



Public Safety Communications Revolution

OUR BROADBAND FUTURE



BACKGROUND

- For almost 100 years, every agency & jurisdiction has had their own radio licenses, systems, and procedures
- Each system grew in competition with others, leading to interference and congestion
- 9/11, Katrina, and Boston all exposed our failures to effectively communicate across disciplines and systems
- These pressures are driving us to improve **interoperable communications**



INTEROPERABILITY

- Defined as the ability of disparate agencies to effectively communicate, as authorized, in real-time
- DHS Office of Emergency Communication created the National Emergency Communications Plan (**NECP**)
- Each state has a corresponding Statewide Communications Interoperability Plan (**SCIP**)
- The Statewide Interoperability Coordinator (**SWIC**) is the focal point for communications strategic planning in each state



MILESTONES

- In 2007, smartphones revolutionized our concept of mobile data; voice alone is no longer acceptable
- In 2012, Congress mandated the Nationwide Public Safety Broadband Network, or **FirstNet**, to provide interoperable, nationwide voice and data communications as recommended by the 9/11 Commission
- In 2014, Governor Sandoval established the Nevada Public Safety Communications Committee (**NPSCC**) to advise on FirstNet deployment and public safety communications



KEY PLAYERS

- The Nevada Division of Emergency Management (**NDEM**) is the State Administrative Authority for the FirstNet State & Local Implementation Grant Program (**SLIGP**)
- The Statewide Interoperability Coordinator (**SWIC**) is the agent and representative of NPSCC and NDEM, promoting interoperability efforts at all levels



NPSCC MEMBERS

Director; Department of Public Safety
State Chief Information Officer
Chief; Division of Emergency Mgmt
Statewide Interoperability Coordinator

Representatives from:

Nevada Department of Transportation
Nevada National Guard
Homeland Security Commission
Nevada Sheriffs' and Chiefs'
Association
Nevada Fire Chiefs Association
Inter-Tribal Council of Nevada
Las Vegas Metropolitan Police
Department

Nevada System of Higher Education
NV Energy
Nevada Hospital Association
Southern Nevada Area
Communications Council
Washoe County Regional
Communications System

A public safety representative from a
county whose population is less than
100,000

A representative from the US
Department of Homeland Security



FIRSTNET

- FirstNet is a Federal Agency
- Operates as an independent not-for-profit entity
- Exclusive, nationwide licensee for the “D Block” of public safety radio channels
- Building a nationwide, interoperable, digital data network
- Authorized \$2 Billion in Start-Up Funds
- Up to \$5 Billion more available from a 2015 Spectrum Auction



WHAT WILL IT DO?

- It's wireless broadband “private internet”
- Extends agency computer resources to the field
- Allows for data to be shared from 9-1-1, PSAPs

Robots

Drones / UAVs

Tablets

“Google Glass”

Smart vests

Sensors

Telepresence

Social Media

Live Video

Database Access

GIS & Maps

Documents

Medical Records

Next Gen 9-1-1

Mutual Aid

Live Cameras

Biometrics

...and more



FIRSTNET'S GOALS

- High-Speed, High Reliability Data Service
- Cover 95% of USA, indoors and out
- Public – Private Partnership
- All 56 States and Territories “Opt In”
- Eventual Mission Critical Voice Service
- Open to **any** public safety use
 - Public Works, Schools, Hospitals, Police, Fire, EMS, Utilities, Transportation, etc.
- Available at competitive prices



FIRSTNET WILL NOT...

- Replace Land Mobile Radio (LMR)
- Provide Mission-Critical Voice
- Be Immediately Available Everywhere
- Be Mandatory to Subscribe
- Be “Universal” – there will be gaps and drops in coverage, just like today’s systems



OPTING IN VS. OPTING OUT

- FirstNet is mandated by Congress
- FirstNet services must be **offered** to public safety users
- However, **use** of the Network is not mandated
- FirstNet will build the network “core”
- States that “Opt Out” must build a “radio access network” (RAN) to connect
- “Opting In” means FirstNet builds the state’s RAN
- FirstNet services are billed directly to your jurisdiction



THE BIG BUILD

- FirstNet will need at least 30,000 towers (sites)
- Some sites already exist (cell, LMR, etc.) and will offset the cost of the network
- FirstNet will partner with agencies, jurisdictions and carriers to realize this vision
- Those discussions will take place after public safety's interest is determined



HERE'S WHERE YOU COME IN

- SLIGP is designed to help us learn and plan
- The biggest need is **information**
 - Do you want to use FirstNet?
 - How much are you willing to pay?
 - What applications would you like to see?
 - What about coverage?
 - Can you share tower space? Microwave? Fiber?
- More than ever, get your IT team involved
 - Data security, user authentication, bandwidth control



THE SLIGP PROCESS

Phase I

- Outreach
- Education
- Identify Users



Phase II

- Identify Resources
- System Design



FirstNet

- State Plan
- MOUs
- Construction
- Subscription



PHASE I – 2014 INTO 2015

- Broad Outreach
- Identify Potential Users
- Assess Level of Interest
- High-Level Reconnaissance
- Not looking for specifics or commitments
- No agreements or contracts
- FirstNet would like to know what you're using now



PHASE II - 2015

- Network Development Phase
- Determine coverage gaps
- Identify specifics about potential shared assets
 - Towers
 - Backhaul
 - Bandwidth Available
 - Power and Hardening
- Draft Contracts and Agreements



DESIGN & BUILD-OUT – 2016?

- FirstNet, NDEM SLIGP Team, Governor's Staff Consult
- FirstNet Delivers a Plan based on Phases I and II
- NPSCC provides advice
- Nevada decides
- Contracts executed
- Construction begins



THANK YOU

George J. Molnar

Nevada Statewide Interoperable
Communications Coordinator

GMolnar@dps.state.nv.us

(702) 486-4498