FIRSTNET®
Built with AT&T

LAW ENFORCEMENT

CONNECTED RESPONSE
FOR PUBLIC SAFETY

Innovative solutions for officers and their vehicles

INTRODUCTION

FirstNet® Built with AT&T: Why We Exist

As first responders, fast and reliable communication is vital to your ability to serve and protect, to save lives. Yet no one knows better than you what can happen when you don't have access to the best technology.

The devastating losses from the terrorist attacks of Sept. 11, 2001, exposed glaring weaknesses in the nation's communications systems. Cell service was spotty. Emergency response teams could not communicate using their trusted radios. And many lost their lives that day, including 421 first responders. To prevent such tragic losses from happening again, something had to drastically change in the way first responders communicate.

A 9/11 Commission was formed to identify the challenges and gaps in these communications systems. And the report that followed recommended a nationwide communications network just for public safety. In the years after the report's release, public safety organizations and associations came together to advocate for and encourage Congress to pass legislation to create such a network. And in 2012, Congress passed an act that created the First Responder Network Authority (FirstNet Authority) and charged it with building a nationwide communications network just for first responders.

In March of 2017, in a first-of-its kind public-private partnership, the FirstNet Authority awarded AT&T a 25-year contract to build, deliver and operate FirstNet – an innovative ecosystem that comprises the network, devices, applications and services. AT&T was the only major commercial carrier to bid and commit to build and maintain the only nationwide network for first responders.

As first responders, you put your lives on the line every day to help others. A reliable and highly secure communications network is what you deserve, what you must have to do your jobs successfully. AT&T is honored to partner with the FirstNet Authority to build and maintain *your* network.

The FirstNet® Built with AT&T Difference

Covers more first responders than any other network in America

Prioritized access, never competing with commercial traffic

Band 14 Spectrum, now covering more than 99% of the American population

Highly secure network with available end-to-end encryption

No throttling for FirstNet subscribers anywhere in the U.S.

Body-worn cameras are just one tool to improve location and situational awareness for the Connected Responder.

> "These innovations address problems law enforcement has faced for a long time: staffing issues, dwindling budgets and communication challenges."

THE MODERN
LAW ENFORCEMENT RESPONDER

By Todd Early, Director, Public Safety Business Development, FirstNet®, former Assistant Chief, Texas Department of Public Safety

Since the country's first publicly-funded, full-time police departments were established in the 19th century, our profession has always evolved and changed. Today is no different – with the exception that the rate of change is far faster than in years past.

What excites me most is that many of the innovations I see now are directly addressing problems law enforcement has faced for a long time: staffing issues, dwindling budgets and other resources, and – to put it plainly – the need to do a lot more with a lot less. And then there's the everpresent priority to ensure officers are as safe and healthy as possible. That's a need that will never go away.

The modernization and expansion of available tools is impressive. Officers and command staff are getting real-time information at their fingertips. In-vehicle mobile data terminals (MDTs) and tablets, among other technologies, enable seamless **interoperable communications**. That could be one-to-one communication between officers, across agencies or jurisdictions, or among command center staff and multiple units responding to an incident.

Better and more timely information allows **location and situational awareness** that simply wasn't possible before. And that equates to helping officers keep communities safe.

Also important is the rise of the **mobile office environment**, making it easier and faster to file reports, issue e-citations, access databases and complete tasks virtually, without heading back to the station. Best of all, these innovative, mission-critical tools act as force multipliers. Again, doing much more with less.

These capabilities are possible through **highly reliable, prioritized wireless connectivity** in the officer's vehicle – what we at FirstNet®, call the Connected Vehicle. Using the FirstNet-enabled 5G router with Wi-Fi connectivity and FirstNet MegaRange™ high-powered user devices (these significantly boost cellular transmission), officers can have robust connectivity even in areas that typically have spotty coverage or sit at the edge of a cell connection.

Options That Meet Your Operational Goals

Today's law enforcement officers also have options. I mentioned limited budgets and resources earlier. That's important because if you're a small agency, you may not have the funds to buy a complete suite of software solutions. It might make more sense to add one or two new products at a time, growing your capabilities as budget allows.

