

8th Annual Strategic Planning Conference



November 4, 2014
Bastrop, TX

Agenda

- o SWIC Update
- o FirstNet / Public Safety Broadband
- o TxICC Charter Update Discussion
- o Texas SCIP Discussion
- o Strategic Advisory Groups
- o System Owners Meeting
- o Texas Public Safety Broadband
- o Focus Group Overview
- o Vote – TxICC Charter and SCIP

SWiC Update

- Deputy SWiC position
- Radio Infrastructure Funding
- Strategic Plan for System of Systems

SWiC Update

2014 Technical Assistance Requests

- o Broadband Planning – Coverage Maps; completed Jan 2014
- o COMT Train-the-Trainer – completed June 2014
- o Broadband Engineering – Technical Overview; completed Jan 2014
- o Tactical Field Operation Guide – TxCFOG in final review
- o AUXCOMM – 2 State-Certified Instructors have been identified
- o Cache Radio Users Guide – in final review

2015 Technical Assistance Requests

- o COMMEX
- o COMMEX Train-the-Trainer
- o Regional Communications Migration Planning
- o Radio Operator Training
- o Broadband Mobile Data Use Assessment
- o SCIP Workshop

SWiC Update

Just a few of the things we have been working on this year, more details later this morning:

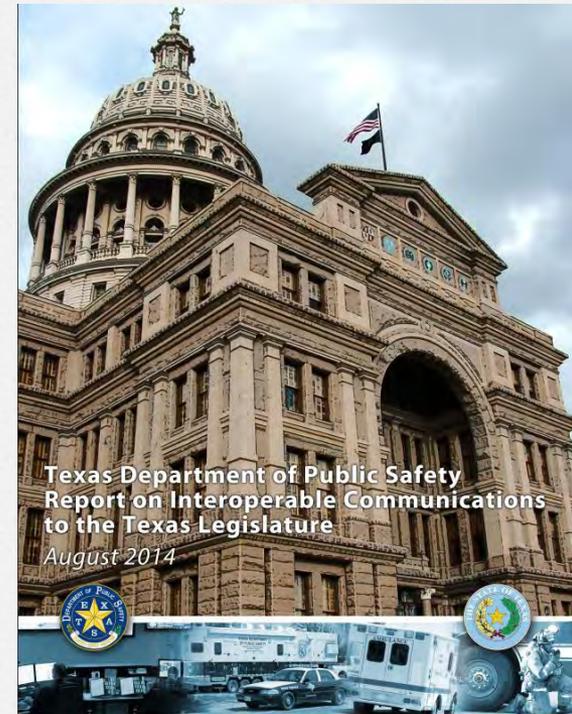
- o TSICP update
 - MSAT Talkgroups
 - Statewide Radio ID plan

- o Tx Communications Field Operation Guide – 1st Draft

- o Spectrum Management Lease Agreement

2014 Legislative Report

- o 2104 Legislative Report released and posted on the DPS website.
- o Focus Group reports serve as a vital resource for information



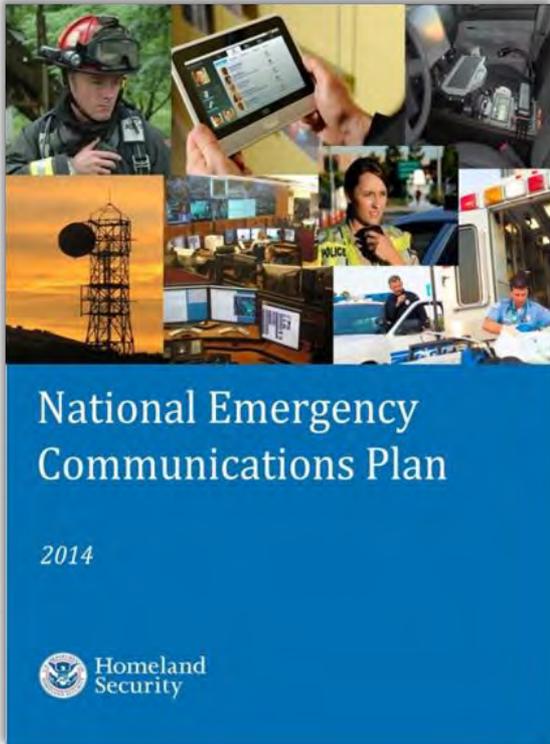
SWiC Update

700 MHz Updates - FCC14-172 24 OCT 2014

- o Required transition from 12.5 KHz to 6.25 KHz – **eliminated**

- o Air-to-Ground communications on secondary trunking channels – **redesignation approved**
 - o 2 W ERP limit, up to but not exceeding 1500 ft
 - o Operation within 315 km (195.7mi) of Mexico on case-by-case basis, using US primary spectrum when possible

National Emergency Communications Plan (NECP)



Goal 1:

Governance & Leadership

Goal 2:

Planning & Procedures

Goal 3:

Training & Exercises

Goal 4:

Operational Coordination

Goal 5:

Research & Development

National Emergency Communications Plan (NECP)



PAST

- Limited communication options
- Reliance on voice
- Scarcity of information

FUTURE

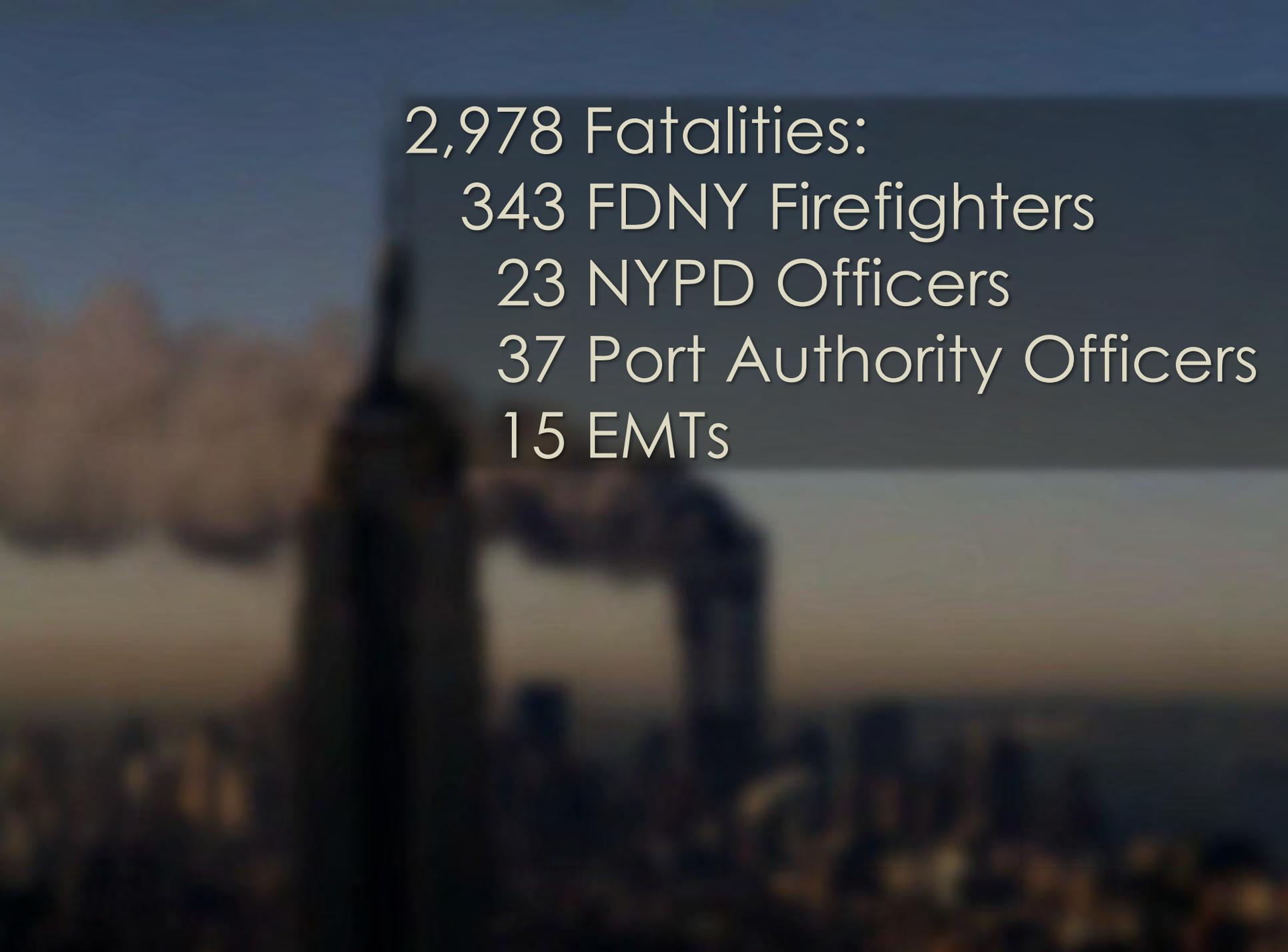
- Many communication networks
- Increase in mobile to mobile/data communications
- Abundance of information

FirstNet Public Safety Broadband

o Video

o Program Introduction





2,978 Fatalities:

343 FDNY Firefighters

23 NYPD Officers

37 Port Authority Officers

15 EMTs

Final Report of the National Commission on Terrorist Attacks Upon The United States



Recommendations

27. Congress should support pending legislation which provides for the expedited and increased assignment of radio spectrum for public safety purposes...



