
Establish network core

THE ROAD TO FIRSTNET

HOW MUCH WILL IT COST?

To offer public safety grade services at a cost that's competitive and compelling to users.
- FirstNet Tenet

2016+

Governor reviews design offer and opts in or out of FirstNet network deployment
Integrate Next Generation 9-1-1

2022

Last spectrum auction
Network substantially in operation

FirstNet in California

For more FirstNet facts visit: www.firstnet.gov

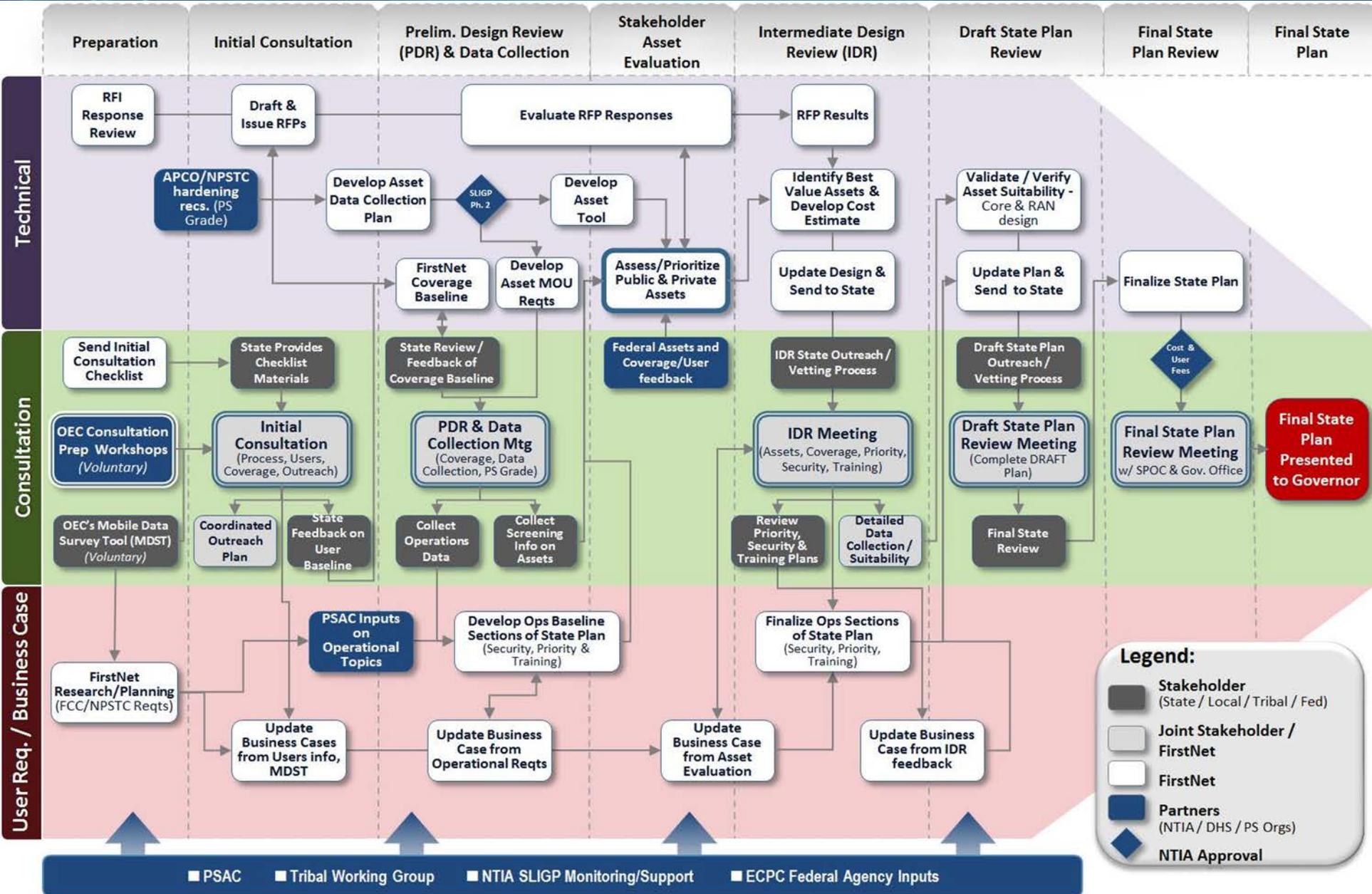
Major Sources:
Public Law 112-96, "Middle Class Tax Relief and Job Creation Act of 2012"; Further amended in Title VI of PL 112-96, entitled "Public Safety Communications and Emergency Services Auctions";
House Bill 1074, "Middle Class Tax Relief and Job Creation Act of 2012";
Congressional Research Service (CRS).