Purchases to modernize your agency should also work with what you already have. Interoperability — the ability to connect to systems and products you know and trust — is a critical part of cutting-edge and future technologies. It gives you more options to choose what works for you.

> "Whatever you buy to modernize your agency should be interoperable with technology you already have, acting as a force multiplier."

As you're thinking about what you want your department to look like in the months and years to come — and what technologies make sense for you — I encourage you to start by thinking about your operational goals.

For example, would adding a router to the cruisers in your fleet to enable robust, prioritized connectivity help to overcome frequent communication obstacles? Would that improved connectivity make providing and accepting mutual aid with neighboring

agencies easier and faster? What would it look like to have technology that makes it nearly effortless for officers to share near real-time data, video, images, text and voice with each other and with dispatch and a command center? What about connecting these technologies to others you have, like land mobile radio (LMR), dashcams, body-worn cameras, and beyond? Extending connectivity and capability by bringing together mission-critical tools acts as a force multiplier for law enforcement. I've seen it in action.

These are some of the use cases that Connected Response for Public Safety can help your agency address.
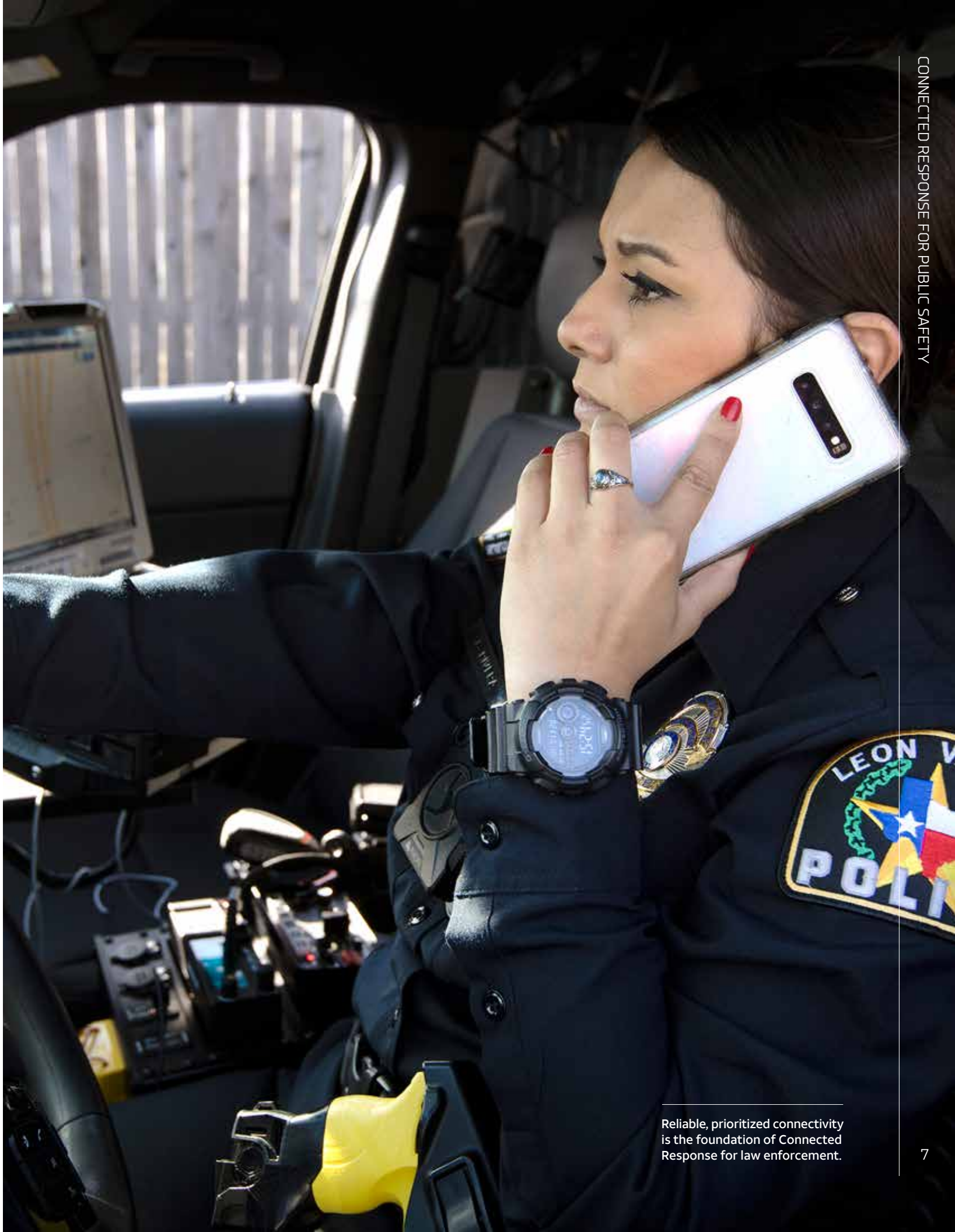
Todd Early
Director, Public Safety
Business Development,
FirstNet Program at AT&T

