



# FirstNet™

[www.firstnet.gov](http://www.firstnet.gov)



## FirstNet Overview

**Kristi Wilde, ENP**  
Outreach Coordinator

Sacramento, CA  
November 20, 2014

# Why FirstNet



# Our History & Mandate



2004

## Middle Class Tax Relief and

*"The First Responder Network  
single public safety wireless link  
necessary to ensure the public  
operation of the nationwide*



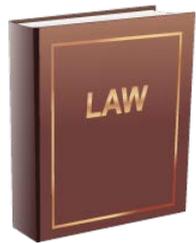
**increased assignment  
spectrum for public  
purposes.**

THE

### **Associations Supporting D-Block Reallocation**

National Governors Association	National Criminal Justice Association
National Association of Counties	National Association of Police Organizations
National League of Cities	National Volunteer Fire Council
United States Conference of Mayors	National Troopers' Coalition
Council of State Governments	National Organization of Black Law Enforcement Executives
International City/County Managers Association	Association of Air Medical Services
National Conference of State Legislatures	Advocates for Emergency Medical Services
International Association of Chiefs of Police	Emergency Nurses Association
International Association of Fire Chiefs	National Association of Emergency Medical Services Physicians
National Sheriffs' Association	National Association of Emergency Medical Technicians
Major Cities Chiefs Association	National Association of State Emergency Medical Service Officials
Metropolitan Fire Chiefs Association	National Emergency Medical Services Management Association
Major County Sheriffs' Association	American Probation and Parole Association
Association of Public-Safety Communications Officials	National Association of Regional Councils
National Emergency Management Association	
International Association of Emergency Managers	
Police Executive Research Forum	

2011



## THE LAW

2.22.12

FirstNet becomes law  
PL 112-96

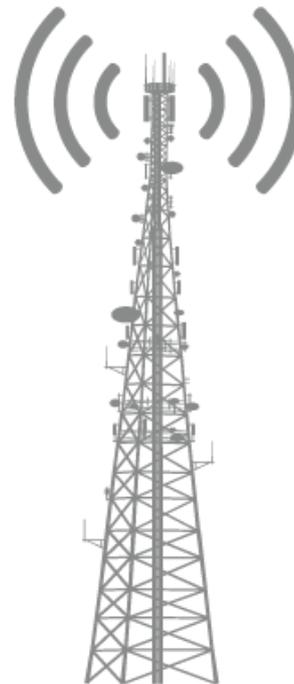
## GOVERNANCE



FirstNet Board of directors' **15** members, including those with backgrounds in public safety, government, and telecommunications.

Governor appoints **1** Single Point of Contact (SPOC) and governing body to represent the state's interests to FirstNet.

**40** member Public Safety Advisory Committee (PSAC) advises FirstNet on public safety intergovernmental matters



## FUNDING



**\$7B** authorized to build the FirstNet network. Funded by spectrum auctions through 2022. The first auction netted



**\$1.56B\***

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

*\* Source: FCC (Feb. 27, 2014 ) Auction 96. [www.fcc.us/1eVrkUp](http://www.fcc.us/1eVrkUp)*

# First Responders Deserve the Best Network



- FirstNet will ensure the development of a reliable and resilient broadband network that will provide nationwide coverage, even in the most remote regions
- The network must meet public safety's requirements and ensure priority and preemption during emergencies
- The network will provide access to applications and broadband services

