Outreach Plan

In addition to the below education and outreach activities, FloridaNet is planning ongoing communications with Local, State and Tribal representatives that includes:

- Regular newsletter communications of key actions and events
- A YouTube video on FloridaNet
- Continued development and enhancement of our website, forums and social media

We also will continue to support and provide State and National workshop participation

- FloridaNet Local, State and Tribal members participating in key national workshops, conferences and events to stay up to date on national developments
- Ongoing coordination with the Region IV states via regular meetings
- Develop a FloridaNet speakers bureau providing speakers and information to support all state-wide association gatherings in Florida

Specific SLIGP workshops under Phase I

- Coverage workshops to engage Local, State and Tribal representatives on LTE coverage, contract vehicles and current users
- Continued development of a governance with a focus on local control

Included In This Section:

- Regional Workshops
    - June 2013
        - Presentation
        - Meeting Summary
        - Meeting Minutes
    - July 2013
        - Presentation
        - Meeting Minutes
- Listening Sessions
    - Presentations
        - FirstNet
        - FloridaNet
        - Data Sharing
        - Participation
    - Sessions: February 2014
        - Jacksonville, FL

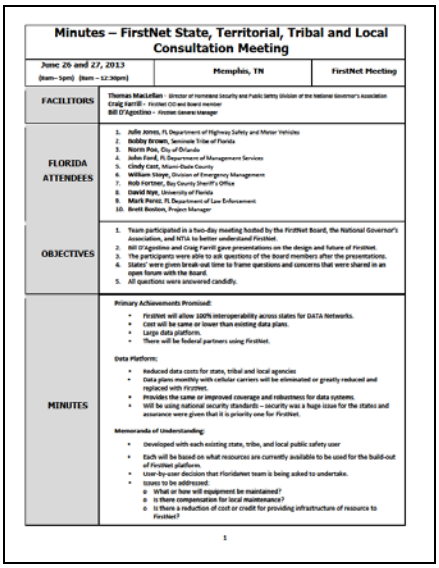
        - Tallahassee, FL
    - Sessions: March 2014
        - Pensacola, FL
        - Deer Field Beach, FL (West Palm Beach)
        - Tampa, FL
        - Punta Gorda, FL
        - Miami, FL
        - Orlando, FL
    - Sessions: April 2014
        - WebEx
- Website
    - FloridaNet.gov
    - Google Analytics
- Other Outreach
    - Brochure
    - Video
    - Senate Appropriations Committee

Regional Workshops

June 26-27, 2013 – Memphis, TN

Presentation: Vision for the Future *(For document, see Exhibit 33)*

Meeting Minutes *(For document, see Exhibit 34)*



Minutes – FirstNet State, Territorial, Tribal and Local Consultation Meeting

June 26 and 27, 2013 (8am–5pm) (8am – 12:30pm)	Memphis, TN	FirstNet Meeting

FACILITORS

Thomas MacLellan – Director of Homeland Security and Public Safety Division of the National Governor's Association
Craig Farrill – FirstNet CTO and Board member
Bill D'Agostino – FirstNet General Manager

FLORIDA ATTENDEES

1. **Julie Jones**, FL Department of Highway Safety and Motor Vehicles
2. **Bobby Brown**, Seminole Tribe of Florida
3. **Norm Poe**, City of Orlando
4. **John Ford**, FL Department of Management Services
5. **Cindy Cast**, Miami-Dade County
6. **William Steye**, Division of Emergency Management
7. **Rob Fortner**, Bay County Sheriff's Office
8. **David Nye**, University of Florida
9. **Mark Perez**, FL Department of Law Enforcement
10. **Brett Boston**, Project Manager

OBJECTIVES

1. Team participated in a two-day meeting hosted by the FirstNet Board, the National Governor's Association, and NTIA to better understand FirstNet.
2. Bill D'Agostino and Craig Farrill gave presentations on the design and future of FirstNet.
3. The participants were able to ask questions of the Board members after the presentations.
4. States' were given break-out time to frame questions and concerns that were shared in an open forum with the Board.
5. All questions were answered candidly.

MINUTES

Primary Achievements Promised:

- FirstNet will allow 100% interoperability across states for DATA Networks.
- Cost will be same or lower than existing data plans.
- Large data platform.
- There will be federal partners using FirstNet.

Data Platform:

- Reduced data costs for state, tribal and local agencies
- Data plans monthly with cellular carriers will be eliminated or greatly reduced and replaced with FirstNet.
- Provides the same or improved coverage and robustness for data systems.
- Will be using national security standards – security was a huge issue for the states and assurance were given that it is priority one for FirstNet.

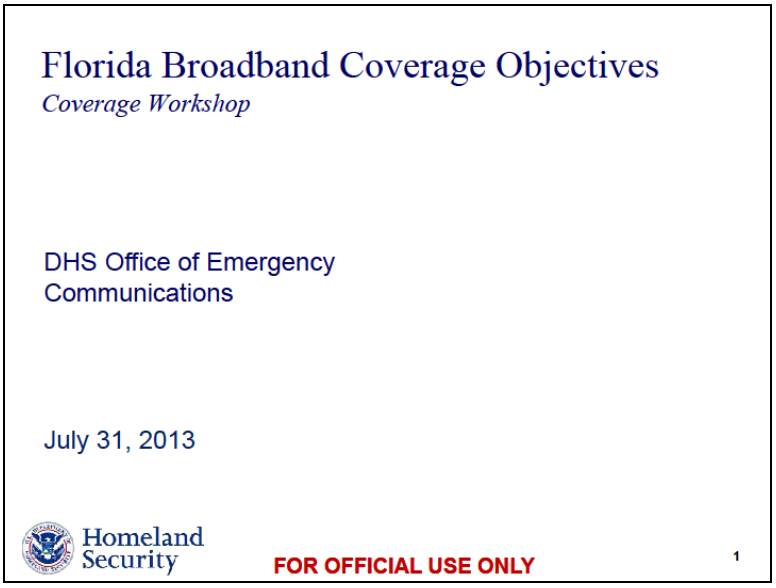
Memoranda of Understanding:

- Developed with each existing state, tribe, and local public safety user
- Each will be based on what resources are currently available to be used for the build-out of FirstNet platform.
- User-by-user decision that Floridanet team is being asked to undertake.
- Issues to be addressed:
  - What or how will equipment be maintained?
  - Is there compensation for local maintenance?
  - Is there a reduction of cost or credit for providing infrastructure of resource to FirstNet?

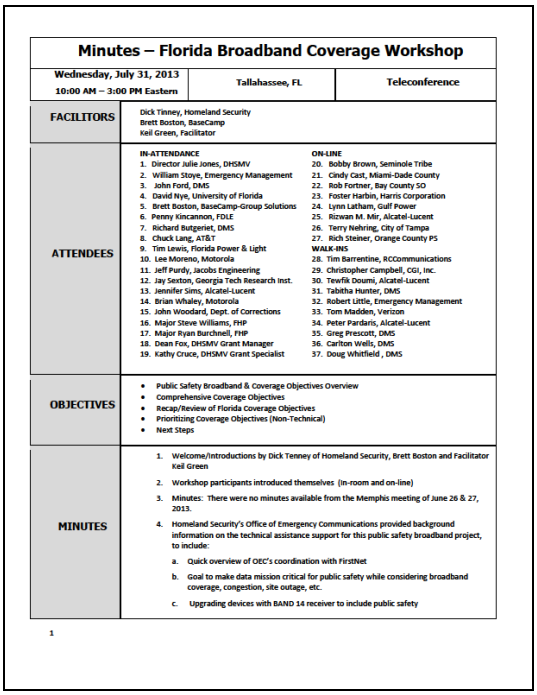
1

July 31, 2013 – Tallahassee, FL and WebEx

Presentation: Florida Public Safety Broadband Coverage Objectives *(For document, see Exhibit 35)*



Meeting Minutes *(For document, see Exhibit 36)*



Minutes – Florida Broadband Coverage Workshop

Wednesday, July 31, 2013 10:00 AM – 3:00 PM Eastern	Tallahassee, FL	Teleconference

FACILITORS	Dick Tinney, Homeland Security Brett Boston, BaseCamp Keil Green, Facilitator
ATTENDEES	**IN-ATTENDANCE** 1. Director Julie Jones, DHSMV 2. William Stoye, Emergency Management 3. John Ford, DMS 4. David Nye, University of Florida 5. Brett Boston, BaseCamp-Group Solutions 6. Penny Kincannon, FDLE 7. Richard Butgeriet, DMS 8. Chuck Lang, AT&T 9. Tim Lewis, Florida Power & Light 10. Lee Moreno, Motorola 11. Jeff Purdy, Jacobs Engineering 12. Jay Sexton, Georgia Tech Research Inst. 13. Jennifer Sims, Alcatel-Lucent 14. Brian Whaley, Motorola 15. John Woodard, Dept. of Corrections 16. Major Steve Williams, FHP 17. Major Ryan Burchnell, FHP 18. Dean Fox, DHSMV Grant Manager 19. Kathy Cruce, DHSMV Grant Specialist **ON-LINE** 20. Bobby Brown, Seminole Tribe 21. Cindy Cast, Miami-Dade County 22. Rob Fortner, Bay County SO 23. Foster Harbin, Harris Corporation 24. Lynn Latham, Gulf Power 25. Rizwan M. Mir, Alcatel-Lucent 26. Terry Nehring, City of Tampa 27. Rich Steiner, Orange County PS **WALK-INS** 28. Tim Barrentine, RCCommunications 29. Christopher Campbell, CGI, Inc. 30. Tewfik Dourni, Alcatel-Lucent 31. Tabitha Hunter, DMS 32. Robert Little, Emergency Management 33. Tom Madden, Verizon 34. Peter Pardaris, Alcatel-Lucent 35. Greg Prescott, DMS 36. Carlton Wells, DMS 37. Doug Whitfield , DMS
OBJECTIVES	• Public Safety Broadband & Coverage Objectives Overview • Comprehensive Coverage Objectives • Recap/Review of Florida Coverage Objectives • Prioritizing Coverage Objectives (Non-Technical) • Next Steps
MINUTES	1. Welcome/introductions by Dick Tenney of Homeland Security, Brett Boston and Facilitator Keil Green 2. Workshop participants introduced themselves (In-room and on-line) 3. Minutes: There were no minutes available from the Memphis meeting of June 26 & 27, 2013. 4. Homeland Security's Office of Emergency Communications provided background information on the technical assistance support for this public safety broadband project, to include: a. Quick overview of OEC's coordination with FirstNet b. Goal to make data mission critical for public safety while considering broadband coverage, congestion, site outage, etc. c. Upgrading devices with BAND 14 receiver to include public safety

1

Listening Sessions

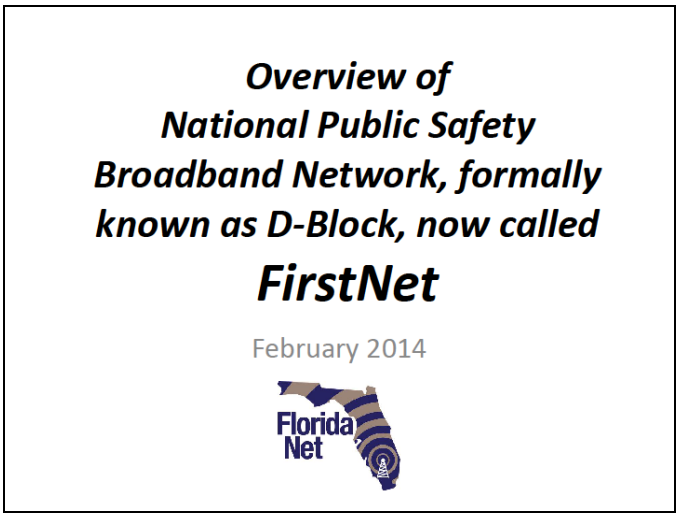
FloridaNet has hosted a series of statewide listening sessions to brief first responders, public safety technologists, and government leaders on FirstNet. The following shows the agenda, presentations and locations for the sessions.

The agenda for the three-hour sessions consisted of the following:

- Registration for non-preregistered participants
- Welcome and Overview
- Introductions to FloridaNet & Planning Process
- Questions from the Audience
- Overview of FirstNet
- Break
- Questions
- How can I Participate in FloridaNet?
- Adjourn

Presentations:

- FirstNet Overview *(For document, see Exhibit 37)*



- FloridaNet Overview *(For document, see Exhibit 38)*

Overview of FloridaNet

Project approach for designing a National Public Safety Broadband Network, formally known as D-Block, now called FirstNet

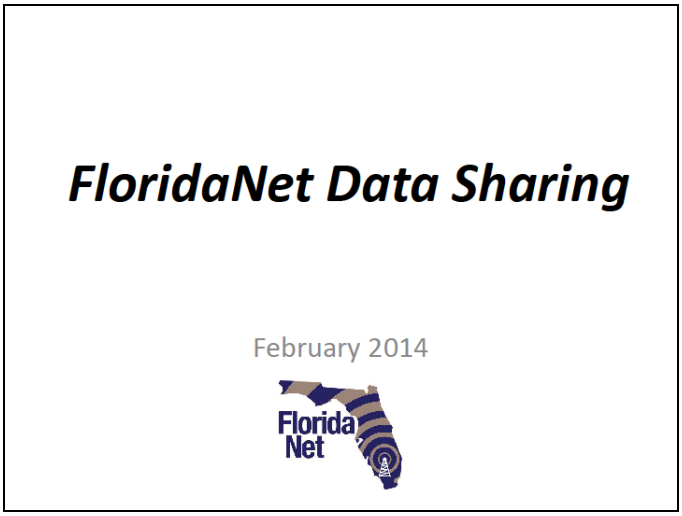
February 2014

- How to Participate *(For document, see Exhibit 39)*

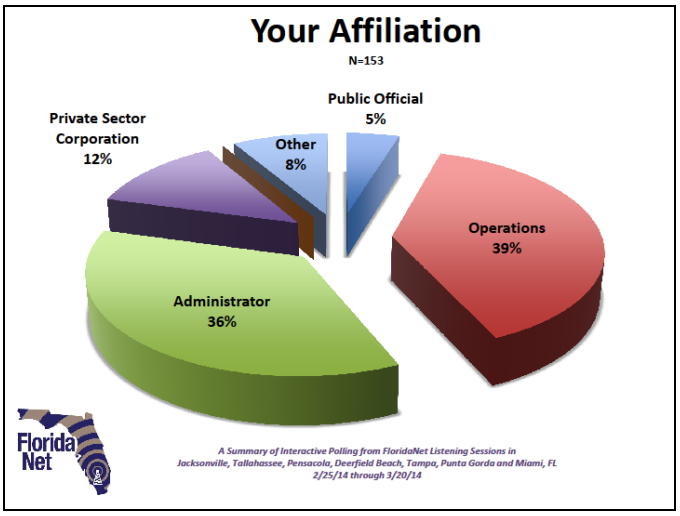
FloridaNet
How to stay connected.

February 2014

- Datasharing *(For document, see Exhibit 40)*



- FirstNet Audience Response Summary *(For document, see Exhibit 41)*



- Jacksonville, FL *(For document, see Exhibit 42)*

Jacksonville 2.25.14
Session 1

Participants

Contact	Representing	email
John Moorhouse	Alachua County	jmoorhouse@asco.us
Ryan Lee	Alachua County	rlee@alachuasheriff.org
Chris Parker	St. Johns County	cparker@sjso.org
Steve Hayner	Duval County	shayner@coj.net
Michelle Poole	Motorola	Michelle.poole@motorolasolutions.com
Bobby Calhoun	Hasty's Communication	b.calhoun@hastys.net
Bruce Windeshem	Hasty's Communications	BruceW@hastys.net
Kim Laidler	City of Jacksonville	Kiml@coj.net
Lee Mathis	St. John's County	lmathis@sjcfl.us

FloridaNet

- *The orientation slide deck materials were presented*
- *This process is bringing the entire state together to figure out how to build a public safety broadband network in FL. A technical needs assessment is needed to link this to a national network. Everybody has a chance to participate.*
- *Florida didn't set up a formal commission. They decided on a more decentralized and locally-focused entity for planning. It was understood that a top down from Tallahassee approach wasn't the way to go. The good news: everybody gets to participate. The bad news: Florida has 67 counties!*
- *The planning grant came out of Commerce: $4.9 mil over 2 years. We have the resources necessary to get a good data assessment.*
- *A broad mix of over 120 public and private organizations has participated so far. More are expected. We have active involvement from both Tribal partners.*

Summary Notes from Jacksonville, February 25, 2014 Session 1 *1*
Not Verbatim Comments

- Tallahassee, FL *(For document, see Exhibit 43)*

Tallahassee 2.27.14
Session 1

Participants

Name	Organization	Email
Carlton Whaley	Franklin County Sheriff's Office	whaley@franklinsheriff.com
Allen Ham	Franklin County Sheriff's Office	a.ham@franklinsheriff.com
Charles Radcliff	Florida Forest Service	Charles.radcliff@fredfromflorida.com
Christopher Sellio	FWC	Chris.sellio@myfcwc.com
Timothy Lee	Consolidated Leon County Communications	Timothy.lee@tlccoa.org
Billy Fair	Leon County Sheriff's Office	Fair2@leaocountyfl.gov
Nick Simoncini	FDLE	nicholassimoncini@fdle.state.fl
Burt Himmer	DFS, Insurance Fraud	Burt.himmer@myfloridacfo.com
Bobbie Jo Chambers	Gasden County Sheriff's Office	bobbiejchambers@tds.net
Samantha O'Brian	Gasden County Sheriff's Office	samanthaobrian@tds.net
Jon Erwin	FL Dept. of Health	Jon.erwin@flhealth.gov

FloridaNet

- *The orientation slide deck materials were presented*
- *Coverage is different in this world. Jay's here to help us clarify*
- *$7 billion is a nice starting point, but some perspective is required. Verizon INDEPENDENTLY, spends $11Bill on maintenance*

Summary Notes from Tallahassee February 27, 2014 Day 1 *1*
Not Verbatim Comments

- Pensacola, FL *(For document, see Exhibit 44)*

Pensacola 3.6.2014
Session 1

Participants

Name	Organization	Title	Phone	Email
David Musselwhite	Escambia BCC	IT	850-595-4890	DAmussel@myescambia.com
Chuck Good	Safety & Training	Pensacola Energy	850-474-5305	cgood@citofpensacola.com
Troy Dunphy	SMART Region1	COML	850-322-6499	
Michael Weaver	Escambia County Public Safety		850-471-6411	mdweaver@myescambia.com
Mary Sumner	FWC	LE Captain	850-595-8905	Mary.sumner@myfwc.com
Brian Lambert	FWC	LT	850-232-0475	brian.lambert@myfwc.com
Ben Burns	Office of Ag Law Enforcement	Captain	850-941-6011	En.burns@freshfromflorida.com
Dan Hahr	FWC	LT	850-595-8905	Daniel.hahr@myfwc.com

FloridaNet

Presented orientation slide deck materials

- *The grant went through Highway Safety because they had the funds to do the match*
- *FL is the only state to include the private sector in the planning process*
- *Both Tribal nations are actively involved in the planning effort*

Summary Notes from Pensacola March 6, Day 1 *1*
Not Verbatim Comments

- Deerfield Beach, FL – West Palm Beach *(For document, see Exhibit 45)*

Deerfield Beach
3.10.2014
Session 1

Participants

Name	Title	Organization	Phone	Email
Michael Twigger	Division Chief	Delray Beach Fire Dept.	561-243-7414	twigger@mydelraybeach.com
Mike Hans	Sgt.	Palm Beach County Sheriff's Office	561-267-4434	hansm@pbso.org
Edwin Harp	LT	FWC	954-654-1078	Edwin.harp@myfwc.com
Scott Caske	LT	FWC	954-668-9700	Scott.caske@myfwc.com
Jeff Moral	A. Chief	Tamarac, FL	954-597-3800	jeffmo@tamarac.org
Victor Williams	Asst. Chief	DBFR	561-243-7487	williamsve@mydelraybeach.com
Steve Anderson	Division Chief	Delray Fire Rescue	561-243-7440	andersons@mydelraybeach.com
Van Schoer	Specialist	Tamarac Fire	954-597-3805	Van.schoer@tamrac.org
Ashley Lee	Emergency Management Manager	Florida Hospital Association	561-972-6401	ashleyL@fha.org

FloridaNet

Summary Discussion Notes from Discussion in *1*
Deerfield Beach, FL Summary: March 10, 2014 Session 1
Not Verbatim Comments

- Tampa, FL *(For document, see Exhibit 46)*

Tampa 3.13.2014
Session 1

Participants

Name	Title	Organization	Phone	Email
Dennis Stahley	Detetctive Sgt.	Bradenton Police Dept	941-932-9307	Dennis.stahley@cityofbradenton.com
Terry Brigman	CIO	City of Lakeland IT	863-834-6051	Tony.brigman@lakelandgov.net
Gary Ballard	Fire Chief	Lakeland Fire Dept.	863-834-8200	Gary.ballard@lakelandgov.net
Patrick Katroscik	ASA	City of Tampa	813-274-5520 x5530	Patrice.katroscik@tampagov.net
Andrew Blankenship	Chief Engineer	Communications International	813-892-8214	ablankenship@ask4ci.com
Sylvia Camacho	Supervisor	Pinellas County Sheriff's Office	727-582-6181	scamacho@pcsonet.com
Sheila Sommer	Com Center Supervisor	Pinellas County Sheriff's Ovvice	727-582-6181	ssommer@pcsonet.com
Mindy Strwart	Radio Manager	City of Ocala	352-401-6000	mstewart@ocalafl.org
Donald Hall	Major	Clearwater Police Department	727-562-4352	Donald.hall@myclearwater.com
Joseph Lyons		Winter Haven Police Dept.	863-291-5705	jlyons@mywinterhaven.com
Jean Marie Heim	Program Manager	Harris CapRock	301-461-4846	jheim@harris.com

Summary Discussion Notes from Discussion in Tampa, FL Summary: March 13, 2014 Session 1
Not Verbatim Comments

1

- Punta Gorda, FL *(For document, see Exhibit 47)*

Punta Gorda
3.17.2014
Session 1

Participants

Name	Title	Organization	Phone	Email
Bob Finney	Technical Manager	Collier County Sheriff's Office	239-253-4989	Bob.finneiii@colliersheriff.org
Jim Kauffman	Director, Planning & Technology	Bonita Springs Fire & Rescue District	239-949-6200	jkauffman@bonitafire.org
Kevin Lombardo	VP/GM	RU	239-571-0335	klombardo@ru.com
John Barkley	Lt., Professional Standards	Naples Police Dept	239-213-4874	jbarkley@naplesgov.com
Bill R				
Andy Stadtler	Radio Manager	Lee County	239-533-3617	astadtler@leegov.com
Tom Foy	ASAC	FDLE	321-231-2727	tomfoy@fdle.state.fl.us
Scott Bialy	Detective/Bomb Squad	State Fire Marshall	239-278-2530	Scott.bialy@myfloridacfo.com
Mike Oler	Sgt/Bomb Squad Commander	Collier CO Sheriff's Office	239-253-4689	Paul.oler@colliersheriff.org
Mike Harrington	Sr. Account Manager	Motorola	239-574-8765	Michael.harrington@motorolasolutions.com
Bill Rule	Commander of Communications	Collier Sheriff's Office	239-252-9364	Bill.rule@colliersheriff.org

Summary Discussion Notes from Discussion in Punta Gorda FL, Summary: March 17, 2014 Session 1
Not Verbatim Comments

1

- Miami, FL *(For document, see Exhibit 48)*

Miami 3.19.2014
Session 1

Participants

Name	Title	Organization	Phone	Email
Greg Ruben		Miami Dade Fire		
Andy Pichs		Miami Dade Fire Rescue		
Freda Vaughan		FDOH Region 7		
John Meizoso		Miami Dade Fire Rescue		
Jose Estrella		City of Miami		
Russ Ryan		ATF-DOJ		
Jose Rivera		MDPD		
Jeff F				
Jason Swift		City of Coral Gables		
John Cracollici		Cisco		
Cindy Cast				
David Patlak		Miami Beach		

FloridaNet

- *The orientation slide deck materials were presented*
- *We'll tell you what's known and offer some speculation on*
- *Q: $4.9 million allocated to FL?*
- *A: Yes...for setting up governance and planning...not for building or equipment*
- *If you don't define your own jurisdiction someone else will do it for you. This is huge. Getting our preferences in early to this process offers the greatest chances for success.*

Summary Discussion Notes from Discussion in Miami, FL Summary: March 19, 2014 Session 1
Not Verbatim Comments
1

- Orlando, FL *(For document, see Exhibit 49)*

Orlando 3.31.2014
Session 1

Participants

Name	Title	Organization	Phone	Email
Tommy Barnes	Fire	Sanford Airport Fire Dept.		
David Charles	Deputy	U.S. Marshals Service		
Joshua Cordero	Comm Center Trainer	Highlands CO Sheriff's Office	863-301-6000	cordero@highlands.org
Crista Dexter	Comm Center Trainer	Lake CO Sheriff's Office	342-2101	Crista.dexter@lcso.org
Suzanne Garfinkel	Support Service Supervisor	Lake Mary Police Dept.	407-585-1322	sgarfinkel@lakemaryfl.com
Maureen Hatcher	Director of Communication	Lake CO Sheriff's Office	407-343-2101	Maureen.hatcher@lcso.org
Randy Jones		Lake CO Fire Rescue	352-267-7700	rjones@lackcountyfl.gov
Glenn Lopez	Comm Coordinator	Volusia County SO	386-248-1774	glopez@vcso.us
Anthony Merola	Training	UCF PD	407-456-5620	Anthony.merola@ucf.edu
Myra Merritt	Assistant Director of Communications	Lake CO Sheriff's Office	343-2101	mmerritt@lcso.org
Marcus Messura	Account Manager	Motorola	321-228-6800	Amm124@motorolasolutions.com

Summary Discussion Notes from Discussion in Tampa, FL Summary: March 31, 2014 Session 1
Not Verbatim Comments
1

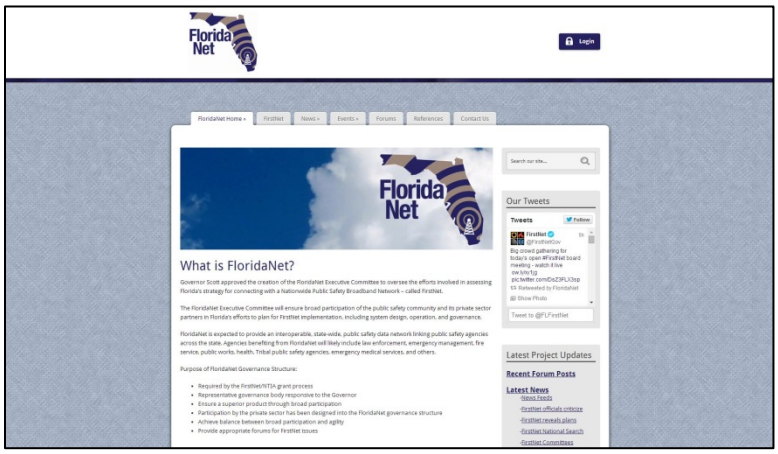
Sessions: April 2014

- WebEx

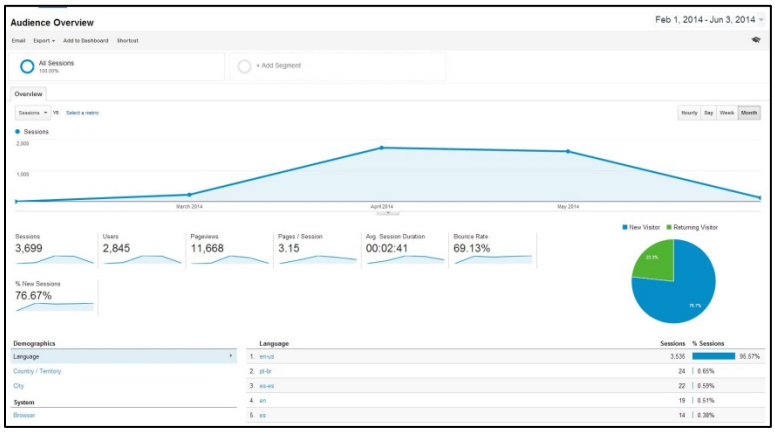
Website

FloridaNet has provided its own website to facilitate the process of informing and engaging the public safety community. To date the site has approximately 180 members, consisting of a range of disciplines, such as public safety officials, law enforcement, and fire department. The site is expected to grow over 500 members by July.

FloridaNet Home



Google Analytics



Other Outreach

FloridaNet is in the process of producing a brochure/pamphlet to distribute as well as a video to forward to the public safety community across the state to continue outreach efforts for FirstNet and FloridaNet.

On October 9, 2013, then Executive Director of Florida Department of Highway Safety & Motor Vehicles and Florida's State Single Point of Contact to FirstNet, Julie Jones, presented information to the Senate Appropriations Committee Meeting in Tallahassee, Florida about

FirstNet. All members of the committee received a copy and engaged in questions and answers with Director Jones. In attendance at the meeting were eight (8) Senate Appropriation Committeee Members and a minimum of 20 people in the audience. The meeting was televised, which was estimated to have a 50+ viewership, which brings the total to approximately 80 people viewing the presentation by Director Jones.

Presentation: FirstNet *(For document, see Exhibit 50)*

Exhibit 33

FirstNet™
U.S. DEPARTMENT OF COMMERCE

Vision for the Future

Regional Workshop

June 26, 2013

Craig Farrill
Acting CTO
FirstNet Board Member

Bill D'Agostino
FirstNet General Manager

What We'll Cover

VISION AND GUIDING PRINCIPLES

LEARNING FROM PUBLIC SAFETY

THE STATE & LOCAL CONSULTATION PROCESS

RESEARCH AND ANALYSIS

PROJECT PHASES

CLOSE

What is the vision of FirstNet?

FirstNet™

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."

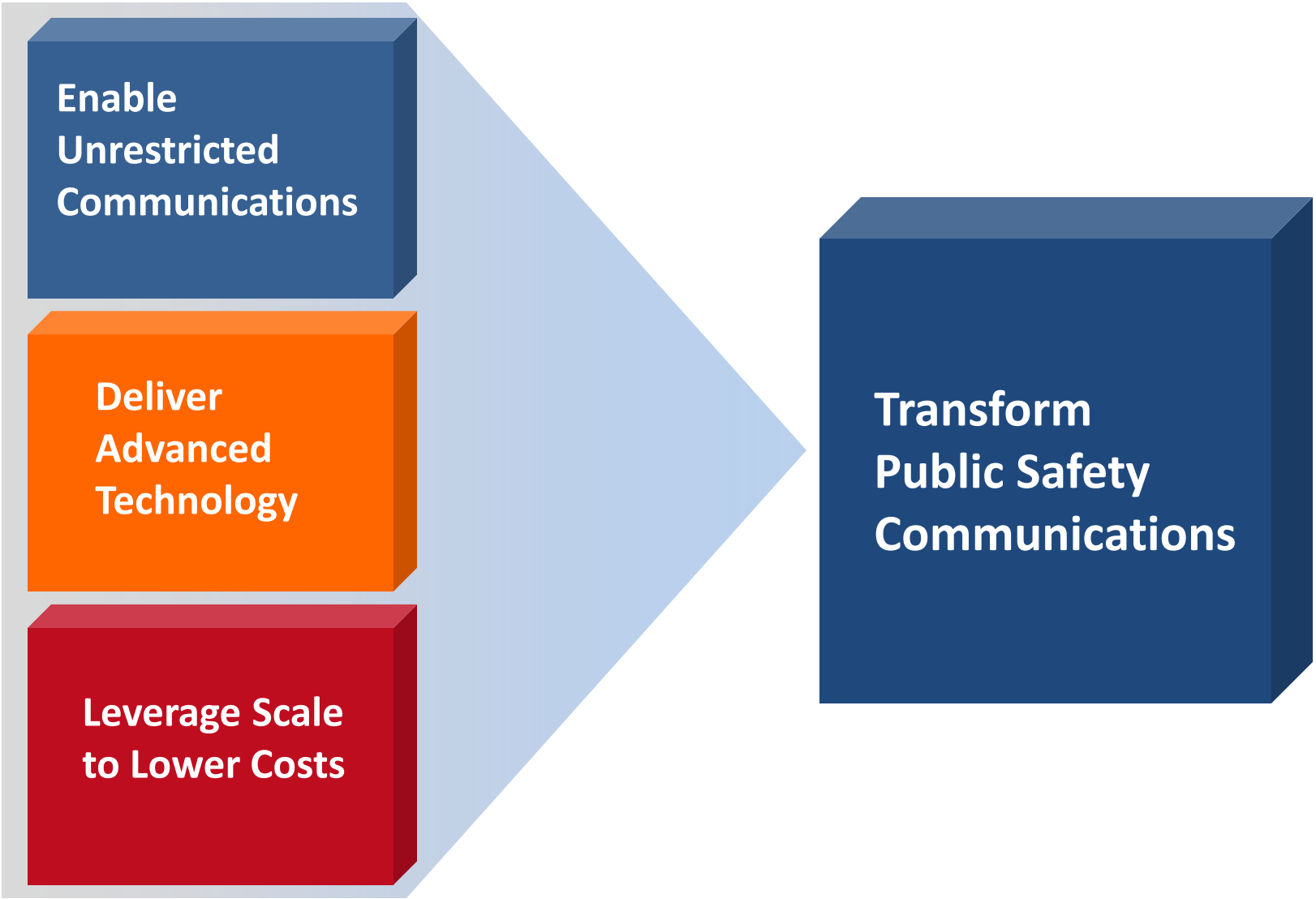
Jeffrey D. Johnson, Chief (Ret.)
Chief Executive Officer — Western Fire Chiefs Association
FirstNet Board Member

FirstNet exists to serve public safety.