Todd Early is director of public safety business development for FirstNet. In his current role Todd is responsible for public safety business development at a national level. Todd recently retired as assistant chief from the Texas Department of Public Safety (State Police), where he served almost 28 years. He led the FirstNet Public Safety Advisory Committee for the last three years before retiring.

Todd had oversight of the statewide Law Enforcement Communications Operations & Real-time Operations Communications Centers, statewide land-mobile radio system, fleet operations, facilities management and the Public Safety Solutions Center.

Todd served as the Statewide Interoperability Coordinator for almost 10 years and the Texas Single Point of Contact for the First Responder Network Authority.

Reliable, prioritized connectivity is the foundation of Connected Response for law enforcement.

Fresno Sheriff's Department deputies participate in a search-and-rescue exercise.

When technologies are connected, the whole is truly greater than the sum of its parts.

EXPLORE
THE CONNECTED RESPONSE ECOSYSTEM

The Connected Response for Public Safety concept illustrates a vision for a connected response ecosystem. It shows how a variety of tools and technologies – MDTs, dashcams, devices and routers – can work together to keep you connected and provide the situational awareness you need to complete your mission.

As you explore the Connected Response Ecosystem for FirstNet – for both vehicles and responders – you'll see the potential you can realize through these connections:

• Smoother, faster communication and response times

• More informed deployment of resources

• More effective and relevant data with mission-critical solutions

• Safer, healthier communities and officers

To help you get started, there are certain foundational technologies that enable a connected response ecosystem to flourish, including a FirstNet connected smart device, FirstNet-enabled router with Wi-Fi connectivity, FirstNet MegaRange™ to help boost your signal when needed and a FirstNet-enabled Land Mobile Radio.
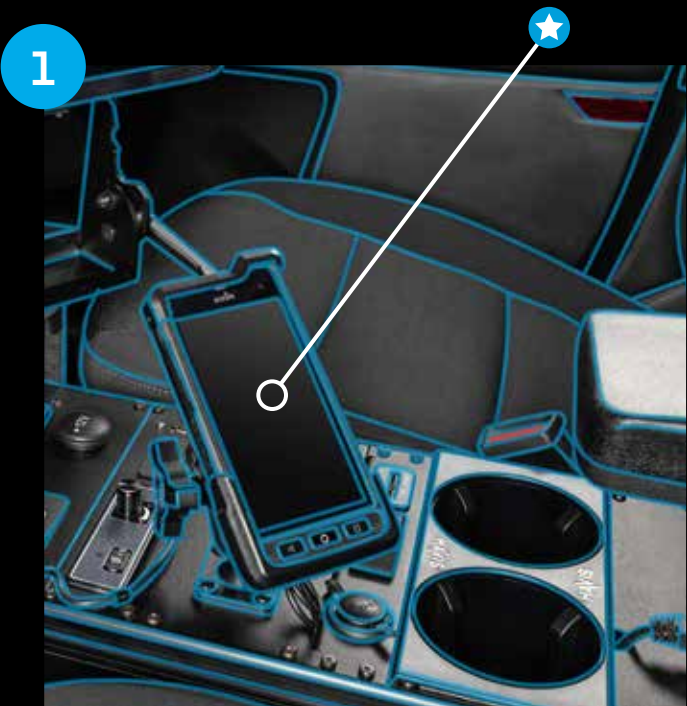
"Our region includes Santa Barbara and Ventura County. As part of this system, we need to be able to communicate with each other effectively. There are so many agencies across the three counties. And only some of those agencies have other agencies on their radio system. So during disasters we communicate with neighboring agencies primarily through cellular service. That's one of the reasons we are on FirstNet. [During an active shooter situation a couple of years ago], we relied heavily on FirstNet to ensure we kept our connection. Communication was critical, as it was our lifeline and our means of preventing another tragedy from happening."