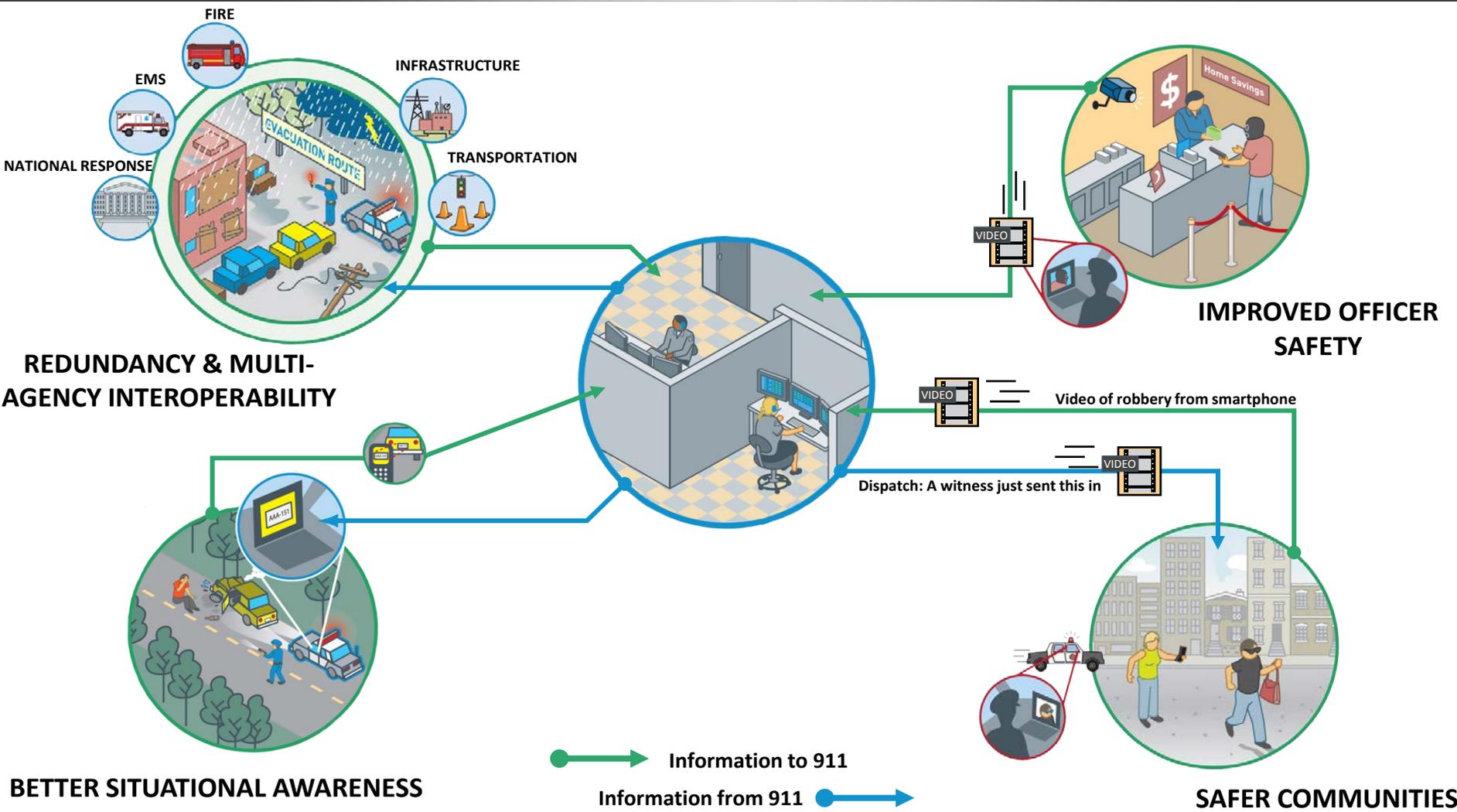


# FirstNet Shared Goals with NG9-1-1



- Technology Modernization: Both represent efforts to update voice centric legacy systems to IP based architecture to allow telecommunicators and first responders to leverage information in multiple media formats
- National Focus: Both aim for broadband connectivity in urban, rural, remote communities
- Improved Emergency Response: Both seek to enhance communications and coordination of responses to requests for public safety assistance
- Planning & Governance: Both require planning and governance to ensure successful deployments

