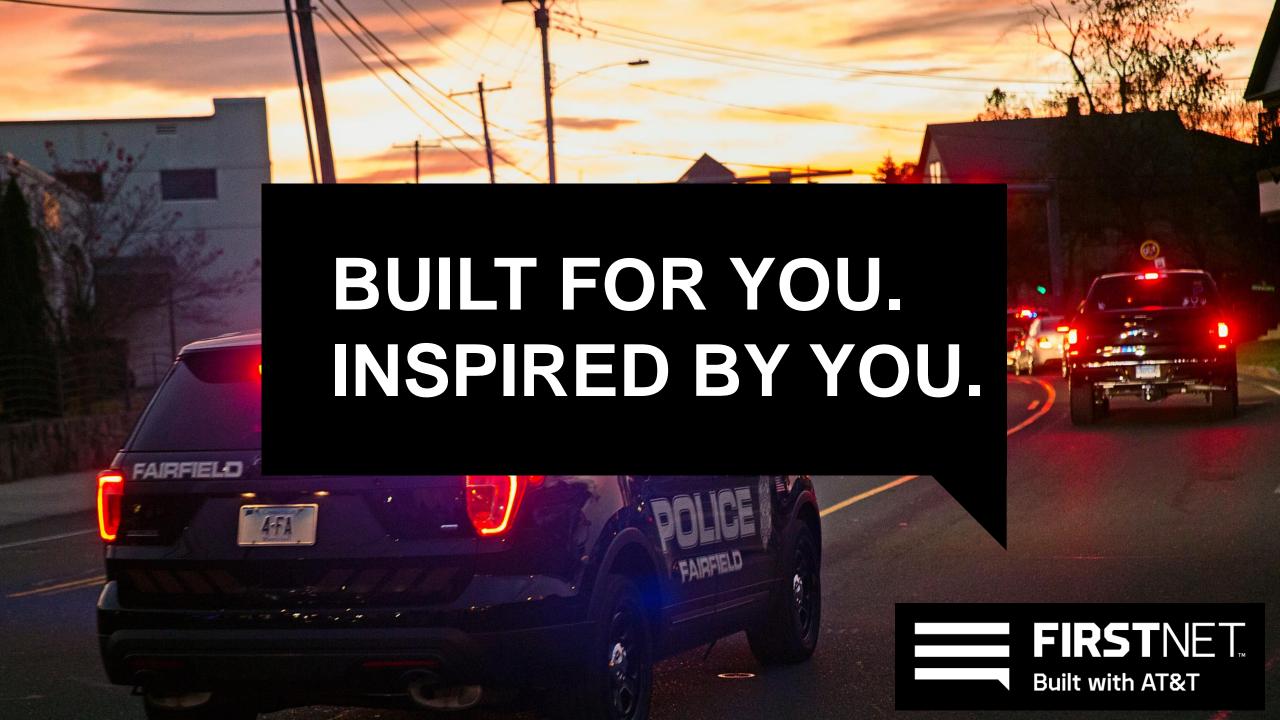
FirstNet Update

Steve Noel, FirstNet Lauren Paolini, AT&T Ron Spencer, Motorola Solutions Bill Schrier, FirstNet





FIRSTNET FEATURES FOR PUBLIC SAFETY COMMUNICATIONS



Access to Quality of Service, Priority & Preemption on ALL AT&T's LTE networks



Device portfolio for public safety users to include iOS (Apple), Android and other devices



End-to-end network cybersecurity solution; dedicated security operations center



- Identity, credentialing to protect sensitive information
- FirstNet App Store with curated, vetted, secure, applications



- An Applications Development **Ecosystem for Developers**
- Local control: ability to see network status, change priorities



- \$40B in network investments over 25 years
- Network includes AT&T's existing telecom assets (valued at \$180B)



- 72 new deployables (cell sites on light trucks) dedicated for public safety use
- Partnerships with 45 rural telecom providers and wireless roaming agreements with 25 companies



- Customer service team dedicated to public safety
- Creation of 10,000+ U.S. jobs in next 2 vears



Annual payments to FirstNet for 25 years for reinvestment on behalf of public safety

FIRSTNET: THE FUTURE OF PUBLIC SAFETY COMMUNICATIONS

Look for this logo to keep up with First Responder Network Authority's programs, activities, and public safety outreach