– Ian Parkinson, Sheriff-Coroner, San Luis Obispo County, California

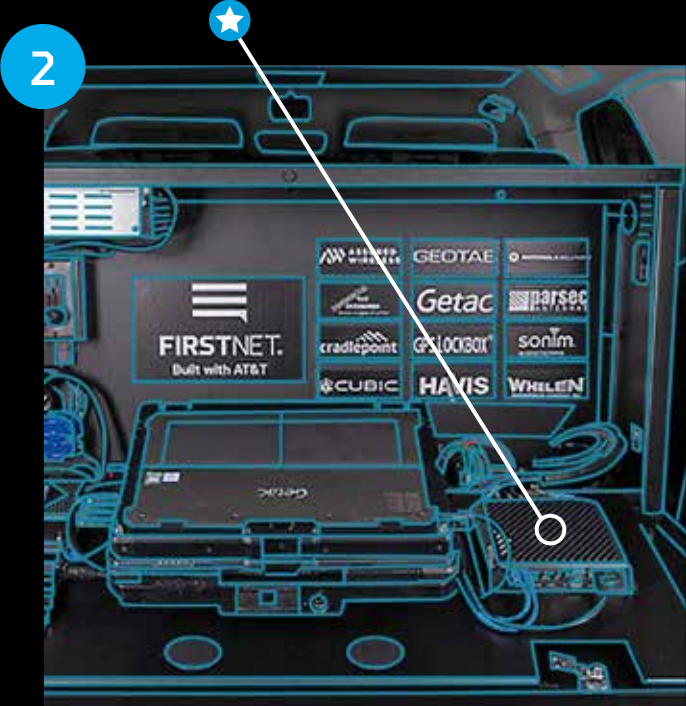8

9

CONNECTED RESPONSE
FOUNDATIONAL TECHNOLOGY

⭐ THE CORE FOUR

While law enforcement agencies can and should choose only the solutions that will most benefit their personnel, these four are the foundation of Connected Response for Public Safety and often a good place to start:
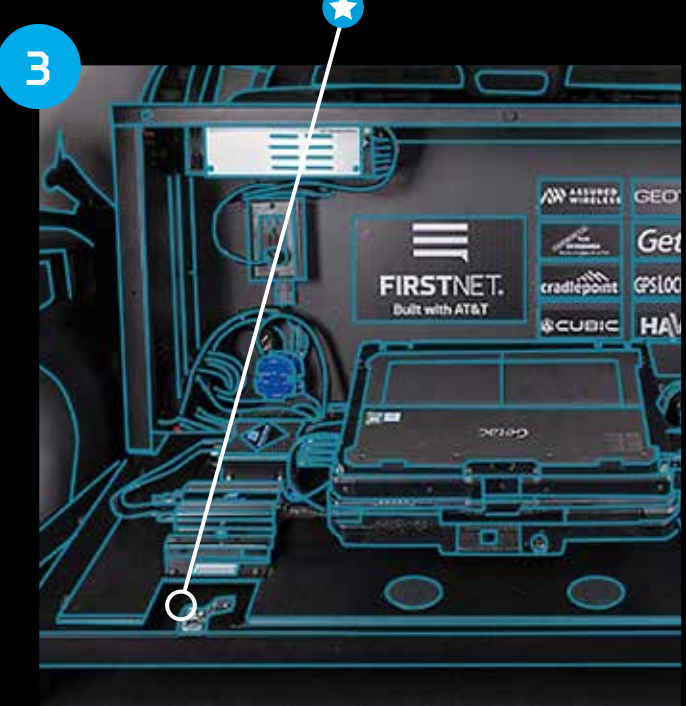

