

Wasatch Front Regional Communication Advisory Committee

Tracey Murdock, Senior Adviser, First Responder Network Authority Shae Cook, Principal Consultant, FirstNet AT&T 30 August 2018



FirstNet

A nationwide public safety wireless broadband network

Providing 21st century communication tools for public safety





Innovative Public-Private Partnership

 U. S. Federal Government Agency

> First Responder Network Authority

- Oversees the Network contract with AT&T
- Consults with the public safety community
- Drives public safety innovation
- Learn more at FirstNet.gov



Private Partner

AT&T

 Deploying Nationwide LTE FirstNet Network

Priority and preemption on a secure, reliable network

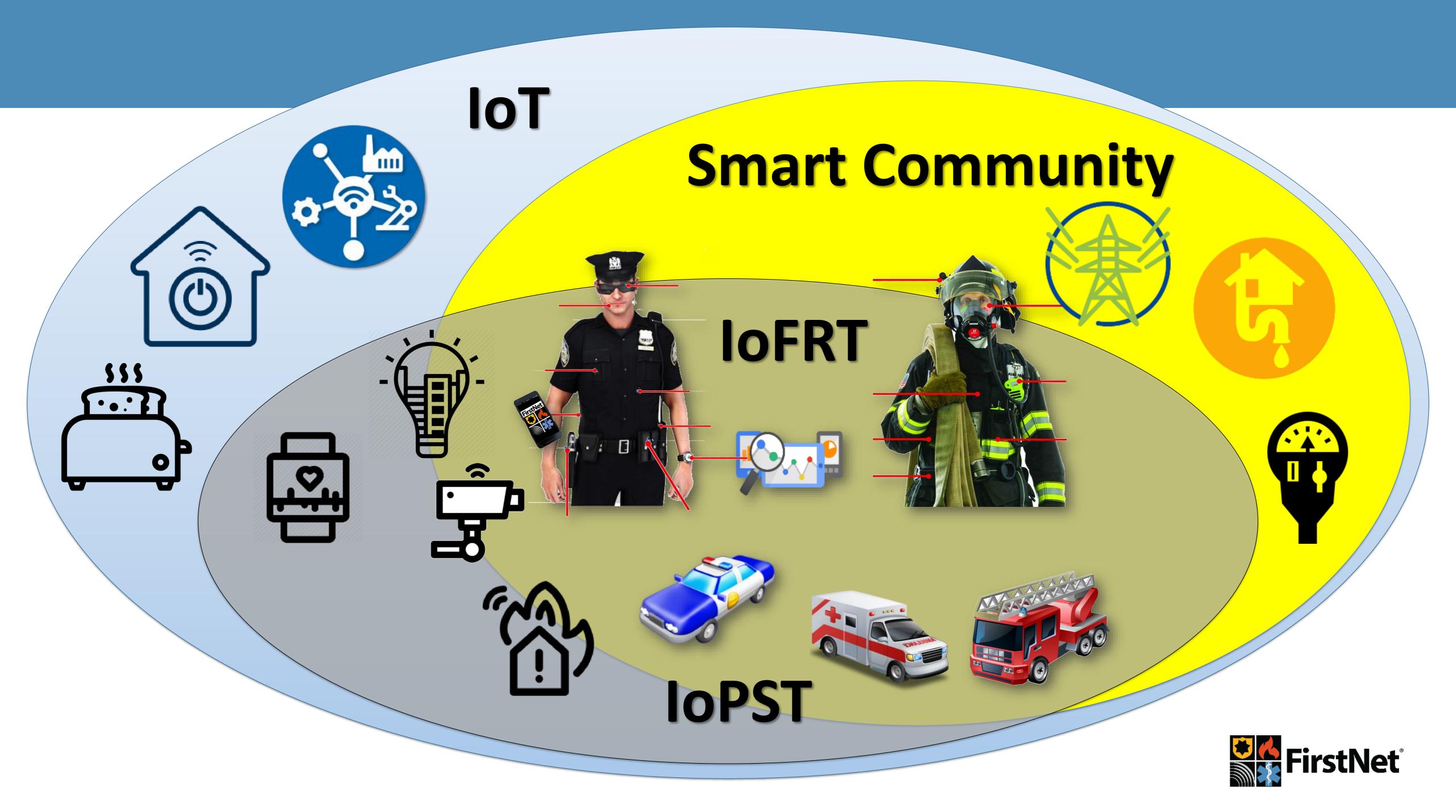
Services, Devices, Apps,
 Local Control, Customer Care