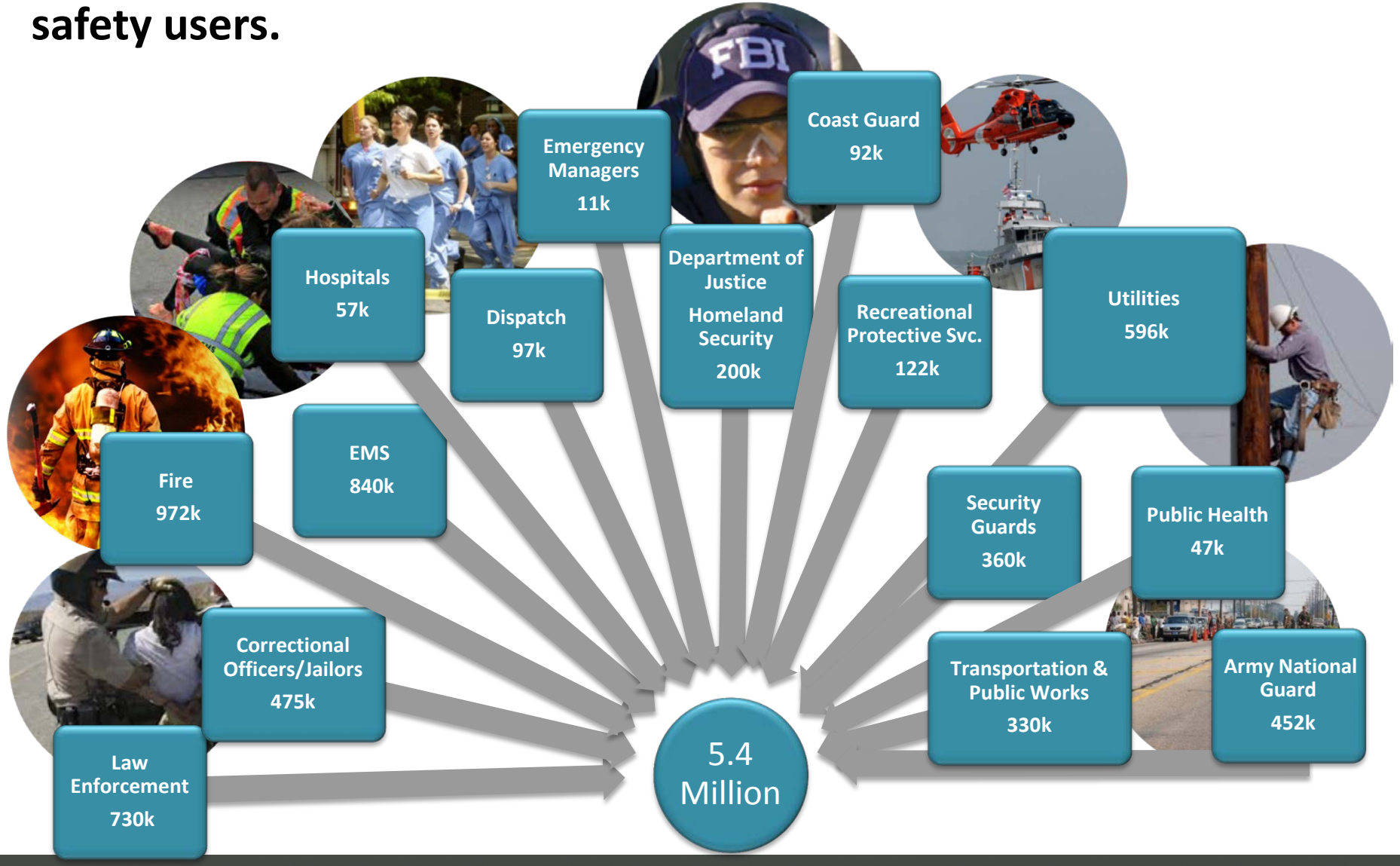
PERCEPTION	REALITY
Public safety may have to give up autonomy and control.	FirstNet will be a nationwide platform; Public safety sets rules locally.
Public safety will lose management of devices, users and talk groups.	Public safety will maintain local management.
FirstNet will cost too much to build and operate.	FirstNet has substantial opportunities to partner to lower construction and operating costs.
States can use FirstNet spectrum to generate revenue.	Fees from the use of FirstNet spectrum must , by law, be reinvested to build, operate, maintain, and improve the network.
FirstNet will replace LMR networks.	FirstNet will augment LMR for many years.
FirstNet has already begun designing the network.	FirstNet is in the research and analysis phase and must have input from states and territories to design the network.

VISION & GUIDING PRINCIPLES

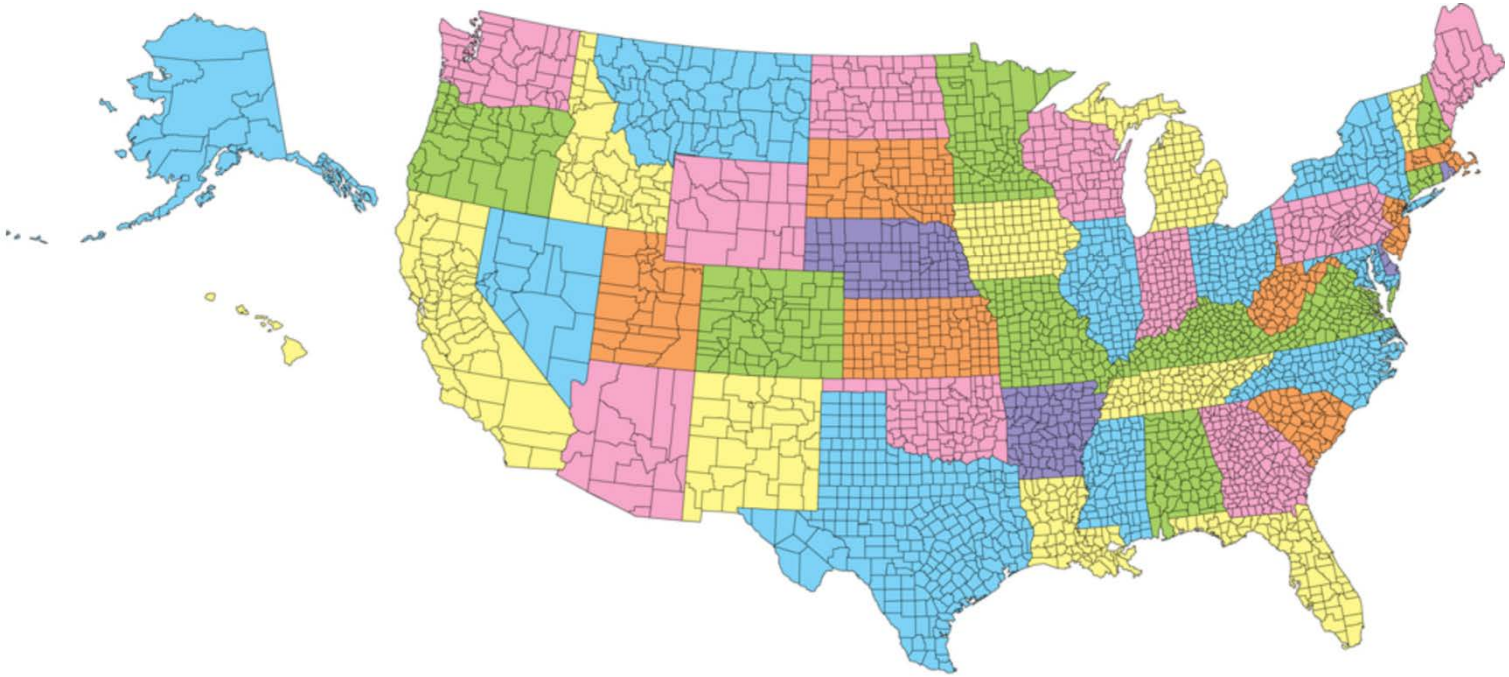
FirstNet will provide tools that emergency responders need and deserve.



FirstNet has the potential to support a broadly defined set of public safety users.



FirstNet will work toward supporting first responders wherever their need is.

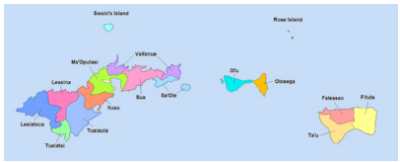


That includes 3,252 counties across 50 states and 6 commonwealths/ territories.

DC

Puerto Rico

Virgin Islands



American Samoa

Guam

Northern Mariana Islands

FirstNet will provide dedicated spectrum, a single technology and funding to create a nationwide network dedicated to public safety.

Public Safety Effectiveness

- Dynamic Priority Access
- Force Multiplier

Public Safety Grade

- Reliable
- Hardened
- Redundant
- Security

Public Safety Applications

- 4G data for video and web
- Non mission-critical voice

4G LTE: A Proven Next Generation Technology

- Fastest data speeds
- A bigger pipe
- Field-tested across the country
- Global technology standard
- Being adopted as a standard for public safety
- Non-mission critical voice

> "First responders need a network they can rely on and trust to get the job done, even in the worst of circumstances. That's what FirstNet will build."

Chuck Dowd
Assistant Chief of Police, New York City
FirstNet Board Member

FirstNet Will Augment LMR

- Public safety will rely on LMR for mission-critical voice for many years
- FirstNet can be co-located on existing LMR infrastructure
- Sharing infrastructure will keep costs down and enhance coverage
- Our goal is to allow voice to pass between the two networks

What is the FirstNet business model?

Break even and build a self-sustaining network

- Fee for service
- Leverage value of the spectrum
- Reflect value of contributed assets and partnerships

"FirstNet intends to offer public safety grade services at a cost that's compelling to users."

— FirstNet Tenet

LEARNING FROM PUBLIC SAFETY

The Foundation of our Planning

FirstNet
U.S. DEPARTMENT OF COMMERCE

Public Safety Input To Date: More than 1,300 Baseline Requirements

NPSTC NIST NTIA FCC SAFECOM

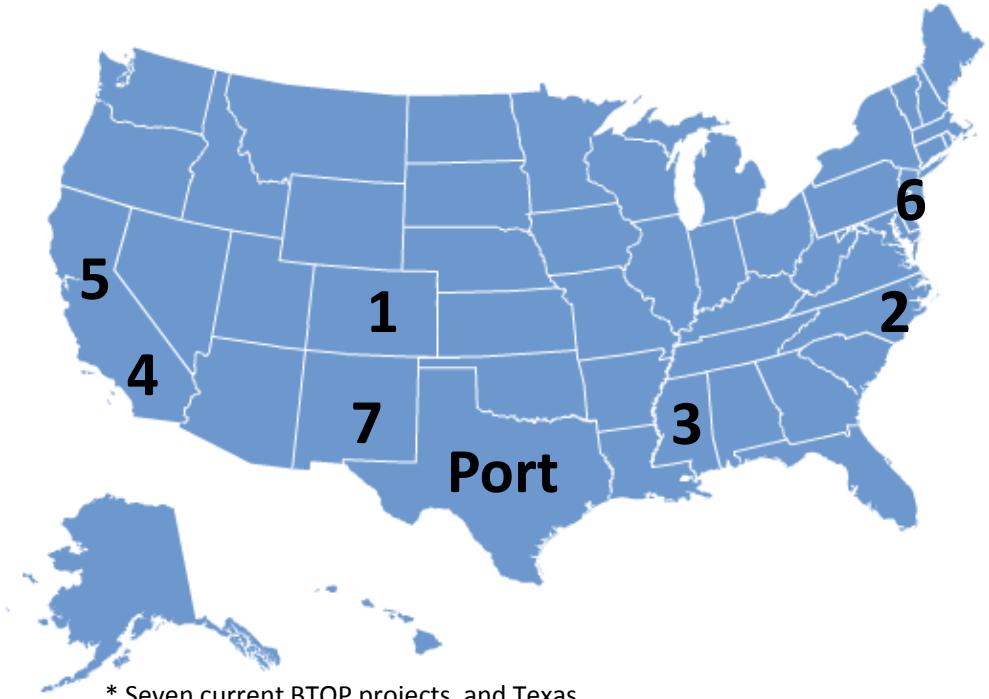
NPSTC Requirements	# of Req's
User Services	312
Network Services	209
Transport Requirements	154
System Design	66
User Equipment	60
Local Operations Support	157
Migration and Evolution	60
Governance	10
Policies and Procedures	94

FCC Minimum Interopability Specifications	# of Req's
Requirements (Must)	46
Considerations (Should)	55
Interfaces (Architectural)	11
Recommended Interfaces Requirements	9

FirstNet will:

- Build on the foundation of early work done by public safety groups
- Seek vendors who will meet or exceed these requirements
- Address the 375 requirements approved by the NPSTC Executive Committee
- Broaden the requirements to increase flexibility and decrease costs

FirstNet Pilot Projects* will provide broad learning opportunities.



* Seven current BTOP projects, and Texas

BTOP Grantees
1. Adams County, CO
2. Charlotte, NC
3. Mississippi
4. LA-RICS (Los Angeles)
5. Bay-RICS (San Francisco)
6. New Jersey
7. New Mexico
Ports
Harris County, TX

- International interference
  - Operational issues
    - Applications

Public Safety Advisory Committee (PSAC) activities

- 40+ member organization
- Executive Committee had a two-day briefing with FirstNet technical team in March
- Executive committee will meet monthly for updates with the General Manager
- Outreach for conferences
- Handling specific projects

STATE & LOCAL CONSULTATION PROCESS

Input and Requirements

Workshops are just the start.

FirstNet will continue to consult with the states, tribes, territories and localities until we have the information we need to develop state network build-out plans.

Activities	When
Nationwide, Regional Workshops	May – June 2013
Individual State Meetings	Beginning June 2013
Data Gathering	Commencing with Phase 2 SLIGP Funds Release

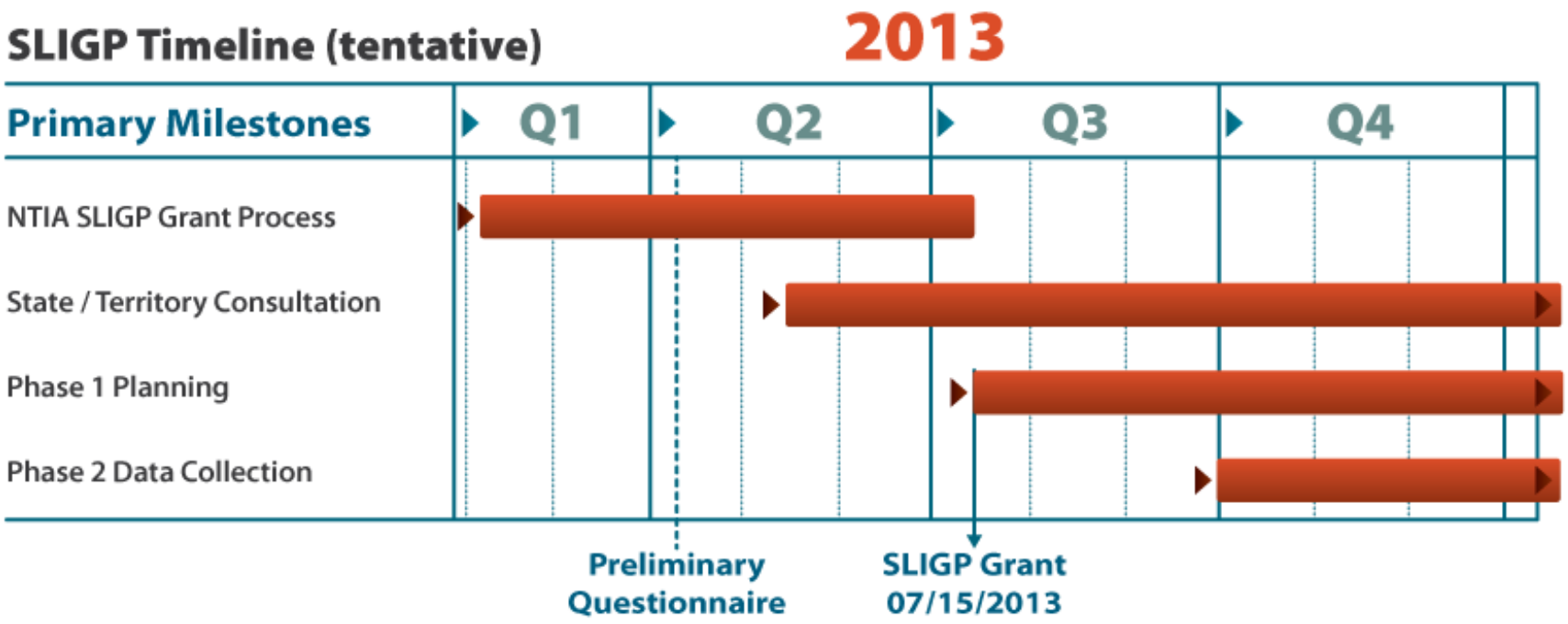
Information and data needed.

- **Only what's needed:** The data request will be structured to be as efficient as possible.
- **What is needed:** FirstNet requires input and requirements from state, local and tribal entities to prepare network plans for state review. Examples include:
  - Architecture of an evolved packet core and radio access network
  - Required coverage areas of the network
  - Hardening, security, reliability, and resiliency requirements
  - Assignment of priority users and selection of secondary users
  - Training needs
  - Availability of assets that may be utilized

Resources and help.

- **Funding:** State and Local Implementation Grant Program (SLIGP) funds will enable states to plan and collect data for the nationwide public safety broadband network.
- **Ability to preview the data elements:** FirstNet will share preliminary data needs with workshop participants for state feedback. The FirstNet team will use these consultations to finalize a full data request supporting the formal SLIGP effort.
- **Time to prepare:** FirstNet anticipates releasing the full data request sometime during the summer of 2013.
- **Additional tools and support:** DHS Office of Emergency Communications has planning tools and some previously collected data that states can choose to use upon request.

STATE CONSULTATION PROCESS



- The SLIGP program runs for three years. FirstNet anticipates a significant amount of data will be collected early in the process.
- SLIGP Phase 2 is tentatively scheduled to start shortly after Phase 1.

FIRSTNET IS COMMITTED TO:

Seeking out scale economy advantages.

Balancing the need for input with the desire to make progress.

Following the requirements mandated by law that govern how we operate.

Operating with transparency without jeopardizing our ability to negotiate

Offering public safety-grade services at a cost that's compelling

Listening to you and what your state needs.

Exhibit 34

Minutes – FirstNet State, Territorial, Tribal and Local Consultation Meeting

June 26 and 27, 2013 (8am– 5pm) (8am – 12:30pm)	Memphis, TN	FirstNet Meeting

FACILITORS	**Thomas MacLellan** - Director of Homeland Security and Public Safety Division of the National Governor's Association **Craig Farrill** - FirstNet CIO and Board member **Bill D'Agostino** - FirstNet General Manager
FLORIDA ATTENDEES	1. **Julie Jones**, FL Department of Highway Safety and Motor Vehicles 2. **Bobby Brown**, Seminole Tribe of Florida 3. **Norm Poe**, City of Orlando 4. **John Ford**, FL Department of Management Services 5. **Cindy Cast**, Miami-Dade County 6. **William Stoye**, Division of Emergency Management 7. **Rob Fortner**, Bay County Sheriff's Office 8. **David Nye**, University of Florida 9. **Mark Perez**, FL Department of Law Enforcement 10. **Brett Boston**, Project Manager
OBJECTIVES	1. Team participated in a two-day meeting hosted by the FirstNet Board, the National Governor's Association, and NTIA to better understand FirstNet. 2. Bill D'Agostino and Craig Farrill gave presentations on the design and future of FirstNet. 3. The participants were able to ask questions of the Board members after the presentations. 4. States' were given break-out time to frame questions and concerns that were shared in an open forum with the Board. 5. All questions were answered candidly.
MINUTES	**Primary Achievements Promised:** • FirstNet will allow 100% interoperability across states for DATA Networks. • Cost will be same or lower than existing data plans. • Large data platform. • There will be federal partners using FirstNet. **Data Platform:** • Reduced data costs for state, tribal and local agencies • Data plans monthly with cellular carriers will be eliminated or greatly reduced and replaced with FirstNet. • Provides the same or improved coverage and robustness for data systems. • Will be using national security standards – security was a huge issue for the states and assurance were given that it is priority one for FirstNet. **Memoranda of Understanding:** • Developed with each existing state, tribe, and local public safety user • Each will be based on what resources are currently available to be used for the build-out of FirstNet platform. • User-by-user decision that FloridaNet team is being asked to undertake. • Issues to be addressed: o What or how will equipment be maintained? o Is there compensation for local maintenance? o Is there a reduction of cost or credit for providing infrastructure of resource to FirstNet?

MINUTES

Security:

- Who are the administrators of the system?
- Who will have access (from an administrator perspective) to the data?
- Who manages the application coding, maintenance, and modification?

Priority Users:

- Who develops the priority of applications running on the network?
- Who prioritizes the users within the state and outside the state?

Main Learning Points:

- FirstNet will be a dedicated public safety data network, controlled and driven by the users. It will NOT be piggy-backed on a commercial network.
- FirstNet commits to provide a better price and equal or better coverage than current systems for data communications.
- FirstNet is a 4G/LTE data network with a large band-width dedicated to public safety.
- Applications and secure devices are envisioned and an RFI has been issued to vendors, with replies due by September.
- Florida will control governance of priority users and each user can control its own data and who has access to the data.
- Opt-out doesn't mean you can say "no" to FirstNet.
- Florida must develop an alternate plan if it opts out.
- The states have requested the FirstNet Board provide a clear definition of opt-in/opt-out conditions and requirements.
- FirstNet is doing the legwork that Florida will have to do to design a system.
- The FirstNet model will be replicated nationally.
- Areas that couldn't afford to develop their own networks can get a good product at a reasonable price.
- FirstNet will be similar to the Universal Access model of AT&T, with subsidization of rural, tribal and underserved areas.
- Service will be a combination of mobile, satellite up-link, and portable repeaters.
- FirstNet is requesting in the research and analysis for three items:
  - Requirement of state
  - Priority of state
  - Concerns of the state
- The four building blocks of FirstNet are:
  - The core network (band class 14, 10 MHz by 2, 10 MHz for Tx and 10 MHz for Rx)
  - Transport backhaul
  - Radio access network (RAN)
  - PS devices.
- FirstNet indicated that the core network would be their responsibility and they would complete this task. In addition, they indicated that the States would be responsible for the Radio Access Network (RAN)

Next Step:

Individual meetings to be scheduled with each state and the FirstNet project team.

The meeting was adjourned.

Exhibit 35

Florida Broadband Coverage Objectives

Coverage Workshop

DHS Office of Emergency Communications

July 31, 2013

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Today's Agenda

I. OEC Background and Public Safety Broadband Overview

I. OEC Technical Assistance
II. NPSBN & FirstNet
III. State and Local Implementation Grant Program (SLIGP)

II. State of Florida Overview

III. Coverage Objectives

I. Assumptions/Ground Rules
II. Defining Coverage Objectives
III. Agency/Facility/Critical Infrastructure Objectives
IV. Tribal/Federal Land Objectives
V. Commercial/Unserved Area Objectives
VI. Other?

IV. Prioritization

I. Users, Potential for Adoption (Cost), Interest/Involvement
II. Other?

V. Next Steps

OEC Background and Public Safety Broadband Overview

Office of Emergency Communications

Mission: OEC leads the coordination of interoperable emergency communications at the Federal, State, local, and tribal levels and supports national security/emergency preparedness communications.

- **OEC expanded in Nov 2012 to include several National Communications System (NCS) functions.**
- **OEC now includes:**
  - **Architecture and Advanced Technology Branch**
  - **Communications Portfolio Management Branch**
  - **Policy and Planning Branch**
  - **Public Safety and National Security/Emergency Preparedness Partnerships Branch**
  - **Regional Coordination Branch**
  - **Technical Assistance Branch**

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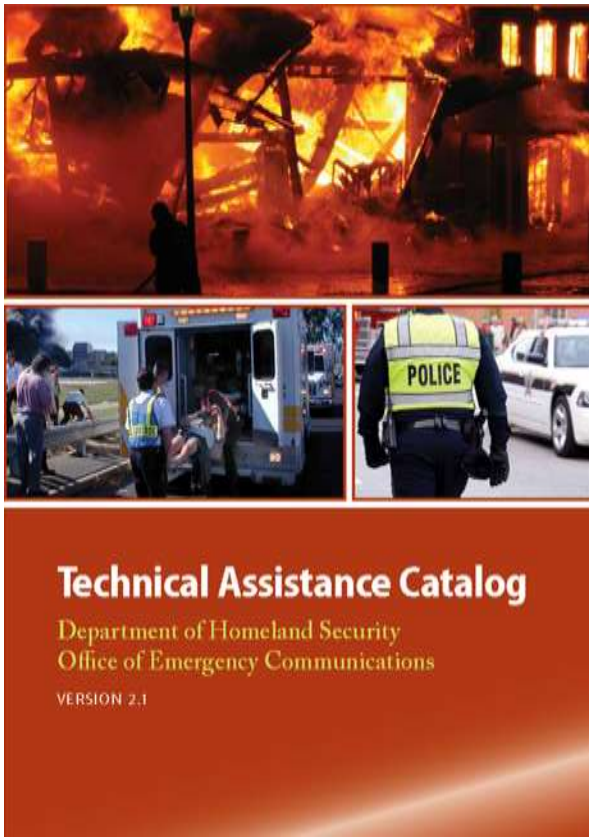
Approaches to OEC TA

- **State-Requested TA**
  - Supports State/local interoperable communication needs in multiple areas
    - For example, operations, training, exercises, governance and SOPs; engineering; CASM
  - Supports State/local emergency communications strategies: SOP ; guidelines; TICPs; SCIPs
  - Furthers goals and objectives of NECP
  - Submitted via SWICs

- **National Priority TA Offerings**
  - Vary year to year
  - Special TA focused on specific capability or stakeholder group, for example, NPSBN/FirstNet, Tribal Nation outreach

- **Automated Tools (www.publicsafetytools.info)**
  - Specially designed web-based tools assist stakeholder/agencies with ongoing emergency communications needs
  - Features OEC-developed tools and stakeholder inputs



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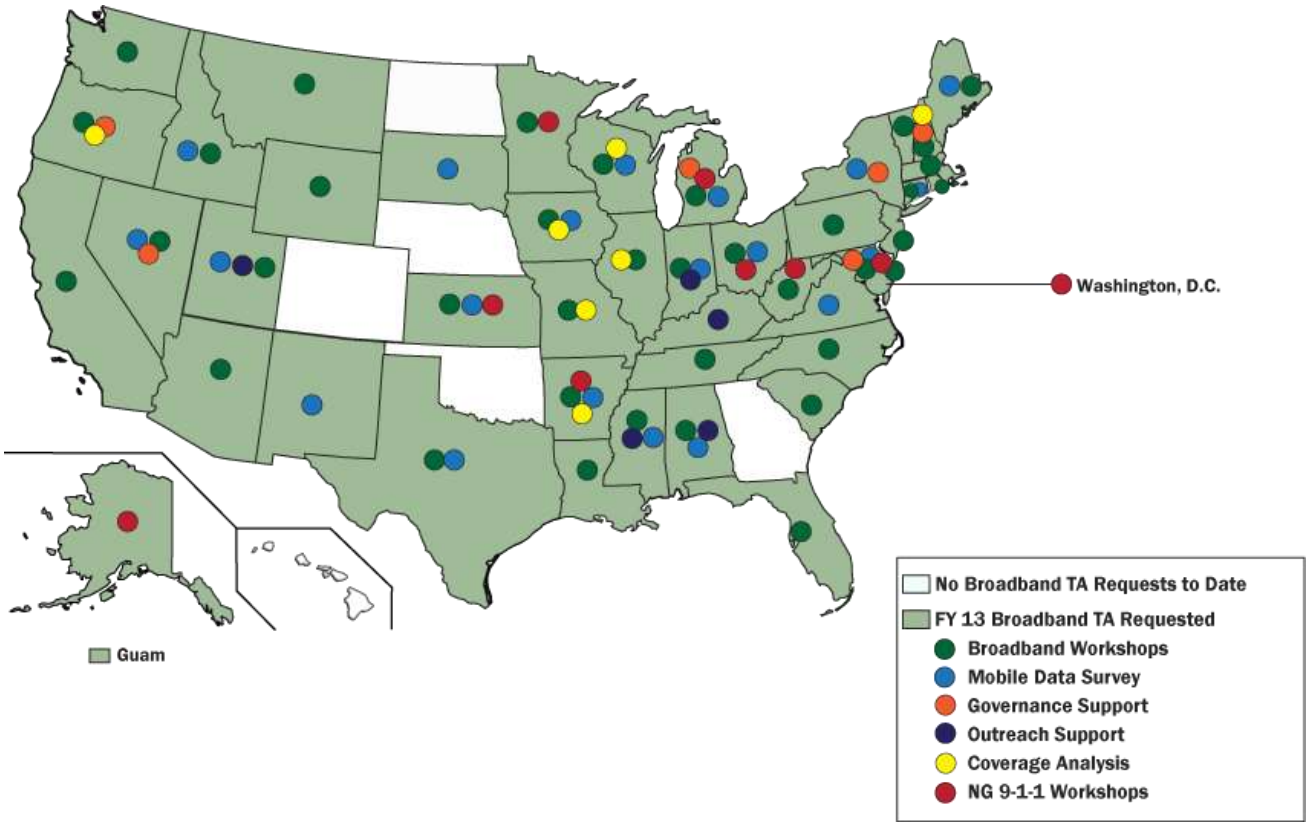
OEC Technical Assistance Support for Broadband

Planning Workshop:
One day informational and planning workshop based on OEC developed State broadband plan template

Mobile Data Survey:
Web-based survey to collect information on current use of mobile data and awareness of FirstNet and the NPSBN



Governance: Support for the development or expansion of SIGB to the required single point of contact governance body for broadband

Outreach: Support for State website content or publications to help inform local and tribal agencies on broadband developments

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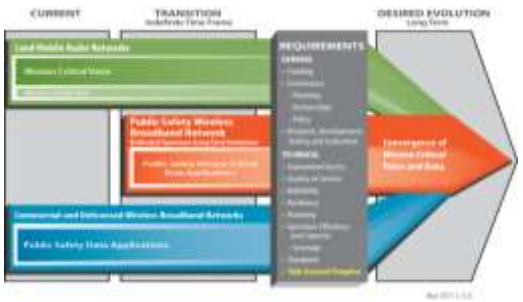
2013 National Priority TA Offerings