1

2

3

4

FirstNet connected smart device with mission critical push-to-talk

A public safety-grade group communications service defined by 3GPP Mission Critical standards. Delivers group and 1-to-1 push-to-talk calling; location services to map or call team members; text messaging to groups or individuals; file-sharing of images, video clips, documents and more.
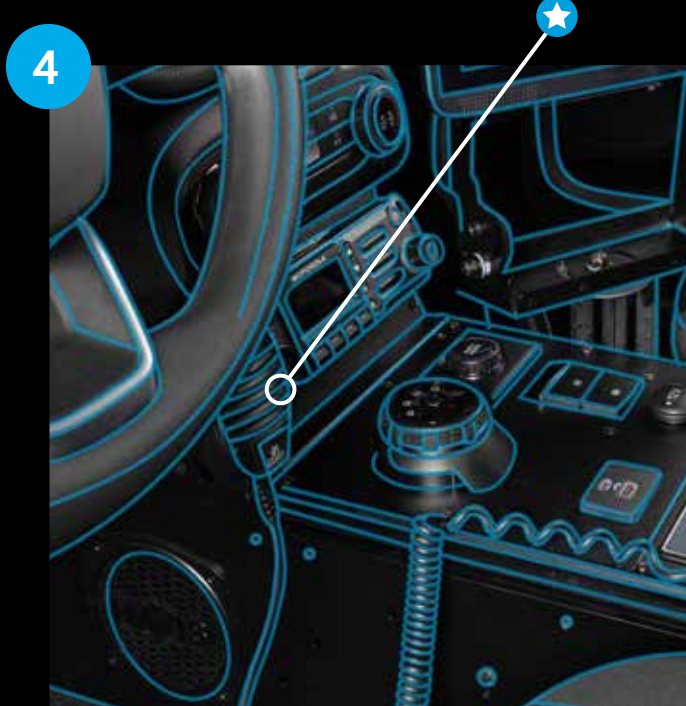
Router – FirstNet 5G Wi-Fi Connectivity

The foundation of all reliable, robust and prioritized connectivity and communications for Connected Response for Public Safety. FirstNet enables public safety to connect in areas where there's typically little or no coverage and also delivers greater uplink speed.