VISION

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



at&t



T-Mobile

Sprint®



Texas' Road to PS LTE



Texas' Road to PS LTE



Carrier Uses/Limitations



- All users are basically equal
- No preemption
- No prioritization

Data network
based on the
3GPP LTE
standard
currently used
by commercial
carriers.





And the problem is getting worse!

St. Peter's Square: The Vatican



Pope Benedict Debut

2005

Only 9 Years Ago It Was Still Uncommon...

Look! A Flip Phone!

St. Peter's Square: The Vatican



2013

Pope Francis Debut

Now, data and devices are everywhere!



Except here...

Boston, MA

April 15, 2013

Delta 984 sir, go.

>> Get help up from the medical tent. Get as many people up here as you can from the medical tent.

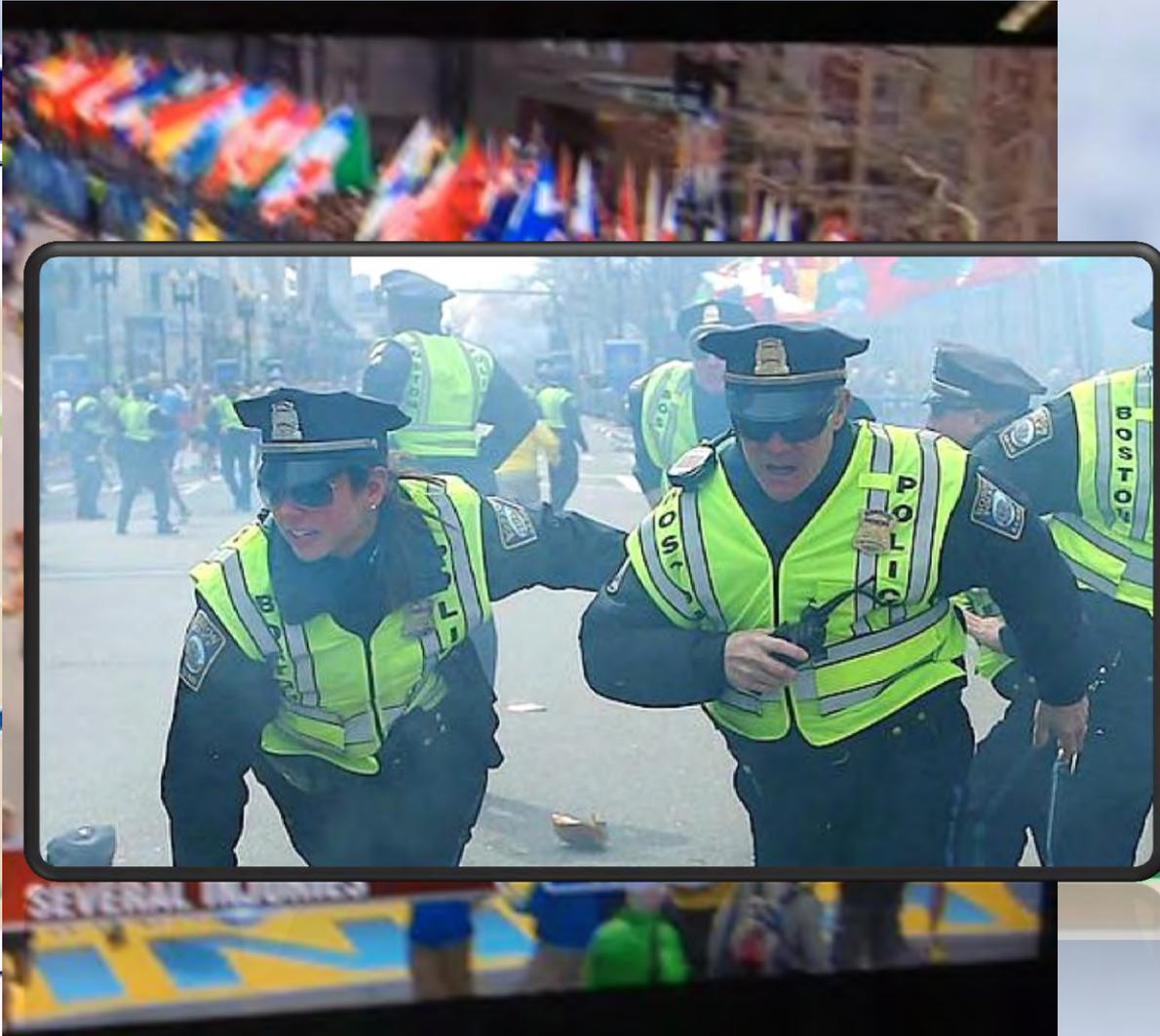
Alright.

>> Delta 984. Send more to the corner of Green (unintelligible) and Huntington... (unintelligible)...We're gonna need more ambulance here....

We need more ambulances....

>> They're goin'.

With Public Safety Broadband...



Police will continue to be the local instrument of law enforcement for the city of Boston. Any future arrangements with manufacturers may adversely impact support for emergency services, disclose protected witness identities, and thereby compromise law enforcement officers' safety and the safety and welfare of the public.



at&t



T-Mobile

Sprint



 **FirstNet**[™] Nationwide Public Safety Broadband Network

New Public Safety LTE Implementation



Dynamic Prioritization of Bandwidth

- Event based
- User based
- Application based
- Regional Interoperability

**Exclusive for
Public Safety:**



**Nationwide Public Safety
Broadband Network**

Band Class 14

Ubiquitous Interoperability: Federal, State, Local and Tribal Responders



West, Texas - April 17, 2013



Now...

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.

>>10-4, I was just about to do that.

<Volunteer Fire Tone Goes Out>

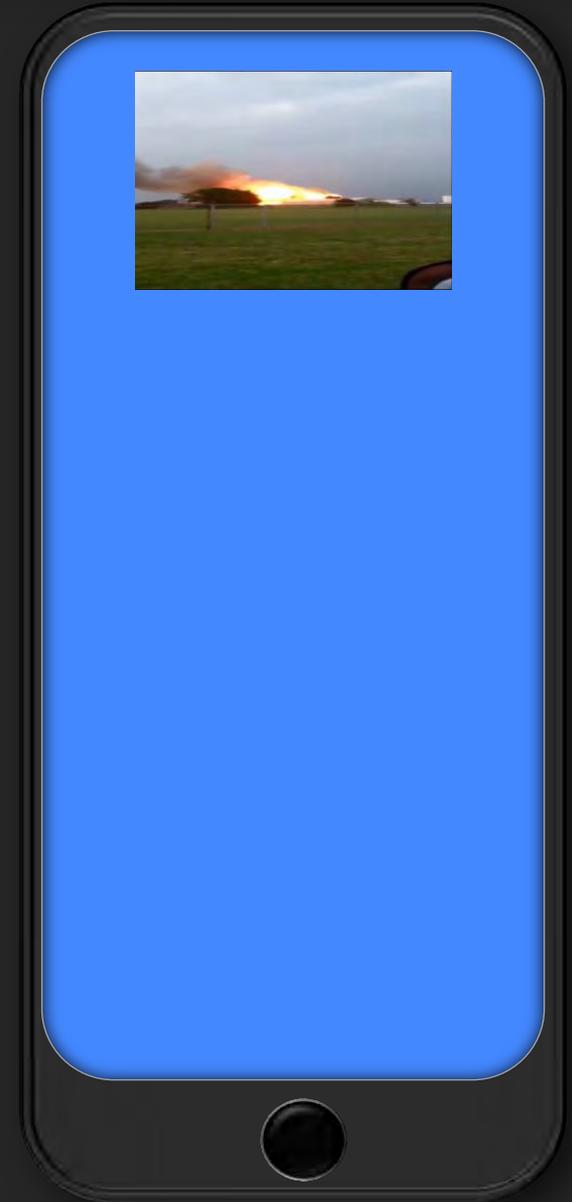
>>...61, fire. 61, fire. We need you to respond to the West Fertilizer Plant. They have uh...fire out there. Again, West fire out to West Fertilizer Plant.

With Public Safety Broadband...



Potential Chronic Health Effects:

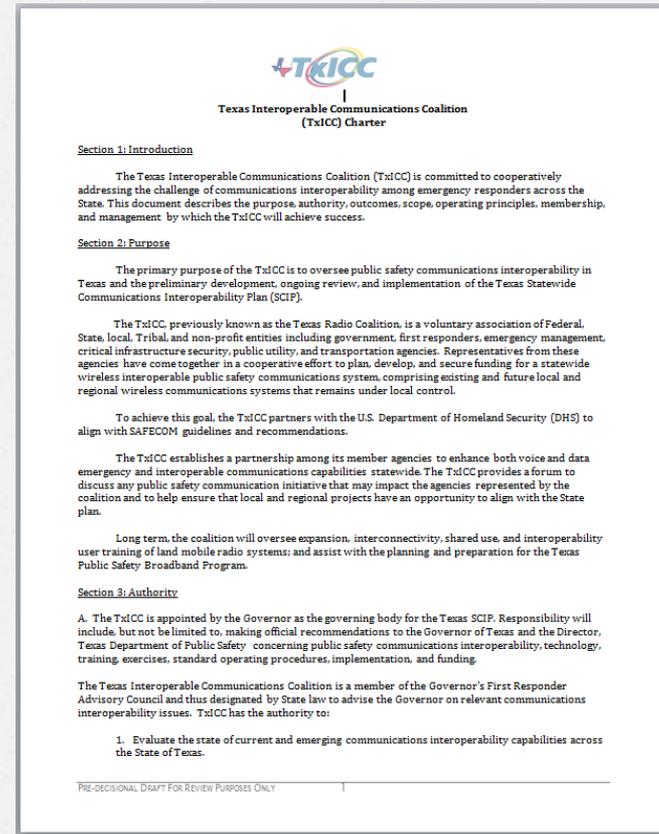
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, mucous membranes. The substance may be toxic to blood, gastrointestinal tract. Repeated or prolonged exposure to the substance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





Charter Update

- Charter has not been updated since the original adoption in 2008
- Added emphasis for both voice and data communications





Break



SCIP Update



Texas

Statewide Communication Interoperability
Plan (SCIP)

September 2014

CMS Case# Number: 1470-0017
Date of Approval:
Date of Expiration:

Paperwork Reduction Act: The public reporting burden for this information collection is estimated to average 1 hour per response, including reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and reviewing and reporting the data. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing the burden, to DHS/SPD/OEC, Section 60325, 2425, ATTN: PRA(1470-0017).