Broadband



- **NPSBN Awareness/Education:** Apprise stakeholders of current policies and direction for NPSBN/FirstNet
- **State Planning Template:** Development of a State Broadband Plan Annex to SCIP
- **Mobile Data Tool:** Web-based survey to document current state of mobile data use.
- **Customized TA:** Address specific broadband issues identified by State/Region

Tribal Goal 2 Support

- **NECP Goal 2:** Data collection from 565 Federally-recognized tribes in the U.S.
  - Collection is government to government; entirely voluntary
  - Questions mirror NECP Goal 2 capability data from counties
- **Technical Assistance :** Limited number of TAs
  - Based on Tribes' interoperable communications capabilities

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FY2013 TA Requests

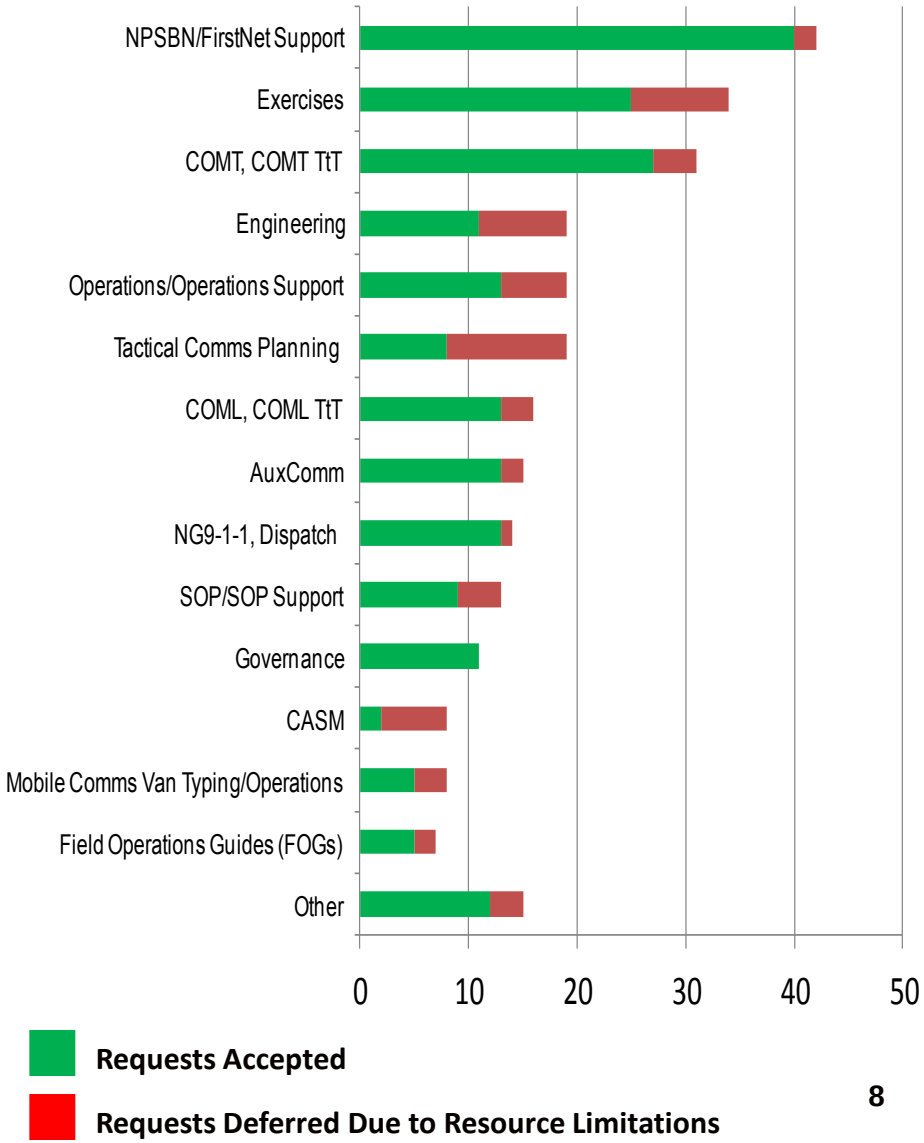
- **Online TA Request and Evaluation Forms**:

  www.publicsafetytools.info

- **New or Revised "Evergreen" Catalog Offerings**:
  - **PSAP/Dispatch Operations/TERT Support**
  - **Revised COMU Offerings**
  - **National Public Safety Broadband Network Issues, FirstNet issues**
  - **Next Generation 9-1-1**
  - **Continuity of Operations Planning**
  - **Mobile Communications Vehicles**

- **FY 2013 Requests**
  - **259 request received to date**
  - **221 accepted to date**
  - **Deferred requests continuously reviewed**

FY2013 TA Requests



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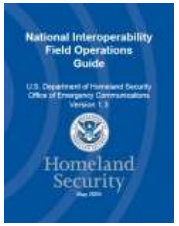
Automated Tools

www.publicsafetytools.info

Resources

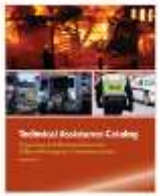
Broadband: Clearinghouse of links/info related to public safety broadband and FirstNet

NIFOG: Order form, smart phone, tablet version of hardcopy NIFOG



Guidance Docs: OEC materials about interoperability issues

Technical Assistance: TA Catalog, request and feedback forms



Training

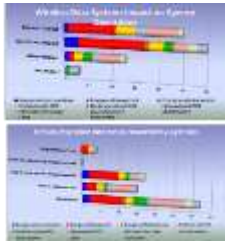
Computer Based Training:

- *Audio Gateway Use*
- *COMU Overview*
- *Auxcomm Overview*
- *Program Management*
- *SAR Training*
- *Radio 101*

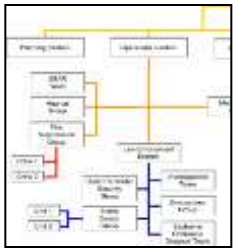
Tools

CASM: Inventory and mapping of LMR assets; over 48,000 agencies represented

Broadband/Mobile Data: Survey collects information on mobile data and awareness of the NPSBN



Response-Level Communications Tool: Supports development of communications-focused "data for real world planning through NECP Goal 2 data



Narrowband Tool: Maps FCC licenses transitioned to narrowband required by January 2013 deadline

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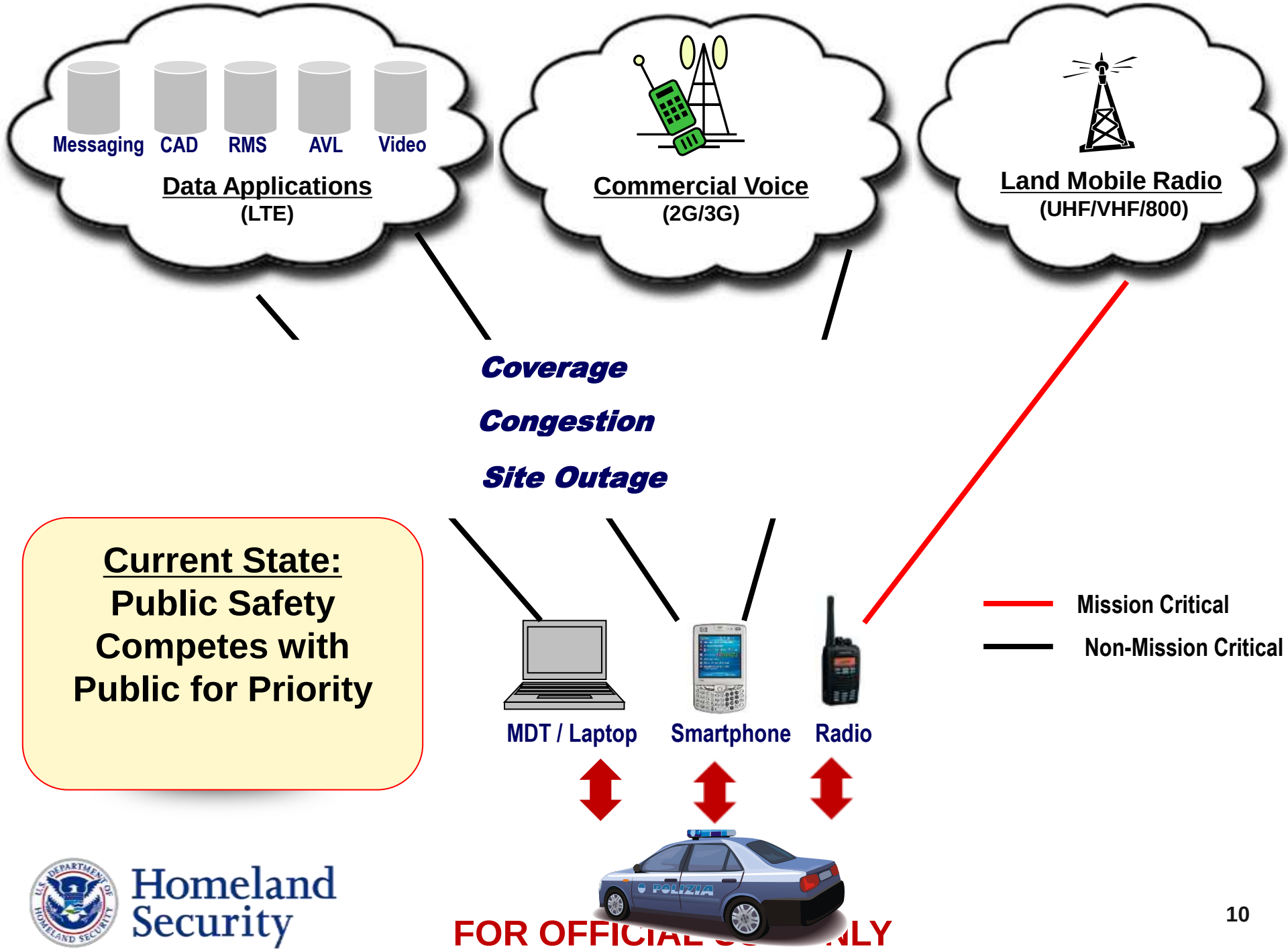

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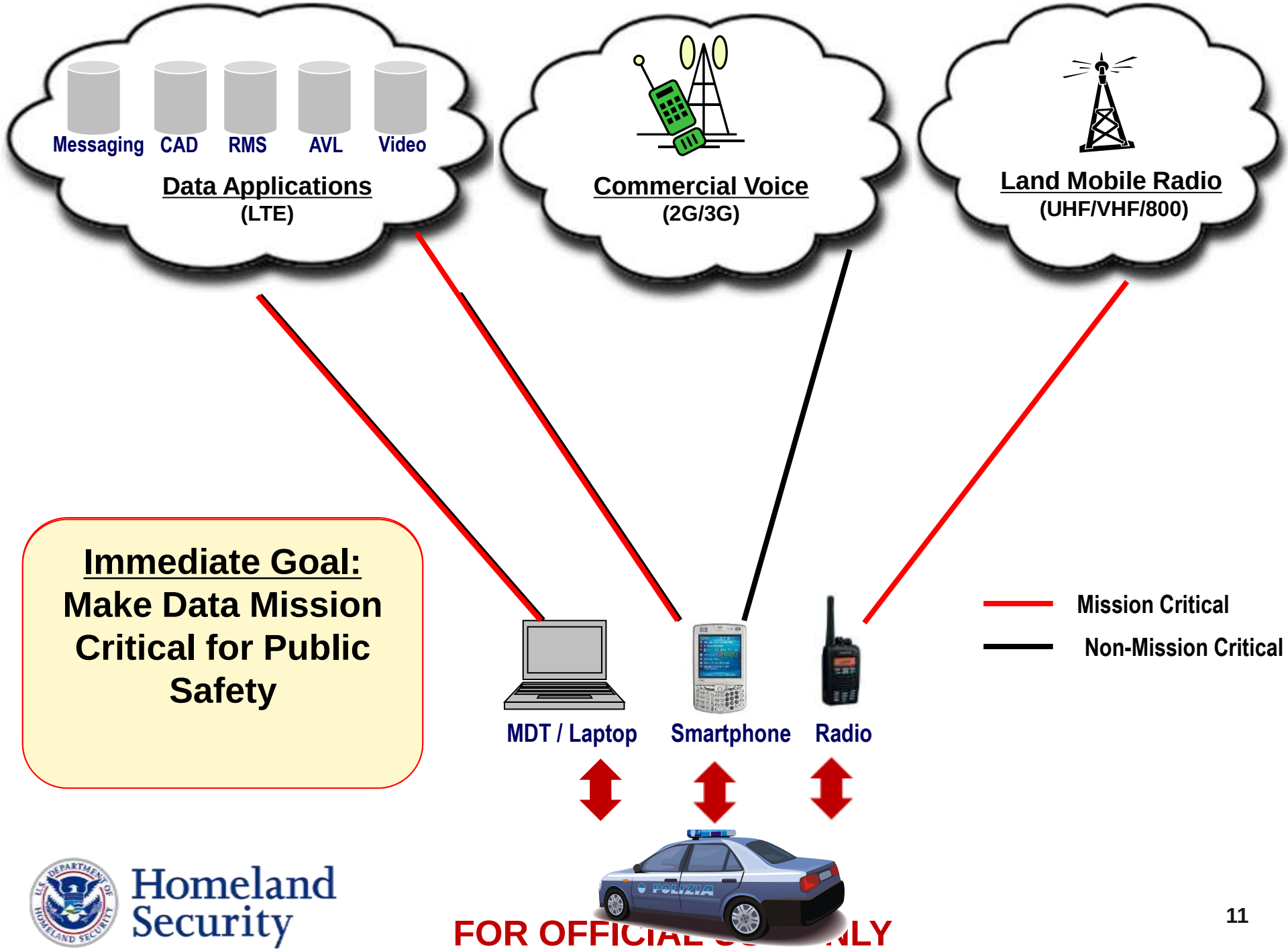

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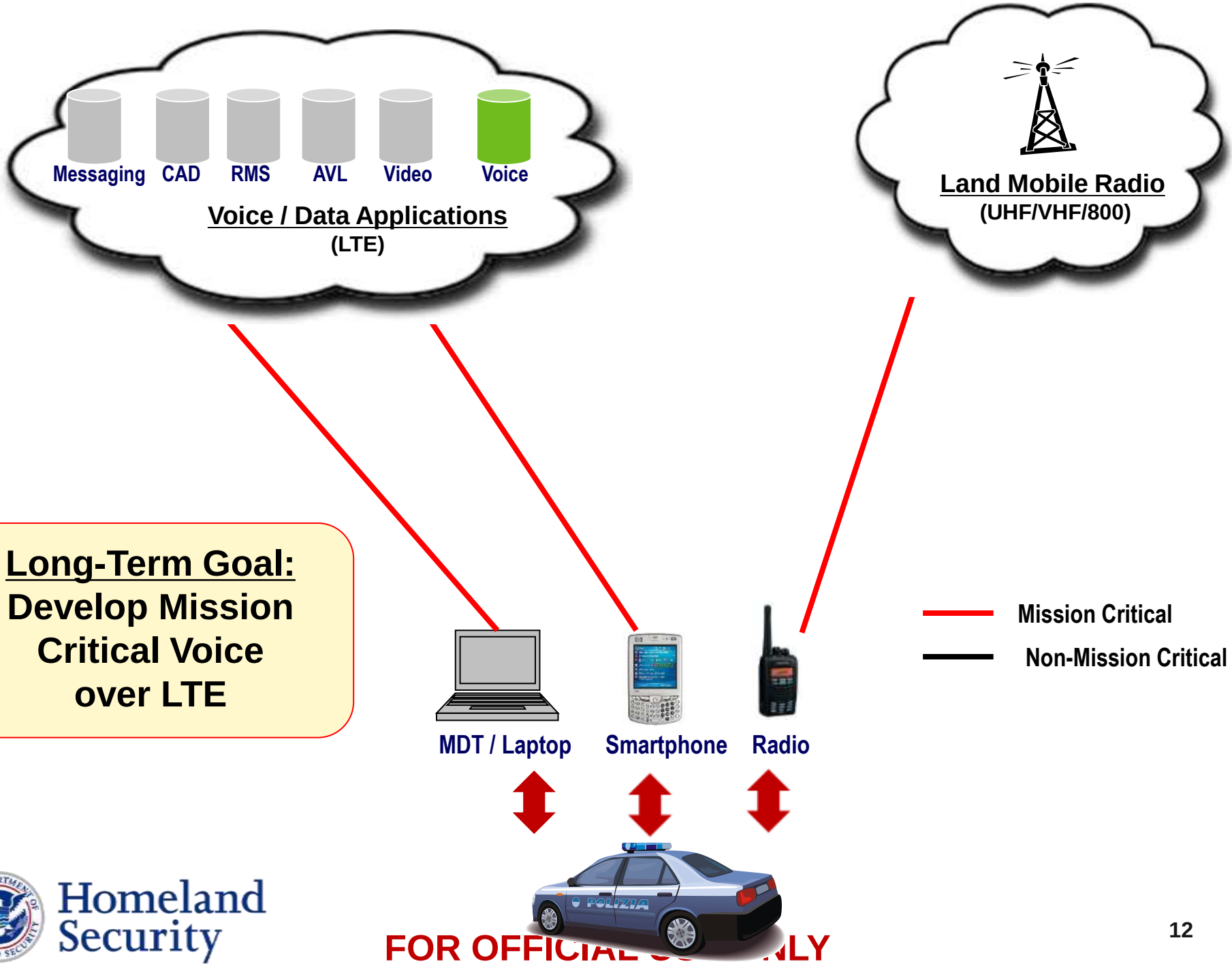

Long-Term Goal:
Develop Mission Critical Voice over LTE

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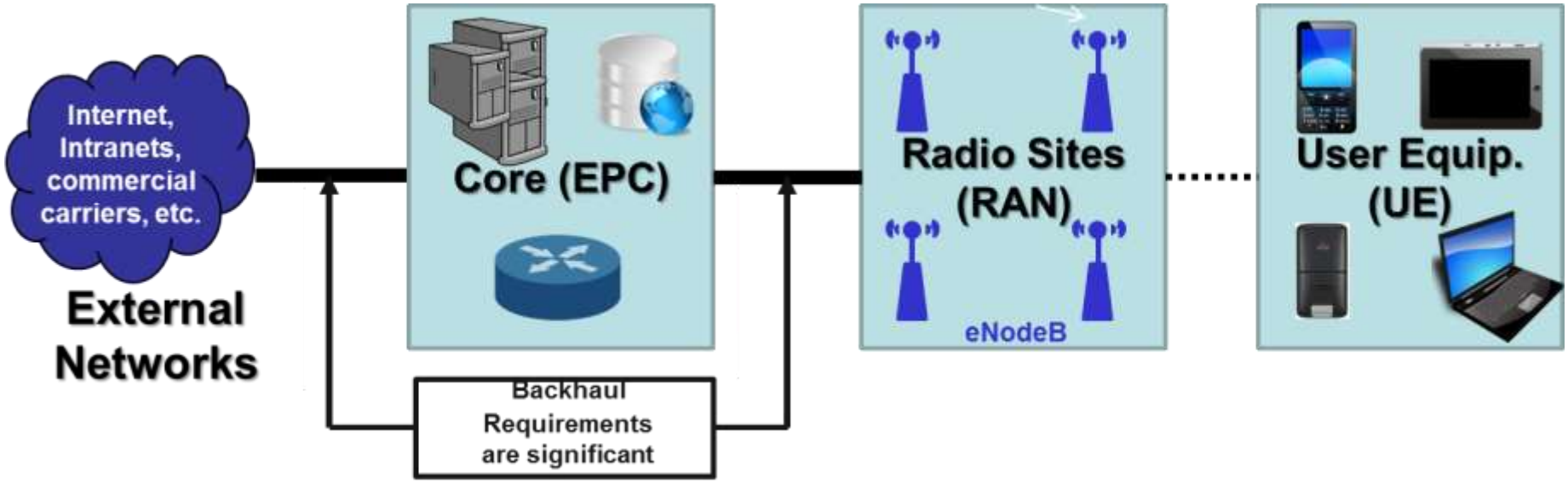
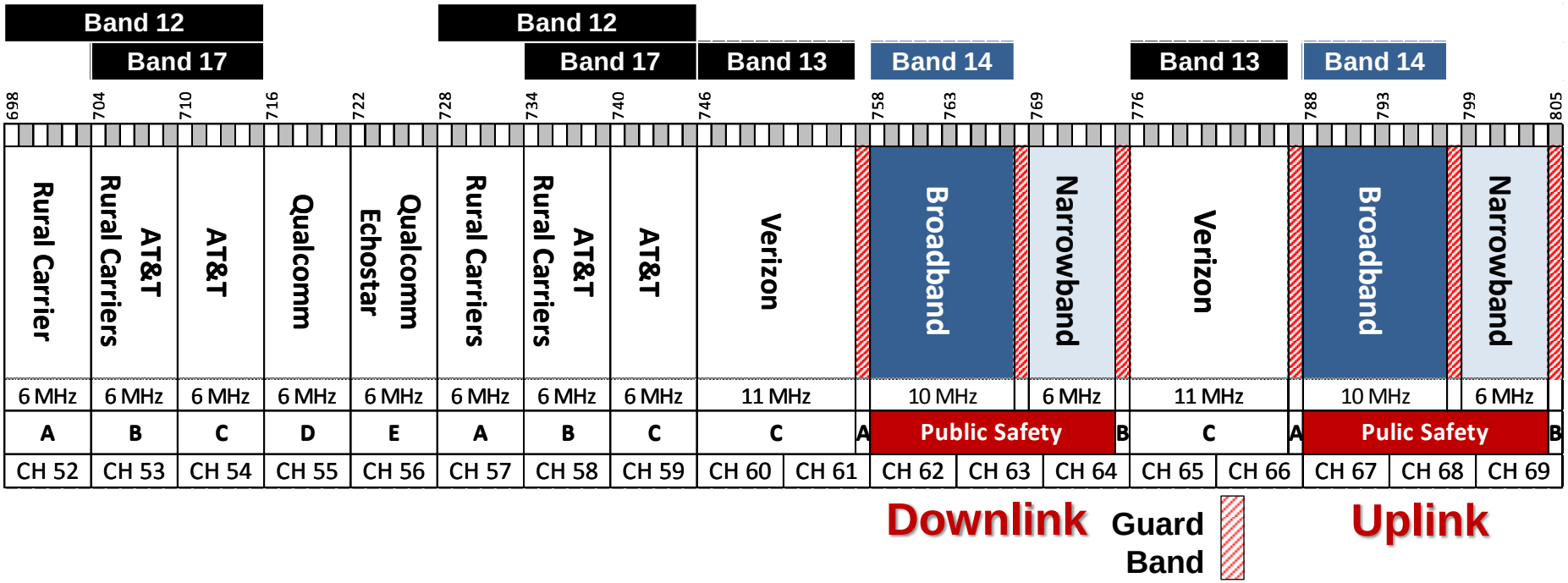
The Proposed Solution

- Create next generation (4G LTE) nationwide public safety wireless network
- Leverage commercial equipment economies of scale while maintaining public safety unique requirements
- Provide high data rates ("broadband") to enable advanced applications
- Use industry standards to enable interoperability for public safety



700 MHz Band Allocation

- Frequencies, TV channels, auction blocks (letters), 3GPP bands
- Public Safety's Broadband allocation is **"Band 14"**
- Major carriers operate in Bands 13 and 17 as well as other bands outside of 700 MHz



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LTE Technical Highlights

- Considered to be one of two **3G^{+}/4G** standards (the other is Wi-Max)
  - Interoperable with 2G and 3G networks
- Cellular standard that was designed for **data first** and not voice
  - Inclusion of LTE standardized voice is a work in progress
- **All-IP** (Internet Protocol) architecture designed for low latency
- Potential for **economies of scale** by leveraging commercial market
- Inter-network **mobility and interoperability** with commercial carriers
- **Flexible** channel bandwidths of 1.4, 3, 5, 10, 15 and 20 MHz
- **High user data rates** to support new applications
- **Security and authentication** mechanisms
- **Priority and Quality of Service** mechanisms
- **Modern antenna techniques** to support improved performance

Middle Class Tax Relief and Job Creation Act of 2012

Title VI: Public Safety Communications and Electromagnetic Spectrum Auctions

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NPSBN Legislation

Middle Class Tax Relief and Job Creation Act of 2012

Public Safety Priority: Passage of legislation to reallocate spectrum was top legislative priority of every public safety association in the United States

D Block: D Block 700 MHz spectrum was reallocated to public safety

Nationwide Approach: License for public safety broadband given to "FirstNet," which is an independent authority within the Department of Commerce to develop and implement the nationwide network

FirstNet Funding: FirstNet provided $2 Billion upfront and a total of up to $7 billion for network construction

State Planning Funds: Up to $135 million State and Local Implementation Grant program (SLIGP) is provided by the NTIA to help State planning efforts in support of FirstNet consultation

Opt In/Out Provision: States have the opportunity to opt-out of the nationwide build-out and develop its own interoperable system with FCC approval

FirstNet Consultation with State

- The single officer or governmental body is expected to consult with FirstNet on several policies, including:
  - 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
- SLIGP funding is intended to support State consultation

SLIGP Activities (NOT YET AWARDED)

- **Governance:** Establish or enhance a governance structure to consult with FirstNet;
- **Representation:** Ensure local and tribal representation when the State is consulting with FirstNet;
- **Education:** Conduct education and outreach for all relevant stakeholders that will be involved in the PSBN;
- **Users:** Identify potential public safety users for the PSBN;
- **MOU:** Develop a standard Memorandum of Agreement appropriate for the State to facilitate the possible sharing of infrastructure with FirstNet;
- **Staffing:** Develop staffing plans to involve local and tribal stakeholders in a future data collection in consultation with FirstNet; and
- **SCIP:** Prepare a comprehensive plan as part of the Statewide Communications Interoperability Plan (SCIP), or a plan complementary and similar to the SCIP, describing the public safety needs that the grantee expects FirstNet to address, plus relevant milestones.
- **Infrastructure Data Collection (Phase 2) -** Maximize use of existing public/private assets to reduce cost and speed deployment.

State Participation – Opt In/Out Option

- FirstNet will initially provide a plan/RFP to States including their proposed allocation of network construction funding.

- Within 90 days, each State can decide if they want to participate in the NPSBN deployment, or they can opt out and build out their own individual State network.

- States opting out have 6 months to submit a plan to the FCC to show that they are interoperable with the nationwide network.

- State Plans must demonstrate:
  - Technical and fiscal capability to operate the State radio access network
  - Ability to maintain ongoing interoperability with the nationwide network
  - Capacity to complete the project within specified comparable FirstNet timelines
  - Cost-effectiveness
  - Comparable security, coverage, and quality of service to that of FirstNet

- If FCC approves the plan, the State may apply to the NTIA for a construction grant and lease spectrum capacity from FirstNet.

- If FCC disapproves the plan, the FirstNet plan will move forward in the State.

Proposed Coverage Process / Approach

TA Supported (No SLIGP Reimbursement) | *SLIGP Funded Activity*

Baseline	Review Against Public Safety Needs	Apply Prioritization Factors	Prioritization/ Revision (SLIGP Phase 1&2)	FirstNet Final Proposal
Land Area	Public Safety Agencies	Underserved	Site Survey	State Plan
Population	Facilities	Tribal Lands	Backhaul	
Population Density	Critical Infrastructure	Rural Areas	Ease of Implementation	
Interstates/ Highways	Federal/State Operations	Borders / Coastlines	MOUs	
	Crime / Disasters		Users	
Set Baseline for Discussion	**Identifies Changes / Enhancements to Baseline**		**Negotiate Changes**	**State Review**

State Requested TA with Coordination from FirstNet | **Official FirstNet Consultation**

Data Sources

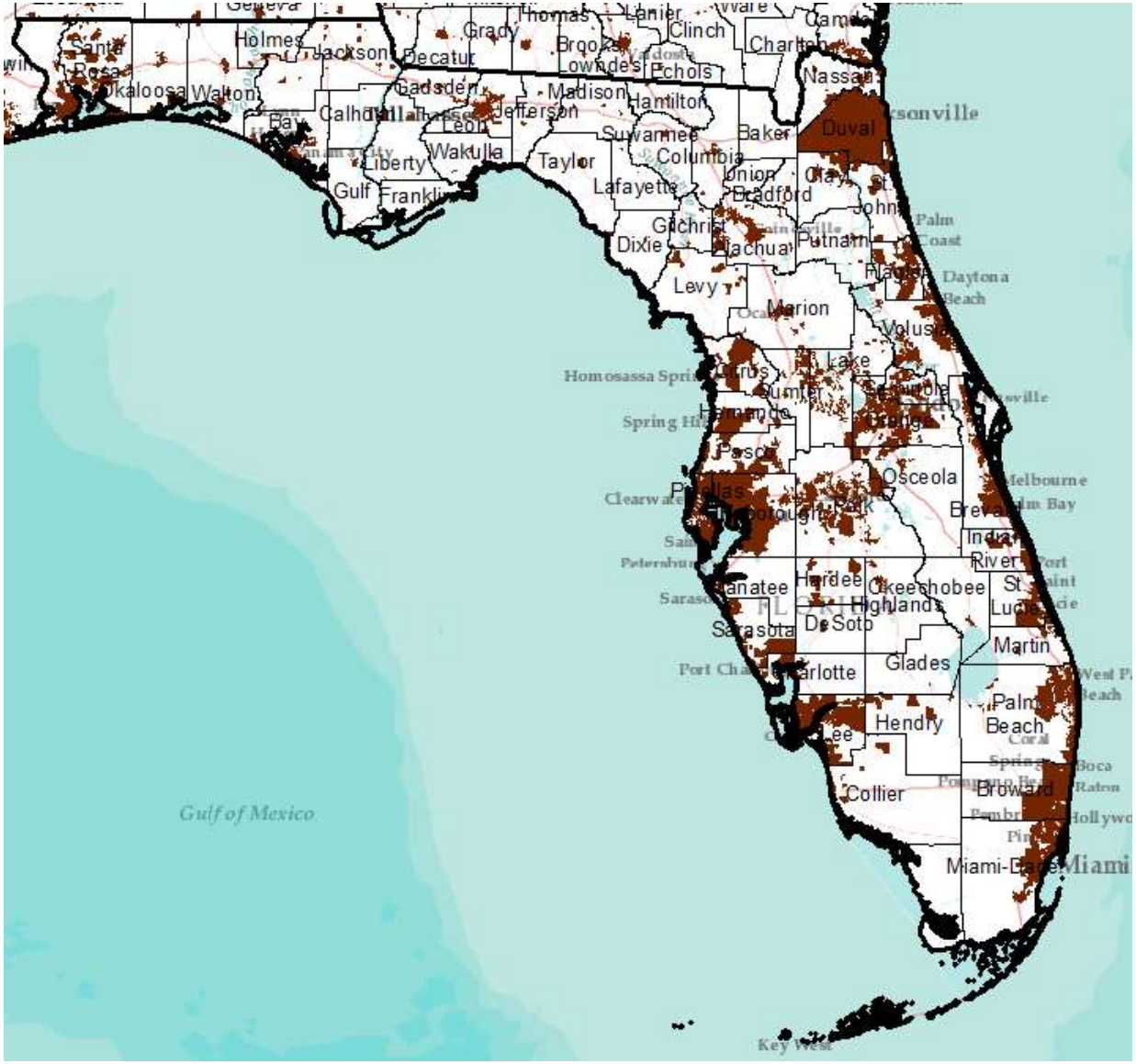
Layer Name	Source	Classification
Initial Layer		
Basemap	Commercial	Open-source
Population Density	Commercial	Open-source
National Highway Network	Commercial	Open-source
USA Major Rivers	Commercial	Open-source
USA Railroads	Commercial	Open-source
Federally Recognized Tribes	Commercial	Open-source
Hazards		
FEMA Evacuation Routes	Commercial	Open-source
Hurricanes 1951-2004	Commercial	Open-source
Tornado Tracks 1950-2008	Commercial	Open-source
Landslide Incidence and Susceptibility	Commercial	Open-source
Seismic Hazard	Commercial	Open-source
Earthquakes	Commercial	Open-source
FEMA 100 Year Flood Zones	Commercial	Open-source
FEMA Disaster Declarations	Commercial	Open-source
Critical Infrastructure		
Public Venues (except for Amusement and Theme Parks)	Commercial	Open-source
Amusement and Theme Parks	Private	FOUO
Dams	Commercial	Open-source
Energy (except for Coal Power and Nuclear Plants)	Private	FOUO
Coal Power Plants	Commercial	Open-source
Nuclear Plants	Commercial	Open-source
Manufacturing (except for Hazardous Material Routes)	Private	FOUO
Hazardous Material Routes	Commercial	Open-source