# Scenarios and Goals for the Continuum of Public Safety Response



## FIRSTNET NATIONWIDE DISTRIBUTED CORE NETWORK

Communications

Applications  
Services

Switching  
Routing  
Scheduling

Databases/  
Warehouses  
Security

Interfaces  
to Other  
Networks

## FIRSTNET RADIO ACCESS NETWORK (RAN)

### STATE RAN



Mutual Aid

First  
Responder

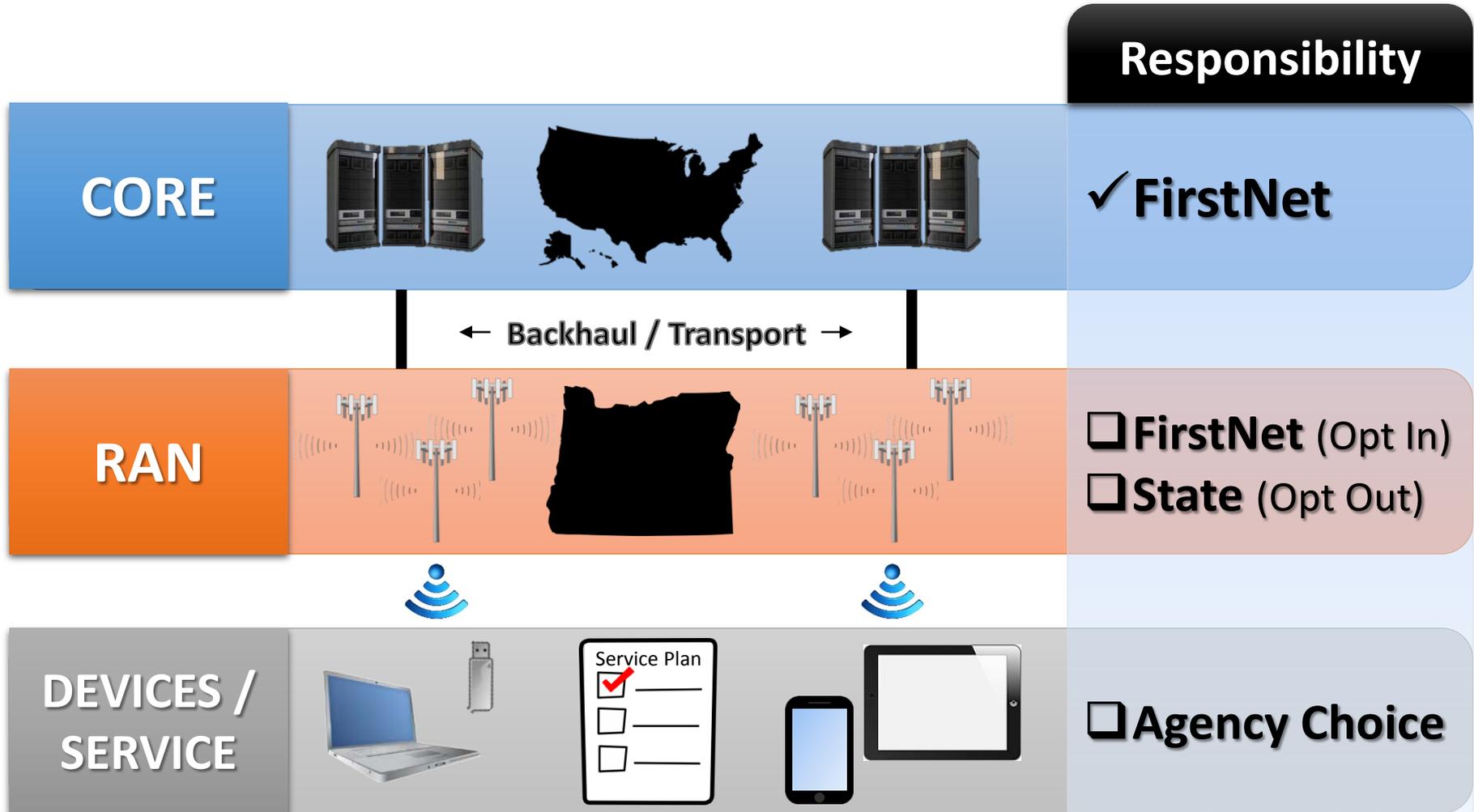
Police

Fire  
Rescue

COVERAGE AREA

..... Backhaul  
⚡ Radio Link

# Network Components and Choices



# Funding

## *Building an Affordable, Self-Funding Network*



### Funding

- The network is to be self-sustaining
- Planning and implementation funding is provided through spectrum auctions
- Funds available until Sept 30, 2022; unused funds revert to the Treasury

Phase	Funds	Purpose
Planning	\$135 Million	Grants to assist States/Territories with planning & implementation
Implementation	\$7 Billion	\$2 Billion provided to start planning, designing and early implementation Remaining \$5 Billion from spectrum auctions
Growth / Sustainment	Ongoing	1. Lease Fee for Excess Network Capacity 2. Lease Fee for Network Equipment / Infrastructure 3. Network User Fee 4. Core Network Access Fee

## The Long-Term Vision



**Mobile Data Terminal -  
FirstNet LTE Air Card**



**Mission Critical Data**

**Smart Devices  
FirstNet LTE Service**



**Mission Critical Voice  
Mission Critical Data**

**Specialty Devices  
FirstNet LTE Service**



**Mission Critical Voice/Data**

# West, Texas - April 17, 2013

It's out West Fire, The uh West Fertilizer is uh... one of their mills is on fire...there's uh heavy smoke coming out of the top of it.

>>Stand by, was just about to do that.

<Volunteer Fire Tone Goes Out>

>>...61, fire. 61, fire. We need you to respond to the West Fertilizer Plant. They have uh...fire out there. Again, West fire (unintelligible)...West Fertilizer Plant.

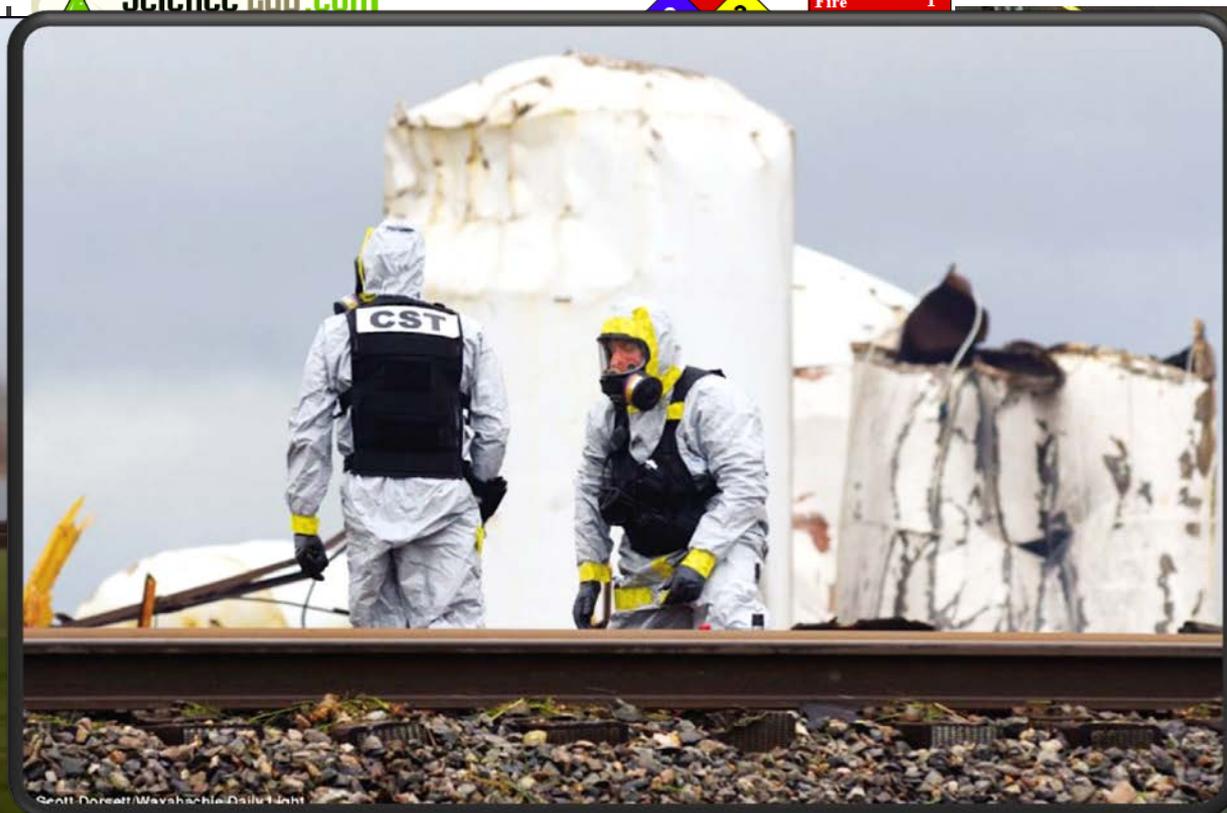
# With Public Safety Broadband...