Learn more at FirstNet.com



First Responders of the Future





Unique Features of FirstNet

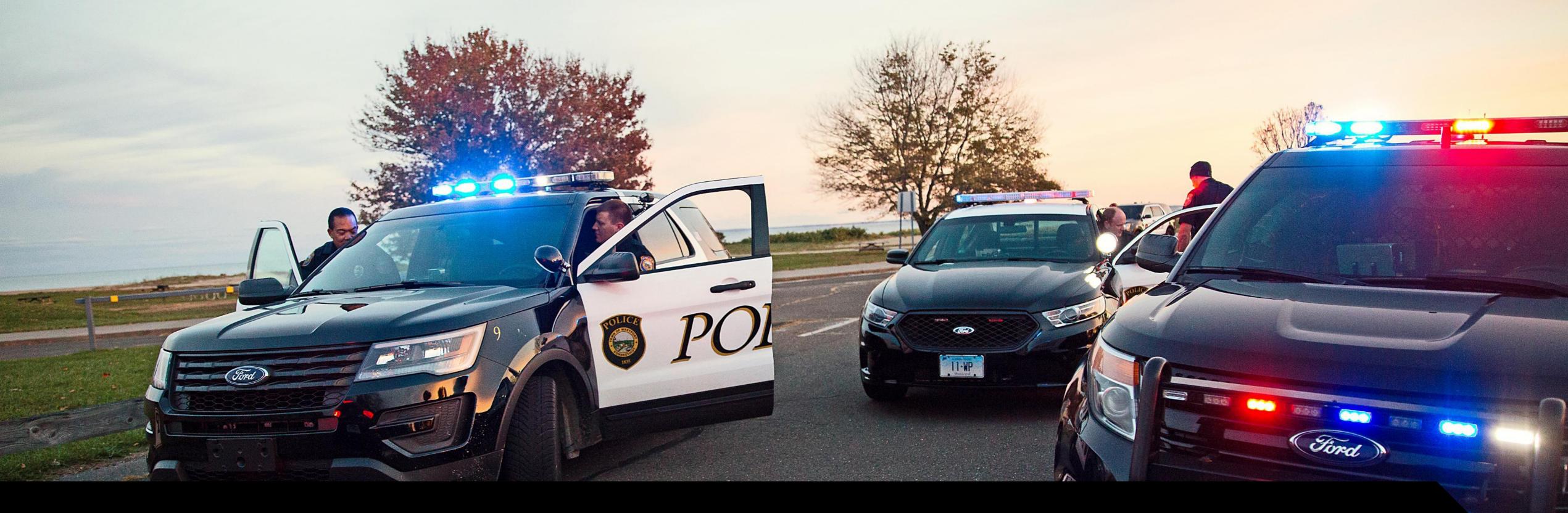
- A network fought for, designed by, and built for public safety.
- Has an oversight organization in the First Responder Network Authority that ensures that AT&T delivers on its commitments, and also advocates for public safety.
- FirstNet has a sustainable financial model that guarantees reinvestment in public safety's network
- Has a separate, redundant and dedicated core it is NOT a virtual core as part of a commercial network.
- Provides dedicated and separate security monitoring of the Network 24/7/365.
- Provided dedicated FirstNet Customer Service Line 24/7/365
- Has a lab run by the First Responder Network Authority that tests and validates the performance of the network, devices, and the applications ecosystem.