FirstNet MegaRange™

This high-power user equipment (HPUE) solution helps boost your signal at the edge of coverage for a range of communications and needs.
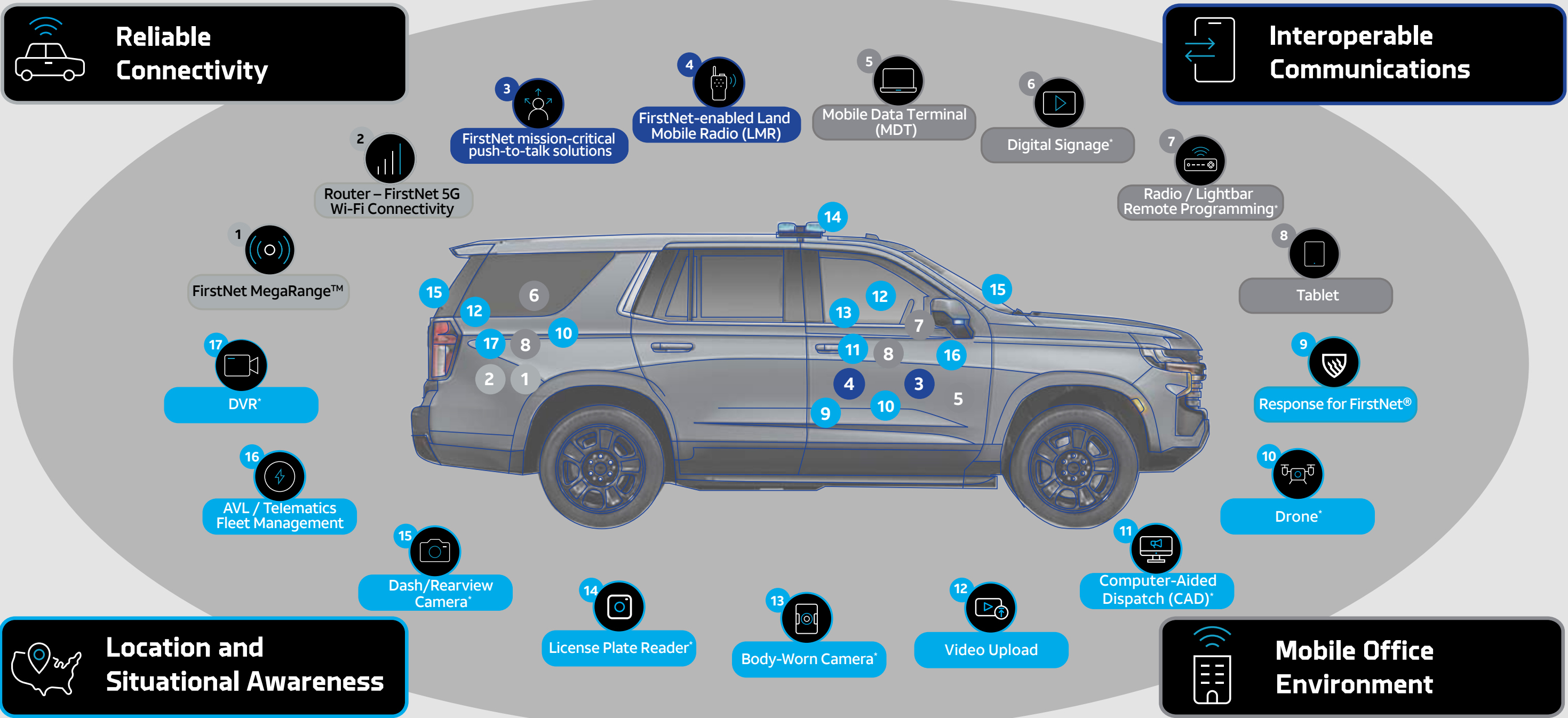
FirstNet-enabled Land Mobile Radio (LMR)

Turn a local radio system into a nationwide platform using the FirstNet network. Provides additional capability, allowing for failover and system redundancy in the event of an outage. Reprogramming your radio to align with a neighboring agency's is simple and quick.

CONNECTED VEHICLE
FOR LAW ENFORCEMENT

Meet the in-vehicle solutions designed to improve officers' location and situational awareness, provide reliable, prioritized connectivity and a mobile office environment, and facilitate interoperable communications. Then reach out to learn more about the specific technologies that can help meet your needs.

Reliable Connectivity

Interoperable Communications

Location and Situational Awareness

Mobile Office Environment

3 FirstNet mission-critical push-to-talk solutions

4 FirstNet-enabled Land Mobile Radio (LMR)

5 Mobile Data Terminal (MDT)

6 Digital Signage*

2 Router – FirstNet 5G Wi-Fi Connectivity

7 Radio / Lightbar Remote Programming*

1 FirstNet MegaRange™

8 Tablet

17 DVR*

9 Response for FirstNet®

16 AVL / Telematics Fleet Management

10 Drone*

15 Dash/Rearview Camera*

14 License Plate Reader*

13 Body-Worn Camera*

12 Video Upload

11 Computer-Aided Dispatch (CAD)*

CONNECTED VEHICLE
FOR LAW ENFORCEMENT

Reliable Connectivity

⭐ **1. FirstNet MegaRange™:** This high-power user equipment (HPUE) solution helps boost your signal at the edge of coverage for a range of communications and needs.

⭐ **2. Router – FirstNet 5G Wi-Fi Connectivity:** The foundation of all reliable, robust and prioritized connectivity and communications for Connected Response for Public Safety. FirstNet enables public safety to connect in areas where there's typically little or no coverage and also delivers greater uplink speed.