- This logo represents the FirstNet Responder Authority organization
- Congress established the FirstNet Responder Authority to deliver the first nationwide public safety broadband network
- The FirstNet Responder Authority oversees the Network contract with AT&T, consults with the public safety community to ensure its voice and needs are heard, and drives public safety innovation for the Network
- Learn more about the First Responder Network Authority at FirstNet.gov

Look for this logo when you want to learn more about the FirstNet Network or to purchase FirstNet services



- This logo represents the FirstNet network and services, built with AT&T
- FirstNet is a nationwide network created for public safety, with public safety
- Key public safety features include a dedicated connection with priority and preemption over a secure, reliable network
- See this logo on FirstNet services, devices, and products
- Learn more about the FirstNet product and services at FirstNet.com



Lauren Paolini

AT&T FirstNet Solutions Consultant

First responders, AT&T and the first responder network authority have come together to build **FirstNet**, a dedicated communications tool created for and by public safety.

A SOLUTION BUILT TO YOUR SPECIFICATIONS

- A network purpose-built exclusively for public safety based on an understanding of public safety needs
- A commitment to grow coverage to rural, tribal and U.S. territories specifically for public safety
- Approved state plans with input from public safety and reviewed by government leaders in each state, territory and tribal community
- Contractually committed to build a network designed to meet a 99.99% end-to-end service availability objective
 a standard unmatched by any other large-scale LTE network in the world today
- No throttling on the network. Prioritization with no speed limits on voice, text or data.
- A dedicated public safety core to be delivered by March 2018 that will route and encrypt network traffic, creating the highly secure environment public safety requires
- An ongoing state consultation process to achieve collaboration with public safety to address their ongoing needs
- Delivery of priority and preemption capabilities, an exclusive public safety core, application ecosystem, deployables, and mission critical services – all required by the government contract

USER TYPES











Primary Users

Fire

Police

EMS



Extended Primary Users

Hospitals Utilities Transportation



Individual Paid Users/Volunteers

Primary or Extended Users
Users that pay personally pay
For service



PRIMARY SUBSCRIBER RATE PLANS

FirstNet Mobile-Unlimited Plans

Unlimited Enhanced for Smartphones	Unlimited Talk, Text, Data, Mobile Hotspot & Tethering	\$60/mo
Unlimited Standard for Smartphones	Unlimited Talk, Text & Data	\$50/mo
Unlimited for Data-only devices ¹	Unlimited Data, Mobile Hotspot & Tethering	\$40/mo

Eligible data-only devices: Tablets, Connected Devices, laptops, LaptopConnect/aircards, netbooks, mobile hotspot devices, and select other data-only devices. Connected Devices: Cameras and select other data-only connected devices. FirstNet Mobile-Unlimited plans do not pool with other FirstNet Mobile Pooled plans.

FirstNet Mobile-Pooled Plans

Data added is cumulative to the total data av	ailable for the group	Add-a-Line4	2GB	5GB	50GB	100 GB	500GB	1000GB
Pooled Data for Smartphones per month	No service commitment ¹	\$19	\$28.50	\$41	\$227	\$412	\$1,917	\$3,682
	Purchase with 2-year service commitment	\$39	\$48.50	\$61	\$247	\$432	\$1,937	\$3,702
Pooled Data for Feature phones ² per month	No service commitment ¹	\$19	 					
	Purchase with 2-year service commitment	\$31	+ 					
Pooled Data for Data-only devices ³ comper month Purchas	No service commitment ¹	\$12	\$21.50	\$345	\$220	\$405	\$1,910	\$3,675
	Purchase with 2-year service commitment	\$22	\$31.50	\$445	\$230	\$415	\$1,920	\$3,685

Data Overage: Pay-per-use rate of \$0.000009536/KB applies.

¹Purchase at full price, purchased with qualified installment agreement, bring your own, or on month-to-month term. ² For basic and quick messaging phones only. ² Eligible data-only devices: Tablets, Connected Devices, laptops, LaptopConnect/aircards, netbooks, mobile hotspot devices, and select other data-only devices: Connected Devices: Cameras and select other data-only connected devices. ⁴Add-a-Line: A 0GB plan that adds a user to the pool of data but does not add additional data. ⁵A 10GB FirstNet Mobile - Pooled Data plan for data-only devices is available for \$55 per month (no service commitment) and \$65 per month (with 2-year service commitment).