For Public Safety, By Public Safety



FirstNet Solution Update

Shae Cook -



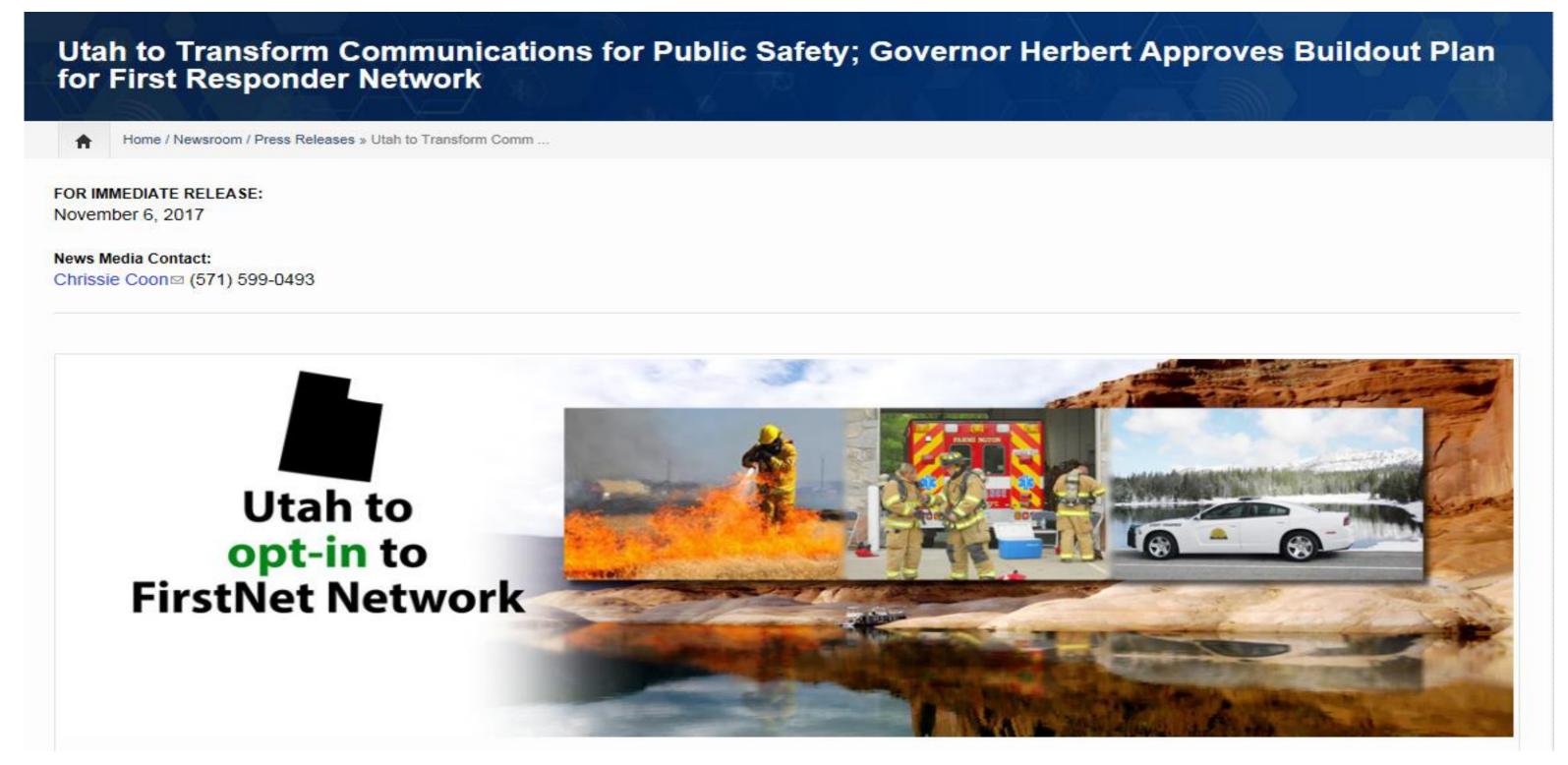


FIRSTNET

is

Here

State of Utah



https://firstnet.gov/news/utah-transform-communications-public-safety

"Utah is pleased to join other states in working with FirstNet to deploy the Nationwide Public Safety Broadband Network," said Governor Herbert. "First responders need to have the most advanced and reliable communication technology so they can access critical information, respond efficiently, and coordinate efforts. The FirstNet plan and associated technology will give Utah and the nation the necessary tools to maximize public safety." -Governor Herbert

Utah Opted In on November 6, 2017

A PRODUCT BUILT FOR YOUR UNIQUE NEEDS – WITH ...