Interoperable Communications

⭐ **3. FirstNet mission critical push-to-talk solutions:** A public safety-grade group communications service defined by 3GPP Mission Critical standards. Delivers group and 1-to-1 push-to-talk calling; location services to map or call team members; text messaging to groups or individuals; file-sharing of images, video clips, documents and more.

⭐ **4. FirstNet-enabled Land Mobile Radio (LMR):** Augments existing LMR capabilities.

Mobile Office Environment

5. Mobile Data Terminal (MDT): In-vehicle laptop providing public safety with mobile office environment capabilities.

6. Digital Signage*: Ability to program vehicular digital signage and digital road signs.

7. Radio/Lightbar Remote Programming*: Remote programming and provisioning of land mobile radio, lightbar features.

8. Tablet: A less expensive and highly versatile tool that augments traditional in-car MDT, delivering greater capability and mobility for officers. Through FirstNet, officers have connectivity that allows them to file e-citations, communicate with CAD and streamline incident reporting.

Location and Situational Awareness

9. Response for FirstNet®: A low-cost, simple-to-use web and mobile situational awareness platform for day-to-day and emergency operations. In one deployable solution, users get near real-time mapping, information-sharing, team mobilization, integrated IAP creation, ICS reporting and push-to-talk communication.

10. Drone*: Improves situational awareness in areas or situations where it's difficult or hazardous for an officer to enter or have visibility.

11. Computer-Aided Dispatch (CAD)*: Officers can interact with dispatchers for call information, run license plates, look for wanted persons, and conduct other queries as well as interface with records management systems.

12. Video Upload: Allows for upload, sharing and storage of video from camera systems.

13. Body-Worn Camera*: Improves officer safety, situational awareness, and after-action reporting.

14. License Plate Reader*: Connects automated license plate recognition system to capture plate numbers and compare plates to a database of vehicles of interest.

15. Dash/Rearview Camera*: Delivers greater situational awareness, safety and after-action reporting.

16. AVL/Telematics Fleet Management: Enables officers to receive faster, more accurate location information and dispatch of the closest available unit. Tracks vehicle health (battery, engine, fuel usage, speed). Can recreate vehicle trips and incidents; and provides intelligent routing.