Science Lab.com



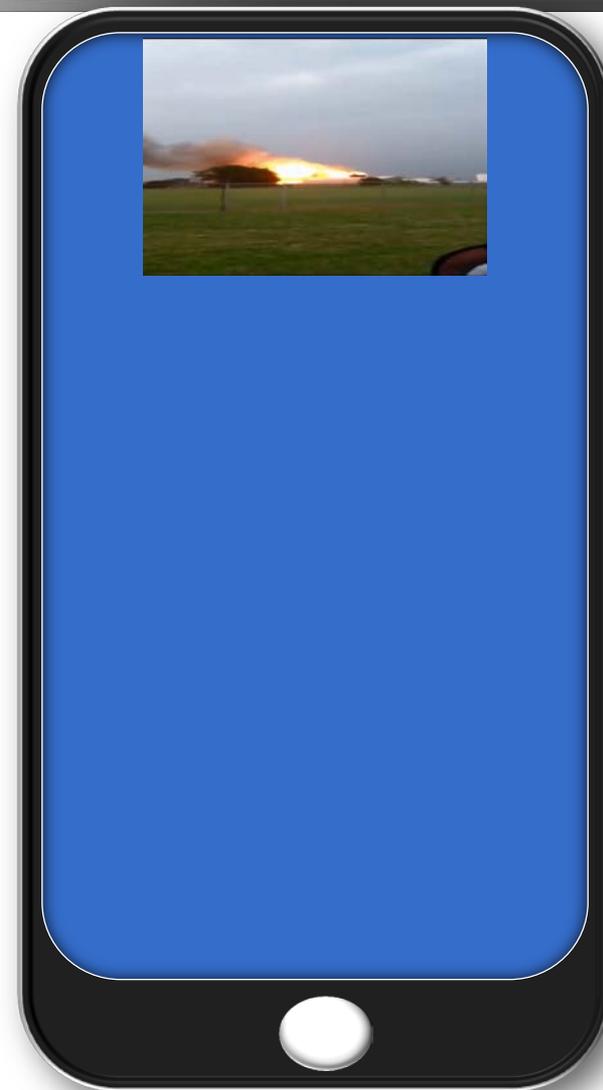
Health	2
Fire	1



Scott Doreatt/Wayshackie/Dailylife14

#### Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, mucous membranes. The substance may be toxic to blood, gastrointestinal tract. Repeated or prolonged exposure to the substance can produce target organs damage.



# Five Unique Coverage Categories



Unique Geography and Demographics Require Multiple Solutions for a Seamless Operation in CONUS and Non-Contiguous States and Territories