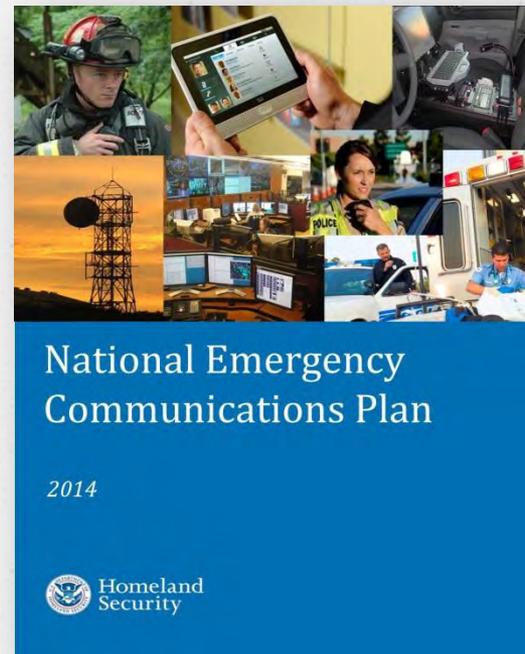
- o SCIP Workshop held September 2013
- o SCIP updated to align with Office of Emergency Communications eSCIP
- o Goals and Initiatives provide a 3-5 year plan for interoperable communications in TX



Strategic Advisory Groups

National Emergency Communications Plan (NECP)

- New technologies and capabilities exist today that did not exist in 2008
- As the emergency communications landscape evolves, so must the emergency communications ecosystem established in this NECP update
- The 2014 NECP is designed to support public safety in today's emergency communications ecosystem



Emergency Communications Ecosystem



Governmental Agencies

(Federal, State, Local, Tribal, Territorial)



Governmental Agencies

(Federal, State, Local, Tribal, Territorial)



Incident Response and Coordination

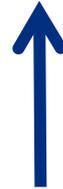
**Notifications,
Alerts & Warnings**



Public, NGOs, Private Sector



**Reporting, &
Requests for
Assistance**

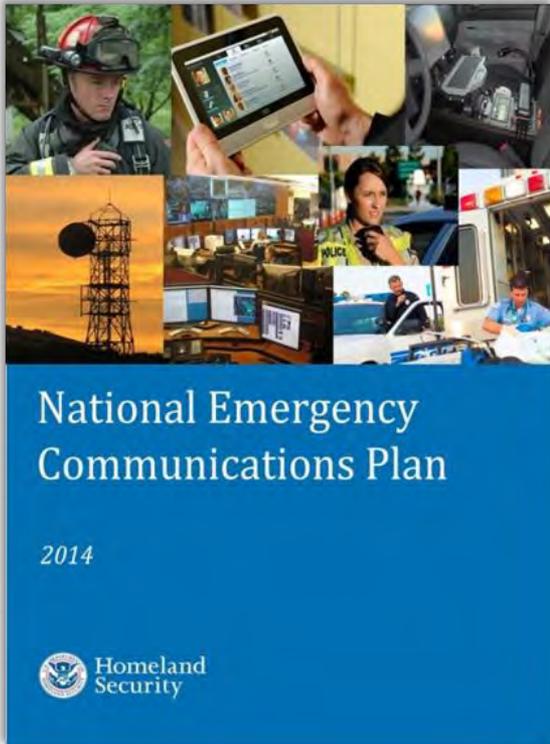


Public, NGOs, Private Sector



Public Information Exchange

National Emergency Communications Plan (NECP)



Goal 1:

Governance & Leadership

Goal 2:

Planning & Procedures

Goal 3:

Training & Exercises

Goal 4:

Operational Coordination

Goal 5:

Research & Development

National Emergency Communications Plan (NECP)

Governance & Leadership

- ✓ Update governance structures
- ✓ Explore Federal emergency communications grants
- ✓ Strengthen regional structures to foster multi-State collaboration

Planning and Procedures

- ✓ Update Statewide Communications Interoperability Plans
- ✓ Coordinate nationwide public safety broadband planning throughout State
- ✓ Develop SOPs for new technologies (e.g., NG 9-1-1)

National Emergency Communications Plan (NECP)

Training & Exercises

- ✓ Develop training and exercise programs that target gaps in emergency communications capabilities
- ✓ Leverage conferences and workshops to promote training opportunities

Operational Coordination

- ✓ Enhance jurisdictions' ability to request communications assets during operations
- ✓ Ensure inventories of emergency communication resources are updated
- ✓ Ensure Public Safety Answering Points support dispatch Communications

National Emergency Communications Plan (NECP)

Research & Development

- ✓ Support the evolution of alert and warning systems (e.g., text-based)
- ✓ Continue to support Project 25 standards development for interoperability
- ✓ Update priority service programs to migrate to internet protocol-enabled fixed and mobile broadband networks

Regional Standard Operating Procedures

Purpose:

- Review existing RSOP template from RICP Round 1, determine potential upgrades, encourage COGs to review, update, and train on RSOPs

Accomplishments:

- In the process of updating an RSOP template

Next Steps:

- Select a web based home to post information



Training

Purpose:

- o Standardized training and exercises on equipment and interoperability

Accomplishments:

- o Created basic interoperability training template
- o Created basic exercise template
- o Training has been approved for Continuing Education credits

Next Steps:

- o Implement 'Basic' training
- o Begin planning integration of LTE training



Texas Statewide Interoperability Channel Plan (TSICP)

Purpose:

- o To provide permissions and guidelines for the use of interoperability or mutual-aid radio channels

Accomplishments:

- o Group released v16 with a vote by the TxICC delegates at the TDEM conference in May, Some administrative corrections were released in August 2014, v16 added MSAT talk-groups and the Statewide Radio ID plan

Next Steps:

- o To continually review the document in comparison with Federal guidelines, and to provide clarifications and improvements



Infrastructure Funding

Purpose:

- o Group to draft educational materials for the TxICC to use for educating elected officials on the importance of funding public safety communications

Accomplishments:

- o Group has met several times, education brochure drafted, talking points drafted

Next Steps:

- o Group to finalize brochure and talking points, TxICC members to distribute and meet with elected officials



Texas Communications Field Operations Guide (TxCFOG)

Purpose:

- o To create a pocket guide specifically for Texas in line with the national-level National Interoperability Field Operations Guide (NIFOG)

Accomplishments:

- o Group has met several times, final draft guide created
- o Group is working this Technical Assistance with the Office of Emergency Communications

Next Steps:

- o Hold webinar with TxICC to review document
- o Create and Share a 'Recommended' short list of prioritized VHF and 700 MHz frequencies to the TSICP working group
- o Finalize TxCFOG



Cache Radio User Training

Purpose:

- o To develop a 'Just In Time' training template to be used with Cache Radio deployments
- o Training gives an overall view of the Texas Channel Plan, but allows agencies to customize with their model of radio and programming

Accomplishments:

- o Group is working this Technical Assistance with the Office of Emergency Communications and has met several times, training template is nearing completion

Next Steps:

- o Finalize Training Template



Assistance to Fire Fighters Grant Opportunity

Purpose:

- To award grants directly to fire departments, unaffiliated EMS organizations and State Fire Training Academies to enhance their ability to protect the health and safety of the public, as well as that of first-responder personnel.

Key Dates and Times:

- Application Start Date: 11/3/2014 at 8:00 AM EST
- Application Submission Deadline Date: 12/5/2014 at 5:00 PM EST

Information sheets at Registration Table



A graphic of the Texas state flag, featuring a white star on a blue field, a white horizontal stripe, and a red field, waving to the right.

***Texas Public Safety
Broadband Program***

Strategic Advisory Groups

SCIP Executive Council (SEC)

Purpose:

- o To serve as regional representatives and the voting public safety governing body for voice and data communications, and also the LTE lead for their region

Accomplishments:

- o 25 people from 13 COGs and one Tribe attended 2-day in-person training meeting in January
- o Held 2 additional in-person meetings (2014 TEMC & SCIP)
- o Average of 14 SEC delegates attended eight monthly calls in 2014
- o Coordinated with the TxPSBP to host 20 broadband meetings, with 3 more scheduled before 2015!!