Layer Name	Source	Classification
Facilities		
Major State Government Building	Private	FOUO
Court Houses	Private	FOUO
Prison Areas	Private	FOUO
Corrections	Commercial	Open-source
Airport Boundaries	Private	FOUO
Airports	Commercial	Open-source
Local EOCs	Private	FOUO
State EOCs	Commercial	Open-source
Urgent Care Facilities	Private	FOUO
Hospitals	Private	FOUO
PSAP	Commercial	Open-source
Schools	Commercial	Open-source
Ports	Commercial	Open-source
Amtrak Stations	Commercial	Open-source
Air National Guard (ANG) Sites	Private	FOUO
Army National Guard (ARNG) Installations	Private	FOUO
Canada and Mexico Border Crossings	Private	FOUO
Agencies		
EMS Departments	Commercial	Open-source
Federal	Commercial	Open-source
Military	Commercial	Open-source
Emergency Management	Commercial	Open-source
Law Enforcement	Commercial	Open-source
Fire Departments	Commercial	Open-source
Final Coverage		
In-Building	Commercial	Open-source
Portable	Commercial	Open-source
Mobile	Commercial	Open-source
Mobile	Commercial	Open-source
Satellite	Commercial	Open-source
USA Federal Lands		
USA Federal Lands	Commercial	Open-source
Commercial Coverage		
Commercial Coverage (for each state)	Commercial	Open-source
State		
State outline	Commercial	Open-source
State counties	Commercial	Open-source
State LTE	Commercial	Open-source
State Public Safety Users	Commercial	Open-source

Florida Overview

Boundaries

State
Counties
Census Designated Places



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Boundaries & Roads

- State
- Counties
- Federally-Recognized Tribes
- USA Railroads
- USA Major Rivers
- Census Designated Places

National Highway Network

- Interstate
- US Highway

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Agencies

Agencies

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

*Several agencies may overlap on the map

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Facilities

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) Installations
- Canada and Mexico Border Crossings

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Critical Infrastructure

Legend

Manufacturing

- Phosphatic Fertilizer Plants
- Nitrogenous Fertilizer Plants
- Explosives Manufacturing
- Biological Products Manufacturing
- Hazardous Materials Routes

Energy

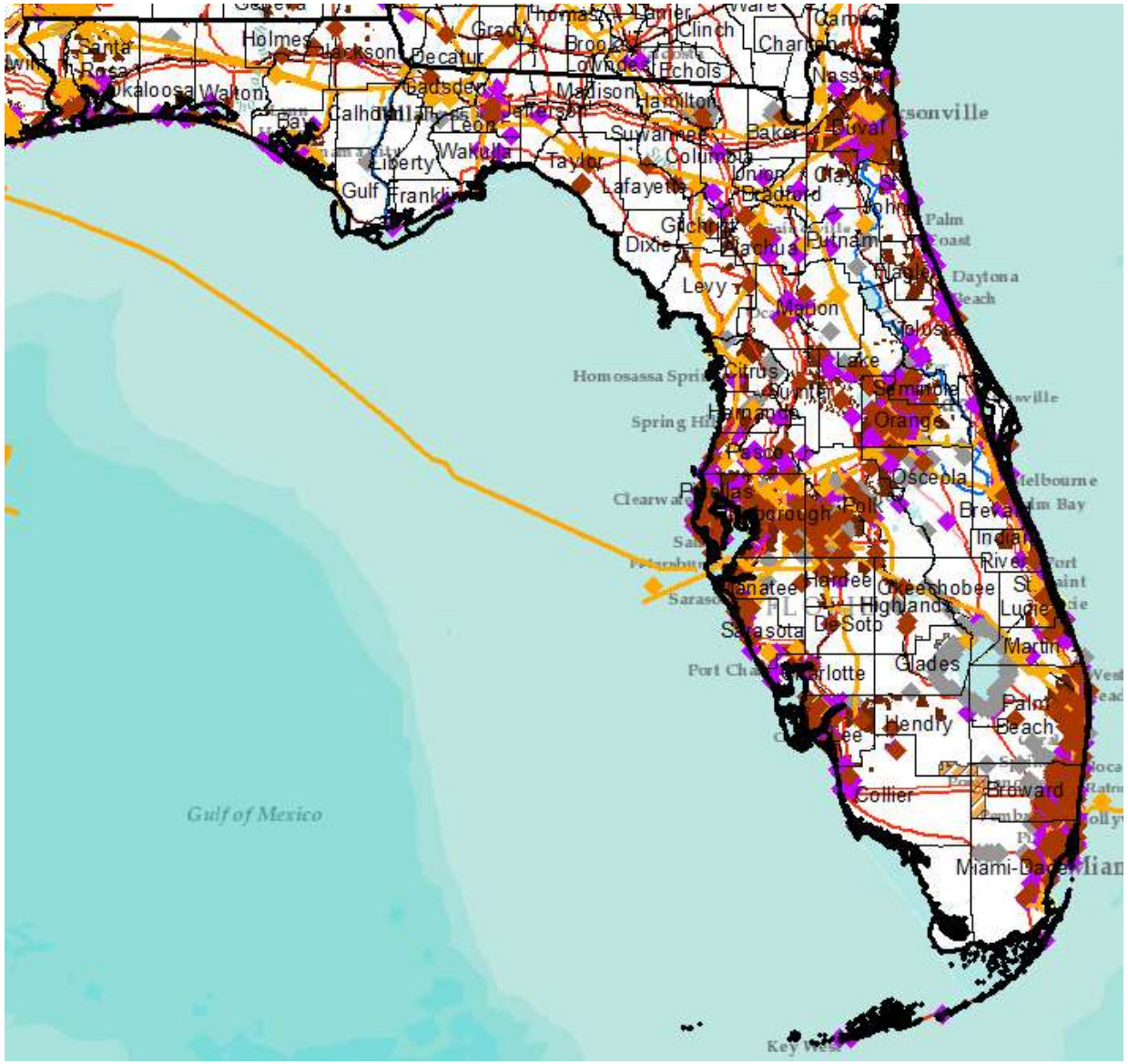
- Petroleum Pumping Stations
- Oil Refineries
- Oil and Natural Gas Pipelines
- Oil and Natural Gas Interconnects
- Natural Gas Storage Facilities
- Natural Gas Processing Plants
- Natural Gas Compressor Stations
- Natural Gas (LNG) Import Terminals
- Ethanol Plants
- Coal Power Plants
- Nuclear Plants

Dams

- Dams

Public Venues

- State Fairgrounds
- NCAA Division I Football Stadiums
- National Hockey League Arenas
- National Football League Stadiums
- National Basketball Association Arenas
- NASCAR Auto Raceways
- Major Thoroughbred Horse Racing Tracks
- Major League Baseball Stadiums
- Indy Racing League Racetracks
- Amusement and Theme Parks



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Agencies / Facilities / Critical Infrastructure

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) Installations
- Canada and Mexico Border Crossings

Manufacturing

- Hazardous Materials Routes

Energy

- Oil and Natural Gas Pipelines
- Nuclear Plants
- Dams

Public Venues

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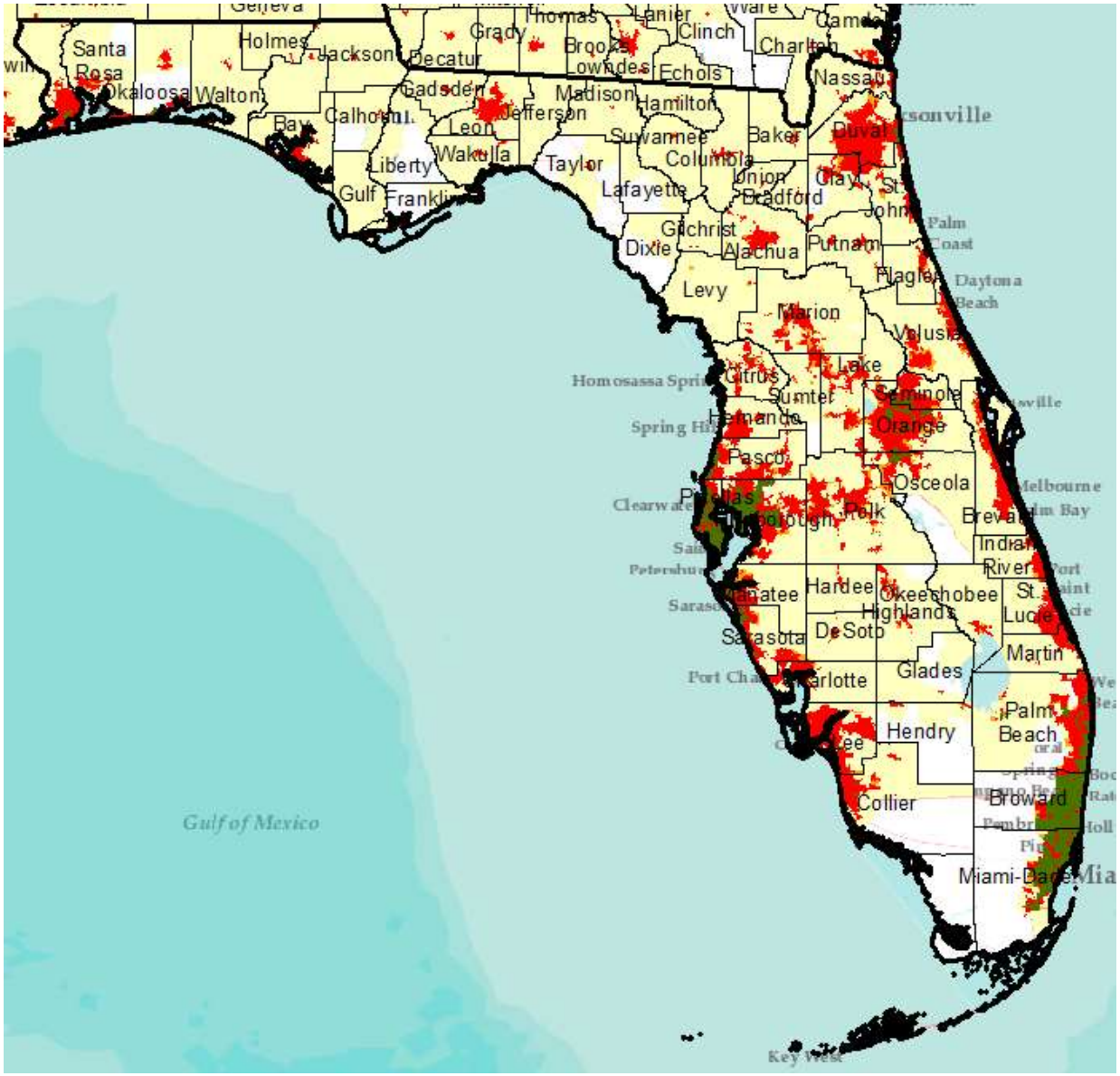
Population Density

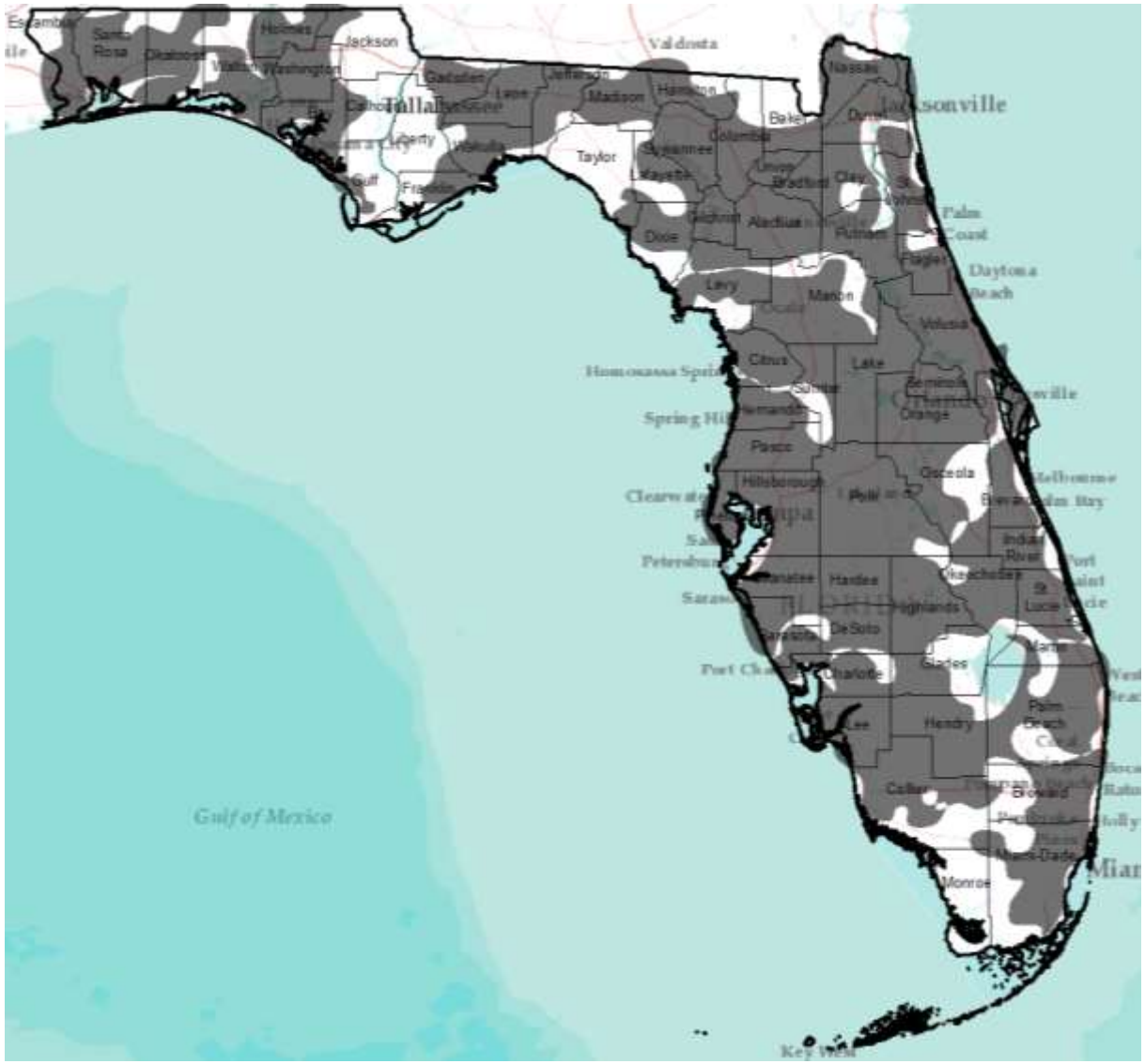
Population Density

- Population Density 2,500+ ppsqmi
- Urban Areas & Clusters (1,000+ ppsqmi)
- Population Density 500+ ppsqmi
- Population Density 5+ ppsqmi



Current Commercial Coverage

All Providers – LTE Coverage



Providers include: AT&T, Verizon, Sprint, T-Mobile, and U.S. Cellular.

*Coverage as of June 2013
Source: *Coverage?* App

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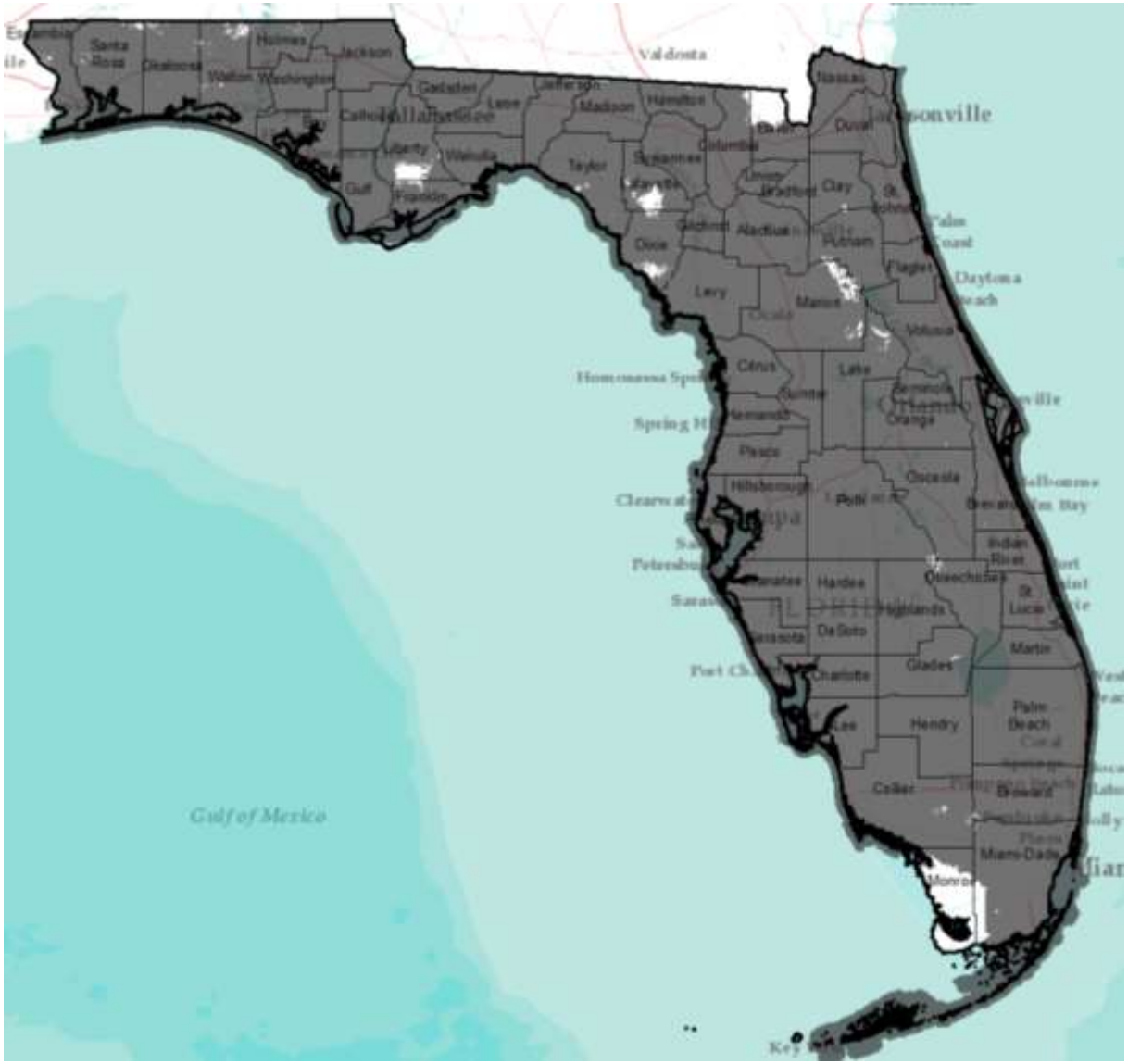
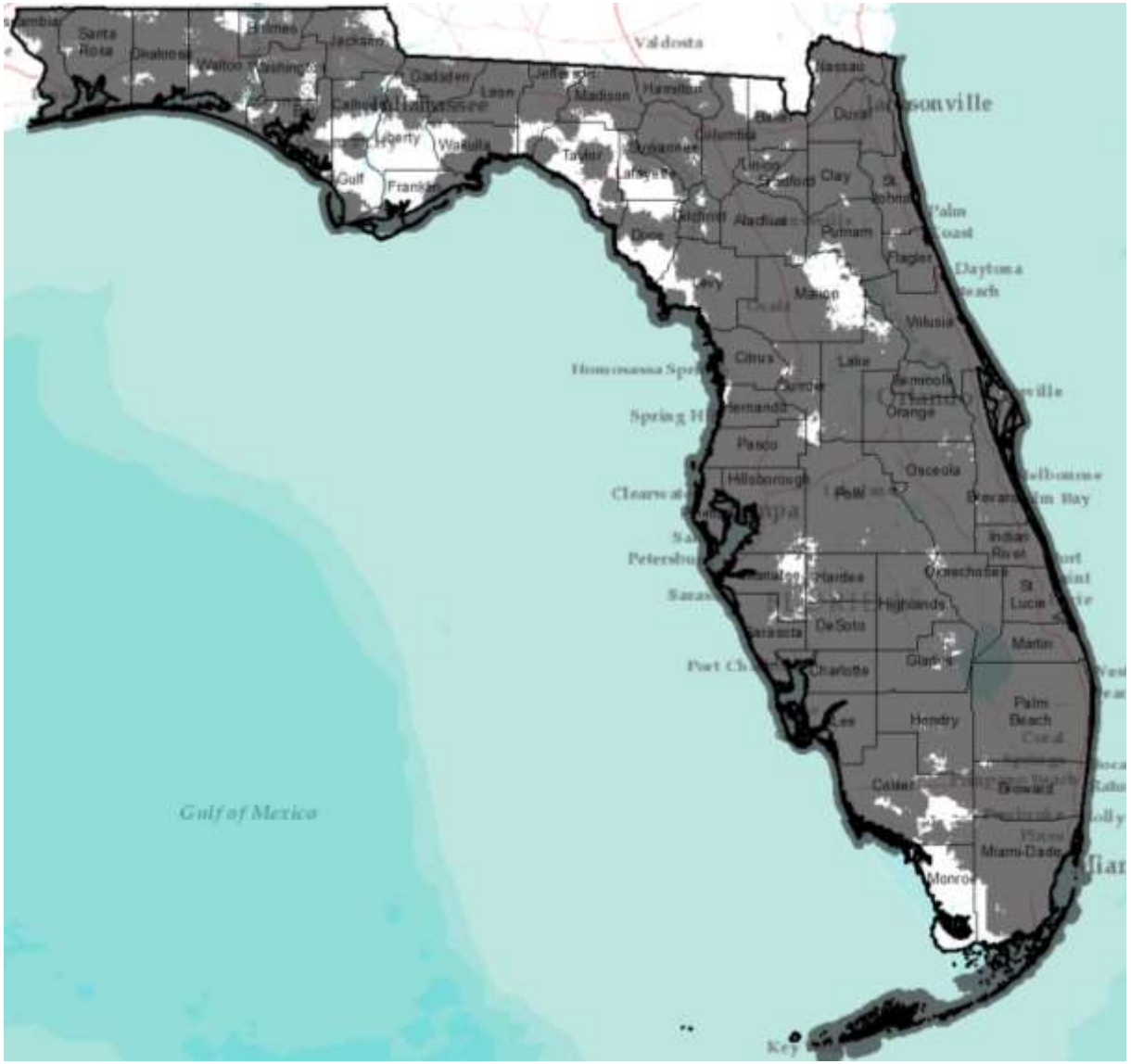
All Providers – 2G, 3G, 4G Coverage



Providers include: AT&T, Verizon, Sprint, T-Mobile, U.S. Cellular, and other regional carriers.

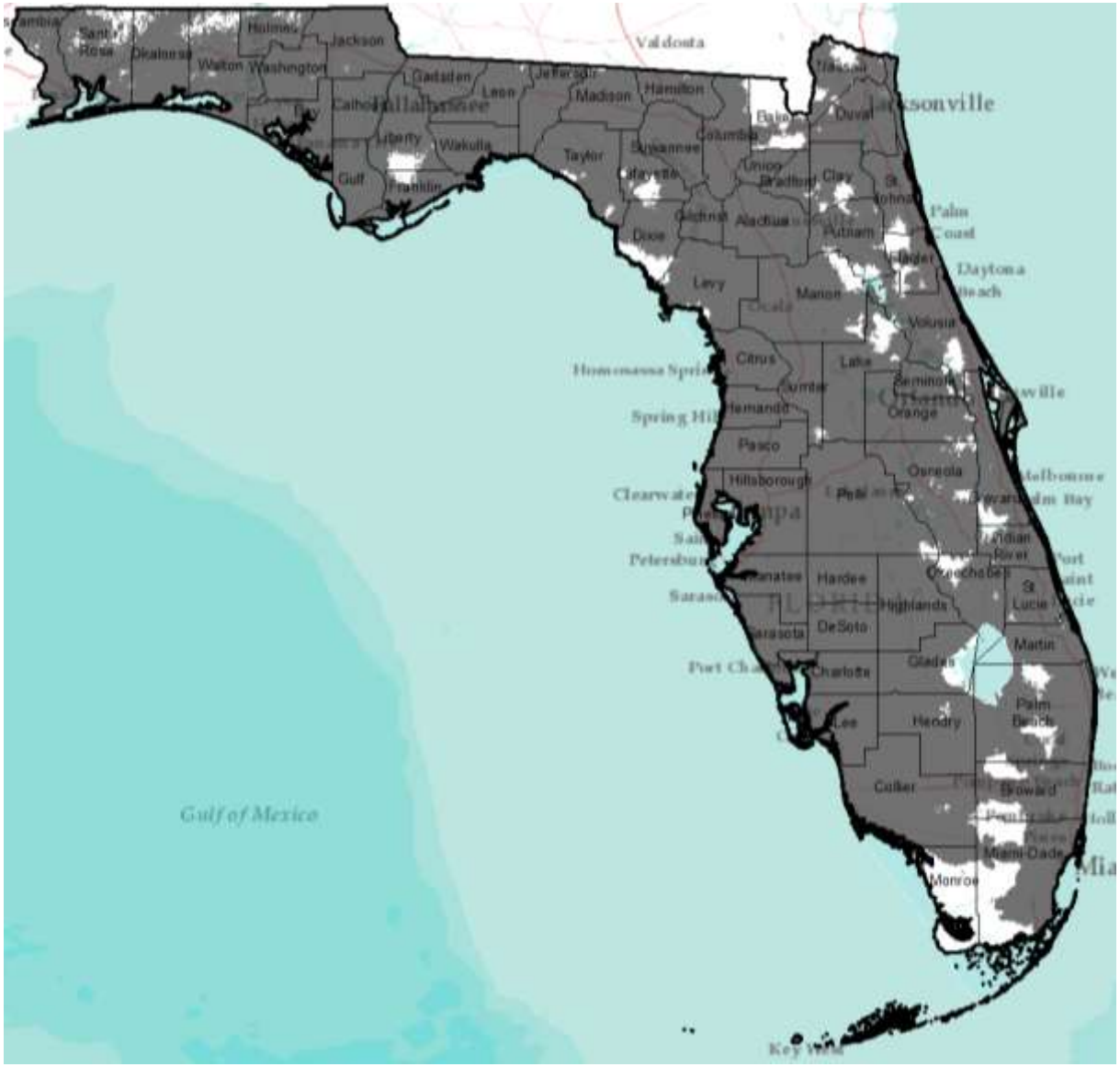
*Coverage as of June 2012
Source: NTIA

AT&T – 2G, 3G, 4G Coverage



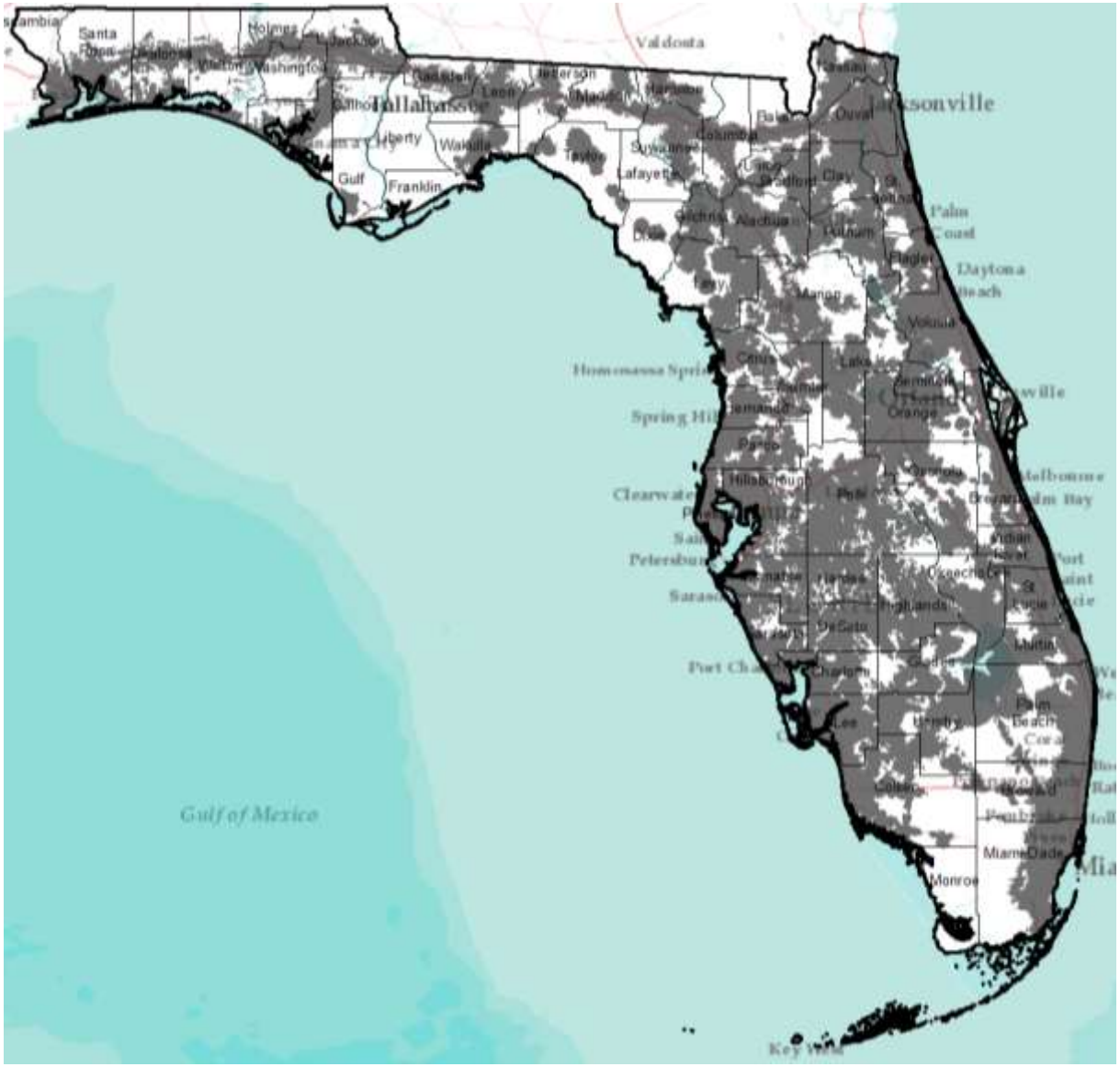
*Coverage as of June 2012

Verizon – 2G, 3G, 4G Coverage



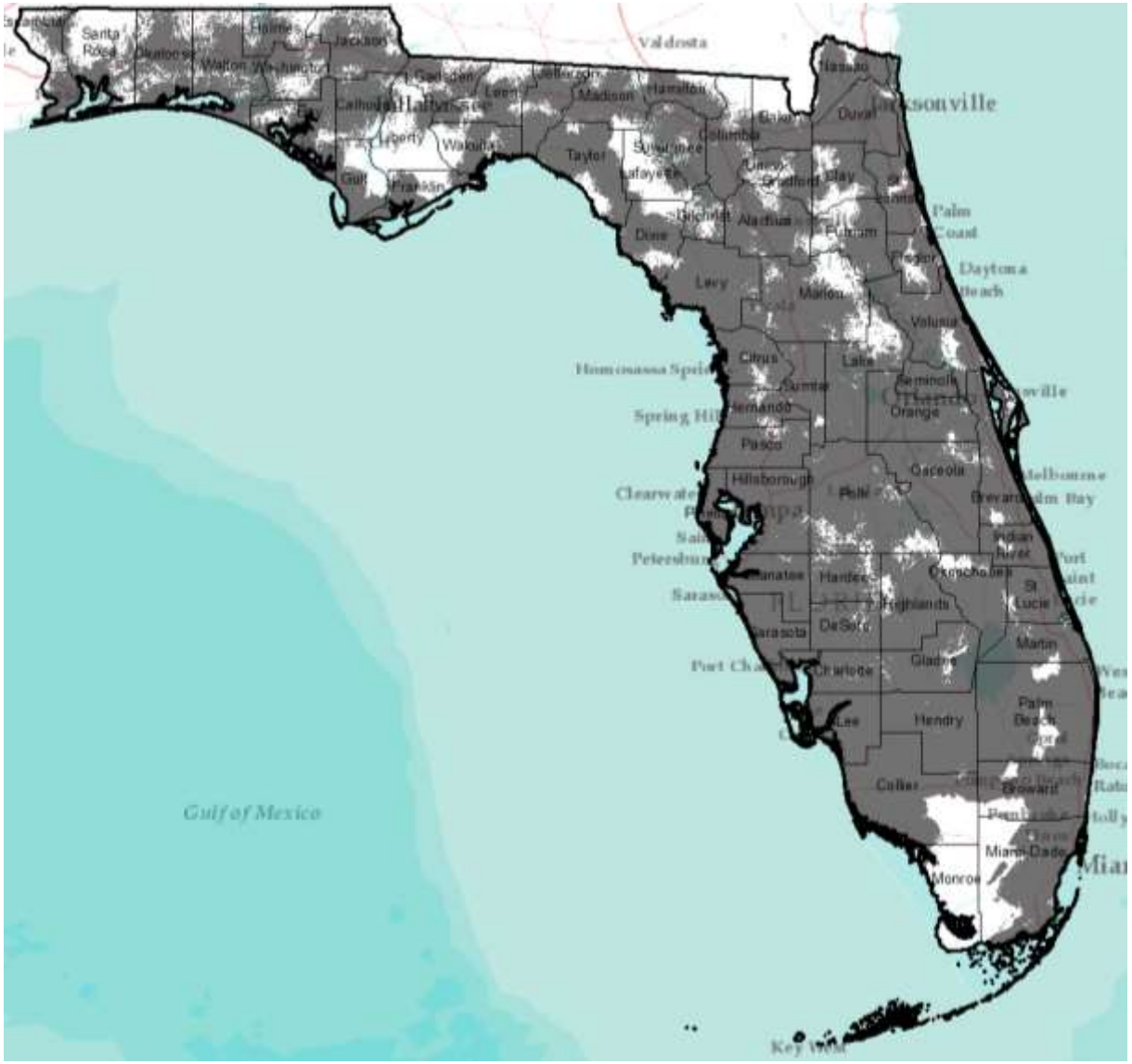
*Coverage as of June 2012

Sprint – 2G, 3G, 4G Coverage



*Coverage as of June 2012

T-Mobile – 2G, 3G, 4G Coverage



*Coverage as of June 2012

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Coverage Objectives

Guidelines

Focus on coverage….not infrastructure

- The goal is to define and prioritize operational coverage needs
- RAN site selection, backhaul, hardening requirements, etc. are for a later discussion
- These site selection factors will be addressed through SLIGP funding

This is a starting point…..nothing is final

- The maps provided by OEC are to help States identify its own coverage objectives
- Many coverage factors/approaches that the State develops can/will adjust throughout the consultation process

LTE is a mobile data solution first…..mission critical voice is yet to come

- NPSBN will initially support mission critical data and (potentially) supplementary voice
- System will not replace need for land mobile radio systems (based on current technology)

OEC Baseline

The following is OEC's proposed approach to coverage levels, NOT FirstNet's requirements.

