



FirstNet in California Governance and Next Steps

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Topics

- **Vision**
- **FirstNet for Fire Service**
- **Governance**
- **Education and Outreach**
- **Designing for Coverage**
- **Managing Expectations**



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

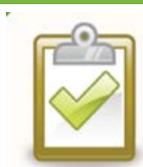
Services

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



Capabilities

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



FirstNet will enable Fire Service Applications

- One and two-way streaming video/in-field ID
- 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)
- Dynamic mapping, weather, traffic
- Remote control of robotic devices
- Next Generation (NG) 9-1-1 texts, photos, data
- Database queries
- Field reporting
- Non-Mission Critical Voice



Courtesy of FirstNet

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

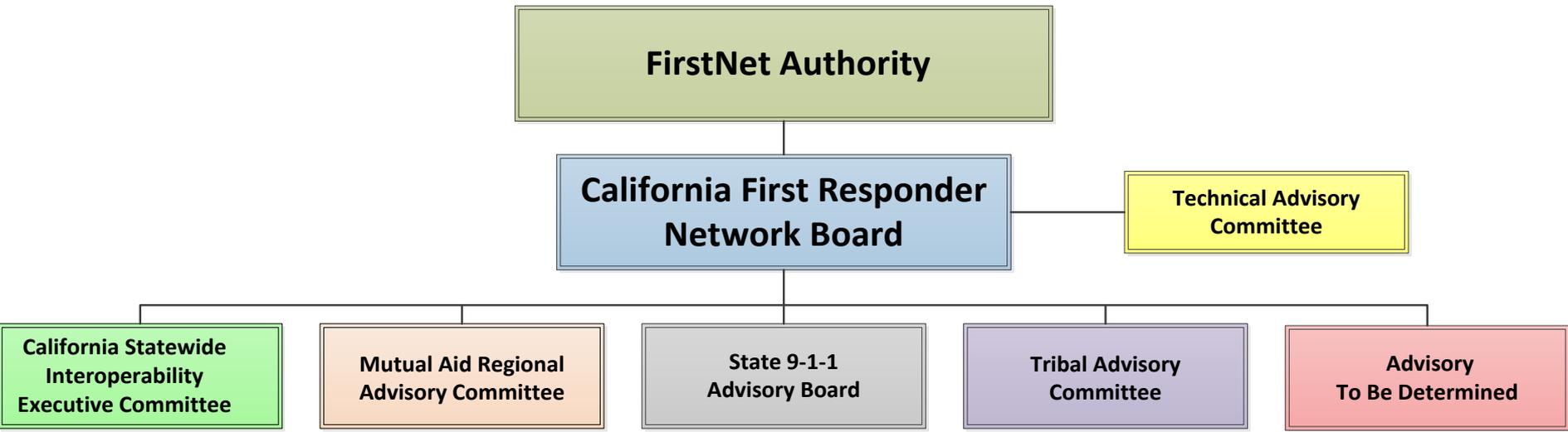
- **State of California Governor’s Office**
 - Per the Act, designates single officer or governmental body to coordinate with FirstNet
 - Makes the Opt-In/Opt-Out decision
- **California First Responder Network Board (CalFRN)**
 - State’s governing body for FirstNet
 - Engages key public safety stakeholders 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