Next Steps:

- o State Consultation meetings
- o Begin forming regional broadband teams

Rural



Purpose:

- o Serve as the rural Texas voice
- o Identify top issues for broadband coverage priorities
- o Rank coverage priorities from most important to least

Accomplishments:

- o Membership formed, 3 meetings held, and input provided on the FirstNet definition of “Rural”

Next Steps:

- o Create list of coverage-related factors
- o Begin writing Rural Texas Report

FirstNet Definition of Rural

o Rural Electrification Act:

A “Rural Area” is ... “any a city, town, or incorporated area that has a population of less than 20,000 inhabitants”, and is NOT contiguous or adjacent to a city or town that has a population greater than 50,000 inhabitants.”

o The State proposes we reject this definition

Reason Selected by NTIA	Reason Rejecting
<ul style="list-style-type: none">• Sufficiently specific and granular	<ul style="list-style-type: none">• Not specific, creates difficult data issues. Very difficult to measure
<ul style="list-style-type: none">• Definition is “widely known”	<ul style="list-style-type: none">• Not well know in PSBB community; Act has 3 very different definitions
<ul style="list-style-type: none">• Will save us time since everyone already knows it	<ul style="list-style-type: none">• Has to be defined and clarified to entire audience no matter what
<ul style="list-style-type: none">• Same objectives as Rural Loan program	<ul style="list-style-type: none">• Similar but not same and end beneficiary is very different

Tribal



Purpose:

- o To collaborate with each of the three Federally-recognized Tribal Nations in Texas and understand their unique requirements for Public Safety Broadband

Accomplishments:

- o Several meetings with Tribal representatives have taken place, both in person and via conference calls

Next Steps:

- o Complete in-person meetings with each Tribal Nation

Memorandum of Agreement (MOA)

Purpose:

- To gather input on a draft template MOA which will facilitate the use of existing local and state infrastructure for the future public safety broadband network.

Accomplishments:

- Initial legal information gathered to be used as input for the draft template MOA

Next Steps:

- Solicit team membership for the SAG



Lunch

System Owners' Meeting

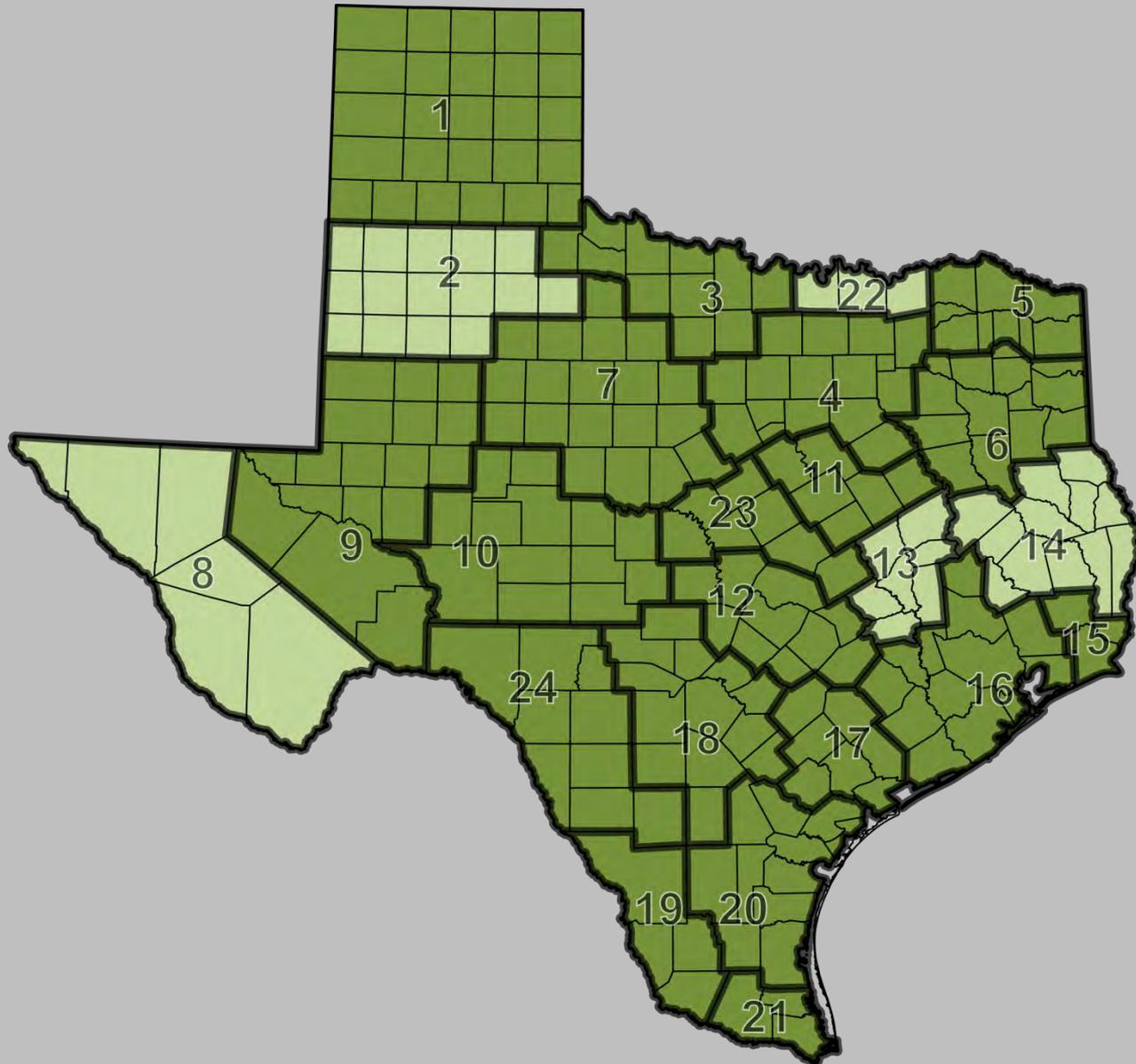
- o January 22, 2014
 - 94 people attended from across the State
- o Discussions included:
 - TSICP Updates (including TSICP and Mobile Satellite working groups), Radio Unit ID Allocation Plan, Statewide Talkgroups, DPS APEX radio rollout, Encryption
- o 85% of post-meeting survey participants said ranked it as a 4 or 5 with 5 being the best use of their time
- o Planning next meeting for Q1 2015



Texas Public Safety Broadband Program

Program Briefing

Regional Kickoff Meetings



Completed

Scheduled

Performance Statistics

	Stakeholder Interactions	Broadband Conferences	Governance Meetings	O&E Material Distribution
Target	11,300	70	53	195,707
To Date	5,950	33	21	53,905
Balance	5,180 (52%)	37 (47%)	32 (39%)	141,802 (27%)

2015 Outreach & Education Plans

- **Executive-Level sponsor program**
 - One-on-One meetings with key influencers
 - Seeking their endorsement of the PS broadband concepts and what these capabilities will bring to their jurisdictions, agencies or disciplines
- **More regional representation on SME team**
 - Provide additional “feet on the street” in all regions of the State
 - Smaller, more personal meetings: Commissioners’ Court, City Council, local user groups, etc.

2015 Outreach & Education Plans

- Roll-out of TxLTE website
- On-line learning system
 - Provide online training on LTE, data gathering, and LTE technical issues
 - Self-paced access to LTE information
 - Expanded over time as more information and requirements develop

2015 Outreach & Education Plans

- Private Sector Webinars
- Quarterly webinars to keep Private Sector apprised of PS LTE, FirstNet, etc.
- Town Hall meetings throughout Texas

Looking Forward: FirstNet, PSCR, Texas, Apps

- **FirstNet Status**
 - Responsibilities
 - Staffing & Board Members changes
 - RFI / RFP's
- **Public Safety Communications Research Program**
- **Texas**
 - Looking Forward - State Consultation Breakdown
 - Who, What, When, Where, Why, How
- **Apps Q&A**
 - Your chance for Feedback
- **Looking Forward**



Nationwide Public Safety Broadband Network

Mission: To design and implement a nationwide public safety broadband network with a self-sustaining funding model and ubiquitous coverage.



FirstNet Responsibilities

- Assess Needs & Resources:
 - Determine public safety needs
 - Define partnership opportunities
 - Determine individual Public Safety needs throughout the State consultation process
 - Identify existing public safety infrastructure
 - Develop Funding Model

FirstNet Responsibilities (Cont)

- Issue RFIs to gather various solutions from vendors
- Develop/Design Network Architecture
- Develop an Implementation and Network Management strategy
- Issue RFP's for infrastructure, services, et al.
- 56 State & Territory Consultations
- Drive the build-out of the FirstNet network
- Manage the Admin and O&M of the FirstNet network