In-Building Handheld Coverage: Coverage provided to a handheld device through minimum one wall

- ***OEC Starting Point*** – Urban Areas and Clusters (1,000 people per square mile) as defined by US Census

Handheld / Partial In-Building Coverage: Coverage provided to a device outdoors or "on the street" including some in-building coverage

- ***OEC Starting Point*** – Rural/Suburban Census Designated Places (CDPs) with more than 5 people per square mile

Vehicular Modem / Partial Handheld Coverage: Vehicle-based user equipment, as well as some handheld coverage

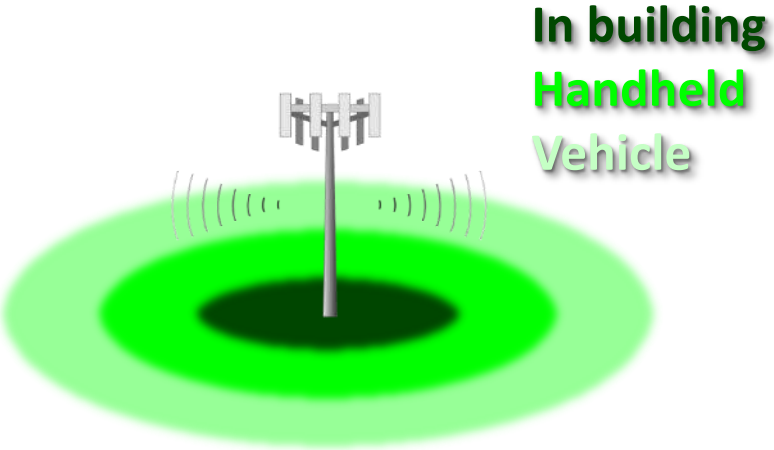
- ***OEC Starting Point*** – Interstates, major state highways / non-CDP rural areas with more than 5 people per square mile

Satellite / Deployable Coverage: Outside of fixed terrestrial coverage, mobile or satellite connectivity only

- ***OEC Starting Point*** – All areas with less than 5 people per square mile

Coverage Objective Levels

- Coverage objective levels (**in-building**, **handheld**, **vehicle**, etc.) does not mean that coverage will only be provided at that level
- It means that level of coverage will be provided ***reliably*** and at a ***minimum data rate***
- A lower reliability and/or minimum data rate would result in greater coverage from the same site



~~Video,~~ Voice, Data

Min. ~~768~~ 256 kbps downlink

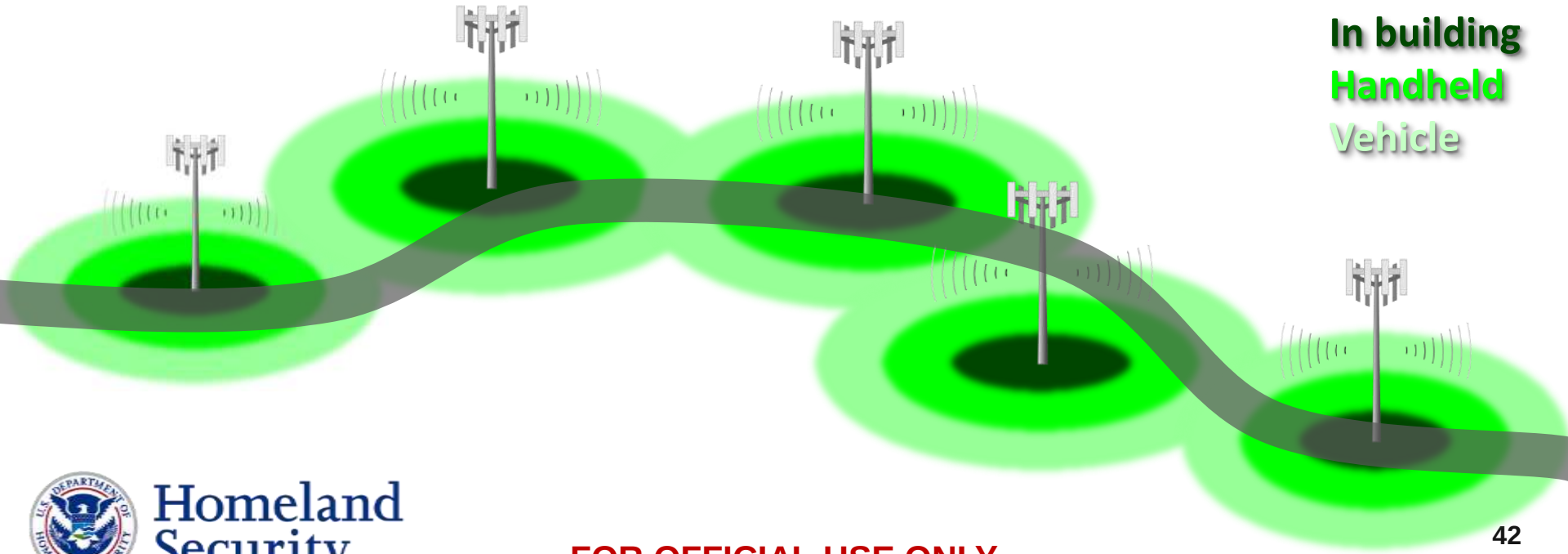
Min. ~~256~~ 128 kbps uplink

~~95%~~ 90% reliability

Service doesn't necessarily stop at the coverage level

Coverage Objective vs. Coverage Map

- Coverage objectives display the State's coverage goals.
- Coverage maps display actual coverage after network build out.
- Once the towers are placed to satisfy the coverage objectives, the resulting map may yield greater coverage.
- Highway example: The objective is to cover the highway to a mobile device, but the resulting coverage will be much greater.



In-Building Coverage

In-Building Coverage to Urban Areas and Clusters are shown in this map.

- **In-Building**

Handheld Coverage

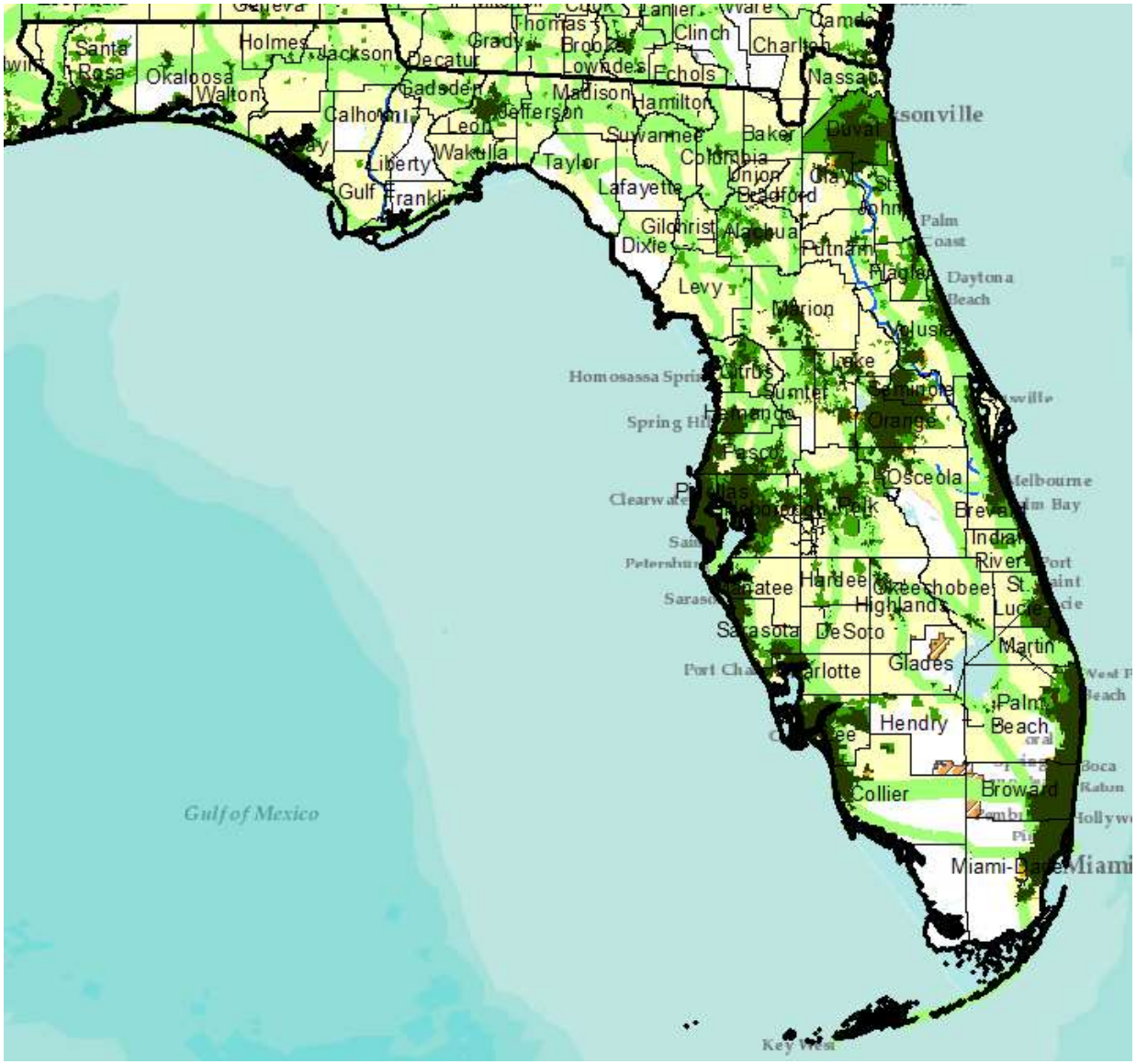
CDPs would have Handheld/Partial In-Building coverage.

- In-Building
- Handheld/Partial In-Building

Vehicular Coverage (Roads)

Interstate and State Highways would have the Vehicular Modem/Partial Handheld coverage.

- **In-Building**
- **Handheld/Partial In-Building**
- **Vehicular Modem/ Partial handheld**



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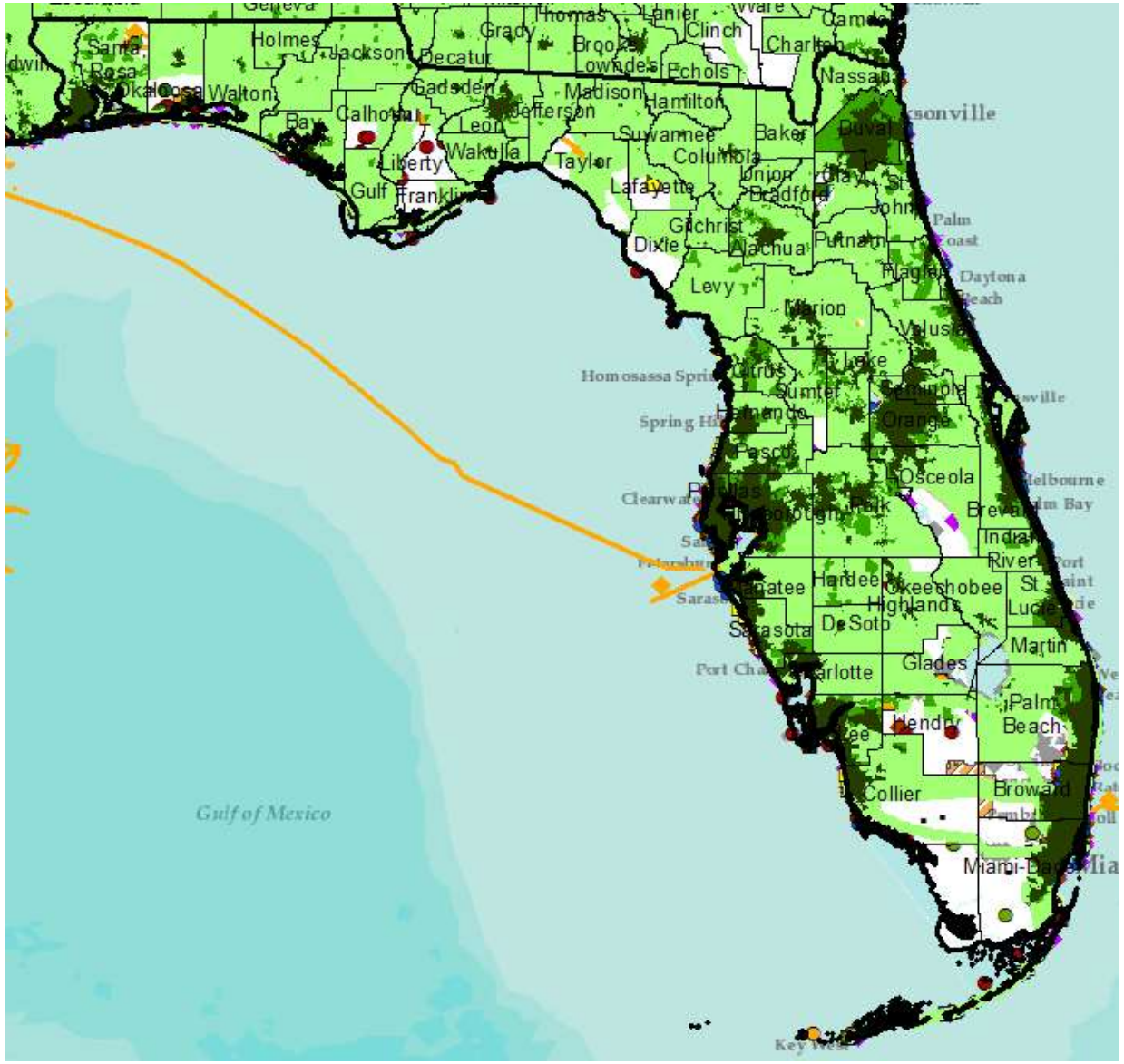
All Coverage Levels

All areas with a population greater than 5 ppsqmi would have Vehicular Modem/Partial Handheld coverage. All other areas would use Satellite/ Deployable coverage.

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



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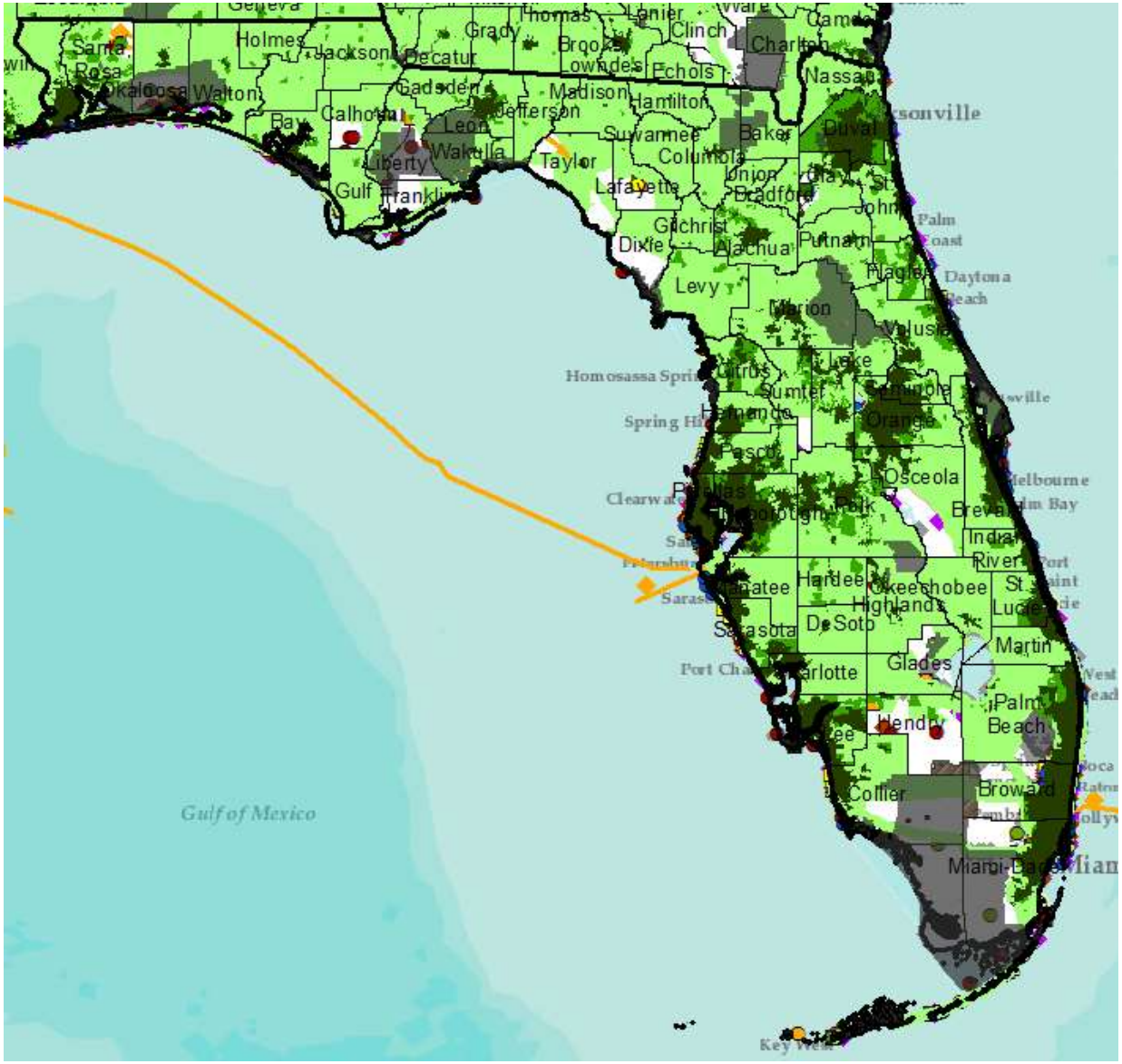
Coverage with Federal Overlay

This map shows the proposed coverage levels with the Federal Lands in the State.

How do Federal Lands affect the State's Coverage Objectives?

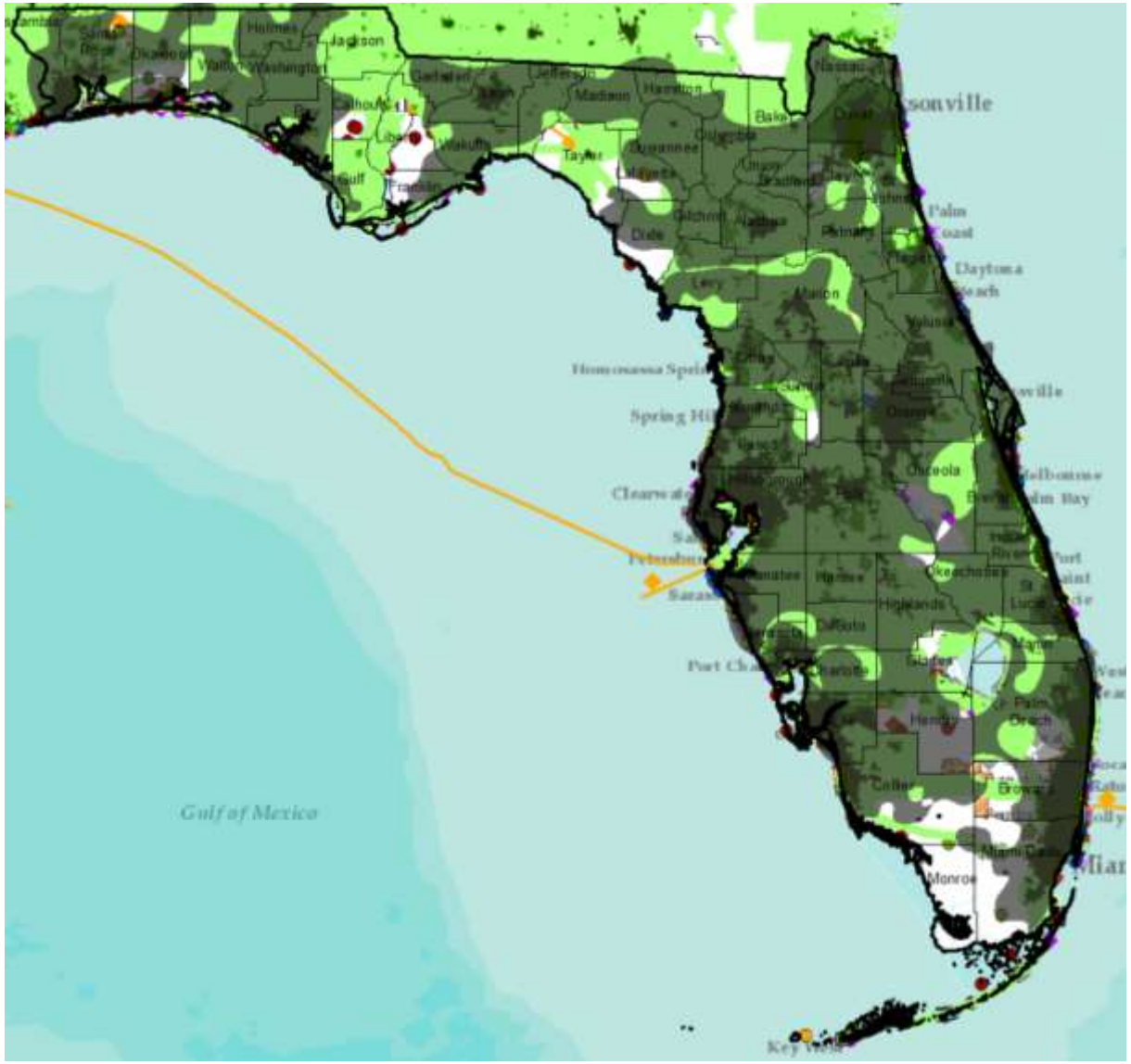
- In-Building
- Handheld/Partial In-Building
- Vehicular Modem/ Partial handheld
- Satellite/Deployable



Coverage with LTE Overlay

This map illustrates advertised Commercial LTE coverage. Providers include: AT&T, Verizon, Sprint, T-Mobile, and U.S. Cellular.

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



*Coverage as of June 2013

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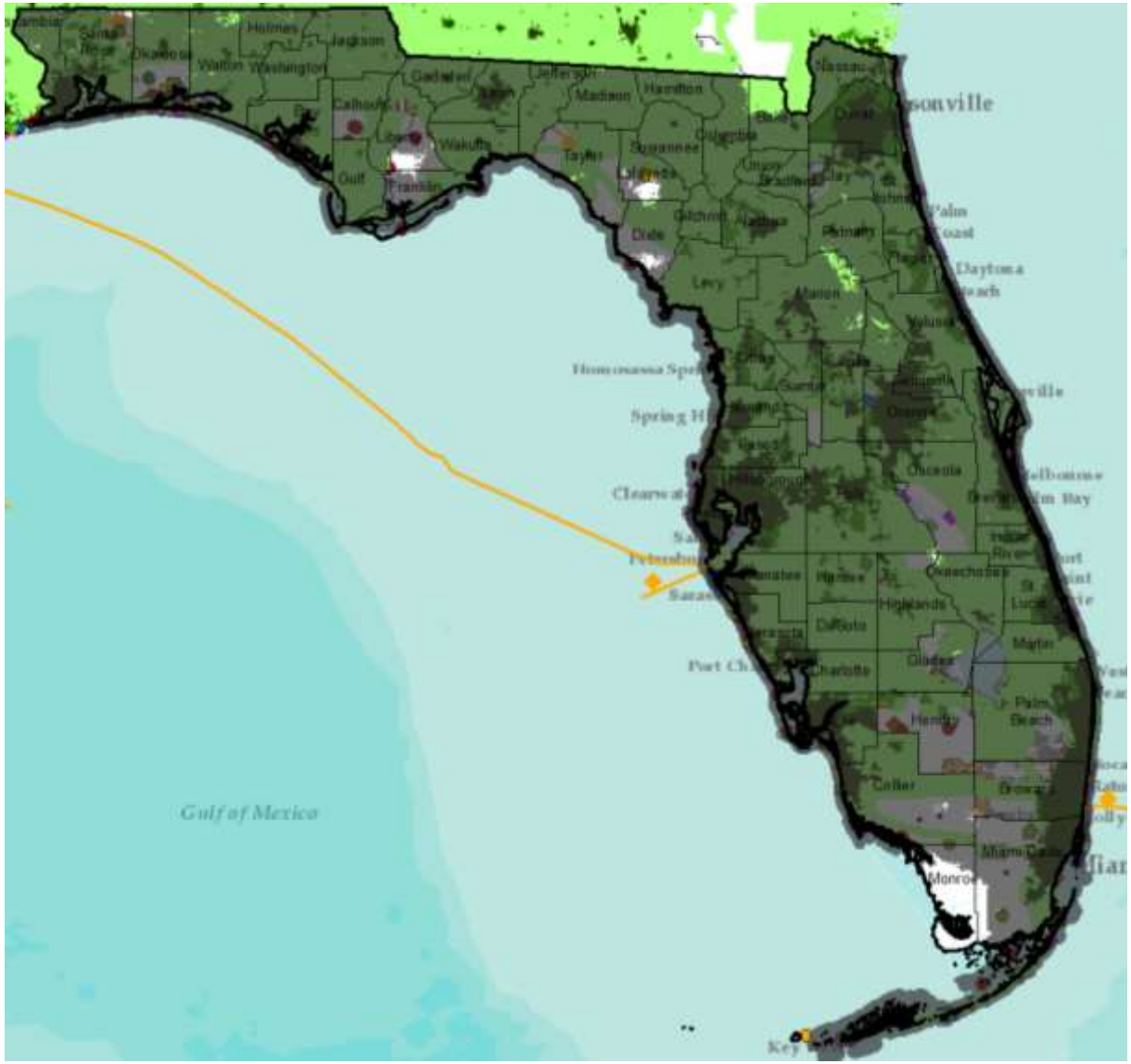
Commercial Provider Overlay

This is a map of advertised Commercial 2G, 3G, and 4G service. Providers include: AT&T, Verizon, Sprint, T-Mobile, U.S. Cellular, and other regional carriers.

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



*Coverage as of June 2012

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Florida Baseline

What are the State's objectives for each of the following coverage levels?

In-Building Handheld Coverage: Coverage provided to a handheld device through minimum one wall

Please insert your coverage objectives for In-Building Coverage.

Handheld / Partial In-Building Coverage: Coverage provided to a device outdoors or "on the street" including some in-building coverage

Please insert your coverage objectives for Handheld/Partial In-Building Coverage.

Vehicular Modem / Partial Handheld Coverage: Vehicle-based user equipment, as well as some handheld coverage.

Please insert your coverage objectives for Vehicular Modem/Partial Handheld Coverage.

Satellite / Deployable Coverage: Outside of fixed terrestrial coverage, deployable, or satellite connectivity only

Please insert your coverage objectives for Satellite/Deployable Coverage.

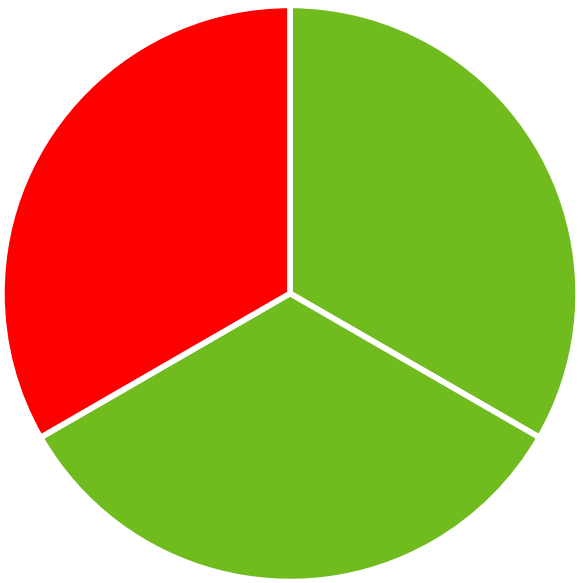
Prioritization

Approach to Prioritization

Prioritization should be based on a number of factors:

1) **User Base:** What agencies are likely users of the NPSBN?
   1) Total number of potential users
   2) Current mobile data users
   3) Available budget
   4) Impact by cost level

2) **Need:** What areas have the greatest "need" for public safety coverage?
   1) Crime data (CAD)
   2) Natural disasters
   3) Critical Infrastructure / manmade threat?
   4) Other factors?
   5) Un-served / underserved?
   6) Coverage level?