FIRSTNET SOLUTIONS CONSULTANT TEAM – STATE OF WASHINGTON

Garett Doyle, FirstNet State Market Manager



- Over 20 years experience in network solutions
 - Public Safety
 - State and local government agencies
 - Enterprise clients
 - AK, CO, ID, MT, NE, ND, OR, SD, UT, WY, WA
- Based out of Denver, CO

Lauren Paolini, FirstNet Solutions Consultant - WA



- 9 Years Wireless/ Telecommunications
 - 3 years small businesses sales
 - 3 years state and local governments wireless solutions sales
 - 3 years in product marketing, mobility and cybersecurity
- · Based out of Seattle

Alex Duman, Eastern WA & State of MT

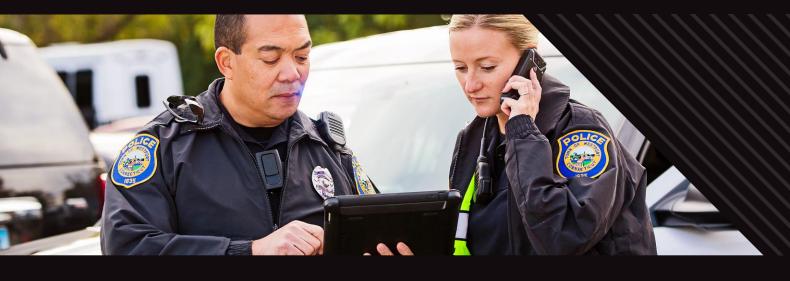


- 14.5 Years in Government and Public Safety Sales
- Includes 12 years working selling & marketing to public safety
- Based out of Missoula, MT

Mack Bickle, Regional FirstNet Solutions Consultant



- 3 Years in Government and Public Safety Sales
- 3 years Telecom/Wireless Technology With Cradlepoint
- Territory: ID, UT, MT, CO, WY
- Based out of Boise, ID



Ron Spencer Motorola Solutions



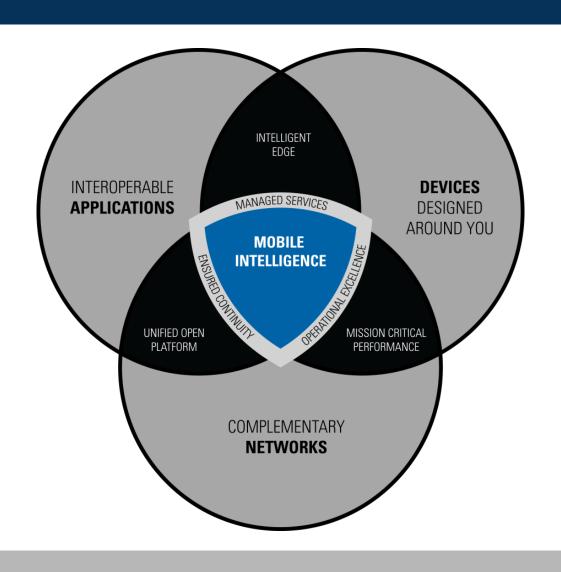
PUTTING PUBLIC SAFETY BROADBAND TO WORK



MOTOROLA SOLUTIONS

WHAT IS MOTOROLA'S ROLE?





WE TURN THE FLOOD OF DATA INTO MOBILE INTELLIGENCE

MOTOROLA SOLUTIONS AND THE PUBLIC SAFETY BROADBAND ECOSYSTEM



CITIZEN AND CITY



911 CALLS and **CITIZEN DATA**

COMMAND AND CONTROL



NG9-1-1 **DISPATCH**



INTELLIGENCE **ANALYST**

DATA & VOICE NETWORKS



LTE



LMR

INTEROP

LAYER

MOBILE INTELLIGENCE



DEVICES, APPS, IoT, SENSOR NETWORKS



SMART CITY and IoT

DEPLOYMENT CONSIDERATIONS





LMR AND FIRSTNET WILL BOTH BE USED BY PUBLIC SAFETY

LMR Mission Critical Voice Compared to LTE PTT

- Network access delay
- Busy network performance
- Site survivability
- · Direct-mode talk-around

Need To Maintain Seamless Interoperability In A Mixed Network Environment

Regardless of agency, carrier partners or technology transition status

EXTEND COVERAGE



While a fire chief is away on business, a large storm causes major flooding, requiring department-wide effort to rescue and evacuate affected residents.