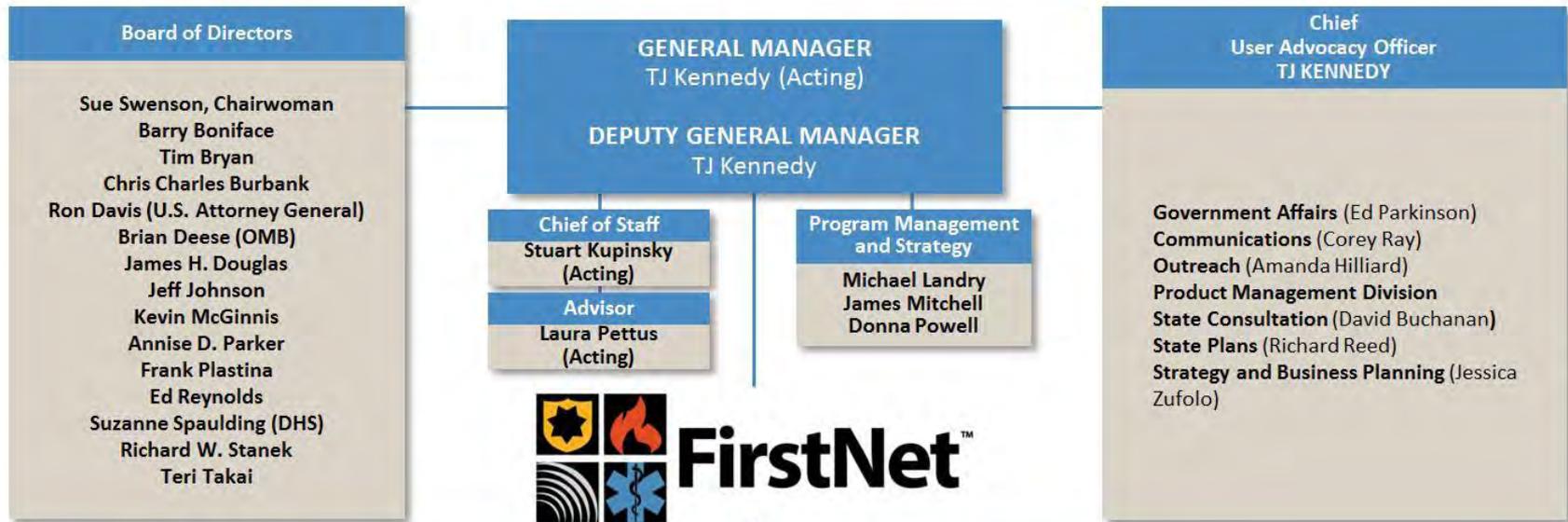
FirstNet Staffing Status

- 80 full-time federal employees
- Senior management team in place
- States interacting with User Advocacy Office
(Outreach)
 - In the process of hiring 10 regional leads
- CTO Office = 2 FTEs, more coming

FirstNet Board Members

- Susan Swenson (Chair) *Telecommunications/technology executive* *Term expires: August 2016*
- Chris Burbank *Chief, Salt Lake City Police Department* *Term expires: August 2017*
- Jeffrey Johnson *Fire Chief, retired; CEO Western Fire Chiefs Association* *Term expires: August 2016*
- Kevin McGinnis *Chief/CEO, North East Mobile Health Services* *Term expires: August 2015*
- Richard W. Stanek *Sheriff, Hennepin County, Minnesota* *Term expires: August 2017*
- Teri Takai *Government IT expert; former CIO of MI, CA* *Term expires: August 2016*
- James H. Douglas *Former Governor, Vermont* *Term Expires: August 2017*
- Annise D. Parker *Mayor, City of Houston* *Term expires: August 2015*
- (US Attorney General) *Attorney General of the United States* *Ex-Officio (– Ron Davis)*
- Shaun Donovan *Director of the Office of Management and Budget* *Ex-Officio (– Brian Deese)*
- Jeh Johnson *Secretary of the Department of Homeland Security* *Ex-Officio (– Suzanne Spaulding)*
- Tim Bryan *CEO, National Rural Telecommunications Cooperative* *Term expires: August 2015*
- Barry Boniface *Private equity investor and telecomms executive* *Term expires: August 2016*
- Frank Plastina *Technology executive* *Term expires: August 2015*
- Ed Reynolds *Telecommunications executive (retired)* *Term expires: August 2017*

FirstNet Organization w/ Designees



FirstNet Offices and Divisions



As of September 2014

FirstNet Acquisitions Status

- RFI for Infrastructure, O&M and all things
'infrastructure & operational' closed last week
- RFC requested with submissions closed last week
 - Rural and other related information requests
- Draft RFP's expected Q1 / Q2 2015

Public Safety Communications Research

- Technical Analysis of all things PS LTE
 - Cellular / LTE Performance
 - Security
 - Apps
 - User Devices
 - Infrastructure
- Likely a clearinghouse for vendors
- Will likely set up test beds & help with approval criteria for User Devices