User Base Need Infrastructure

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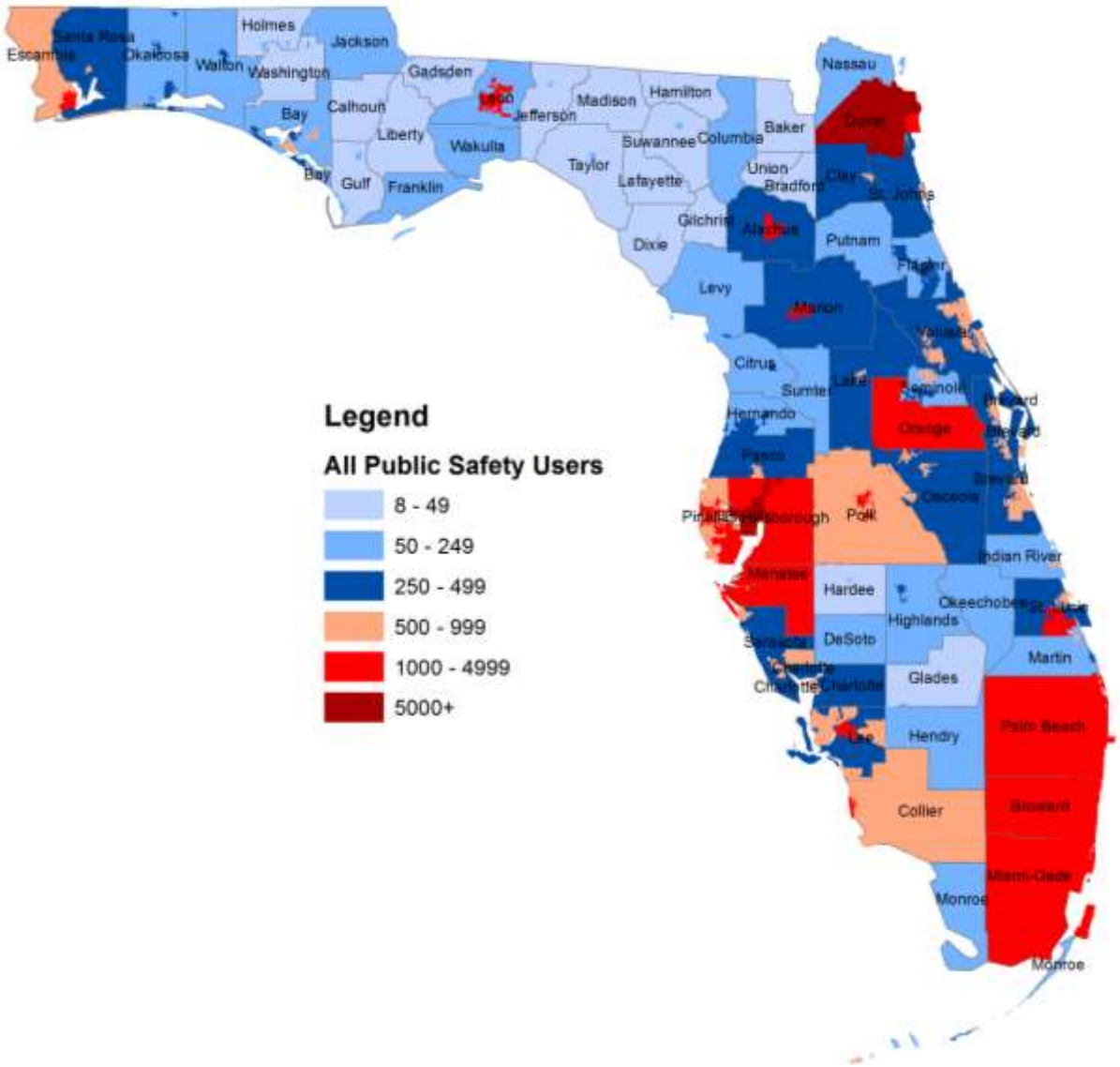
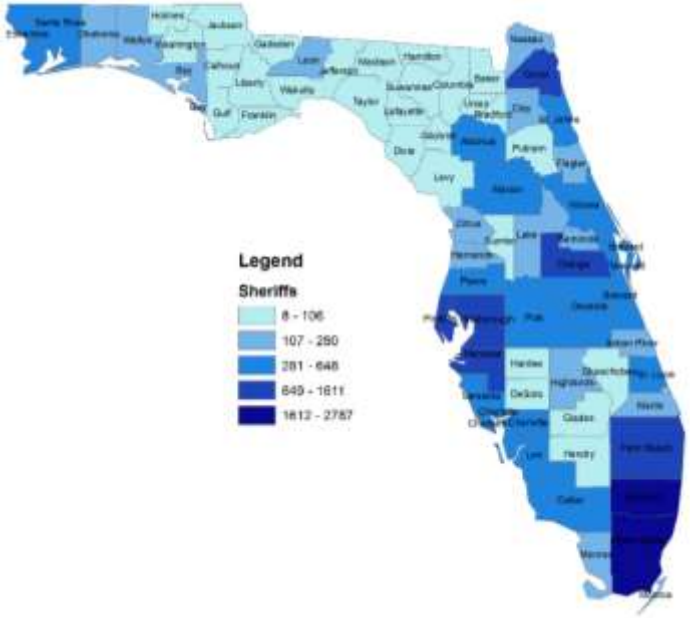
Public Safety Population (Sworn Personnel)

Agency Type	Total Agencies	Total Sworn
Police (Local Law Enforcement)	270	31,563
Sheriff (County Law Enforcement)	65	41,614
State Police (State Law Enforcement)	1	1,606
Fire Departments (All/Most Career)	240	26,725
Fire Departments (All/Most Volunteer)	239	6,395
Emergency Medical Services (partial)	73	2,981
TOTAL	**888**	**110,884**

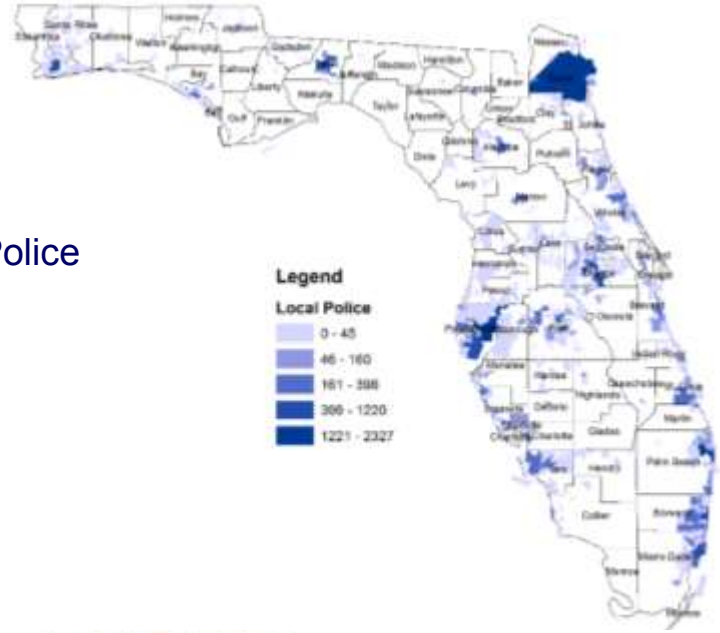


Public Safety Users

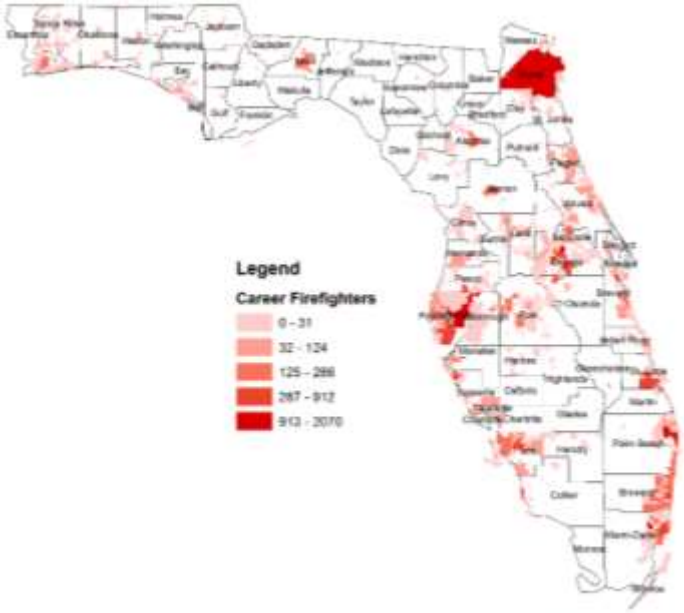
Sheriffs



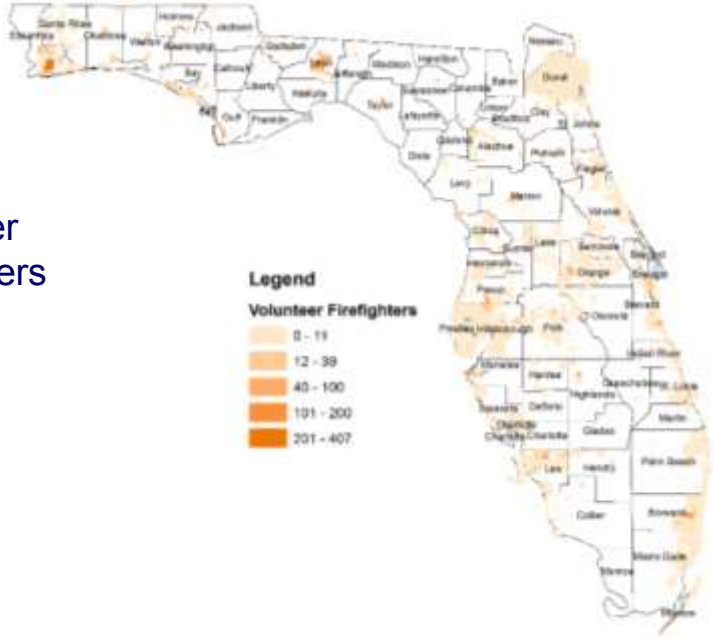
Local Police



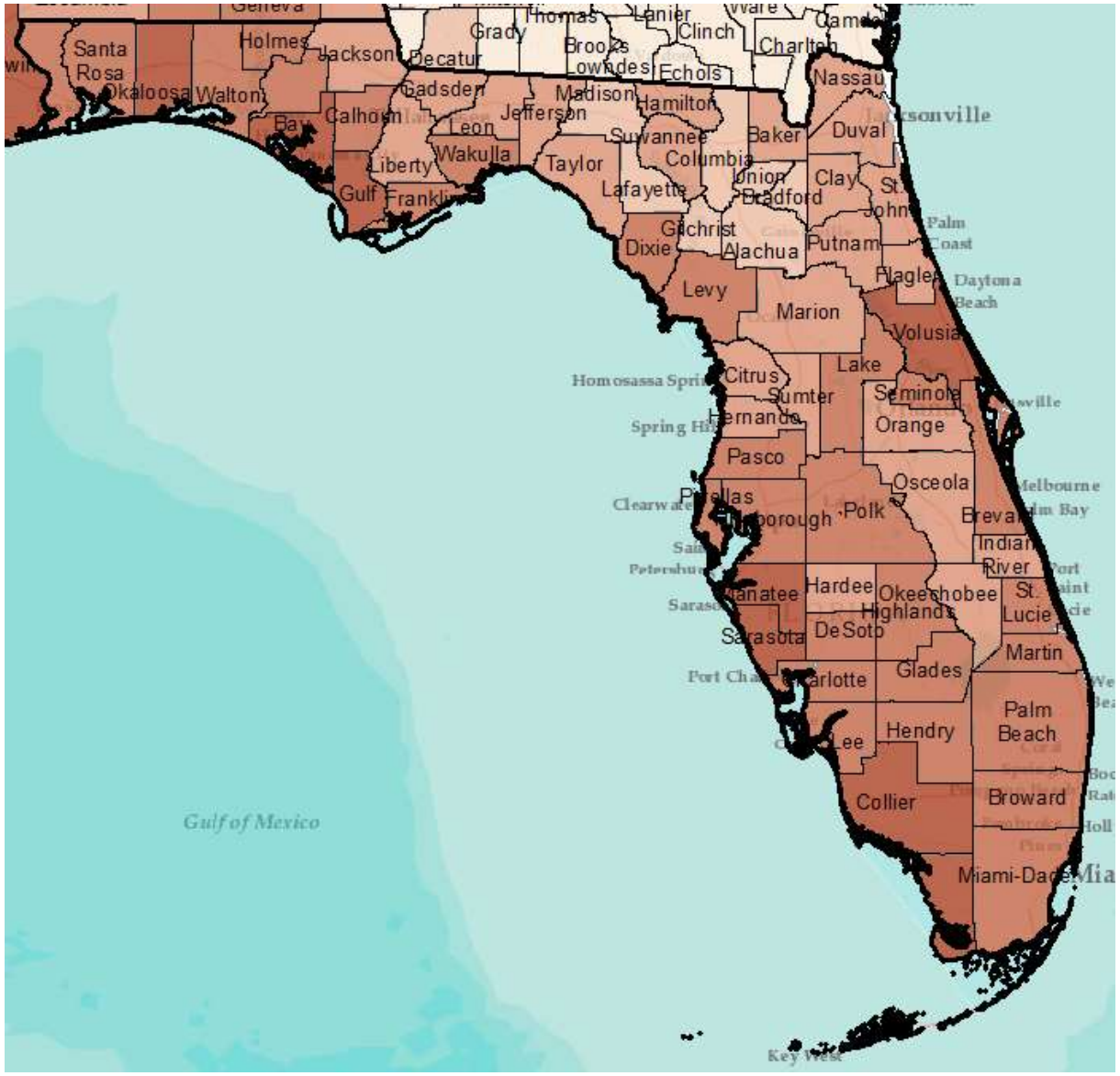
Career Firefighters



Volunteer Firefighters



FEMA Disaster Declarations 1964-2011



Disaster Declarations

- 1 - 5
- 6 - 9
- 10 - 13
- 14 - 18
- 19 - 27

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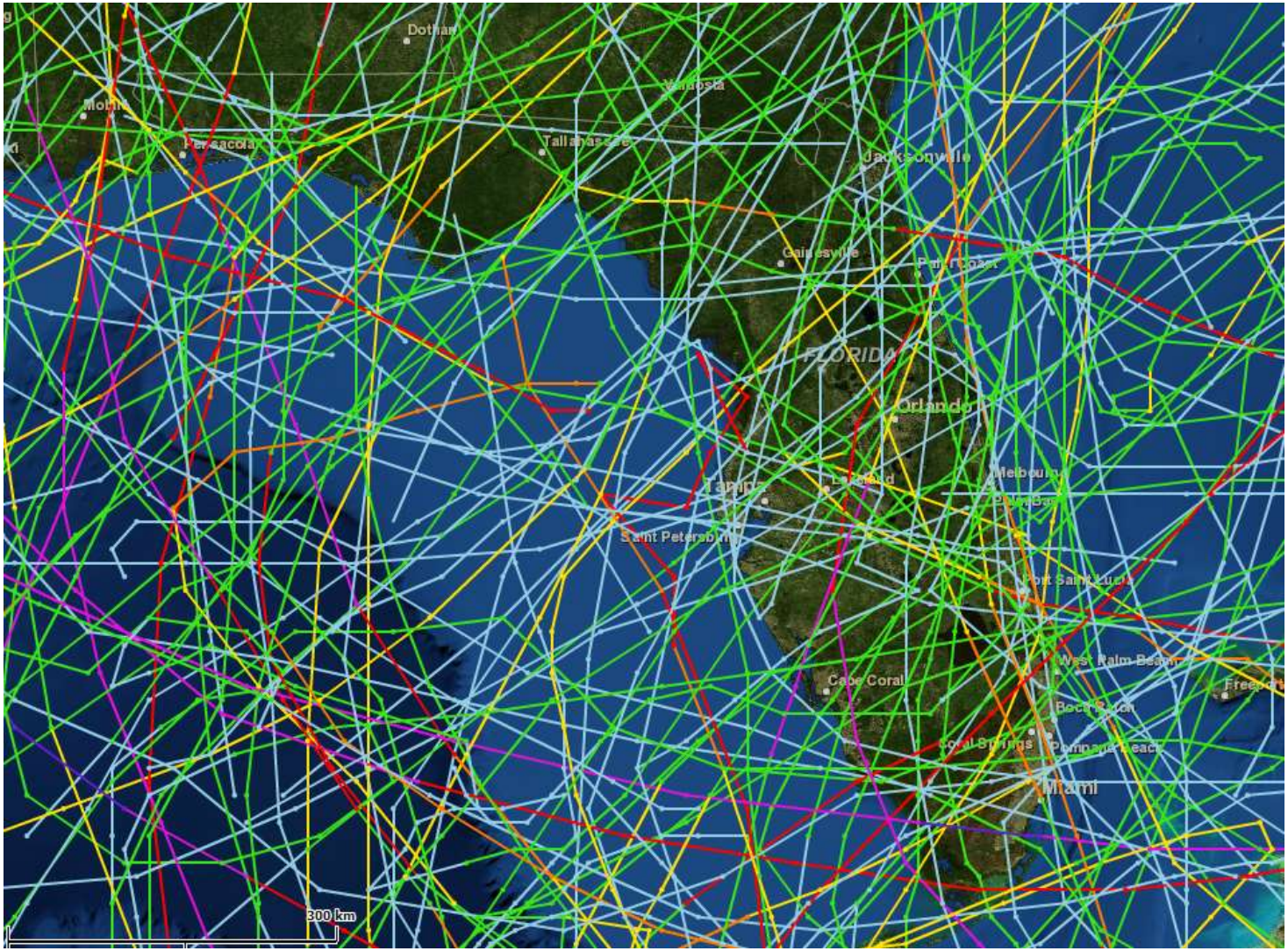
Hurricanes (1950 – 2012)



H5	H4	H3	H2	H1	TS/SS	TD/SD

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Evacuation Routes

Hurricane Evacuation Routes

- INTERSTATE HIGHWAY
- FEDERAL HIGHWAY
- STATE HIGHWAY
- STREET

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Tornado Tracks 1950-2008

Tornado Tracks 1950-2008

- F5
- F4
- F3
- F2
- F1
- F0

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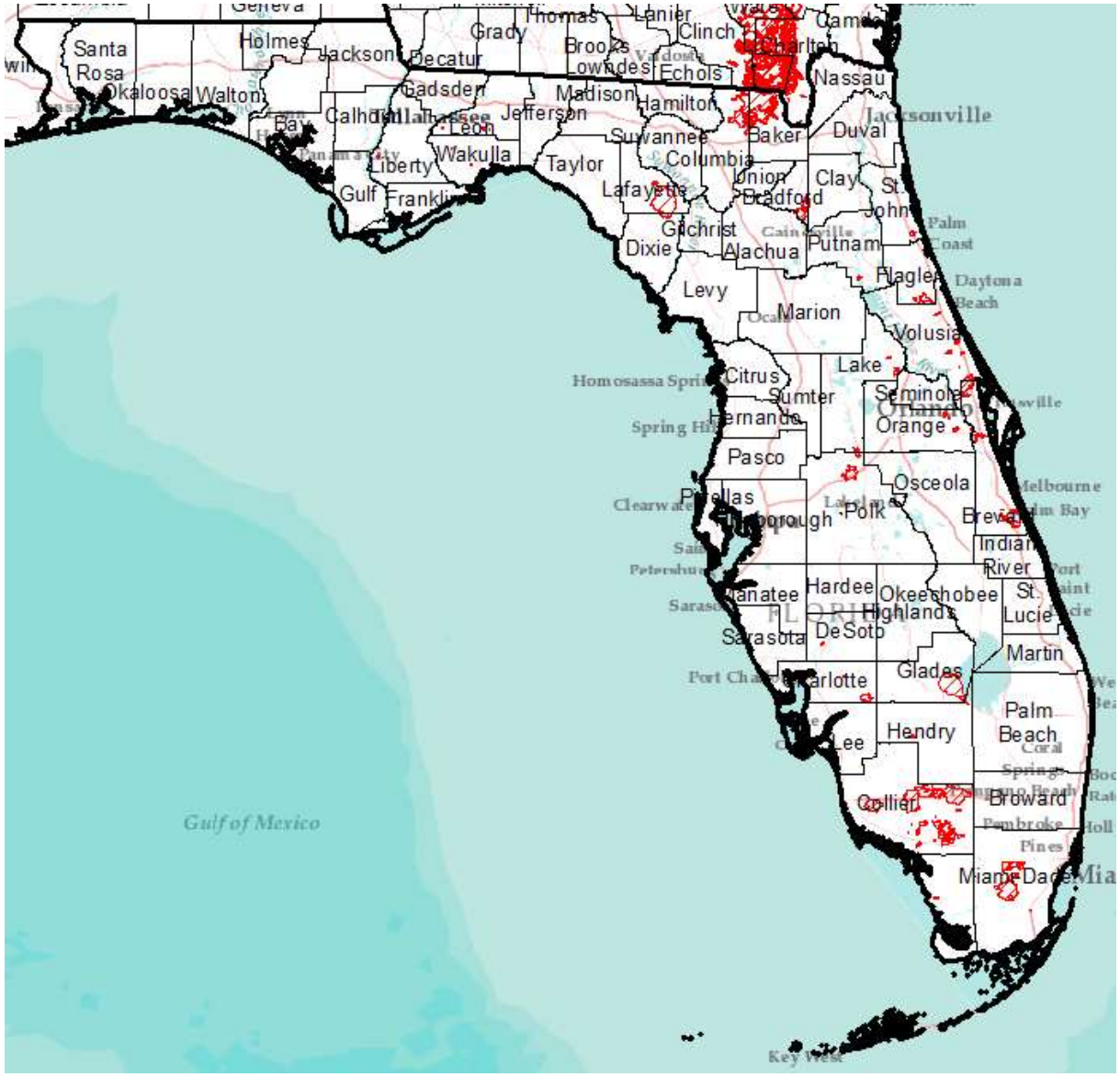
Fire and Fire Perimeters



Fire Perimeters

Landslides

Landslide Incidence and Susceptibility

- High susceptibility/moderate incidence
- High suceptibility/low incidence
- High incidence
- Moderate susceptibility/low incidence
- Moderate incidence
- Low incidence
- No Data

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Earthquakes and Seismic Hazard

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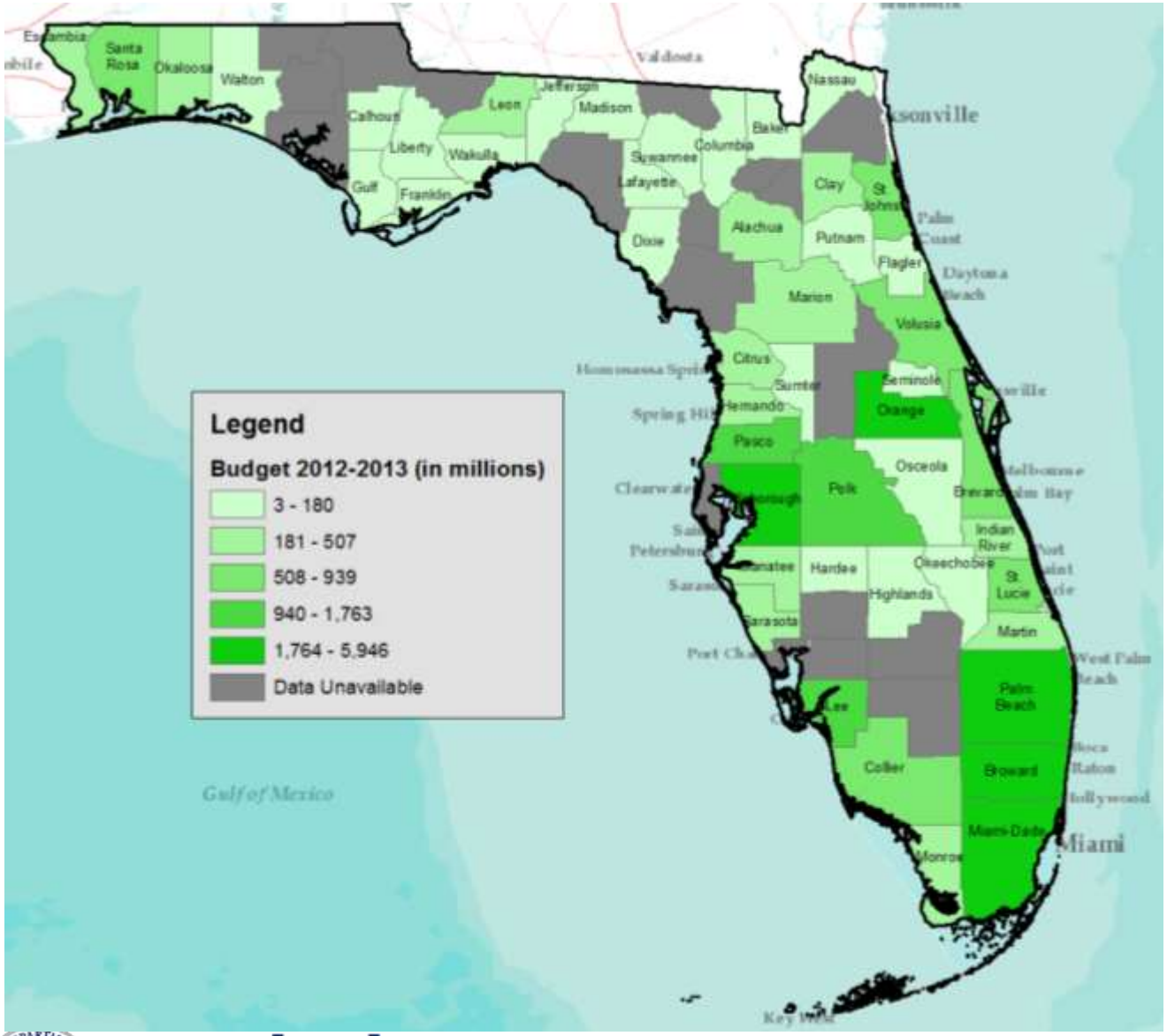
2013-2013 County Budgets



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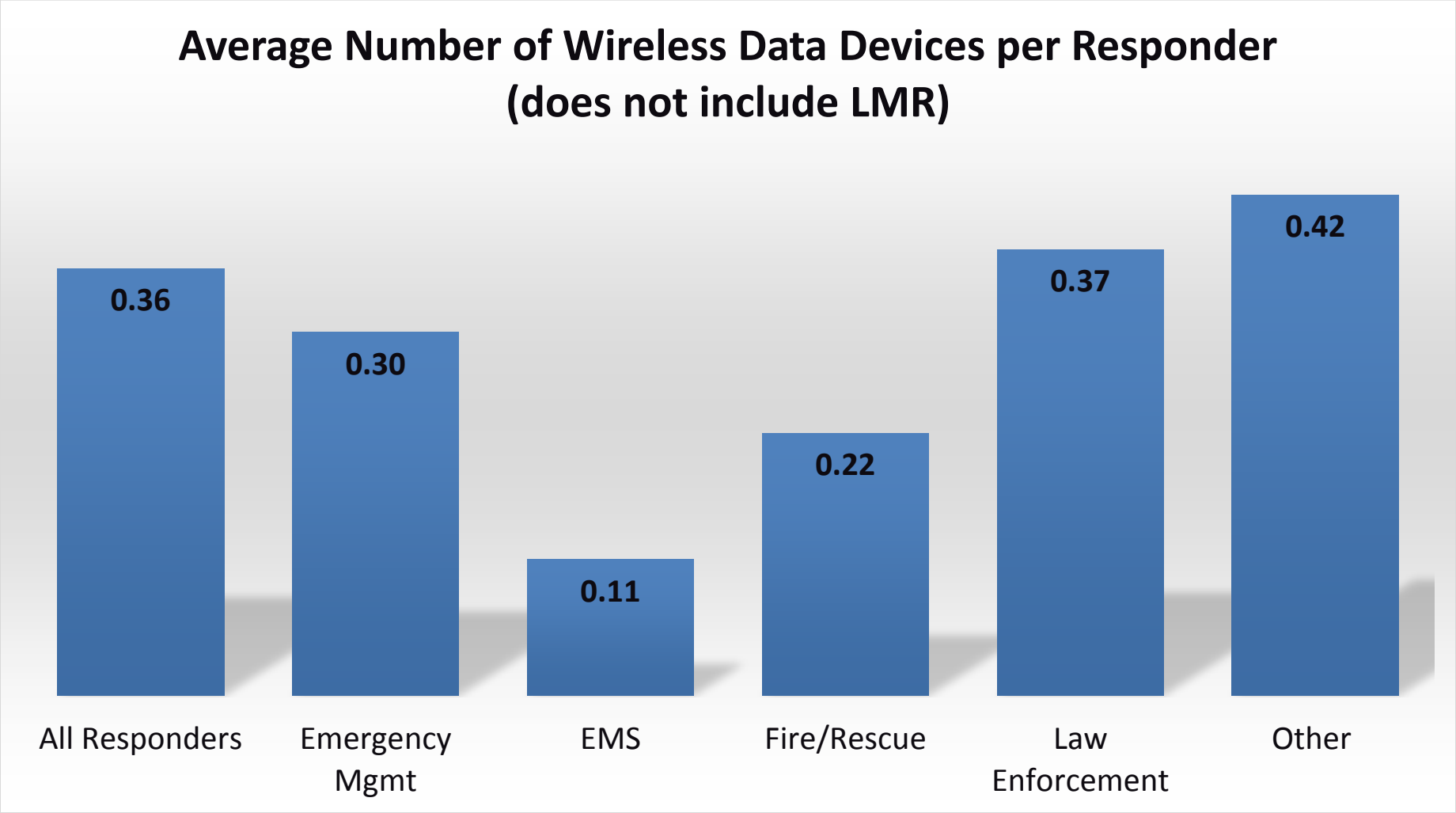
National Mobile Data Survey Results



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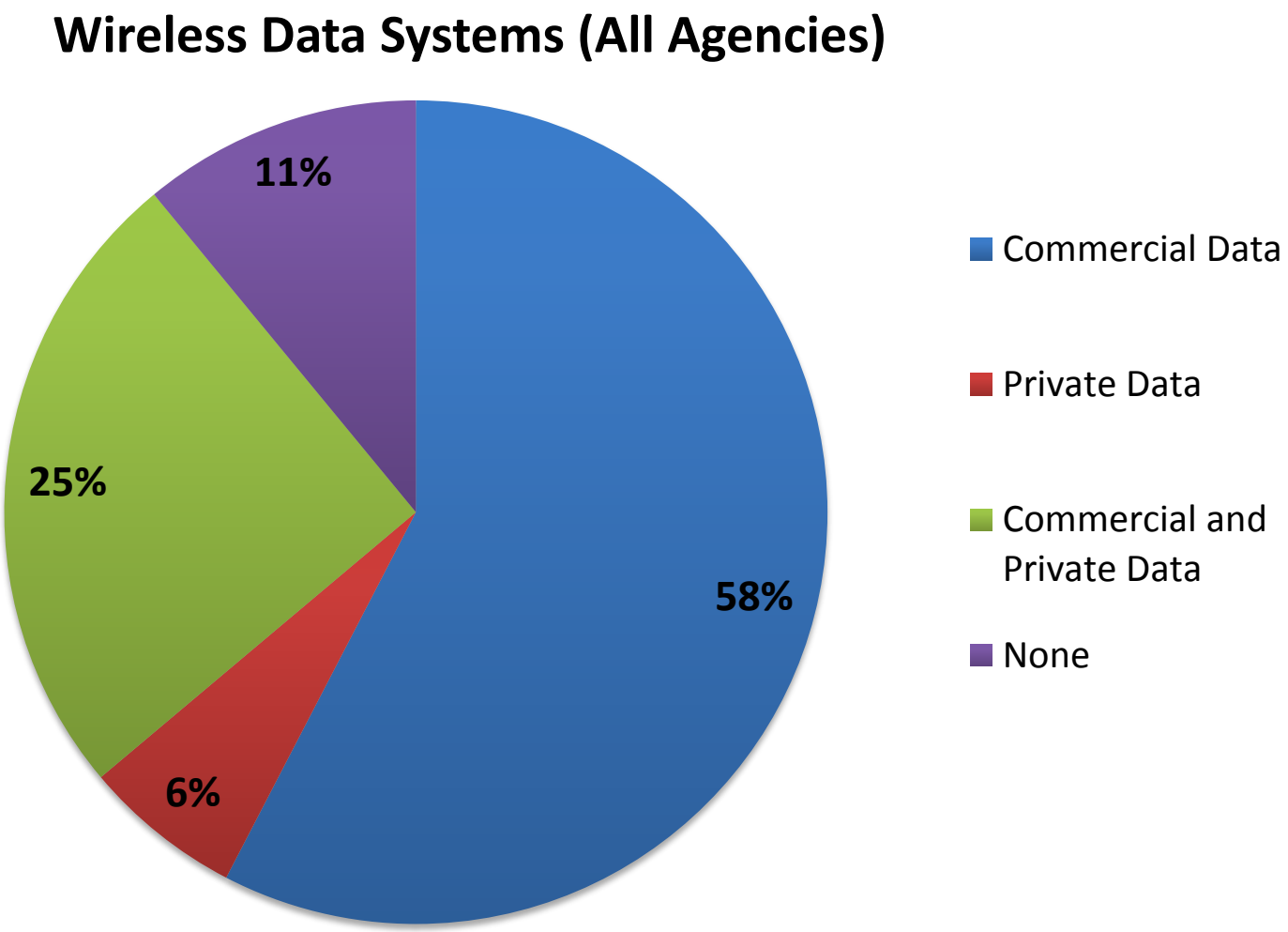
National Mobile Data Survey Results