**Wilderness**



**Rural**



**Suburban**



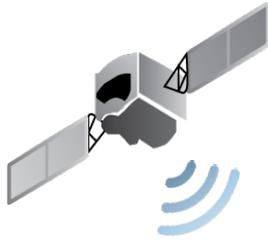
**Urban**



**Dense Urban**

# Diverse Coverage Architecture

## "3-in-1" Approach



**#2:**  
**Mobile Satellite Systems**



**#1:**  
**Multiple Terrestrial Mobile Systems**



**#3:**  
**Deployable Systems**



**Public Safety User**



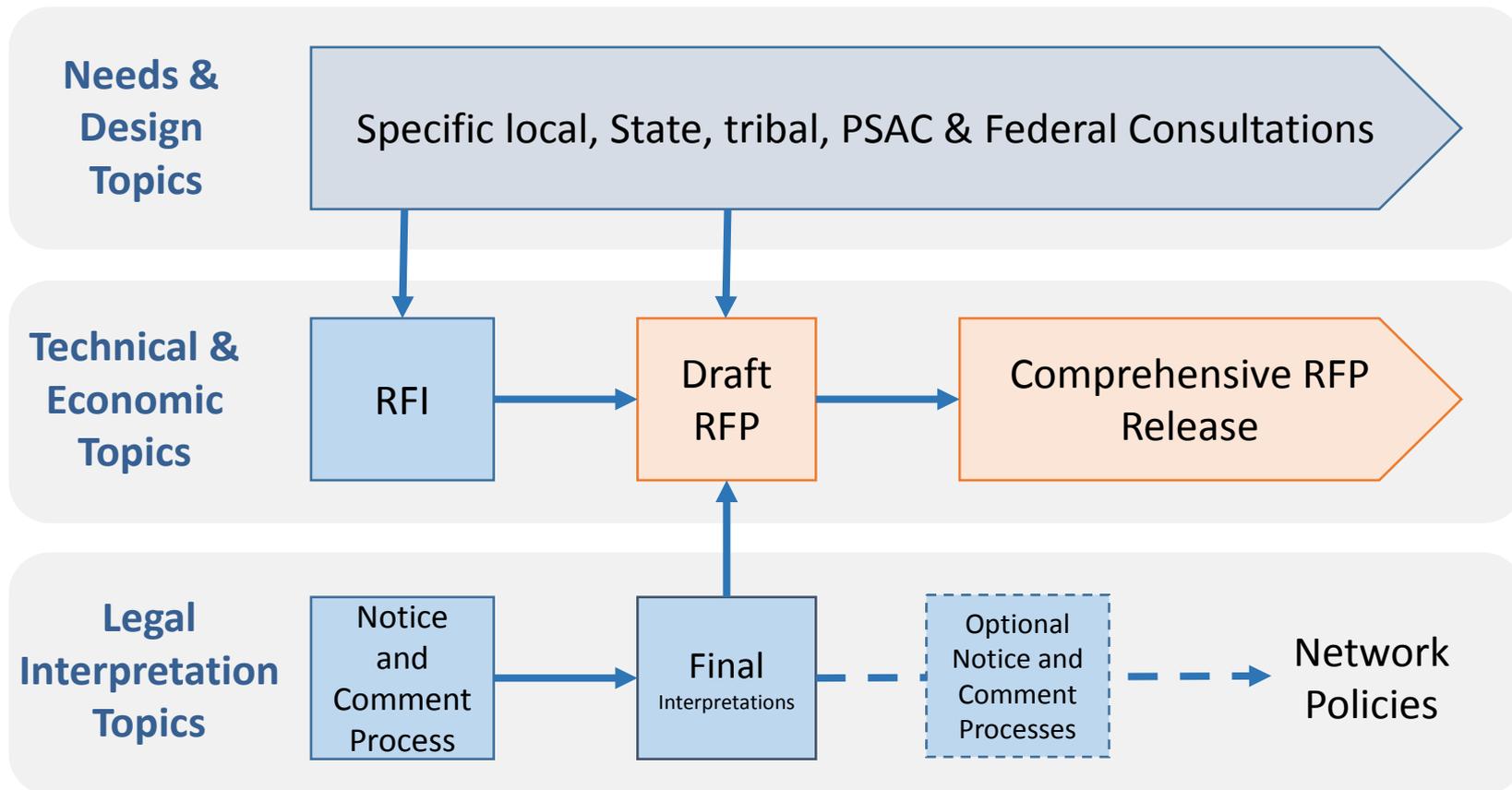
## We are Here

...We want to make rapid progress for public safety, while balancing the need for robust design and cost-effectiveness. At this time, we believe the following milestones, over approximately the next year, should serve as appropriate checkpoints to ensure that we are on track within our roadmap to reach our goals:

- Initiate public notice and comment on certain program procedures, policies, and statutory interpretations;
- Release draft request for comprehensive network proposals for offeror comments;
- Release draft requests for certain network equipment and services proposals for offeror comments; and
- Begin formal state consultations.

As we travel along our program roadmap, we may determine that some of our assumptions are flawed, and change course accordingly. We may change the order of, or the actual roadmap milestones themselves as a result. Nevertheless, we believe we have charted a course to prove out a successful FirstNet for public safety....

# How the Pieces Fit Together



RFP Processes

Consultative Processes

# RFI and Public Notice for Comment Overview



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# What is the purpose of the RFI?



- Provide interested parties with greater visibility into FirstNet's proposed direction for network deployment
- Helps FirstNet gather information
- The Statement of Objectives (SOO)
  - Outlines a performance-based acquisition approach
  - Presents a set of objectives in order to encourage innovative solutions to meet public safety needs
  - Counts on marketplace collaboration to ensure best outcomes for states, territories and tribal lands
- FirstNet Does Not:
  - Dictate a specific technical or network solution – other than a few essential parameters
  - Specify required partnerships, alliances, or joint ventures within the vendor community

# Why Do Notice and Comment?



- Notice is an opportunity to receive input on unclear provisions of the law
- Comments will provide critical inputs into the draft RFP and will shape the economic and technical aspects of the procurement
- Allows a broad audience, including public safety entities, to provide feedback in the *Federal Register* notice process





# This is Just a First Step

- FirstNet issues final interpretations after considering comments, in a subsequent notice and/or in the draft and/or final RFP
- Notice contained preliminary interpretations
- Final interpretations will still only determine outside legal boundaries
- Further detailed rules or policies within those boundaries may be narrower than legal boundary
- Important to maintain flexibility at this stage of program and refine approach as we progress



*Example: if the terms of the Act give FirstNet authority to serve a broad group of customers, FirstNet may nevertheless decide to narrow eligibility in order, for example, to preserve network capacity for public safety*

# Outreach



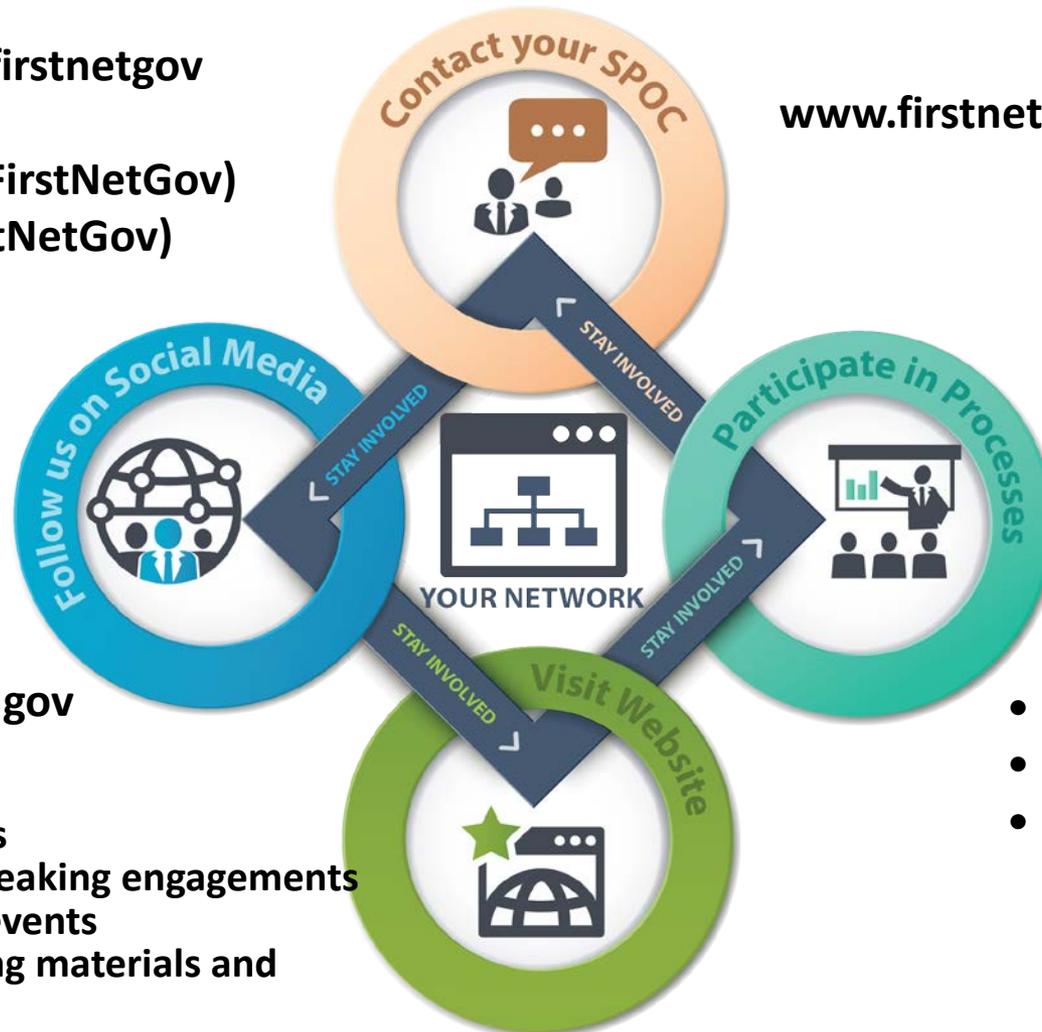
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# Outreach and Communications