AVAILABLE NOW

- FirstNet services are now available on the AT&T
 Commercial Network with full Priority and Preemption capabilities
- Local Control of users and applications
- FirstNet Public Safety Application store
- App Developer Program
- Dedicated FirstNet Help Desk
- Satellite Services
- Enhanced Push to Talk (EPTT) with Interoperability to LMR networks (CSSI/ISSI/RoIP)
- Subscriber Paid (Volunteer/Employee Owned)

AVAILABLE NOW

- IOC-2 March 30, 2018
 - FirstNet Core
 - Deployable Access
 - ICAM
 - Additional Band Class 14 Devices



PRIMARY

Fire
Law Enforcement EMS
PSAP / Emergency Management



 Supports both Agency Paid service and Employee Owned devices (BYOD)

EXTENDED PRIMARY

Healthcare
Utilities
Transportation
Others







FirstNet Rates

FirstNet Smartphones, Data-only, Voice-only, Push to Talk Services

| Unlimited ENHANCED for Smartphones | Unlimited Talk, Text, Data, Mobile Hotspot and Tethering | \$44.99 |
|------------------------------------|---|---------|
| Unlimited STANDARD for Smartphones | Unlimited Talk, Text, Data | \$39.99 |
| Unlimited for Data-Only devices | Unlimited Data, Mobile Hotspot & Tethering | \$36.80 |
| Voice Only | Unlimited Voice | \$22.99 |
| Enhanced Push to Talk | Unlimited Push to Talk (Add- On) | \$2.00 |

- Priority & Preemption built Into all FirstNet Services
- (Voice/Data/Integrated)
- No Capping or Data Throttling
- No Roaming Charges in U.S.
 Territories, Canada, and Mexico!
- \$50 Additionally Off Smartphones
- \$100 New Activation Credits
- Buy Back on existing Devices

Current AT&T Plan: xxx

FirstNet Rate Plan: xxx

FirstNet in Three Easy Steps

Welcome to your network

We're so glad you're interested in becoming a part of FirstNet – the network, devices, applications and technologies purpose-built exclusively for you, based on an understanding of your needs.

FirstNet is helping to make communications for first responders easier, safer, faster and more efficient, so you can focus on what's important. It includes:

- A commitment to build a network designed to meet a 99.99% end-to-end service availability objective – a standard currently unmatched by any other large-scale LTE network in the world today
- Dedicated security operations center to monitor the network (24/7/365) and mitigate threats
- First Priority which means you connect first.
 You don't have to compete with non-public safety users for a connection
- And preemption, which helps ensure you have the bandwidth you need by detouring others off the network. This works like vehicle traffic being routed off the highway to make room for public safety personnel

So, what happens next? As a subscriber paid user*, your agency will first need to verify and approve your eligibility. Once you're identified as an eligible first responder, here's how you can get the FirstNet tools you need to do your job in three easy steps:

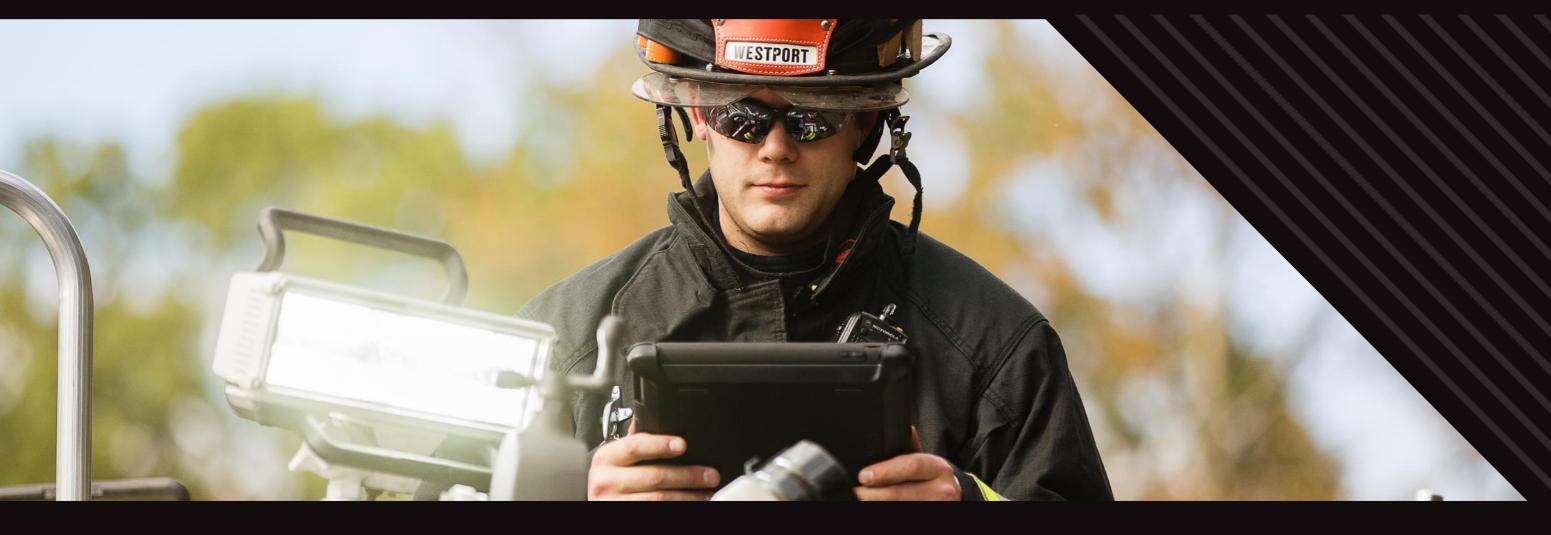
- Look for an e-mail from FirstNet account management advising you of your eligibility and providing instructions for completing an online Local Control user profile
- Complete your Local Control user profile
- Now, you can sign up for FirstNet service online or visit an AT&T retail store. To buy your service at an AT&T retail store, make sure you take the activation code you'll receive in a second email.