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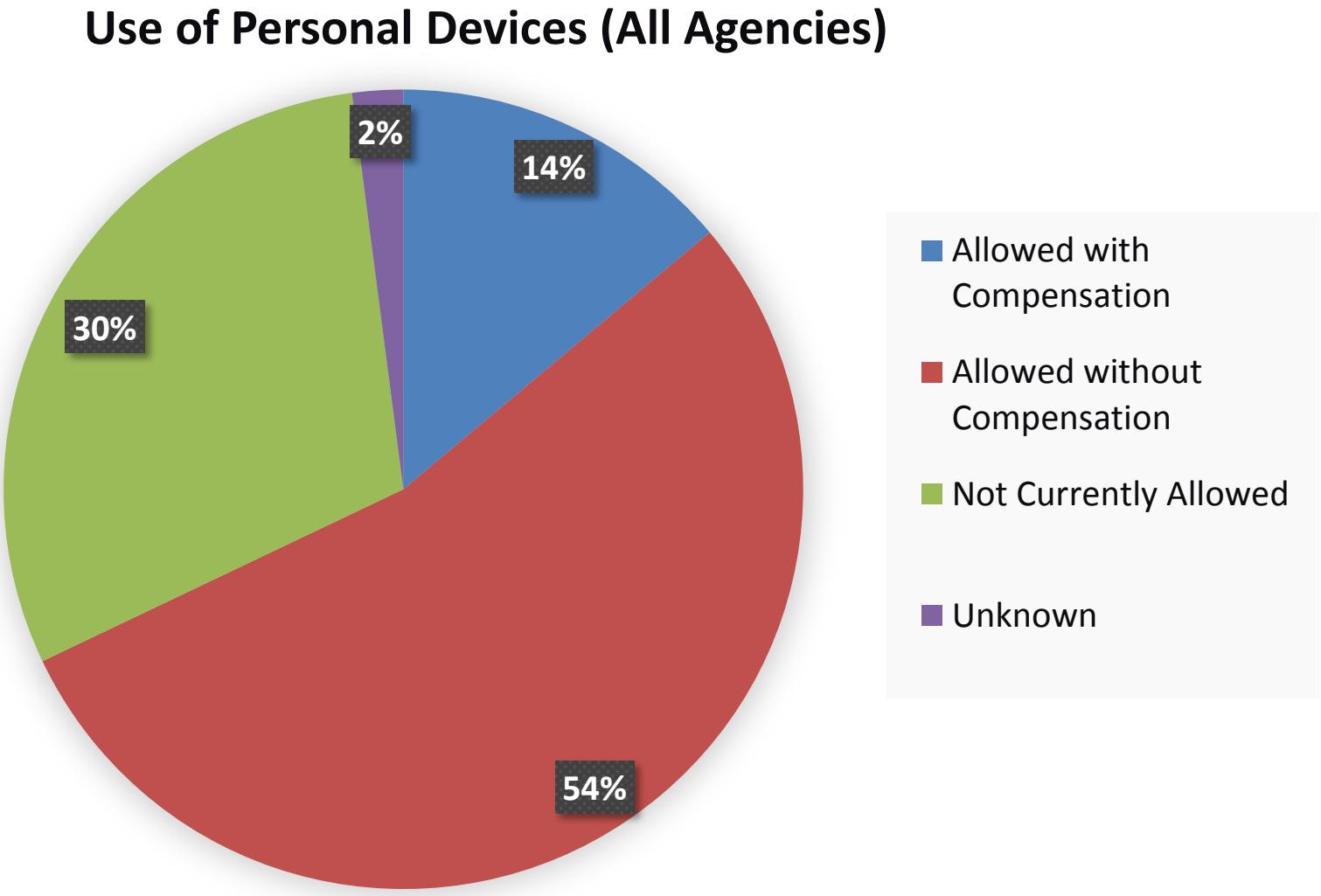
National Mobile Data Survey Results



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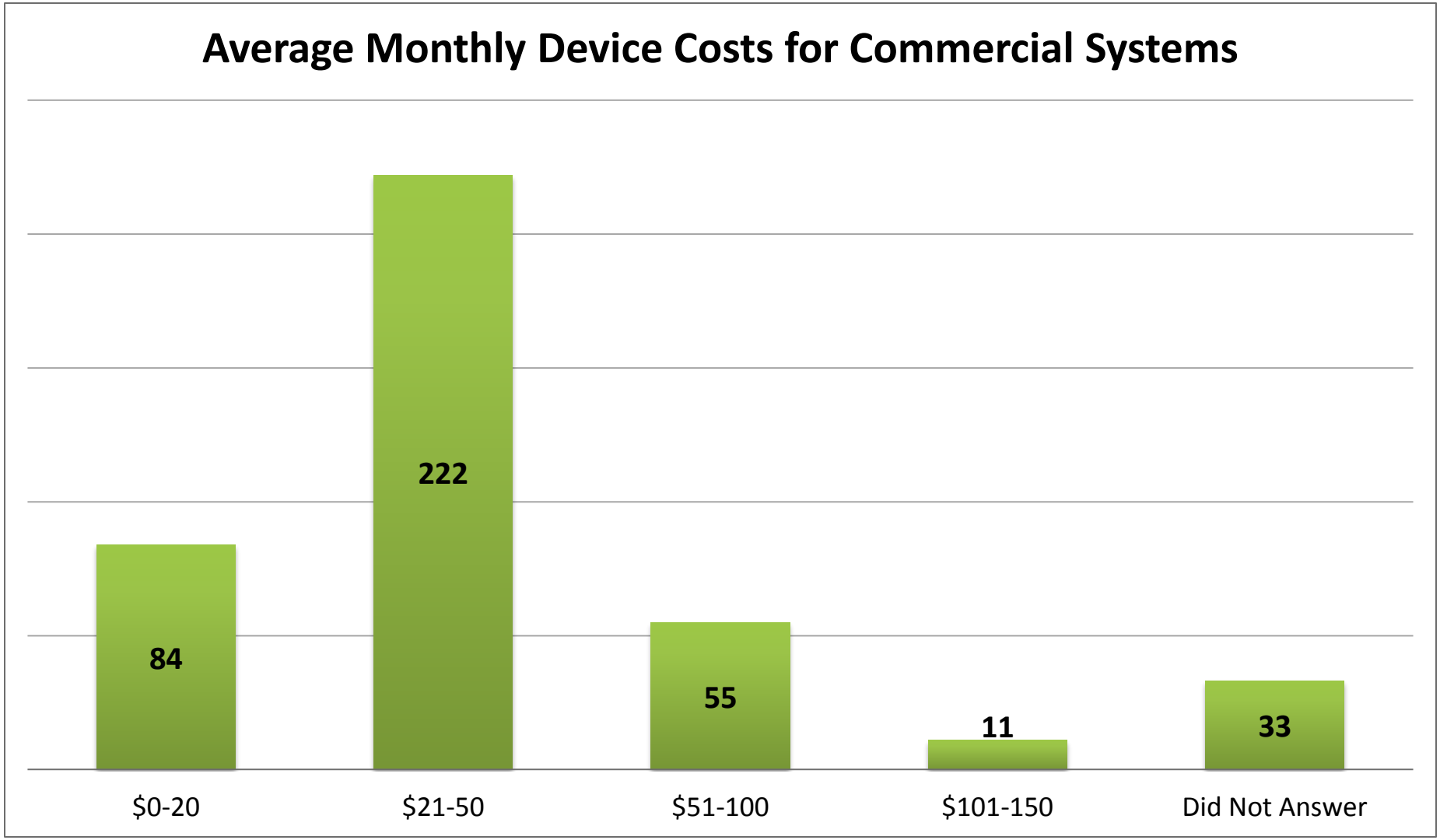
National Mobile Data Survey Results



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Florida Baseline

What are the State's priorities for each of the following phases?

Phase 1:

Please insert your priorities for Phase 1.

Phase 2:

Please insert your priorities for Phase 2.

Phase 3:

Please insert your priorities for Phase 3.

Next Steps / Discussion

Possible Next Steps

- OEC will provide updated coverage objectives with today's input
- OEC can provide all layers for Florida's continued use
- How would Florida propose to update and provide this to FirstNet for consultation?
- Are there additional layers that should be added?
  - OEC base levels?
  - State specific information?
- How will Florida collect potential user information?
  - State survey?
  - Mobile Data Survey Tool?

Homeland Security

State of Florida:

Broadband Coverage Objectives Workshop

Workshop Agenda
July 31, 2013

Department of Highway Safety and Motor Vehicles Headquarters
2900 Apalachee Parkway, Room B130
Tallahassee, FL

1000 – 1015: **Welcome/Introductions**
- Florida Participants
- OEC/ICTAP Facilitators

1015 – 1030: **Public Safety Broadband & Coverage Objectives Overview**
- Broadband / FirstNet Update
- State & Local Implementation Grant Program

1030 – 1230: **Comprehensive Coverage Objectives**
(Break Time as Appropriate)
- Defining Coverage Objectives
- Assumptions / Ground Rules
- Agency / Facility / Critical Infrastructure Objectives
- Tribal / Federal Land Objectives
- Commercial / Unserved Area Objectives
- Other?

1230 – 1330: **Lunch**

1330 – 1400: **Recap / Review of Florida Coverage Objectives**
- Process for Approval

1400 – 1445: **Prioritizing Coverage Objectives (Non-Technical)**
(Break Time as Appropriate)
- Users
- Potential for Adoption (Cost)
- Interest / Involvement
- Other?

1445 – 1500: **Next Steps**

Exhibit 36

Minutes – Florida Broadband Coverage Workshop

Wednesday, July 31, 2013 10:00 AM – 3:00 PM Eastern	Tallahassee, FL	Teleconference

FACILITORS	Dick Tinney, Homeland Security Brett Boston, BaseCamp Keil Green, Facilitator
ATTENDEES	**IN-ATTENDANCE** 1. Director Julie Jones, DHSMV 2. William Stoye, Emergency Management 3. John Ford, DMS 4. David Nye, University of Florida 5. Brett Boston, BaseCamp-Group Solutions 6. Penny Kincannon, FDLE 7. Richard Butgeriet, DMS 8. Chuck Lang, AT&T 9. Tim Lewis, Florida Power & Light 10. Lee Moreno, Motorola 11. Jeff Purdy, Jacobs Engineering 12. Jay Sexton, Georgia Tech Research Inst. 13. Jennifer Sims, Alcatel-Lucent 14. Brian Whaley, Motorola 15. John Woodard, Dept. of Corrections 16. Major Steve Williams, FHP 17. Major Ryan Burchnell, FHP 18. Dean Fox, DHSMV Grant Manager 19. Kathy Cruce, DHSMV Grant Specialist **ON-LINE** 20. Bobby Brown, Seminole Tribe 21. Cindy Cast, Miami-Dade County 22. Rob Fortner, Bay County SO 23. Foster Harbin, Harris Corporation 24. Lynn Latham, Gulf Power 25. Rizwan M. Mir, Alcatel-Lucent 26. Terry Nehring, City of Tampa 27. Rich Steiner, Orange County PS **WALK-INS** 28. Tim Barrentine, RCCommunications 29. Christopher Campbell, CGI, Inc. 30. Tewfik Doumi, Alcatel-Lucent 31. Tabitha Hunter, DMS 32. Robert Little, Emergency Management 33. Tom Madden, Verizon 34. Peter Pardaris, Alcatel-Lucent 35. Greg Prescott, DMS 36. Carlton Wells, DMS 37. Doug Whitfield , DMS
OBJECTIVES	• Public Safety Broadband & Coverage Objectives Overview • Comprehensive Coverage Objectives • Recap/Review of Florida Coverage Objectives • Prioritizing Coverage Objectives (Non-Technical) • Next Steps
MINUTES	1. Welcome/Introductions by Dick Tenney of Homeland Security, Brett Boston and Facilitator Keil Green 2. Workshop participants introduced themselves (In-room and on-line) 3. Minutes: There were no minutes available from the Memphis meeting of June 26 & 27, 2013. 4. Homeland Security's Office of Emergency Communications provided background information on the technical assistance support for this public safety broadband project, to include: a. Quick overview of OEC's coordination with FirstNet b. Goal to make data mission critical for public safety while considering broadband coverage, congestion, site outage, etc. c. Upgrading devices with BAND 14 receiver to include public safety

5. FirstNet is consulting with states in Phase I concerning user requirements for its design of FirstNet and Phase II will cover data requirement collection. RFI – RFP will be used to produce a state plan within 90 days for either opt/in and participating in the NPSBN deployment or opt/out and build their own individual State network. If opting out, the state will have six months to provide a plan build-out. Either way, the state will still need to communicate with the national network. Issues to be considered in making this decision are: What is the state's return on investments and what can be provided for our citizens? What would be the benefit to not accepting monies? Even if the state opts out, there will be a cost to the state for features in the basic coverage. Coverage and user discussions are needed as FirstNet will be trying to decide what the states currently have and what they need to provide broadband coverage. NTIA needs a business plan to ensure uniformity.

6. Florida Department of Management Services (DMS) will be providing the state's broadband map to be included with the NTIA information.

7. **Coverage Objectives:** Baseline coverage was provided for a starting point for Florida's consideration on what the state needs. This coverage should include: in-building coverage, partial in-building, vehicular modem, satellite/deployable coverage (hurricanes, etc.). A discussion of maritime coverage is to be considered with Florida jurisdiction covering 200 miles around the state's costal perimeter. Current coverage is 20 to 25 miles in receiving but not necessarily transmitting. Where do we need reliable coverage and at a need minimum data rate? A lower reliability and/or minimum data rate would result in greater coverage from the same site. Non-critical voice is a part of the package that the federal government is providing. A voice-over LTE is available but is not the best solution. Voice over service was discussed. Voice over is not mission critical in Florida – data is. How many users are in a cell (micro/macro cells) to get the performance out of the network? With public safety, the state is required to manage our response by a governing structure on our response. Coverage in shelters should be considered in Florida. Don't just consider who is living in an area, but consider large events expanding the volume of people, such as, sport, conventions, etc.

8. **Florida Baseline:** Existing data line coverage for in-building and outside of building will help in deciding what level of coverage is needed. The City of Tampa wants the same type of coverage they presently have. Instead of having overall (everywhere) coverage, you may wish to consider adding in-building coverage before you considering LTE coverage. What would be acceptable – satellite and other deployable assets? North Florida needs dependable coverage everywhere whether it is satellite or terrestrial. FHP has embedded air cards with external antennae. In-building coverage is not guaranteed unless you put in-building boosters. Director Jones reminded the group that our perspective should consider emergency needs with data (EKGs, etc. for EMTs, Firefighters, etc.) not just law enforcement. Networks may not be "mission critical" but data for field personnel make it mission critical. Expectation in designing the systems must be considered for mission critical issues especially in counties that do not have full voice/data coverage. Issues with harden coverage and what is available for data coverage is out there (state, county, city requirements must be considered in the design). At what level is Florida going to want for low or high density level of the population? After coverage, consider potential users and how are they going to use the system. Do you have the service today? Do you have in-building coverage now? Cost factors to be considered (too expensive)? Just list your requirements to meet the capacity and coverage needs. Do we need to look at where the high commercial sites are located that we do not need to lose data transmission? Not necessarily but rather public safety priority. Will FirstNet be dual band to include commercial besides public safety? The network will be designed for public safety first and what the users need it for today. This is an independent public safety network (bandwidth). But, they may go to a commercial entity to add to a tower at a cost.

9. **Prioritization (User Base and their Needs**) : The Public Safety Population (sworn

personnel) includes in their number of users the police, sheriff, FHP, FDLE, fire department, and EMS. Law enforcement is the largest user. Currently, 54% of these use their own personal devices (cell phones, etc.) which could present legal issue. The average monthly cost is around $21.50. On- line with OEC there is a breakdown of survey data info on mobile data use. Look at your current state contracts to see what is available now and what the state is using. Consider your coverage needs and prioritization. Miami/Dade is not going to move to another platform unless they can be provided more than what they presently have (in and out-building, voice, data). Considering Intel-level security, we need willingness to secure the data and set up an appropriate vehicle to move there and identify what we need. Set up the vehicle on the front end to do that. Commercial is not going to know where the coverage for security works and where it does not as well as the time of year based on foliage. Statutory confidentially is important and data verification.

10. **Florida Baseline - What are the phases this group is willing to accomplish (do)?** How does the State of Florida want to accomplish (operational concept) and then see if it is compatible with the data coverage. If LMR is critical then the performance requirements should be critical and see what the commercial side can provide. Consider the present users and future users to see how the operational concept can be enhanced. In Phase I, the global guidance cannot be identified with knowing user needs. Go to agencies with data and other resources available, get with the technical committee and then see what our options are. (Julie Jones) Get the data and use the methodology to ensure what questions need to be asked and start thinking. On the user side, what can the state do? Focus on agencies and asked the pertinent questions (five areas) that were listed on the screen but not included in the handout. Get to right people, give them a specific return date and give them feedback for future sub-surveys. State contract - How is the coverage? Mobile users - Do you use data or state contract or private system? Considering User/administration/ finance/budget: User or coverage? Which is first? Do you parallel? Micro targeted for the survey – coverage and appliance rather than contract administrators. The state contract is using a ceiling price for convenience (no bid, etc.). Is the contract surrounded by what towers are there? We are not worrying about the infrastructure; FloridaNet's focus is on a visionary concept - Where we want to get to is in Phase II**.**

11. **Currently we only want to know users and needs.** By surveying the correct people, we will know what the state needs. Normal operations coverage for a dedicated public safety network that has the same capabilities to satisfy needs and there will be a cost for upgrades. Agencies need to advise where they have a need to cover the gaps that are missing in their network coverage. DMS has a tool to survey the users. Does the state want to know what the entities currently have or what they would want to have? You have to look at both, but ideally it would be the later. We are to identify what our current needs are and what we need to have in the future. What do you want and what do you need in the future? Our goal is to deliver a better product State what we got, this is what we need and if you can provide for our needs, we can have a better product. Over an eight to ten year period, what comes after 4G – 5G? They have a visionary approach to this project. Go for the whole enchilada and go backwards from that. We cannot set up budgetary needs; we have to set up for a business model only. We have to take a direct approach on the government's model. We will probably get a FirstNet design with a commercial infrastructure. The network is going to be built around the spectrum.

    We need an existing coverage model with gaps and define coverage objectives for Florida. Objectives 1 – 9. Then get survey underway. It would be interesting to have a bookend discussion of the state's needs (the haves and have-nots) to give to FirstNet.

12. Need feedback on basic information derived from this workshop through BaseCamp.
13. Public/Private team will be getting together to begin working on issues.
14. Brett Boston will be modifying BaseCamp to use an interactive document to respond to users of BaseCamp.
15. Ne**xt Steps** (upon receipt of SLIGP-State and Local Implementation Grant Program)
    - **(1) Objective 1: Develop existing coverage model with gaps and types of coverage.**
    - (2) Establish coverage technical working group
    - (3) Determine data repository and access guidelines
    - (4) Seek input from team on model gaps, discrepancies, and points of concern
    - (5) Provide coverage map access for ongoing reference to working groups
    - (6) Data verification
    - **(7) Objective 2: Define coverage objectives for Florida – short-term, medium-term, long-term**
    - (8) Based on the questions in this workshop, determine the specific coverage needs of FirstNet
    - (9) Utilize the state goals of FN as a starting point for defining Florida's needs
    - **(10) Objective 3: Prioritize Coverage-types and Needs**
    - **(11) Objective 4: Develop "draft business case" for defined needs and priorities**
    - **(12) Objective 5: Coordinate with potential users and gather needs to the draft model**
    - **(13) Objective 6: Create Final Draft Model**
    - **(14) Objective 7: Re-share model with potential users and begin "MOA discussions"**
    - **(15) Objective 8: Present Model to FirstNet and coordinate expectations**
    - **(16) Objective 9: Determine Opt-in/Opt-out rationale**
    - **(17) Objective 10: Get survey mobile data survey underway, beginning with existing State contract data.**
16. Adjourn Meeting

The meeting was adjourned by: Brett Boston

FloridaNet Broadband Coverage Workshop
(Attendees)
Tallahassee, Florida
Wednesday, July 31, 2013

1. Director Julie Jones, DHSMV
2. William Stoye, Emergency Management
3. John Ford, DMS
4. David Nye, University of Florida
5. Bobby Brown, Seminole Tribe
6. Jason Allison, Governor's Office
7. Colin Denney, Verizon
8. Gregory Holcomb, Lake County PS
9. Sherry Martin, Employment Opportunity
10. Mike McHargue, Dept. of Health
11. Amy Mercer, FPCA
12. Mark Perez, FDLE
13. Mike Sole, Florida Power & Light
14. Major Steve Williams, FHP
15. Major Ryan Burchnell. FHP
16. Dean Fox, DHSMV Grant Manager
17. Penny Kincannon, FDLE
18. Chuck Lang, AT&T
19. Tim Lewis, Florida Power & Light
20. Lee Moreno, Motorola
21. Jeff Purdy, Jacobs Engineering
22. Jay Sexton, Georgia Tech Research Inst.
23. Jennifer Sims, Alcatel-Lucent
24. Brian Whaley, Motorola
25. John Woodard, Dept. of Corrections
26. Cindy Cast, Miami-Dade IT
27. Rob Fortner, Bay County SO
28. Foster Harbin, Harris Corporation
29. Lynn Latham, Gulf Power
30. Rizwan M. Mir, Alcatel-Lucent
31. Terry Nehring, City of Tampa
32. Rich Steiner, Orange County PS
33. David Brand, FSA
34. Bob Finney, Collier Co. SO
35. Greg Gibson, Florida Wildlife Commission
36. Michael Hardiman, Alcatel-Lucent
37. Dennis Jones, Tallahassee PD
38. Linda McWhorter, Emergency Management
39. Sandy Meyer, Emergency Management
40. Richard Nelson, Florida Power & Light
41. Major Brett Norton, FWC Law Enforcement
42. Norm Poe, City of Orlando
43. Karl Rasmussen, Governor's Office
43. Nick Simoncini, FDLE
44. Danny Thomas, AT&T
45. Major Mark Trammell, Dept Financial Services
46. Ray Weeks, Miccosukee Tribe
47. Tal Whiddon, Williams Comm.
48. Kathy Cruce, DHSMV Grant Assistant

Exhibit 37

Overview of National Public Safety Broadband Network, formally known as D-Block, now called

FirstNet

February 2014

Introduction to FirstNet

- FirstNet will be the first nationwide, high-speed wireless, broadband data network dedicated to public safety.
- This new network will be public safety-grade, providing access to applications and coverage where public safety needs it most.
- FloridaNet will be the state version of this network and is expected to provide an interoperable, state-wide, public safety data network linking public safety agencies across the state.
- Agencies benefiting from FloridaNet will likely include law enforcement, emergency management, fire service, public works, health, Tribal public safety agencies, emergency medical services, and others.

Introduction to FirstNet

- The first high-speed wireless, broadband network dedicated to public safety
- Ensures seamless communication for public safety use
- Dedicated network was a recommendation of the 9/11 Commission (D-Block)
- U.S. Dept. of Commerce is lead federal agency
- Congress has allocated $7 Billion for the build-out
- 15 member FirstNet Board created to run process within Dept. of Commerce.
- Florida has been awarded $4.9 Million through a State and Local Implementation Grant. Grants are to assist states with planning efforts.

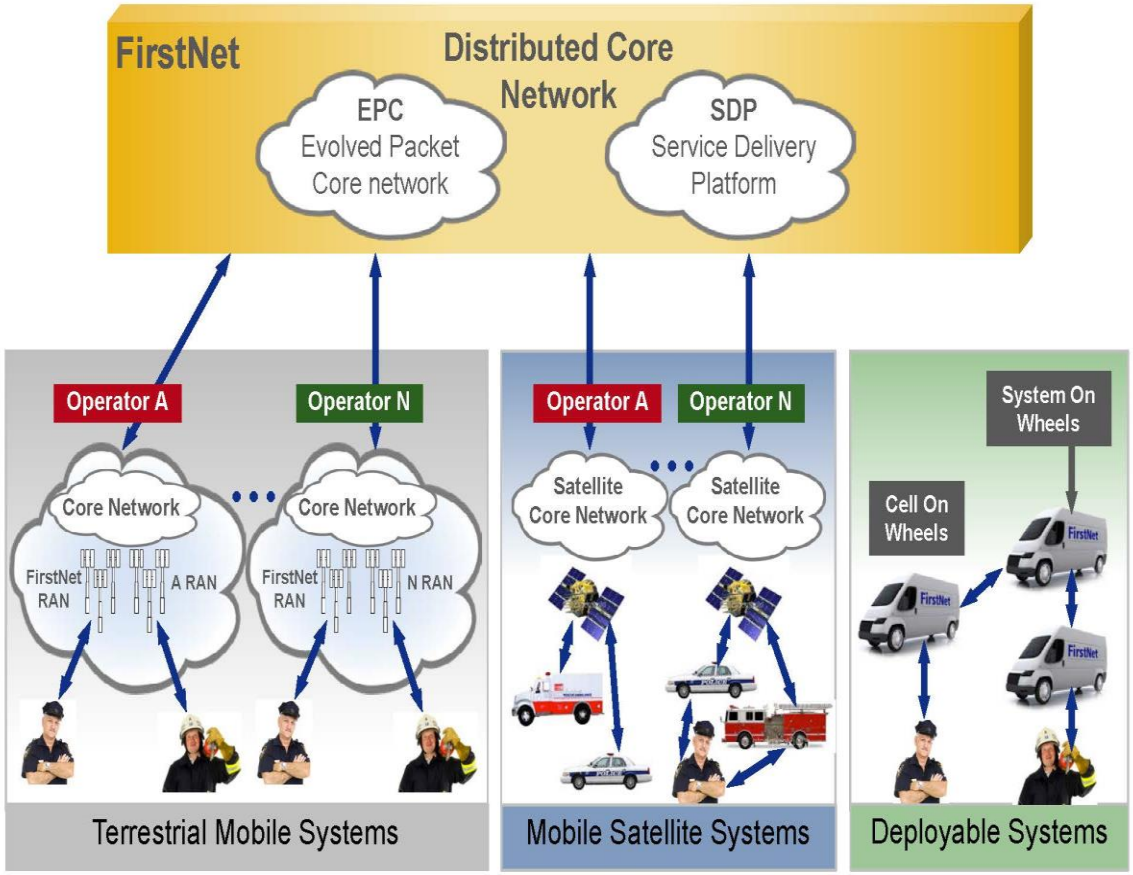
What Will Be Possible with FirstNet?

- FirstNet will be used to send data, video, images and texts as well as make non-mission critical voice calls.
- FirstNet will not replace Florida's Land Mobile Radio System (e.g. SLERS).
- Users will get larger bandwidth and faster access to information they need to meet their mission.
- Unlike commercial wireless networks, FirstNet will allow for priority access among public safety users.
- New applications, appliances and technologies for first responders are developed or will be developed

LTE 101

- Long-Term Evolution = Worldwide wireless broadband standard
- Same standard used by Verizon, AT&T, and most other carriers
- Bigger market = better technology & price (compare to P25)
- Data, NOT mission-critical voice (at least for a long while)
- Will not replace LMR in the near-to-medium term
- Three parts
  - Core – owned run by FirstNet
  - Devices – responsibility of agencies/users
  - Broadband Access Network (BAN) – opt in vs. op

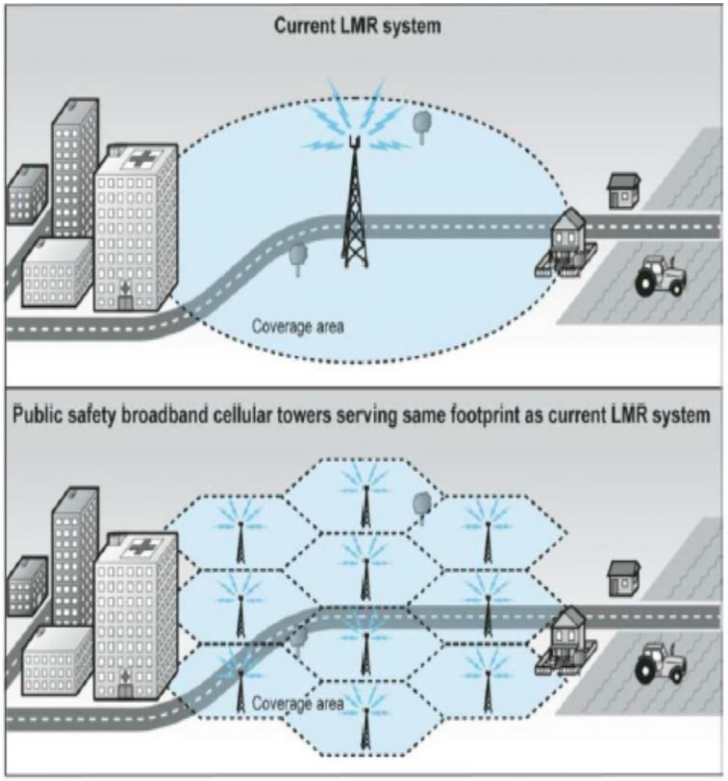
Possible FirstNet Architecture



Devices

LTE vs. LMR

- **LTE – less coverage per tower than LMR**
- **LTE – larger antennas on the tower than LMR**
- **Capacity increase**
  - LMR – add frequencies
  - LTE – add sites
- **Performance vs. distance**
  - LMR – you can understand or you can't
  - LTE – data rates drop as you get farther from tower



Source: GAO.

Other Issues

- **Apps**
  - Will open possibilities from creative people
  - Will be able to access general Internet as required
- **Profiles**
  - Profile should reside in network, not on device
  - Profile can include priorities, skills, etc.
- **Hardening**
  - Florida hardening (hurricanes) will be different than California (earthquakes)
- **Cybersecurity**
  - Must protect public safety data!
  - Large focus from Federal level

NO COMMERCIAL PARALLEL TO FIRSTNET

FIRSTNET

- **Created by law**
- $2 billion funded **without plan, board** or management team
- **Mandated** Initiatives
- Empowers states to **opt-in or opt-out**
- **Geographic coverage requirements**
- **Public safety economics** coupled with finite number of users
- Start-up **constrained by government realities; e.g.,** hiring process, procurement process , pay scale.

COMMERCIAL

- **Created by market need**
- Funding dependent on **plan and management experience**
- Time-to- market and **customer driven initiatives**
- **Defined competitive playing field** to gain customers
- **Capacity** and financially viable user coverage
- **Entrepreneurial** spirit, energy and incentive alignment

Key Understandings

VISION & GUIDING PRINCIPLES

FirstNet will provide dedicated spectrum, a single technology and funding to create a nationwide network dedicated to public safety.