- Twitter @firstnetgov
- LinkedIn
- YouTube (FirstNetGov)
- Flickr (FirstNetGov)

[www.firstnet.gov/consultation](http://www.firstnet.gov/consultation)

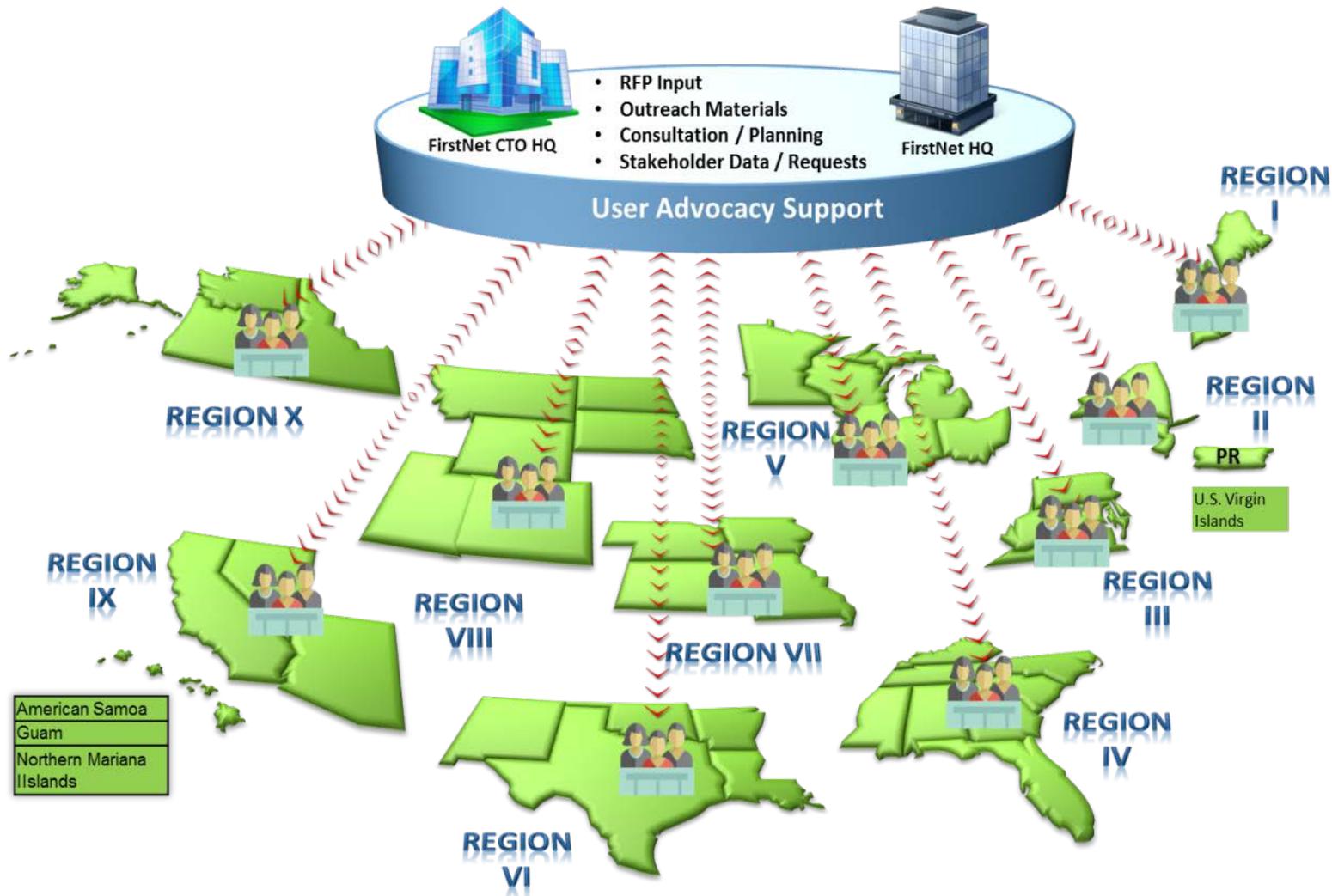


[www.firstnet.gov](http://www.firstnet.gov)