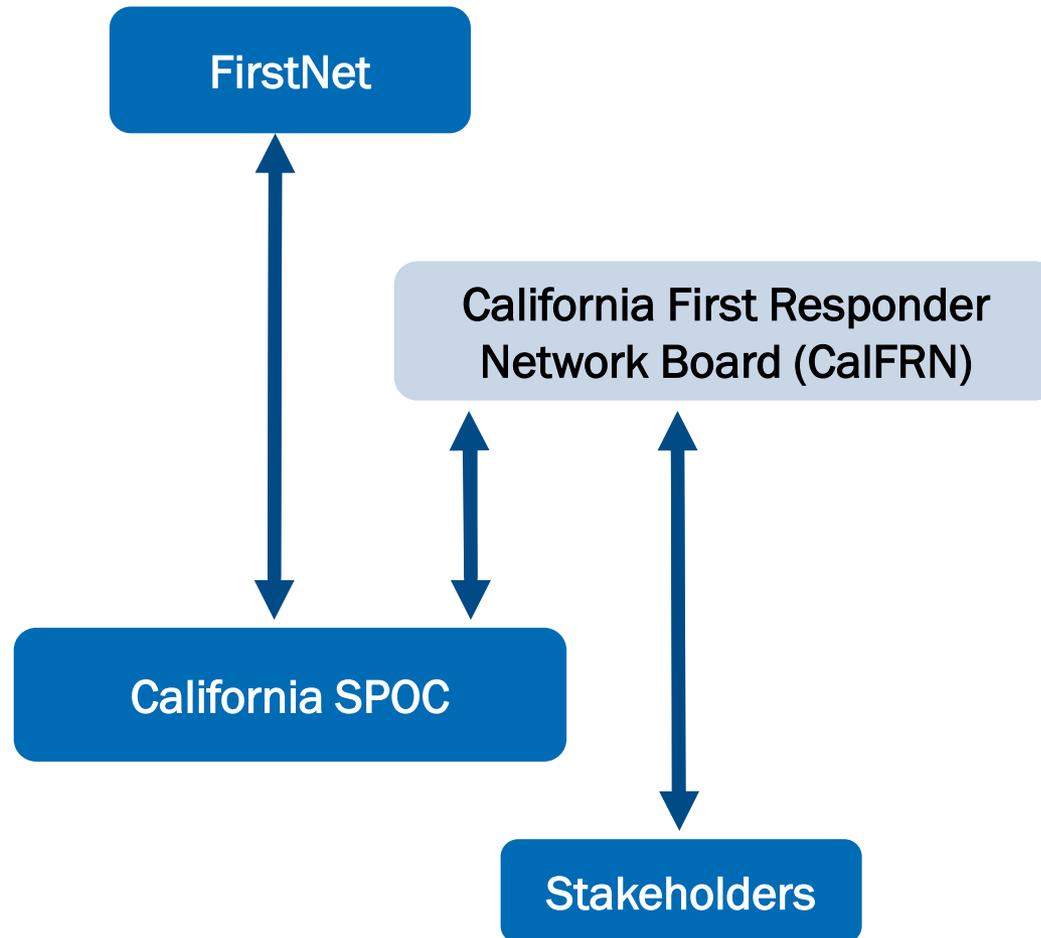
CalFRN Advisory Committees



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
- Working with DHS OEC to schedule coverage objectives workshop