Public Safety Effectiveness

- Dynamic Priority Access
- Force Multiplier

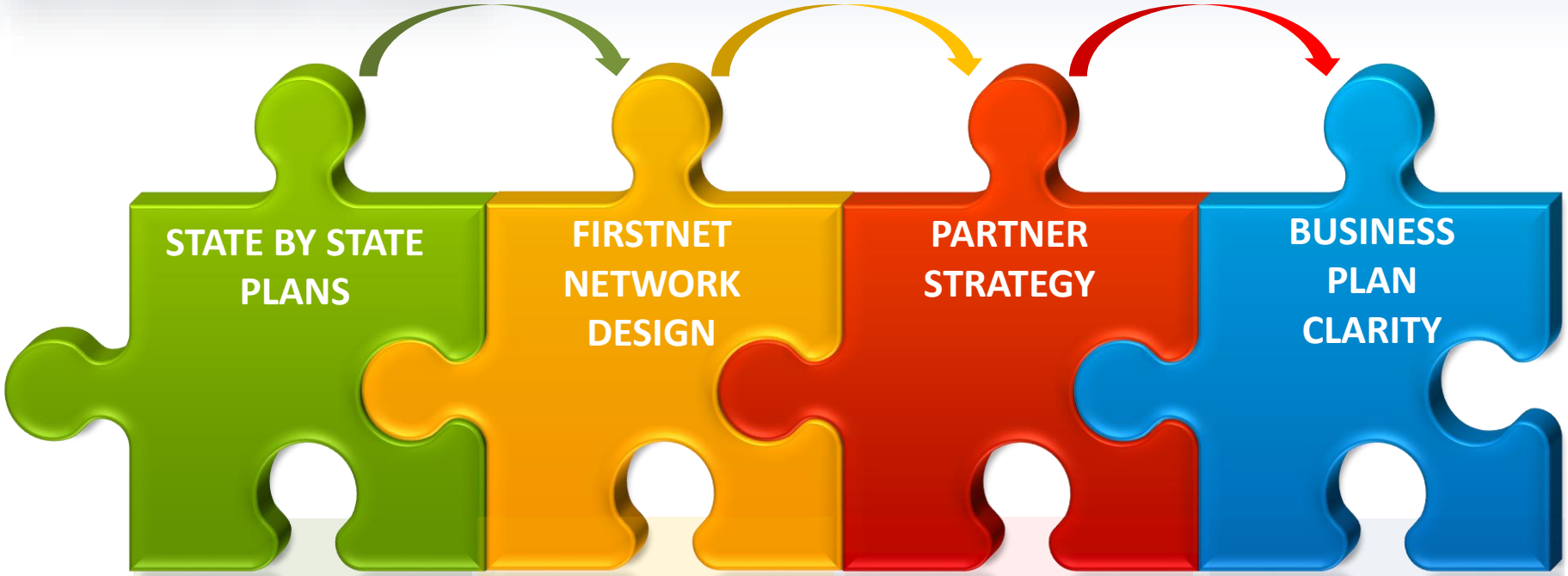
Public Safety Grade

- Reliable
- Hardened
- Redundant
- Security

Public Safety Applications

- 4G data for video and web
- Non mission-critical voice

BUSINESS PLAN



1. Usable assets
2. Coverage needs
3. Number of users
4. Current partners
5. Feature, equip pricing programs

1. Public Safety First
2. Manage the Core
3. Integrate State RANs
4. Mobility, Security, Redundancy
5. Priority, Pre-emption Local Control

1. Value contribution
2. Bring innovation
3. Enables PS design
4. State relationships
5. Diversified Portfolio of partnerships

1. Govt time horizons
2. Know constraints
3. Build momentum
4. Align build with available funding
5. Understand public safety economics

MULTIPLE PARTNERSHIPS

Strong Partnerships are important ensure optimal value creation for FirstNet

Wireless Network Operator Partner (s)

Supplier, Infrastructure Owner/Equity Investment Partner(s)

Federal

State

Local

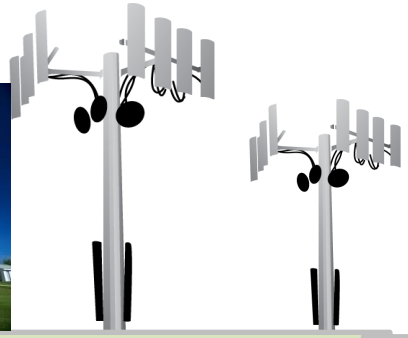
FirstNet, Federal, State, Stakeholder Asset Partner(s)

- Fulfill Public Safety Requirements
- Value Contribution
- Achieve Nationwide Interoperability and Coverage
- Control and Governance
- Contractual Terms & Pricing

Preferred path(s)

GEOGRAPHIC COVERAGE PRIORITY

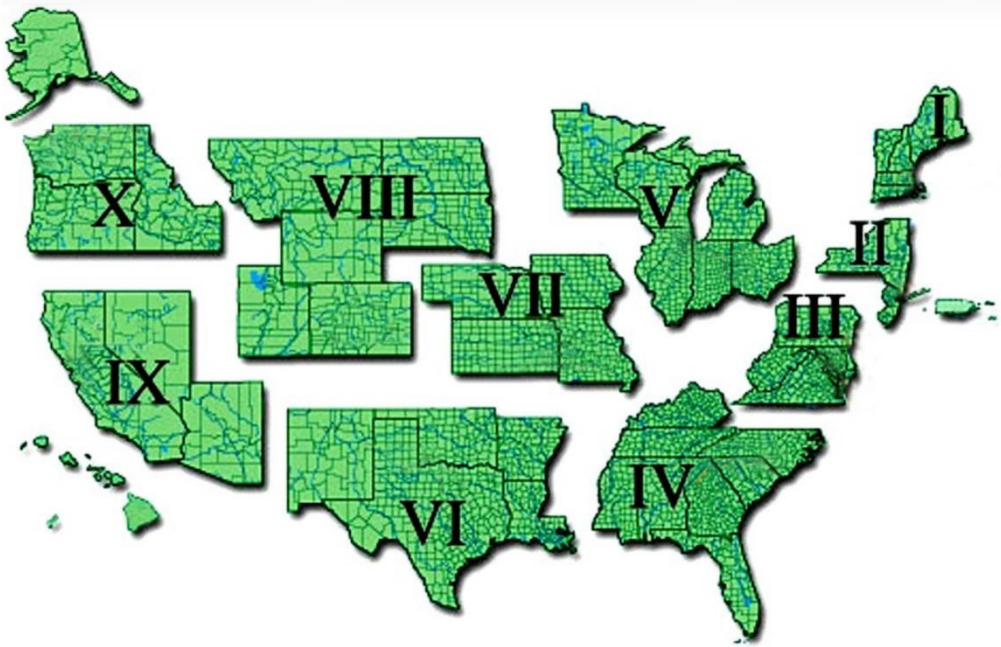
Multiple network coverage solutions operating across 5 distinct geographic categories



Wilderness	Rural	Suburban	Urban	Dense Urban
27% of U.S. Land Mass	68% of U.S. Land Mass	5% of U.S. Land Mass		

FIRSTNET REGIONAL STRUCTURE

The FirstNet operational outreach model aligns with 10 FEMA regions.



10 Regional Teams
Work through the State POCs
Reach into cities and other localities
Current Focus: State consultation
Future Focus:

- **Solution sales**
- **Support**
- **Account Management**
- **Outreach**
- **Education and training**

FEDERAL TEAM

TRIBAL TEAM

2 Nationwide Teams
Gather input and requirements
Serve users

DEVICE CONSIDERATIONS

FirstNet will work with the vendor community on portable devices and in-vehicle routers

	Portables	In-Vehicle Routers	Specialized	Accessories
Device Types				
Category Driver	Build out to gain economies of scale		Special operational needs	Unique uses
Function	• Smartphone • Tablets • Modems	• Routers • Hotspots • Consoles	• Drones • Portable repeaters • Rovers	• Ruggedized cases • Battery packs • Chargers, mics.
Connectivity	• LTE, CDMA, HSPA • LMR/ P25 • Wi-Fi, Bluetooth • Direct mode	• LTE, CDMA, HSPA • Wi-Fi • Ethernet • USB	• LTE, CDMA, HSPA • LMR/ P25 • Satellite repeaters • Location services	• Bluetooth • USB • WiFi
Location Enabled	Yes	Yes	Some	n/a
Band 14 Support	2014	2013/2014	2015+	n/a

COMPLIMENTING LMR WITH LTE

Public safety will rely on land mobile radio (LMR) for mission-critical voice until LTE capabilities exceed current functionality

Elements to be evaluated:

- **Push-to-talk**
- **Direct mode**
- Emergency calling
- Enhanced broadcast
- High-power mobile
- Public safety-grade performance

OVERVIEW OF CONSULTATION PROCESS

- 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
- Plan development will be iterative
- Consultation culminates with the creation of the state plan

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

GETTING STATES READY FOR CONSULTATION (Cont.)

- Consultation Readiness Checklist
  - FirstNet is developing a checklist for SPOCs to use as a guideline prior to consultation.
  - This checklist's topics are consistent with deliverables required by SLIGP.
- Examples of Consultation checklist items may include:

Governance:

- ❑ Functioning governance body in place
- ❑ Date/Time of next governance body meeting known
- ❑ Formal relationships documented with state's tribes

Assessment and Validation:

- ❑ User agencies identified / proposed
- ❑ Secondary users identified / proposed
- ❑ Key stakeholders with assets that could assist with the network build out are identified

Outreach and Education:

- ❑ Statewide outreach plan created
- ❑ Large metropolitan area contact list built
- ❑ Tribe contact list built
- ❑ Rural contact list built
- ❑ Established email list for all public safety leadership in state
- ❑ Calendar of existing state, regional, and national public safety association events

Example

This process will begin with FirstNet communicating to states about the process, roles, and responsibilities; states will be asked to validate and enhance (not recreate) existing information.

3 - 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 Principle

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

Preliminary Design Review	Intermediate Design Review	Critical Design Review
Based on coverage and users from BSA response Preliminary infrastructure estimates	Incorporates revisions from preliminary review Targets best value sites from asset data collection Incorporates RFP / Partnering information	Incorporates revisions from intermediate review Includes tradeoffs / prioritization based on state business plan

4 - STATE OPERATIONS

Key Steps

- Leverage PSAC and others to discuss overall approach to:
  - Local control
  - Prioritization
  - Training
  - Security
- Develop operations template with areas for input/customization
- Develop system cost structure / business plan for state based on preliminary RAN design and potential user base
- Customize based on public safety stakeholder input

Guiding Principles

- Address areas of consultation required by law
- Ensure state RAN design is supported by business planning and cost considerations

5 - FINAL STATE PLAN

Key Steps

- Document proposed coverage and associated cost
- Supply projected funding level
- Provide final review opportunity by state's SPOC / governing body
- Submit to the Governor

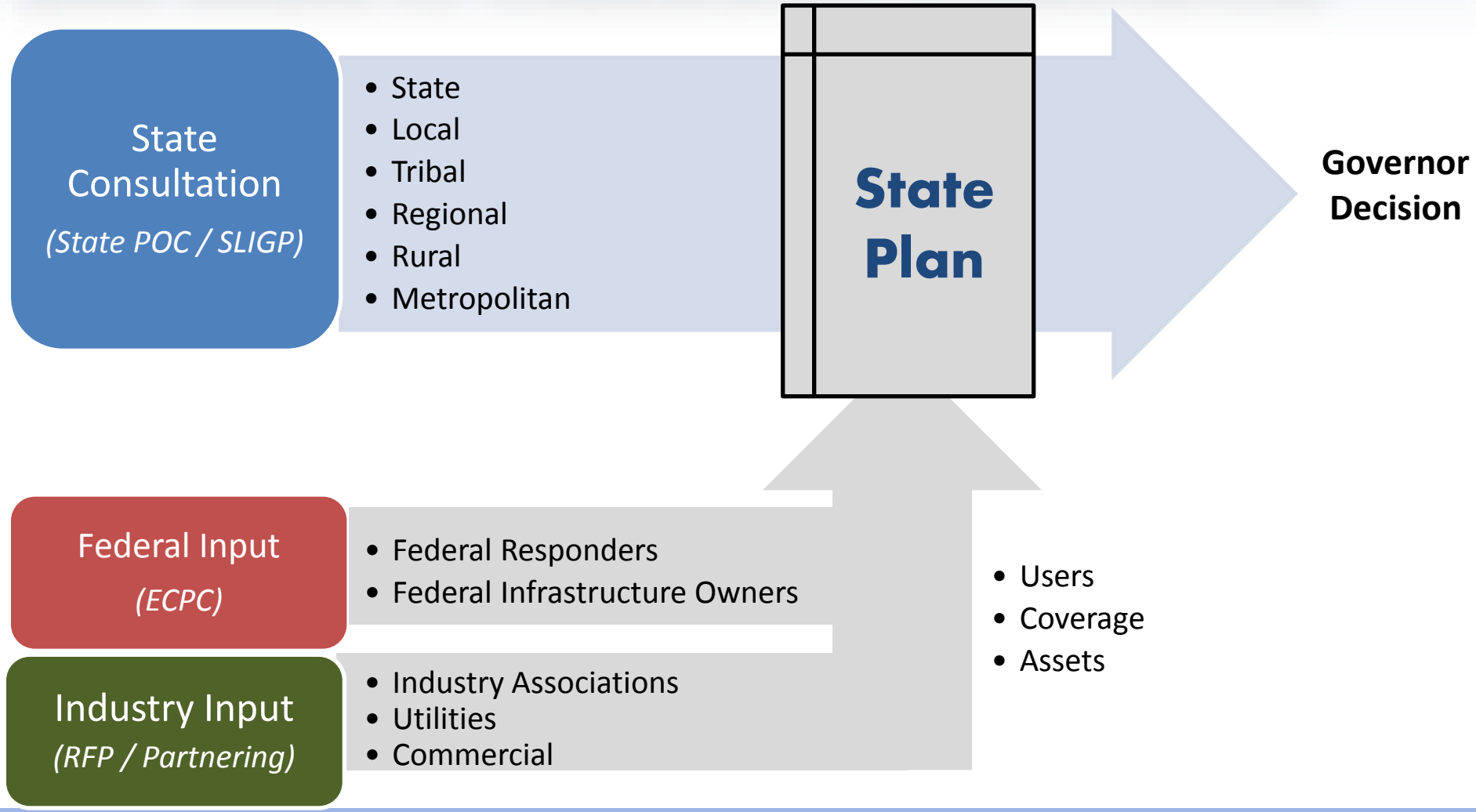
Guiding Principles

- Address areas of consultation required by law
- Ensure public safety stakeholders have had robust involvement before state plan is presented

State Plan Requirements

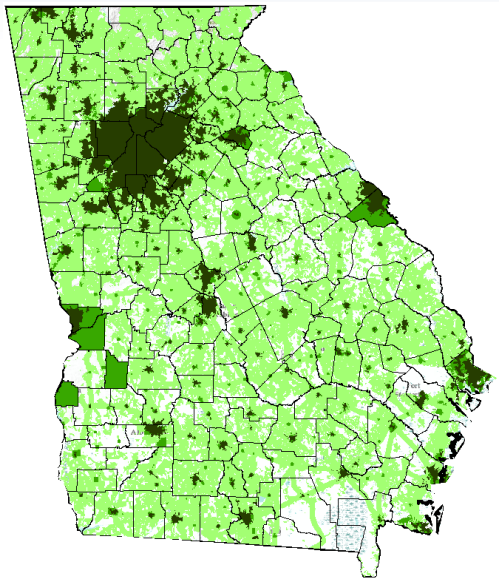
- Completion of the RFP process
- Details of proposed build-out in the state
- Funding level for the state

WIDE RANGE OF STAKEHOLDER CONSULTATION



DEFINING COVERAGE OBJECTIVES

- FirstNet will provide a GIS map showing proposed coverage objectives in four major categories:
  - In Building
  - Handheld / Partial In-Building
  - Vehicular Modem / Partial Handheld
  - Satellite / Deployable
- States will provide updated coverage objectives through an updated GIS file
- States will be encouraged to gather input from all, local , state, and tribal agencies
- Voluntary OEC Coverage Workshops can help states get an early start and better understand this process
- Coverage objectives will be used to focus subsequent SLIGP Phase 2 data collection
- Parallel effort will occur with Federal agencies through federal outreach via ECPC



Coverage Baseline Example

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

IDENTIFYING POTENTIAL USERS

- FirstNet will provide User baseline data (as available) for primary responders in each State to include:
  - Number of agencies by discipline
  - Number of personnel by discipline
  - Detailed agency user database
- FirstNet will also provide potential categories of secondary responders for consideration by the State with guidance provided from PSAC
- States will provide updated data on primary responders and estimated user counts for secondary responder groups whom they believe should be eligible users on the network
- Parallel effort will occur with Federal agencies through Federal Outreach via ECPC
- Voluntary OEC workshops will provide this baseline data as part of the delivery.
- Data will be used to support subsequent data collection during SLIGP phase 2, as well as inform capacity planning

2 - ASSET IDENTIFICATION & SELECTION

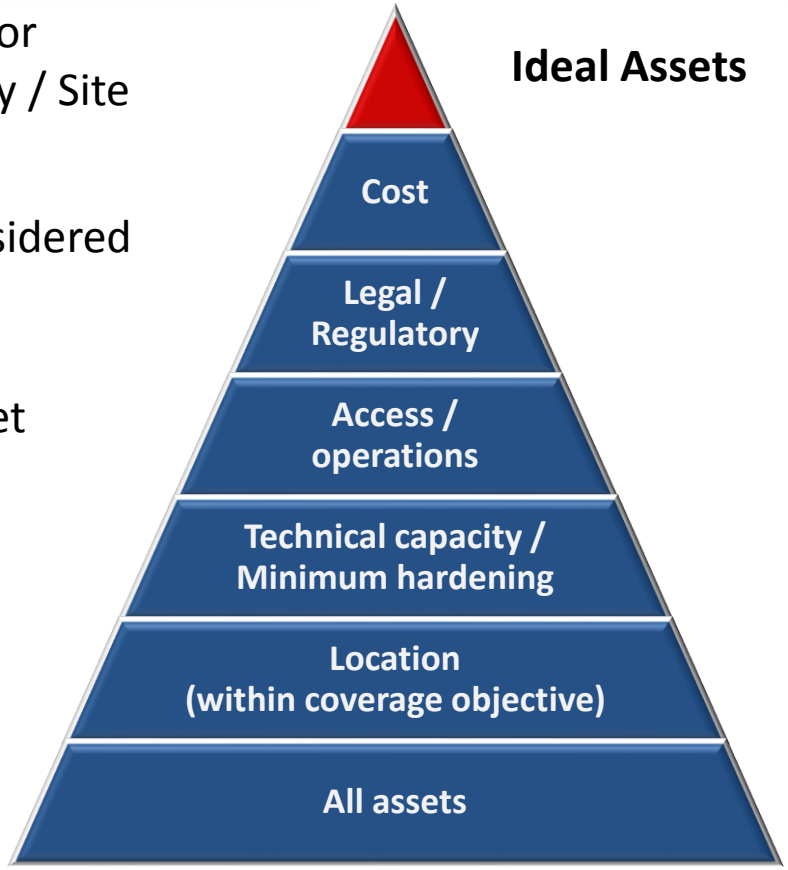
(Aligned with SLIGP Phase 2)

Key Steps

- Define minimum recommended attributes of assets for consideration (Coverage objective / Technical capacity / Site access / Operations / Low cost)
- Request data collection on available assets to be considered
- Assess all assets (commercial & public)
- Select assets based solely on best value to the FirstNet network

Guiding Principle

- Limit data collection to viable assets to save the State time/effort
- Leverage assets to provide better coverage at a lower cost
- Leverage assets to deploy quicker



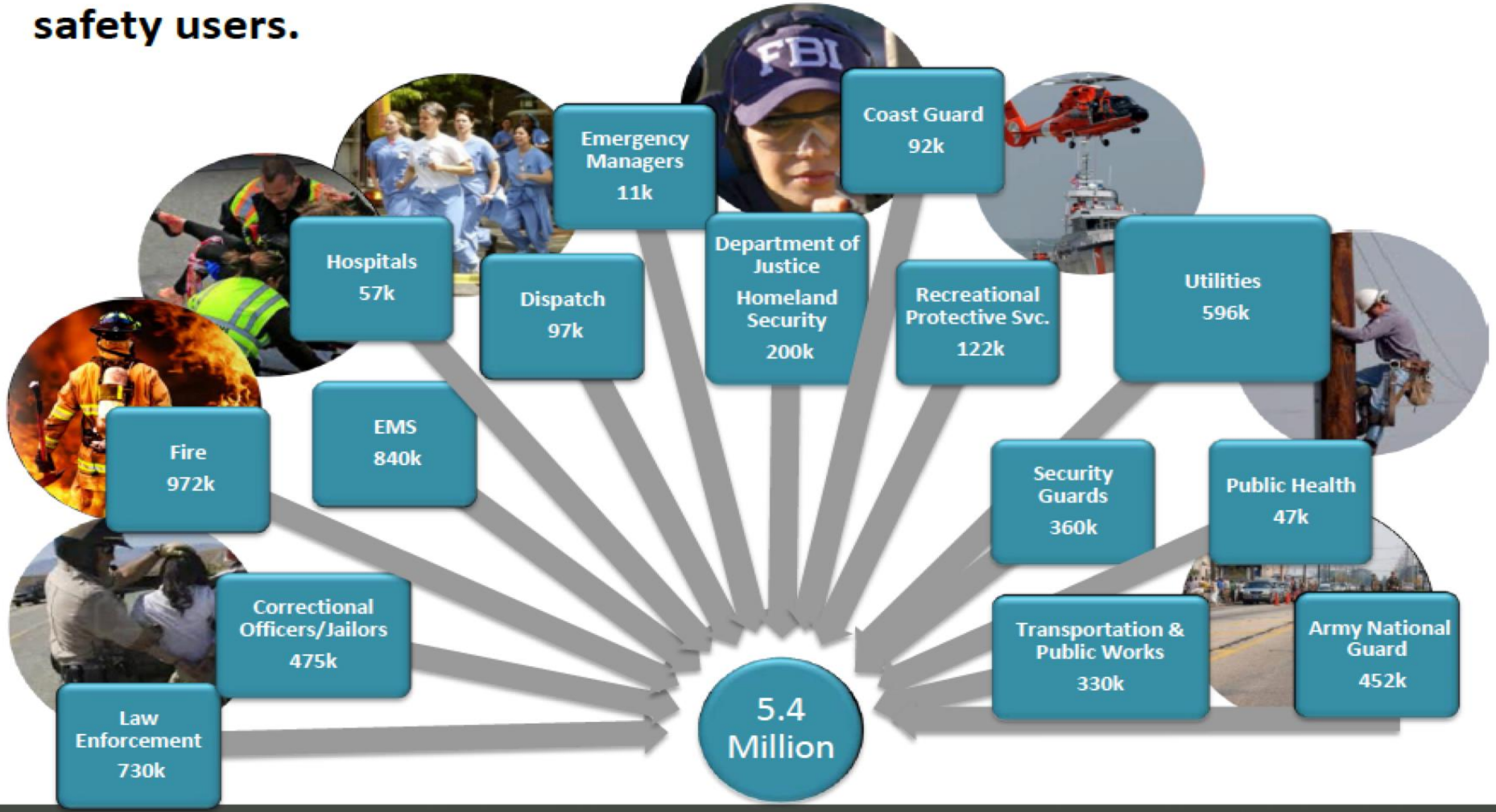
Key Understandings

- Given the spectrum's value, excess capacity will be leased to the commercial sector to underwrite the public safety build-out.
- This will facilitate FirstNet partnering with the private sector but does not require piggy-backing on the private sector network.
- FirstNet will be a dedicated service. Priority and management will be given to and driven by public safety (local control).

Key Understandings

VISION & GUIDING PRINCIPLES

FirstNet has the potential to support a broadly defined set of public safety users.



How Will FirstNet Work?

How will states and agencies participate in the build out of FirstNet?

- ✓ To make FirstNet a nationwide network, all states must have a local broadband access network (BAN) that connects to the FirstNet core.
- ✓ The FirstNet core is a common data sharing architecture.
- ✓ FirstNet is responsible for working through the designated state point of contact to consult with states, local communities, tribal governments and first responders to gather requirements for developing its BAN deployment plan.

What will users pay for FirstNet services?

- ✓ FirstNet intends to offer services at a compelling and competitive cost to attract millions of public safety users and make FirstNet self-sustaining.
- ✓ The use of FirstNet services and applications will be voluntary.
- ✓ <u>The costs for FirstNet services and devices have not yet been set.</u>

State Decision Process

State Decision Process

FirstNet will collaborate with states to develop and deliver a RAN plan that meets their needs.

Consultation
- Regional Workshops
- State Visits
- Ongoing Dialogue

RFP Process

FirstNet Presents Plan to Governor

State Decision
2 Options

90 days to decide and notify FirstNet, NTIA and the FCC

Opt Out

State seeks approval to construct its own RAN

State Requirements:
- Notify FirstNet, NTIA and the FCC of intention to build within 90 days of receiving FirstNet Plan
- Submit alternate plan to FCC and gain FCC approval
- Complete an RFP
- May apply for grant funding from NTIA
- Must apply to NTIA to lease FirstNet spectrum

Accept FirstNet Plan

FirstNet builds the RAN. FirstNet intends to cover the cost to construct, operate, maintain and improve the RAN.

State Decision Process – Funding the Build-Out

OPT-IN

- State accept FirstNet Plan;
  - ✓ FirstNet builds the BAN.
  - ✓ FirstNet intends to cover the cost to construct, operate, and maintain and improve the BAN.

OPT-OUT

- If the state's plan is approved by the FCC, the state may apply for grant funding from NTIA.
- To obtain federal funding to construct a BAN, a state must:
  - ✓ Demonstrate the technical capability to operate and fund the BAN;
  - ✓ Maintain ongoing interoperability with the FirstNet network;
  - ✓ Complete the project within specified comparable timelines;
  - ✓ Execute its plan cost effectively; and
  - ✓ Deliver security, coverage and quality of service comparable to the FirstNet network

Next Steps

- Begin State Consultation Process between FloridaNet and FirstNet
- Get data collection requirements from FirstNet (Available March)
- Get FirstNet preliminary coverage maps and business models (Available April)
- Continue coordinating with Southeastern States (8 - FEMA Region 4 States) on border coverage, priorities, application development, and other regional issues

Exhibit 38

Overview of FloridaNet

Project approach for designing a National Public Safety Broadband Network, formally known as D-Block, now called FirstNet

February 2014

Introduction to FloridaNet

FloridaNet Vision

Charting Florida's response to FirstNet for state, local, regional, and tribal emergency responders and designated public service organizations operating within the State.

FloridaNet Mission

Provide a statewide strategic planning framework for an innovative, inclusive, scalable, sustainable, and well-managed FloridaNet infrastructure that promotes national FirstNet broadband standards and is effective in addressing the unique tribal, rural and urban requirements of the emergency responders and designated public service organizations serving the residents and visitors of the State of Florida.

Introduction to FloridaNet

A little background on FloridaNet…

- Created by Governor Scott to provide governance and a planning assessment framework for the first high-speed wireless, broadband network dedicated to public safety – historically referred to as D-block and now call FirstNet
- Ensure a seamless, reliable, dedicated broadband communication for public safety use in Florida, as part of FirstNet planning
- Assess Florida's options for creating a dedicated broadband data network: a recommendation of the 9/11 Commission (D-Block)
- FirstNet is under the U.S. Dept. of Commerce, National Telecommunications and Information Administration (NTIA)
- Congress allocated $7 Billion for the FirstNet's national build-out
- Florida has been awarded $4.9 Million grant through a State and Local Implementation Grant Process - SLIGP
- The grant assists FloridaNet with its broadband planning efforts.

Introduction to FloridaNet

A little background on FloridaNet…

- Organized in February of 2013
- 50+ public-sector, public safety associations, and private-sector organizations participating in FloridaNet planning efforts
- Both the Seminole Tribe of Florida and the Miccosukee Tribe are participating
- 120 individuals currently participating in planning efforts
- Multiple regional workshops planned for 2014

Introduction to FloridaNet

Purpose of FloridaNet Governance Structure

The governance structure is designed to develop recommendations from the bottom-up in an effort to improve interoperable communications and establish buy-in throughout the FloridaNet assessment process.

FloridaNet
Executive Committee Members

- Chair: DHSMV-Julie Jones, Executive Director
- Governor's Office – Jason Allison, CIO
- Homeland Security Advisor – Mark Perez (FDLE)
- Police Chiefs Association– Amy Mercer, Executive Director
- Tribal Representatives – Bobby Brown (Seminole Tribe of Florida)
  – Ray Weeks (Miccosukee Tribe)
- Sheriffs Association – Steve Casey, Executive Director
- DMS – Stacy Arias
- DEM – Charles Hagan
- Department of Health – Mike McHargue
- Technical Committee Chair – Greg Holcomb, Lake County Public Safety
- Finance Committee Chair – vacant
- Department of Economic Opportunity – Sherri Martin
- Public-Private Sector Co-Chair – Mike Sole, FP&L
- Public-Private Sector Co-Chair – Colin Denney, Verizon
- Fire Chiefs –Kevin Herndon, Deputy Chief

FloridaNet Advisory Committee

FloridaNet Advisory Committee

- Consensus body for major Planning Decisions

Executive Committee

- **Chair: Julie Jones**
- Critical and timely decision-making
- Representatives from each Committee and major stakeholders

Finance Committee

- **Chair: vacant**
- Develop MOUs
- Establish grant and contract guidelines, complete grant applications, and support ongoing grant contract management
- Develop financial components to support proposed Model

Technical Committee

- **Chair: Holcomb**
- Evaluate technical specifications and needs
- Provide subject-matter expertise
- Establish sub-committees, as needed, to develop detailed assessments
- Integral to leveraging Public-Private Committee recommendations

Public-Private Committee

- **Co-Chair: Sole/Denney**
- Assess partnership opportunities
- Determine partnership models and make recommendations
- Align Public-Private cooperation
- Develop plans and actions that leverage existing infrastructure investments

Deliberative Review

50+ representative organizations

Expert organizational reps for Committees & Sub-committees

State and Local Implementation Grant Program (SLIGP)

The SLIGP is a formula-based, matching grant program to assist States, in collaboration with regional, tribal, and local jurisdictions, to perform activities related to planning for the establishment of a nationwide public safety broadband network.

Match: 20% non-federal matching funds toward the total eligible project cost. Matching funds may be in the form of either cash or in-kind contributions.

Two phases of funding:

Phase 1: planning, consulting, and development activities in preparation for consultations with FirstNet, including strategy and timeline development, meetings, governance planning, and outreach and education efforts.

State and Local Implementation Grant Program (SLIGP)

Phase 2: begins after FirstNet has consulted with the State-designated contact about defining coverage needs, user requirements, and network hardening and resiliency requirements, and advises NTIA it is ready for the commencement of data collection

or when NTIA requests a revised budget from recipients for second phase activities.

The second funding phase will primarily address States' needs in preparing for additional consultation with FirstNet and planning to undertake data collection activities. The second phase will fund data collection activities provided that FirstNet has determined that it needs standardized asset and infrastructure inventories from the States.

State and Local Implementation Grant Program (SLIGP)

Ineligible Costs.

Funds awarded under the SLIGP may **not** be used for activities related to site preparation, broadband deployment, installation, construction, or the acquisition of equipment used to provide wireless broadband services. Please note that costs ineligible for SLIGP support may not be included as matching funds.

FloridaNet Progress to Date

- $4.9M awarded September 1, 2013
- Team working on grant implementation
  - ✓Working groups forming for action
  - ✓3-year budget created
  - ✓Project work plan for achieving the 7 grant goals nearly complete

Next Steps

- FirstNet met with FloridaNet on Jan 8th
- FloridaNet hopes to begin a formal state consultation process with FirstNet in late spring
- Technical Working Groups underway creating the survey for data collection process
- FloridaNet will proceed with coverage workshops and state-wide meetings with local first responder network this summer
- The support infrastructure for project implementation is nearly complete

Next Steps

FloridaNet issued an RFI to assist in identifying, planning, and implementing the most efficient and effective way to utilize and integrate necessary infrastructure, equipment and other architecture associated with the National Public Safety Broadband Network to satisfy the current and future wireless communications and data and data network service needs of public safety within Florida.

FloridaNet Today

Deliverables in Phase I

1. Established a governance structure for Florida efforts
2. Developing procedures to engage local and tribal governments
3. Creating and implementing education and outreach process
4. Identifying potential FirstNet users and coverage issues
5. Developing MOA to work with locals, tribes and private sector (and identifying barriers)

Additional deliverables in Phase II

6. Develop staffing plan for the effort
7. Enhance Statewide Communications Interoperability Plan (SCIP) to address broadband