- Fact Sheets
- Blogs
- Presentations
- Upcoming speaking engagements and current events
- Board meeting materials and webcast

- RFI
- Public Comment
- Consultation

# Understanding the Need for Regional Outreach Support

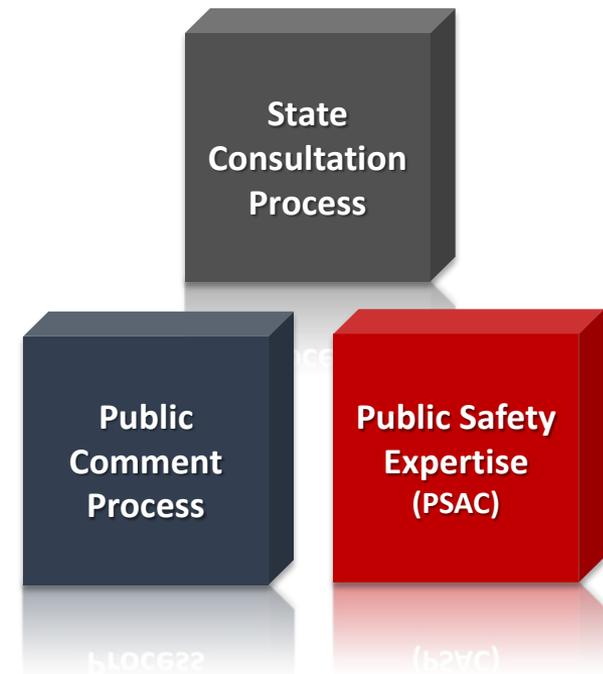


- Ongoing contact through weekly calls with the chair, review of materials, sharing of feedback from the field
- Steady schedule of speaking engagements at association events
- In-person meetings with the full PSAC twice a year
- Monthly conference calls with the PSAC Executive Committee
- Two new working groups – Tribal and Early Builder

# State Consultation



- Construction of a Core and RAN build out
- Placement of towers
- Coverage areas of the network
- Adequacy of hardening, security, reliability, and resiliency requirements
- Assignment of priority to local users
- Assignment of priority and selection of secondary users
- Training needs of local users



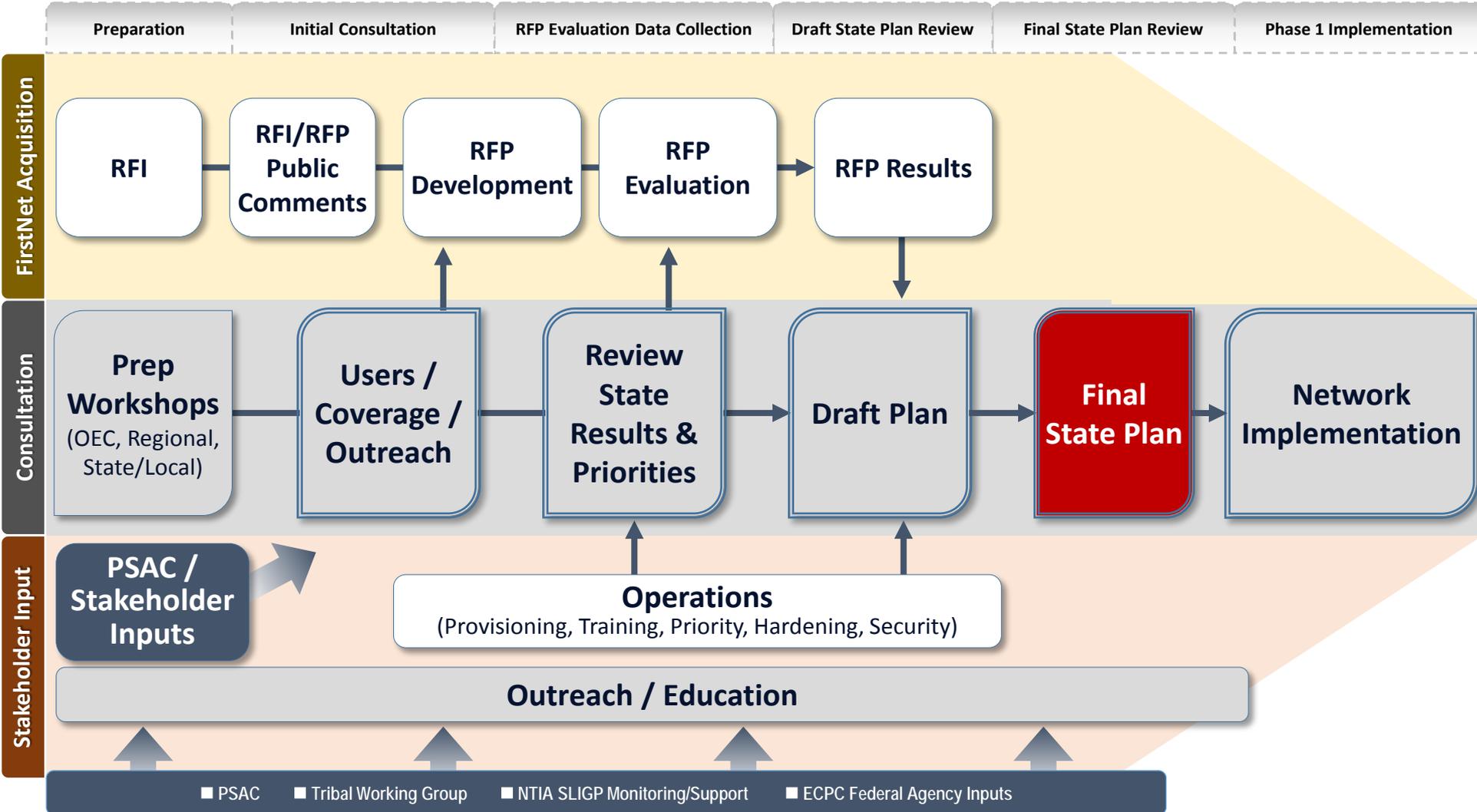
*Note: Tribal consultation requirements under the National Historic Preservation Act will be addressed separately.*