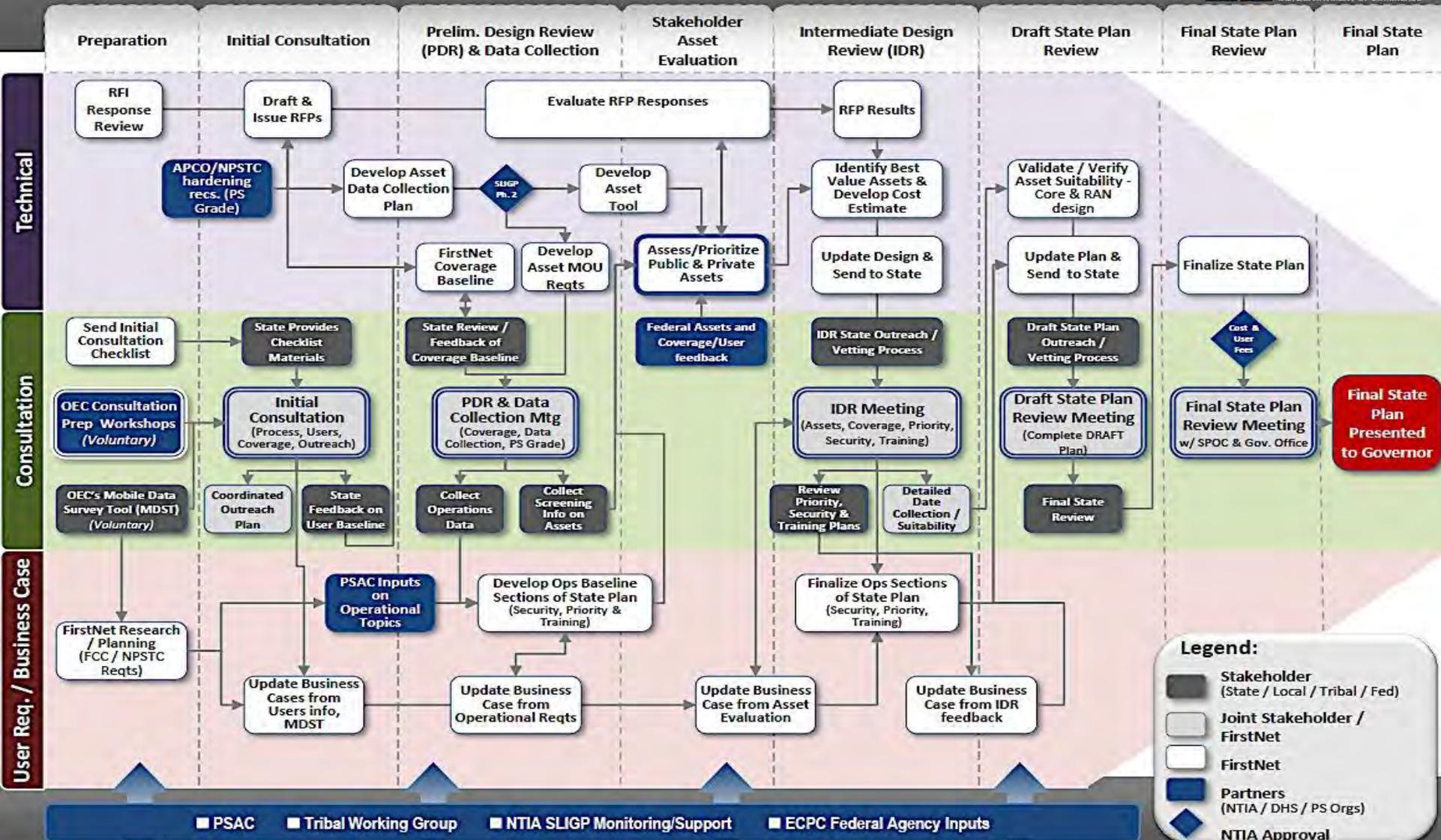


Public Safety Communications Research

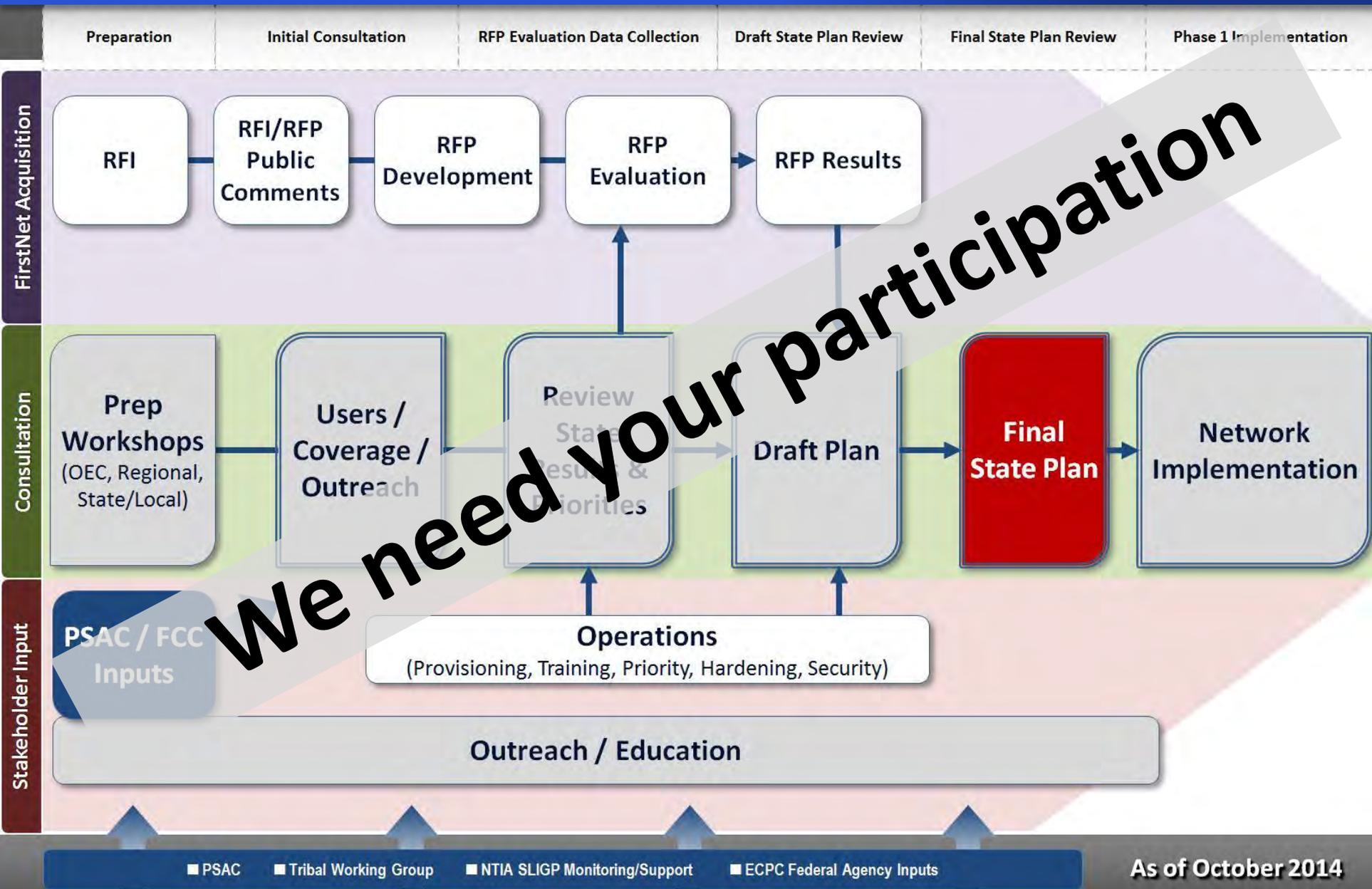
U.S. Department of Commerce – Boulder Laboratories

State Consultation

Preliminary Consultation and State Plan Process



State Consultation – Our ~2 year future

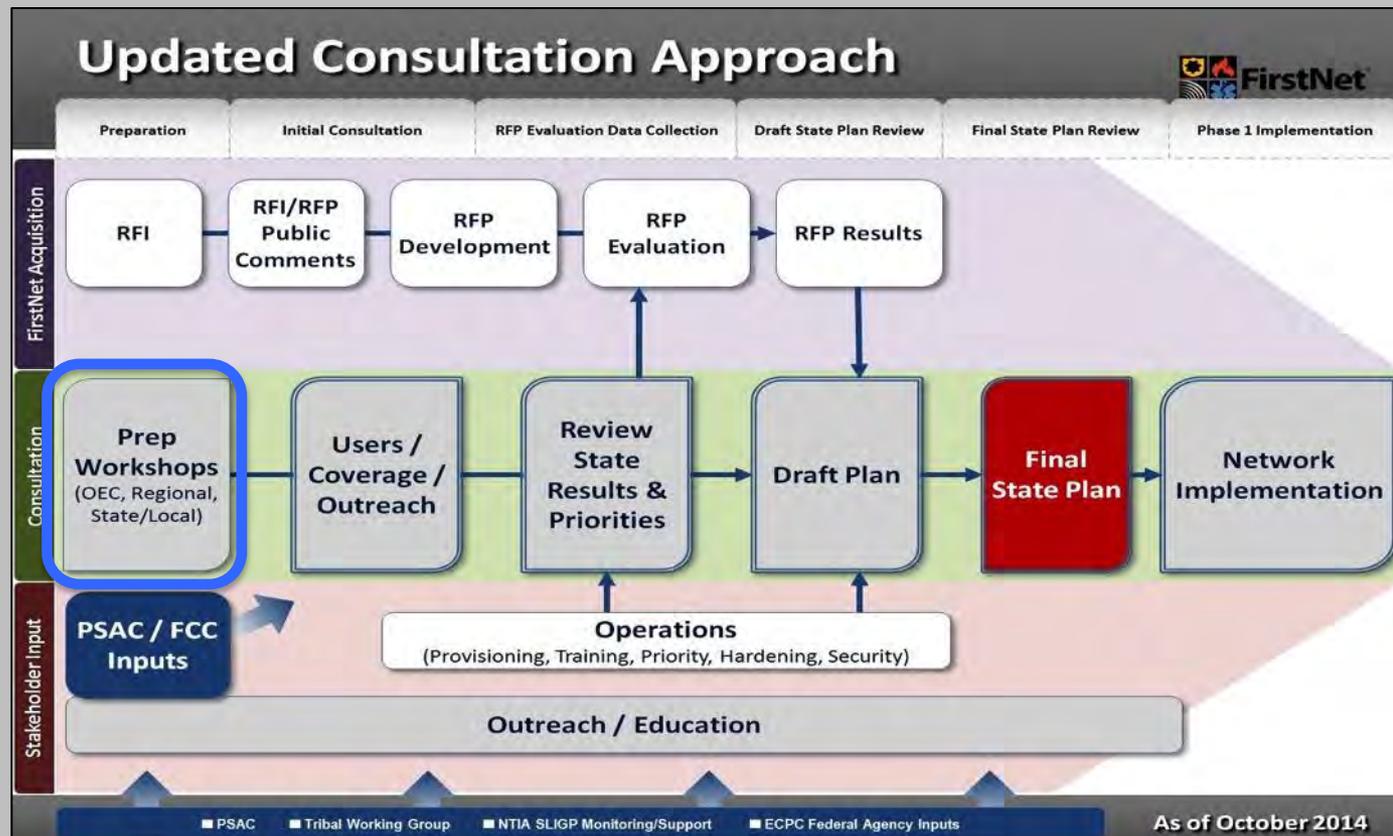


Preparation

Stakeholder (State of Texas, Local, Tribal)

- Mobile Data Survey Tool
- Review Initial Consultation Checklist

Prep Workshops
(OEC, Regional, State/Local)

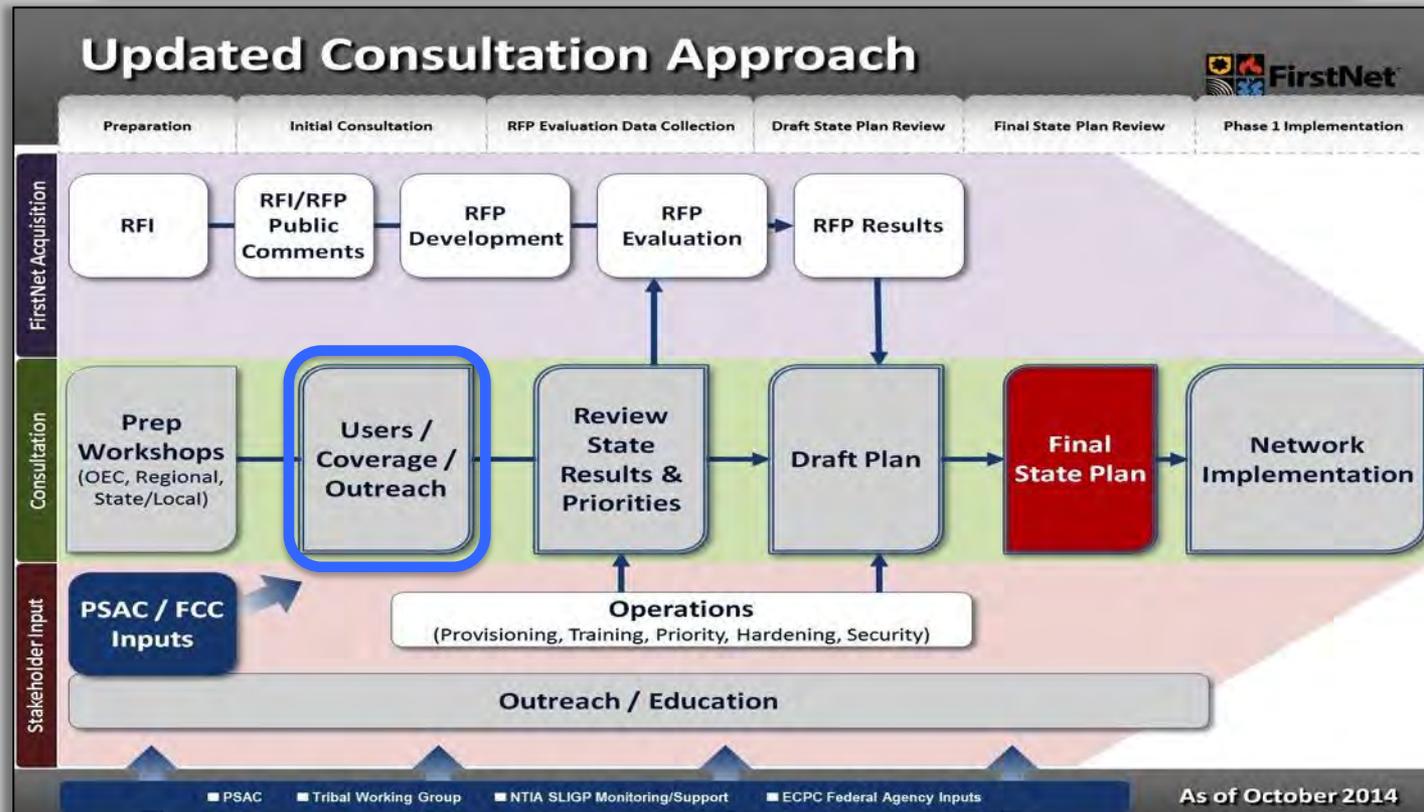


Initial Consultation

Stakeholders (State of Texas, Local, Tribal)