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



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

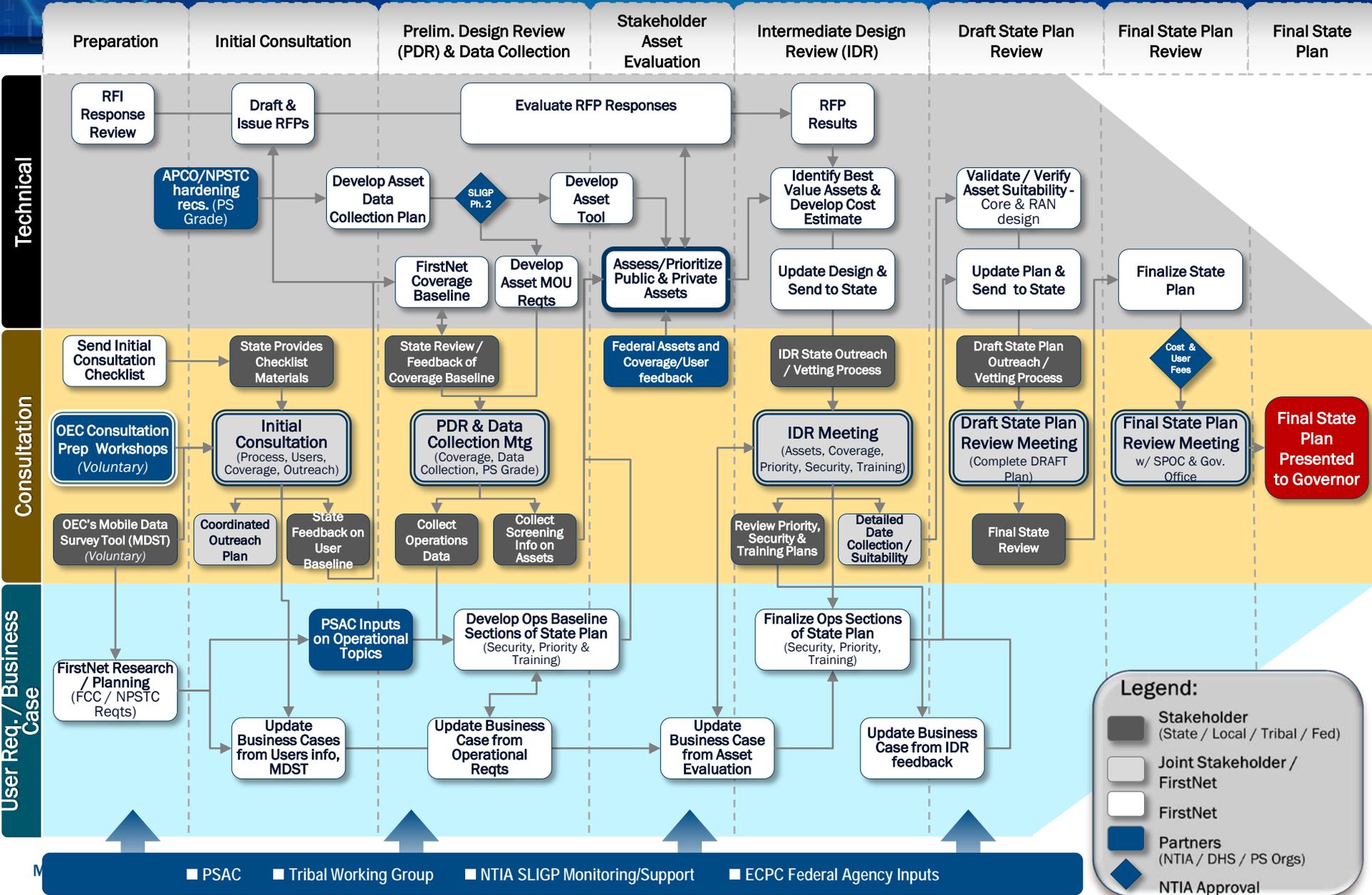
Major Sources:
Public Law 112-96, "Middle Class Tax Relief and Job Creation Act of 2012"; Further amended in Title VI of PL 112-96, enacted Public Safety Communications and Emergency Services Auctions;
House Bill 1014, Wireless 700 MHz and 800MHz Network and Next-Generation Communications for Public Safety, issued by Congress;
Congressional Research Service (CRS).

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DOC OES-PSBN-14-02

Preliminary Consultation and State Plan Process



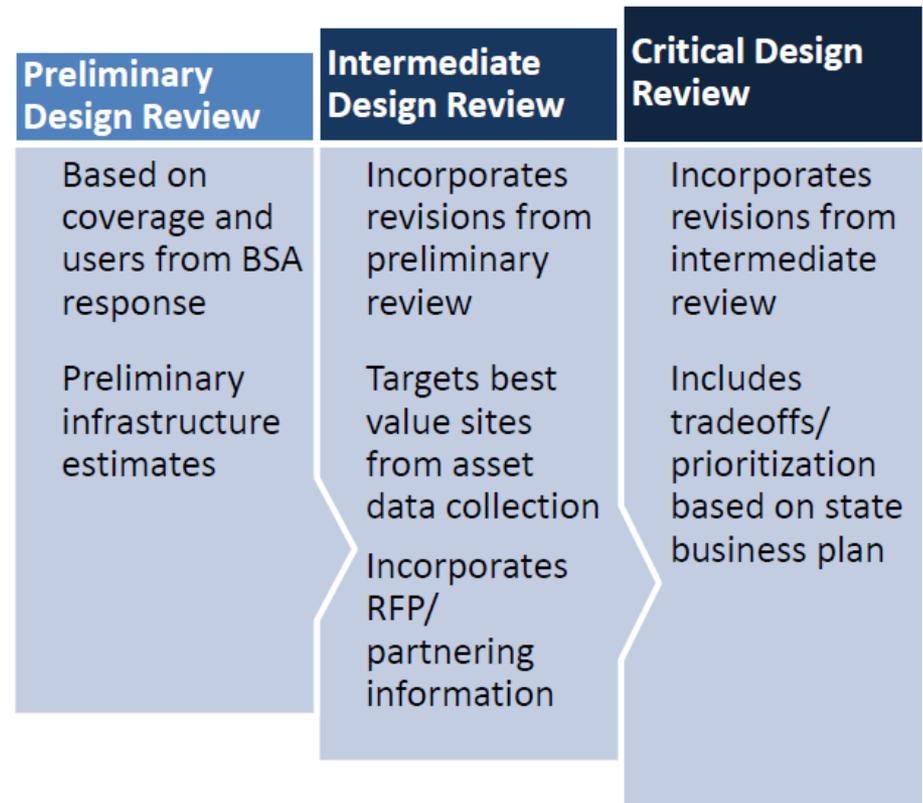
State RAN Design Process

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



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



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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