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DOC OES-PSBN-14-02

Consultation, Outreach, and State Plan Process



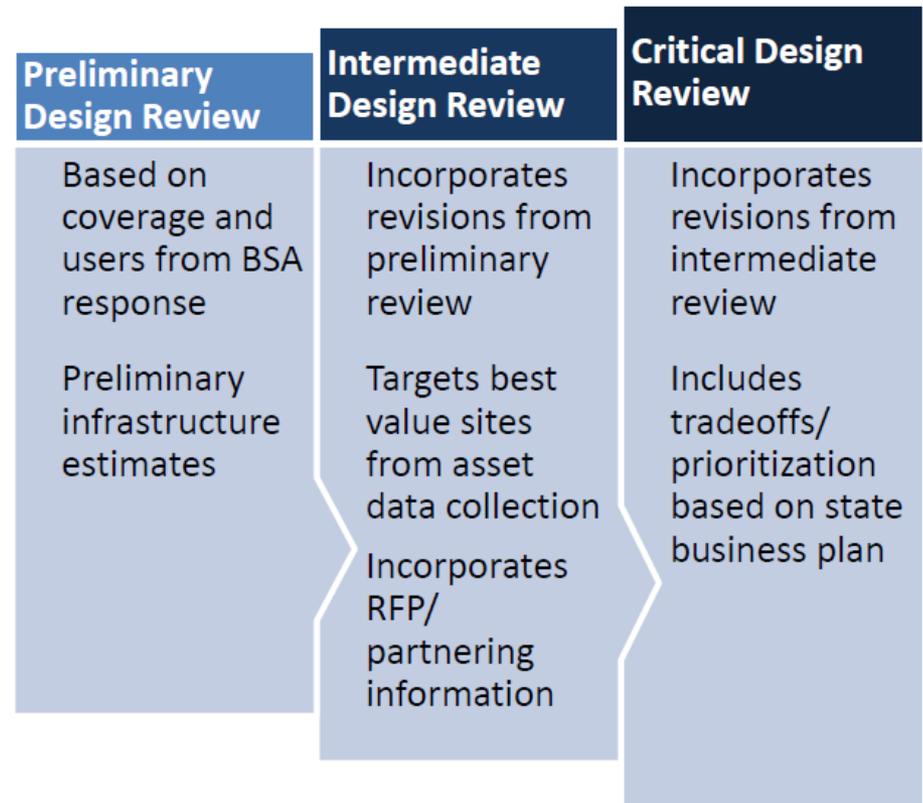
State RAN Design Process

Key Steps

- Multi-phase (preliminary/intermediate/critical design) reviews with state to refine design based on identified priorities
- Incorporate feedback and additional data as it is collected (SLIGP Phase 2/RFP Process)

Guiding Principles

- Ensure on-going review/refinement process with state
- Jointly develop tradeoffs and priorities



Adjusting Coverage for Public Safety Needs

Agencies

- EMS Departments
- Federal
- Military
- Emergency Management
- Law Enforcement
- Fire Departments

Facilities

- Major State Government Building
- Court Houses
- ▨ Prison Areas
- Corrections
- ▨ Airport
- + Airports
- Local Emergency Operations Centers
- State Emergency Operation Centers
- Urgent Care Facilities
- Hospitals
- PSAP
- Schools
- ⚓ Ports
- Amtrak Stations
- Air National Guard (ANG) Sites
- ▨ Army National Guard (ARNG) Installat
- Canada and Mexico Border Crossings

Critical Infrastructure

- ◆ Manufacturing
- Hazardous Materials Routes
- ◆ Energy
- ☢ Nuclear Plants
- ◆ Dams
- ◆ Public Venues



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OEC Coverage Objectives Workshop

Interstates, major U.S. highways and non-CDP areas with more than 5 people per square mile (using census blocks)

All other areas would use Satellite/Deployable coverage.

-  In-Building
-  Handheld/Partial In-Building
-  Vehicular Modem/Partial handheld
-  Satellite/Deployable



FirstNet Timeline

2014-2016

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Help us manage expectations

- LTE is not a replacement for LMR technology today
- LMR will continue to provide mission critical voice communications for the foreseeable future
- The LTE *data* network introduces new capabilities to assist the first responder
 - Provides new supplementary data and video services
 - Its true power and value will be realized once useful, interoperable applications are in the hands of users



Thank You

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