- Respond to Initial Consultation Checklist
- Participate in Initial Consultation
- Provide feedback on relevant Texas issues not included

Users /
Coverage /
Outreach

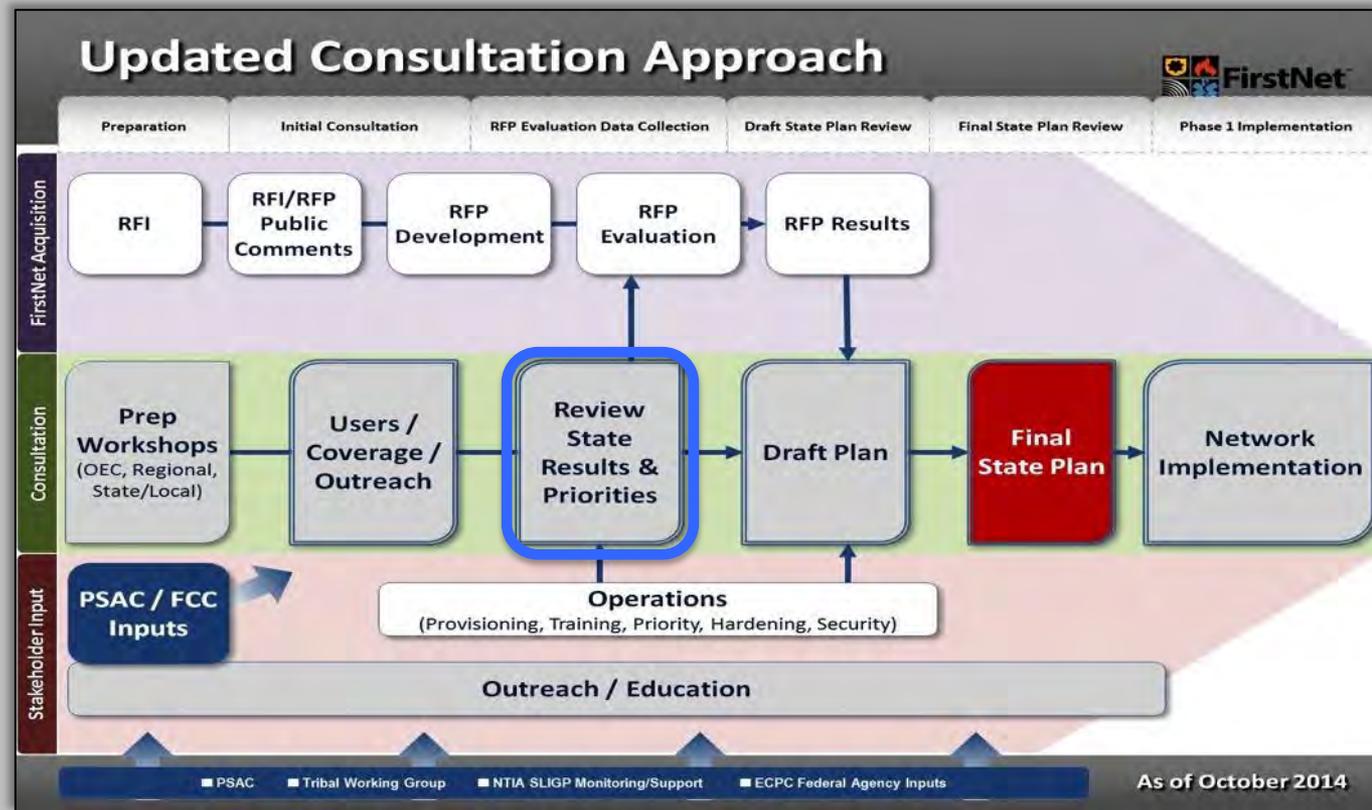


RFP Evaluation Data Collection

Stakeholders (State of Texas, Local, Tribal)

- Review FN Coverage baseline
- Collect Operations Data
- Collect Asset Information

Review
State
Results &
Priorities

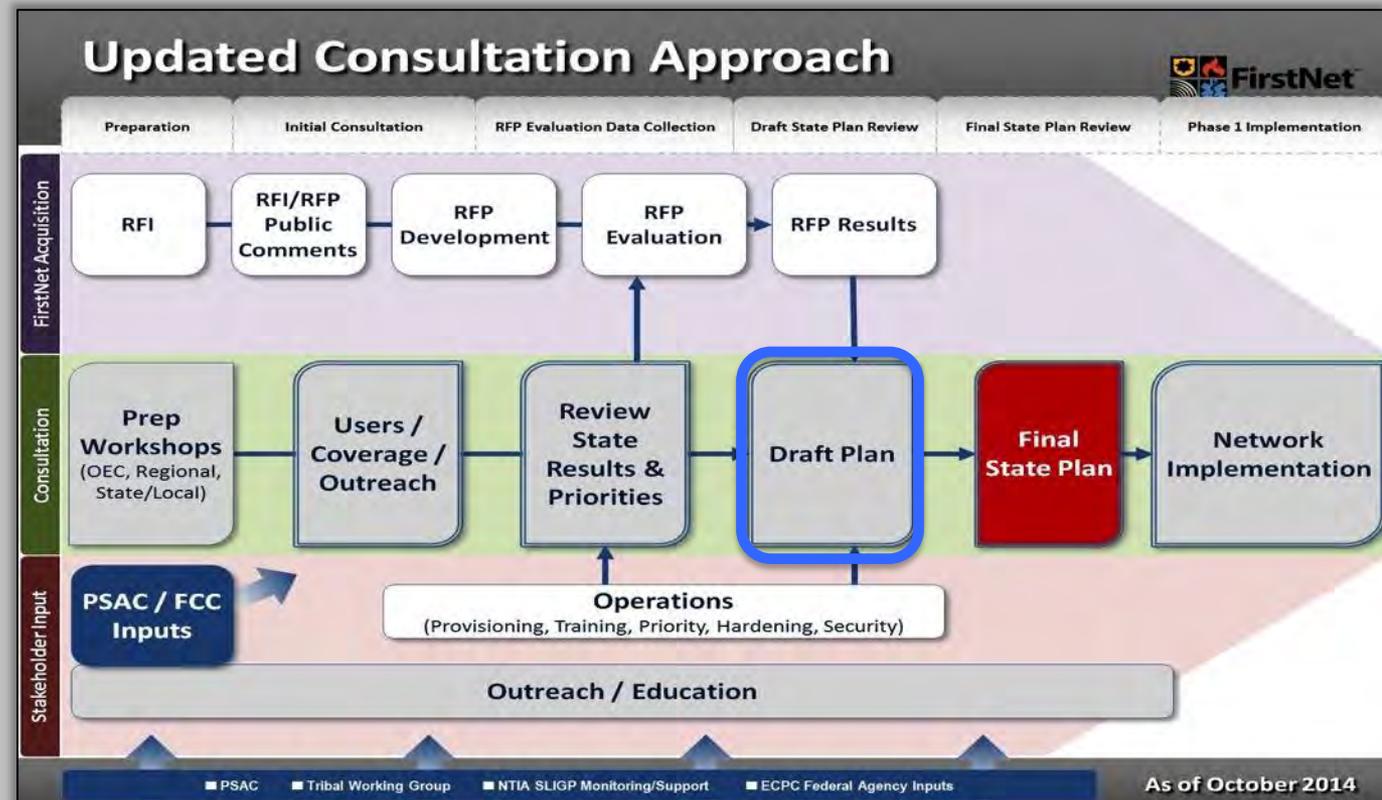


Draft State Plan Review

Stakeholders (State of Texas, Local, Tribal)

- Prepare for IDR w/ State Outreach & Vetting
- Review Security, Priority, Training & State specifics