# Overview Of State Consultation Process FirstNet™

- Consultation is an iterative process, not a single event
- FirstNet will communicate the consultation process and necessary roles and responsibilities
- Consultation will focus on critical information and data
- Like consultation, plan development will also be iterative

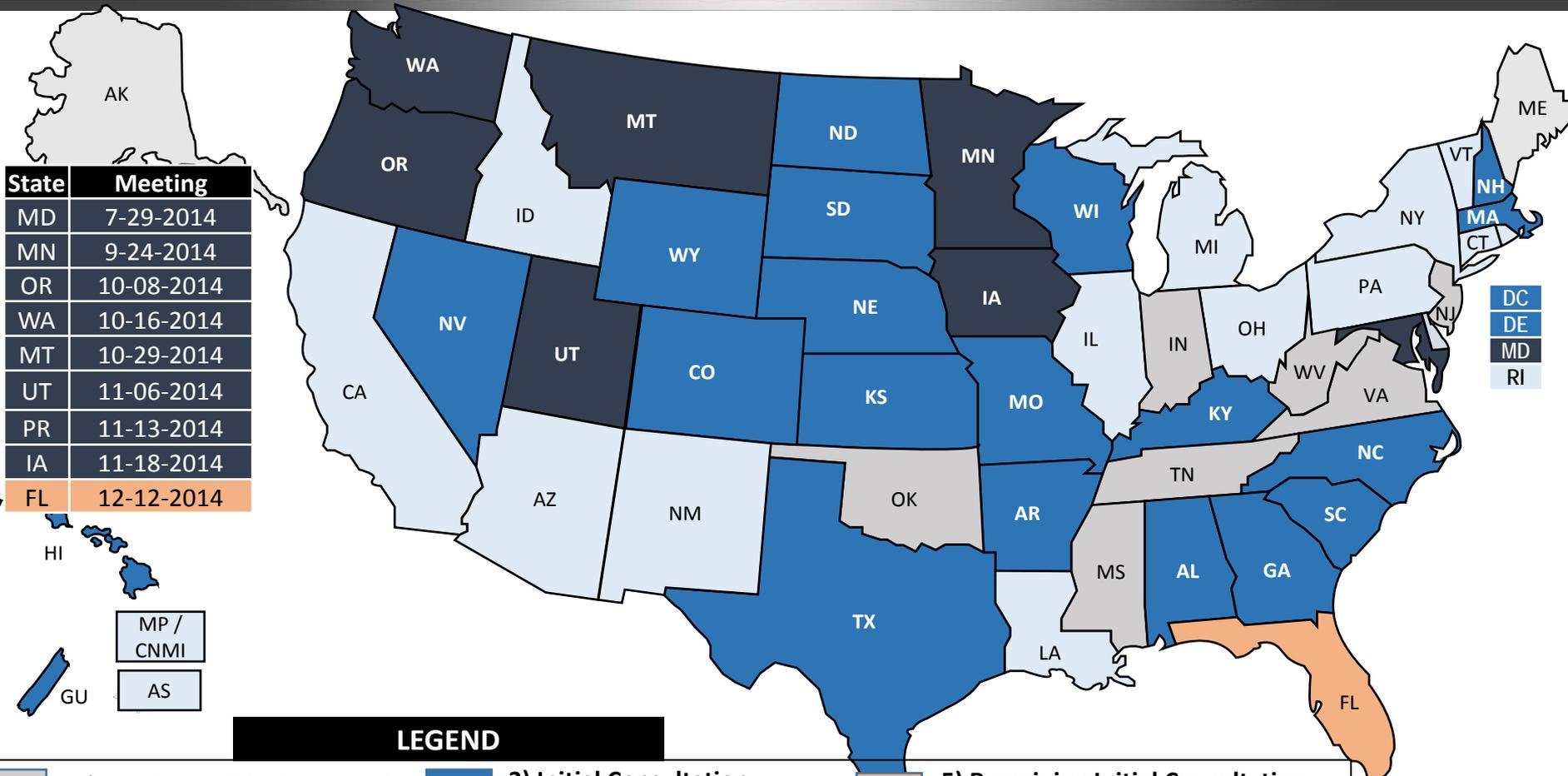
*Together, stakeholders and FirstNet will have engaged in a process that provides meaningful and thorough information for the state plans*

# Updated Consultation Approach



# Tracker – State Consultation Activities

## As of 18 November 2014



### LEGEND

All	1) Received Initial Consultation Package from FirstNet	32	3) Initial Consultation Checklist returned to FirstNet	1	5) Remaining Initial Consultation meetings scheduled in 2014	PR
44	2) Pre-consultation conference call scheduled or closed	8	4) Initial Consultation meeting held with FirstNet	0	6) Additional Initial Consultation Meeting being scheduled in 2014	VI

- Contact Karen Wong, your state point of contact (karen.wong@state.ca.gov) for updates on state activities and to coordinate attendance at consultation meetings
- Participate in public notice processes
- Contact Kristi Wilde, Outreach Coordinator at 202-308-0974
- Visit [www.firstnet.gov](http://www.firstnet.gov), <https://www.youtube.com/user/FirstNetGov> and follow us @FirstNetGov on Twitter for updates, news and resources



**FirstNet**<sup>TM</sup>

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**Thank You**