Out of town and outside of coverage, the fire chief is unable to communicate with his team via LMR.

Using Broadband PTT with Integrated Secure Messaging & Location on Device, the fire chief can see where department assets are engaged, receive important pictures and video and communicate with front line commanders over LMR radio.

When the unexpected occurs, essential members of response teams can connect and collaborate from wherever they are.



COMMUNICATE ACROSS AGENCIES AND DEVICES

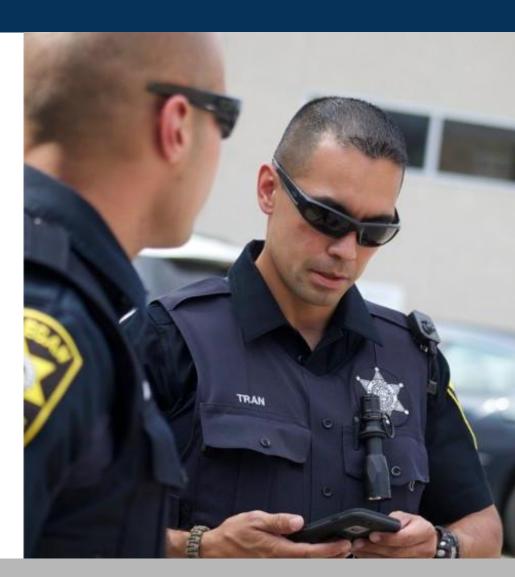


Incident response frequently require that public safety, public works and/or federal agencies work closely together.

Separate data communications networks make interagency collaboration difficult.

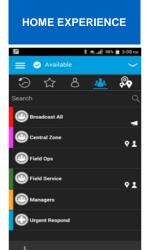
Broadband applications that are interoperable with LMR allow different agencies to share information with each other across broadband and mission-critical voice networks.

When multi-agency response is required, everyone can work together using both voice and data applications.