Draft Plan

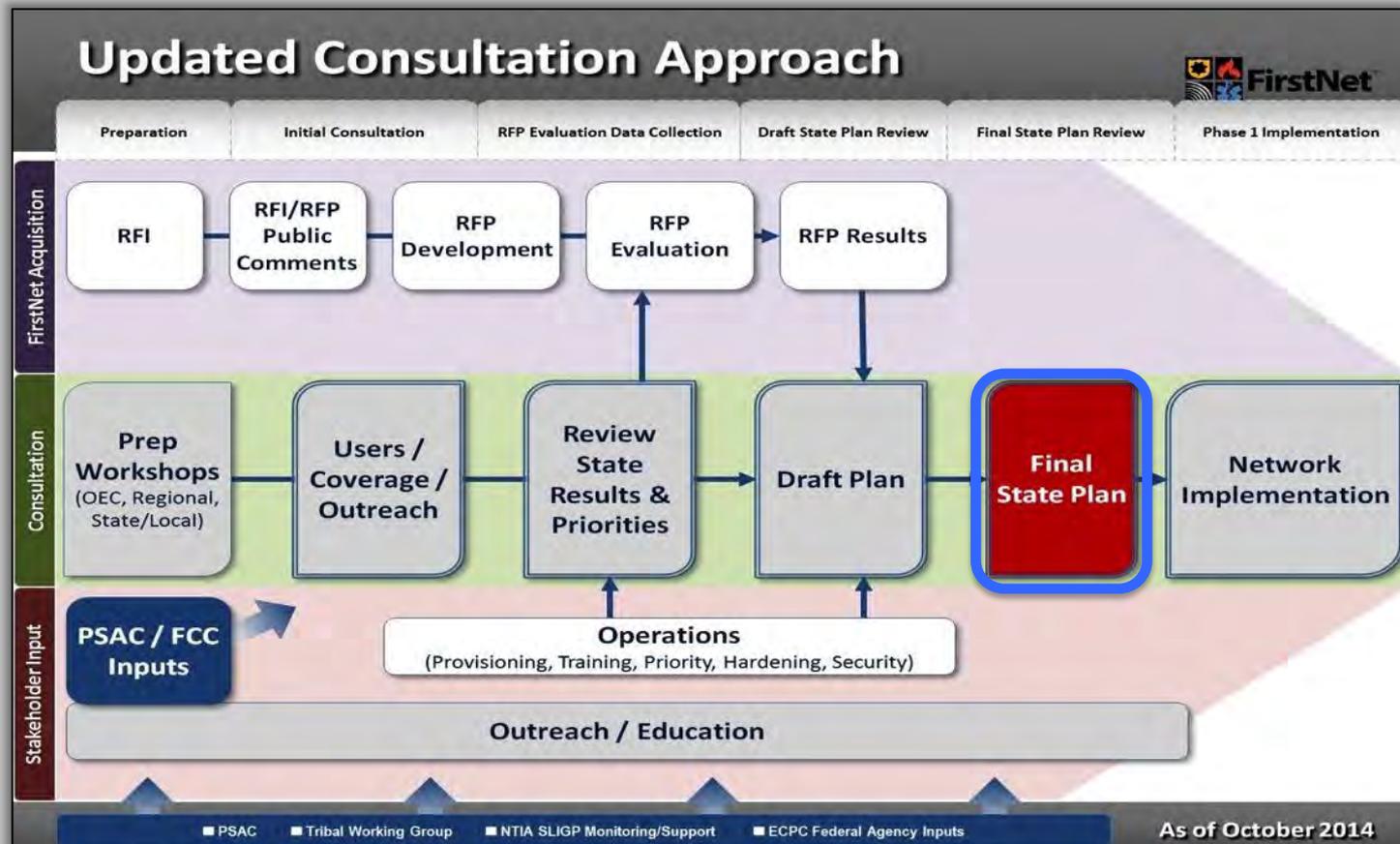


Final State Plan Review

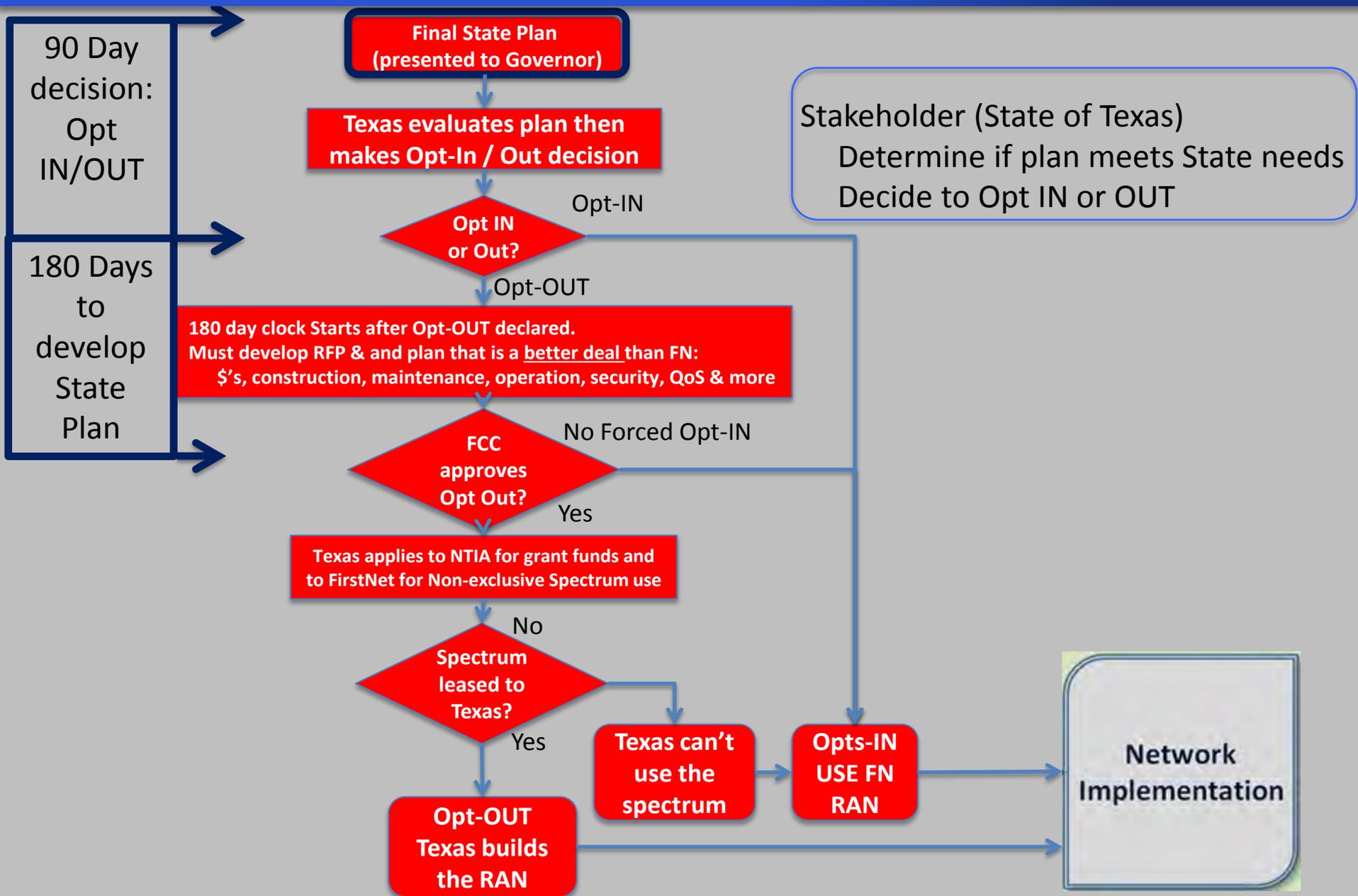
Stakeholders (State of Texas, Local, Tribal)

- Work w/ FirstNet to complete State Plan
- Outreach and Vetting options

**Final
State Plan**



The State Decision: Opt-IN or Opt-OUT



APPS: What do you want to do?

- Apps will make or break FirstNet
- What is important to you?
 - Situational Awareness
 - Communications
 - NCIC / Criminal Records Access
 - GIS
 - Real Time Video
 - Group call / texting

Questions and Answers: Your time to speak

Participate in the online survey by texting answers to 22333



Infrastructure Build-out

FirstNet will fund the public safety broadband infrastructure – Not local jurisdictions.

FirstNet Plan:
Offer network access pricing comparable to commercial carrier networks.



Local Jurisdictions:

At this time, the plan assumes that jurisdictions will only purchase the end-user hardware:

aircards, modems, handheld devices

And pay user fees (at or less than current)



State Funds:

Per the legislation, the Governor will be presented with the FirstNet build out plan for Texas and will have the opportunity to “opt in” or “opt out” of the FirstNet build out plan.



State Funds:

If Texas opts in, FirstNet will finance the build out of the infrastructure.

If Texas opts out, the State will decide how to build out and fund the infrastructure, or possibly choose to utilize a public/private partnership.



State Funds:

No state general revenue funds will be requested or utilized until the Governor has made the decision to opt in or opt out.

What is the State of Texas doing now?

- ✓ Outreach and Education
- ✓ Governance
- ✓ Rural and Tribal strategies
- ✓ MOA Template
- Working closely with FirstNet:
 - SMLA / KLCs next steps
 - Consultation & State Plan Process
- Not considering Opting In or Out at this time

SMLA allows the State to move forward

- Spectrum for Harris County build-out
 - 93 fixed sites + 1 mobile
 - 14 existing sites
 - 24 additional sites immediately
 - 55 additional sites after KLC Plan
 - Deployable eNodeB
- Retain site at Texas A&M / Disaster City

Texas SMLA and KLC Status

- Key Learning Conditions help FirstNet learn from Pilot Projects
- 5 Key Learning Conditions:
 1. Core Transition
 2. Data Analytics
 3. Special Events
 4. Extended Mode
 5. Training

Texas needs to start planning for the future now

➤ Establish Regional Teams

- TxPSBP to create Team Planning Toolkit (draft meeting agendas, training materials, etc.)

➤ Provide your needs on Critical Infrastructure / Coverage Maps

Call to Action

- **Formulate LTE planned event/disaster deployments**
- **Look at Continuum Lanes with a Data Focus**
 - Governance, SOPs, Training, Usage
- **Identity, Control, and Access Management**
 - Determine who gets access to what and when
- **Application Hack-a-thons**



Break

Regional Focus Group Update

- o SCIP Initiative Activities
- o Wireless System Updates
- o Financial Updates
- o Mobile Data Survey

- o 348 Surveys completed!

- o Due 11/1/14

- o 15 COGs have submitted workbooks



Discussion and Vote

- o TxICC Charter
- o Texas – Statewide Communication Interoperability Plan (SCIP)





Thank You