You'll find a selection of rate plans at FirstNet.com/plans

11111

Still have questions? Contact FirstNet Customer Service at 800-574-7000.





Network



- \$200+ Million invested in to the Utah network over the last 3 years
- Utah 16 New Sites Committed in the initial build plan
- Site Acquisition has already begun
- Initial Ask gathering of current LMR sites / backhaul

State of Utah Network

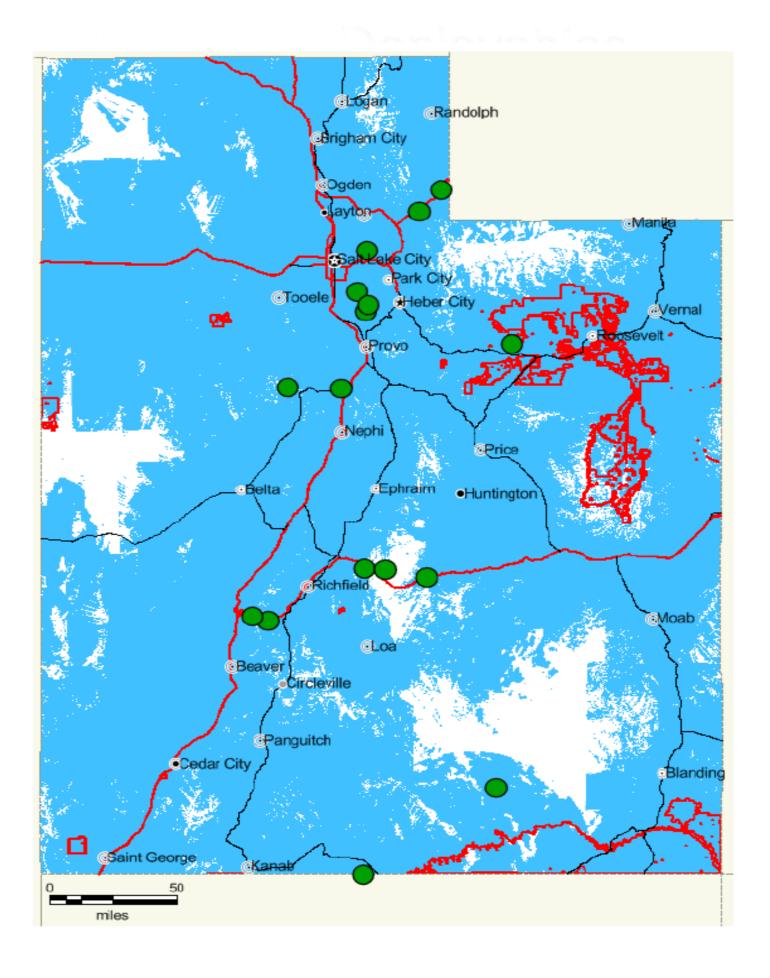
- Existing AT&T LTE Network
- New Site Builds for FirstNet
- Adding BC14 to new/existing sites
- Rural Partner Expansion
- Business As Usual Build Out
- FirstNet Deployables
- In Building Systems (DAS)
- Future Evolutions (5G and beyond)











FIRST PRIORITYTM

Ensuring Quality of Service for first responders is our commitment.



QUALITY OF SERVICE

First responders maintain access to critical communications resources at all times to ensure connectivity and capacity.