AN EXPERIENCE THAT SPANS ALL PLATFORMS

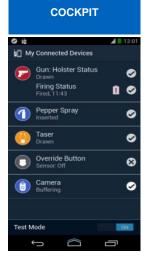






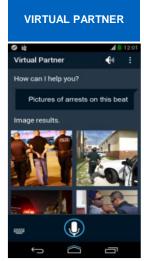






















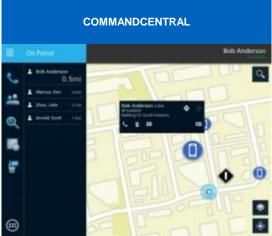


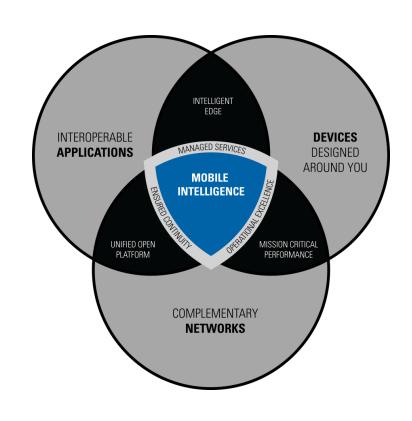


MOBILE INTELLIGENCE – NEXT GEN TOOLS TODAY







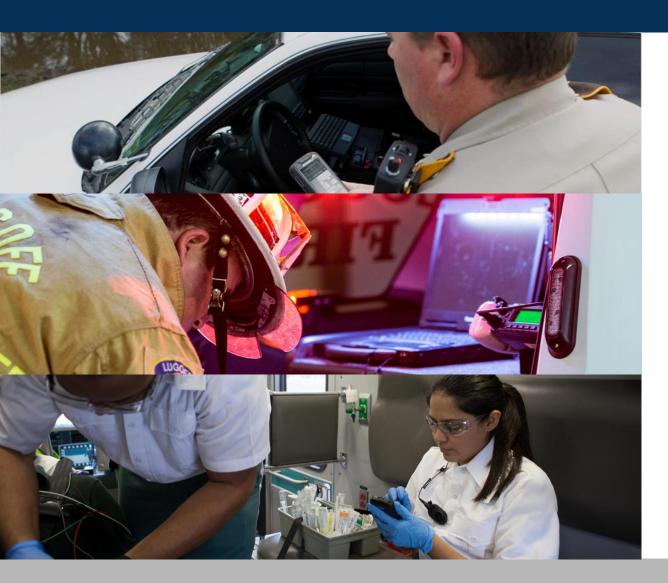




ASTRO P25 Broadband-ready LMR FirstNet PS Broadband Subscription*

FIRSTNET OPENS THE PATH TO THE FUTURE





START USING FIRSTNET NOW

Take Advantage of Groundbreaking New Capabilities

- Priority and pre-emption for data network access
- Faster data speeds for multi-media applications
- Nationwide interoperability

Optimize LMR & LTE Systems for Maximum Interop

- Mutual aid
- Working with federal agencies
- Connecting outside the jurisdiction





Bill Schrier FirstNet

DEVELOPMENT LIFECYCLE and POTENTIAL APPLICATIONS



Access to Patient monitors and records (with permission)

CJIS records, warrants



Engage First Responder Network Authority® safety (needs)

Developers*
Create &
Revise Apps
(Agile)

* 3rd Party companies and governments

CAD Interop NG-9-1-1 Interop



3D Building Diagrams &

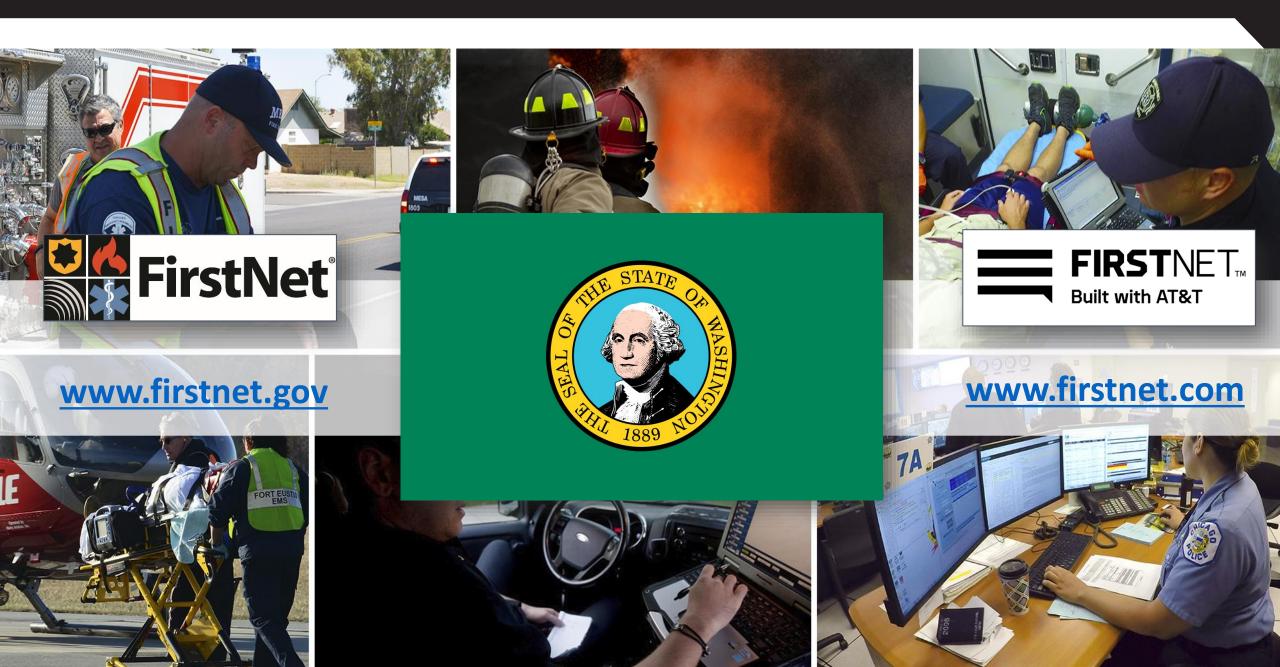
Building

IoT access





DEVELOPMENT LIFECYCLE and POTENTIAL APPLICATIONS







APPENDIX