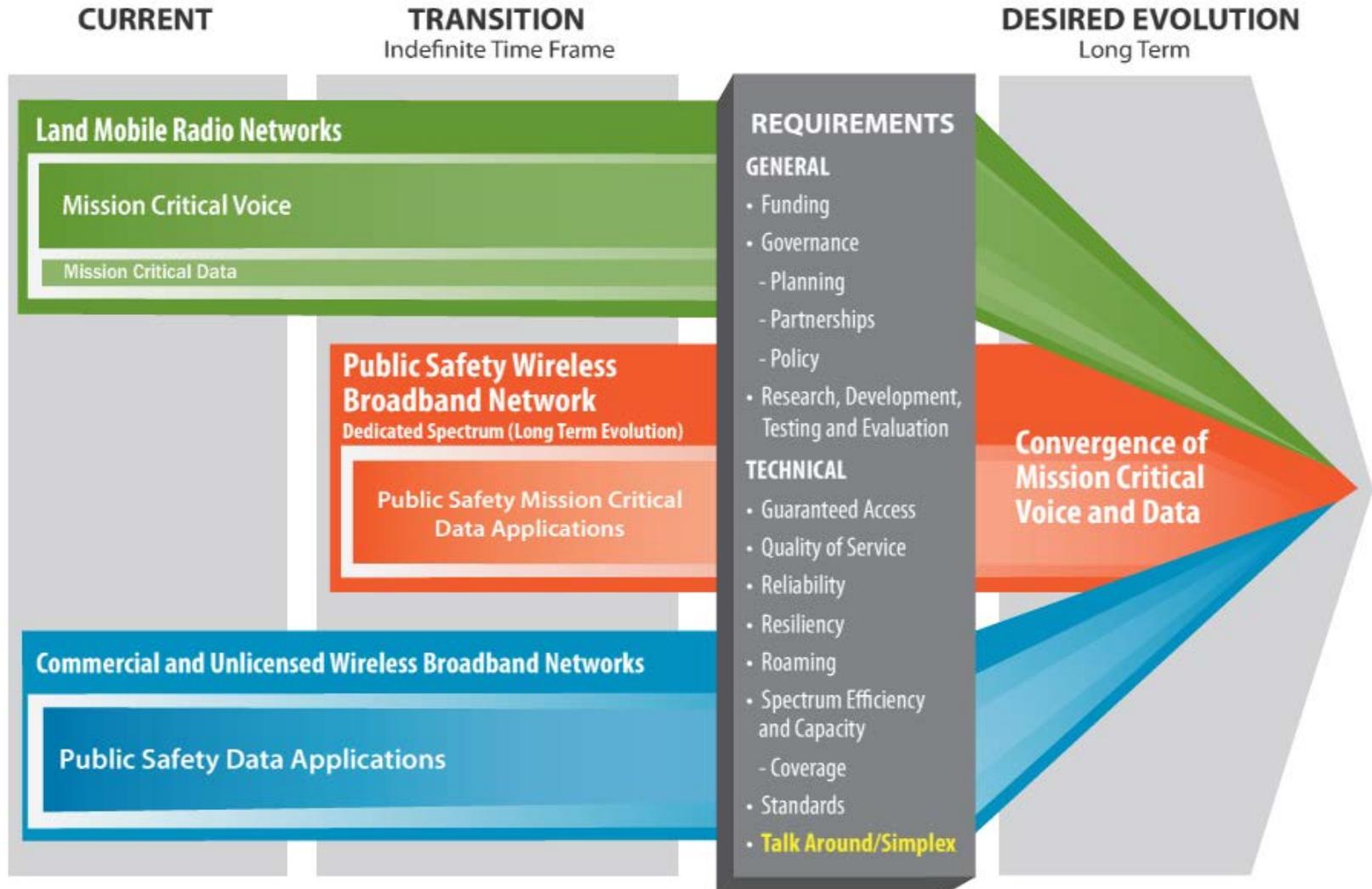
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Help us manage expectations

- 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



Public Safety Communications Evolution to a Single Converged Mission Critical Platform



Thank You

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