FIRST PRIORITY[™]*

First responders receive access to resources first, ahead of others. You're always on, without throttling of text or data. In times of crisis, first responders within the network get first access to necessary resources through the automatic preemption capabilities of the network.

Network Priority

Gives users preferred access to network resources

Network Preemption Terminates or relocates lower priority users to provide primary users with access



Quality of Service, Priority and Pre-emption – Available today on existing AT&T LTE Bands, Inbuilding Networks, all new Sites, and Band 14 when Deployed.



Exclusively for FirstNet users, from the dedicated, tested and certified core

- Dedicated to FirstNet users: segregated to FirstNet traffic
- Enhanced security: designed with a defense-in-depth approach that enhances security at every level
- A highly-secure, physically separate, purpose-built network core
- Geographical redundancy for high reliability
- 24x7 monitoring by a dedicated U.S.-based security operations center
- Dedicated engineering and architecture teams





DEPLOYABLE PROGRAM

Dedicated deployables

Dedicated nationwide fleet including deployables like Band 14 Satellite Cell on Light Trucks



Benefit:

Helps ensure business continuity and disaster recovery

AT&T deployables

Access to commercial Cell on Wheels and Cell on Light Trucks



Benefit:

Augments dedicated resources and redundancies for any situation



Emergency Drop Kit

- ☐ Ideal for short-term situations or as an interim solution until a FirstNet dedicated deployable arrives
- ☐ Helps maintain constant communication and increase situational awareness
- ☐ Cradlepoint LTE router equipped with a FirstNet Ready™ MC400 modem and integrated Wi-Fi
- ☐ Highly secure and reliable data communications hub with intelligent failover to Inmarsat Government satellite service
- ☐ Four FirstNet Ready Sonim XP8 devices
 - With FirstNet Certified and Reviewed apps to help improve public safety's situational awareness (e.g., Intrepid Response)
- ☐ Intrepid Response app can show each first responder's live GPS location in the field

Provides first responders a "bubble of connectivity" the length of a football field





Network - Recap

- FIRST PRIORITY™ benefits on all AT&T commercial LTE bands today
- Band 14 being deployed now adding Capacity and Coverage
- Three levels of permanent priority can be assigned for public safety agencies
- Expanded Rural Coverage through New Site Builds and Partner Coverage
- Access to Satellite Deployables



FirstNet- Why it's different from others

- FIRST PRIORITY™ benefits on all AT&T commercial LTE bands today
- FirstNet has a separate, redundant and dedicated core- it is NOT part of a virtual core
 of a commercial network
- FirstNet has a sustainable financial model that guarantees reinvestment in public safety's network
- Band 14 being deployed now (exclusive to FirstNet) adding Capacity and Coverage
- Three levels of permanent priority can be assigned for public safety agencies
- Expanded Rural Coverage through New Site Builds and Partner Coverage
- Access to Satellite Deployables
- FirstNet has an oversight organization in the FirstNet Authority that not only ensures that AT&T delivers on its commitments but also advocates for public safety



AT&T - Commitment

Consistent FirstNet Updates and Education

Updates on FirstNet Network Build out

- New Site Build-Out
- Obstacles / Hurdles
- Band Class 14 Deployment
- Deployable Access

Other PSE Use Cases / Case Studies



Availability

FirstNet's powerful broadband LTE network allows First Responders to send and receive data, video, images, and Text – without concerns about network congestion. FirstNet offers "true priority" and "ruthless preemption" when its needed. 24/7/365 always on feature

Operability

FirstNet is a nationwide network that provides highly secure, reliable, operable communication between agencies, empowering information sharing across disciplines and jurisdictions, facilitating a dramatic increase in situational awareness

Innovation

FirstNet fosters an ecosystem of innovation, enabling the delivery of actionable data through public safety applications and devices giving First Responders advanced technologies they need to help save lives and keep our communities safe











Stay tuned for more about:

- FirstNet Workshops
- AT&T Roadshow Events
- Utah Regional Events

Go to www.firstnetinutah.org for the latest news and information



FirstNet represents a most significant development for Utah public safety - a nationwide, fully interoperable broadband system with priority for public safety. A network that offers you vast new capabilities, enhances safety and performance, and improves the cost effectiveness of public safety communications. Below we







Learn about what FirstNet means for Get information about devices,







Read about key considerations in Learn about the major milestones for Read about the process involved with

completing the FirstNet State Plan for Utah