17. DVR*: Records high-quality video from dashcams and other cameras.
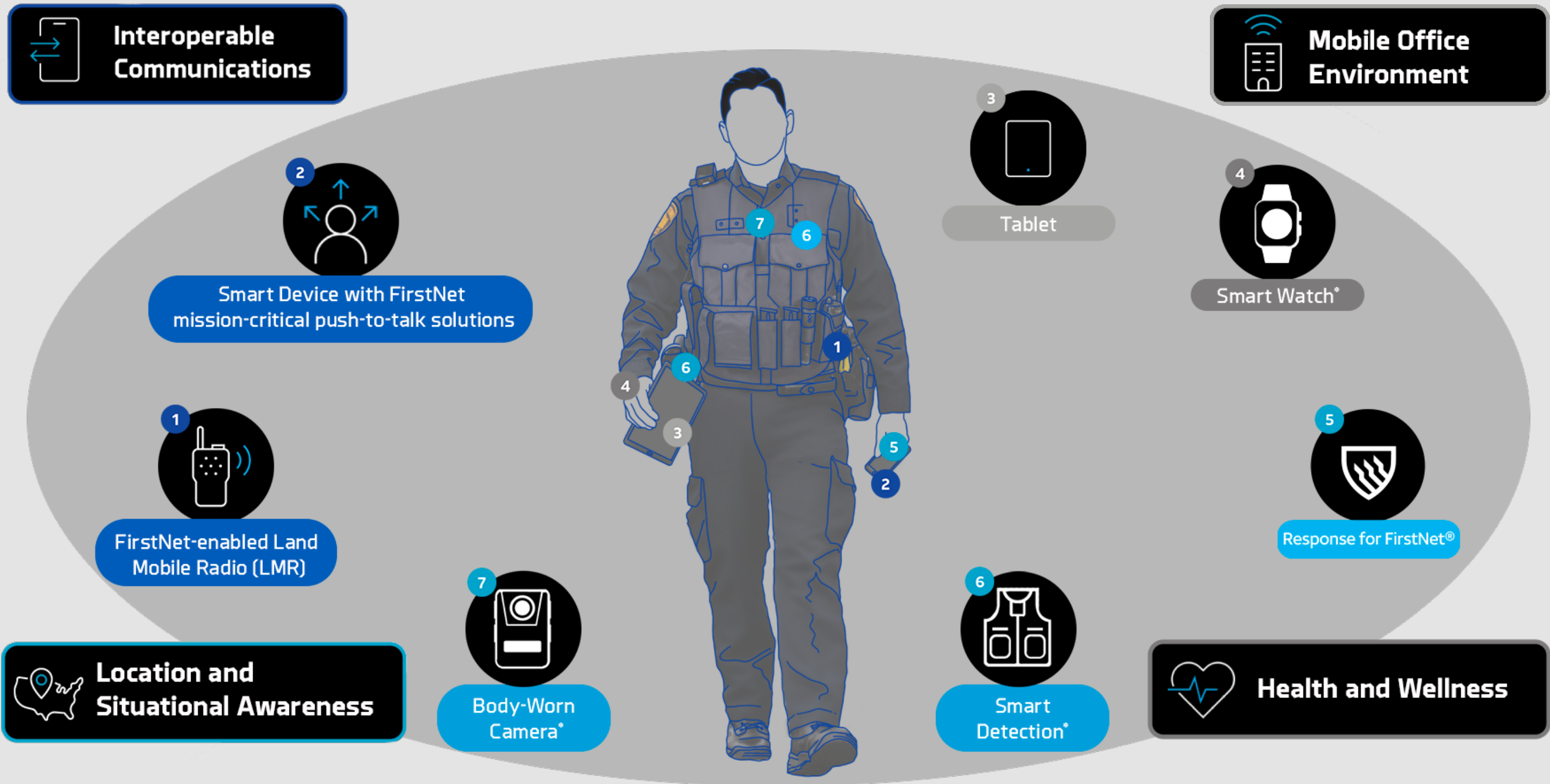
*FirstNet does not sell all of the technologies outlined here. However, FirstNet Ready® and FirstNet Trusted™ devices sold by third parties have been through a rigorous device evaluation and testing process to provide first responders and those who support them with highly secure, high-performance devices ready for use on FirstNet.

⭐ These four technologies are the foundation of Connected Response for Law Enforcement.

CONNECTED RESPONDER
FOR LAW ENFORCEMENT

While there's a lot you can do with a connected vehicle , true connectivity means extending capability when you're *outside* the car — enabling officers to serve safely and effectively at the roadside, in pursuit of a suspect or wherever their job takes them.

These seven solutions help you:

- Get prioritized connectivity to communicate critical information in near real-time
- Use technology to keep officers safe, acting as a force multiplier in times of inadequate staffing and other limited resources
- Make the officer's job — from administrative duties to aiding a neighboring jurisdiction — simpler and faster.

Interoperable Communications

Mobile Office Environment

2 **Smart Device with FirstNet mission-critical push-to-talk solutions**

3 **Tablet**

4 **Smart Watch°**

1 **FirstNet-enabled Land Mobile Radio (LMR)**

5 **Response for FirstNet®**

Location and Situational Awareness

7 **Body-Worn Camera°**

6 **Smart Detection°**

Health and Wellness

CONNECTED RESPONDER
FOR LAW ENFORCEMENT

Interoperable Communications

⭐ **1. FirstNet-enabled Land Mobile Radio (LMR):** Turn a local radio system into a nationwide platform using the FirstNet network. Provides additional capability, allowing for failover and system redundancy in the event of an outage. In cases of mutual aid, reprogramming your radio to align with a neighboring agency's is simple and quick using over-the-air programming, delivering near real-time communication.

⭐ **2. Smart Device with FirstNet mission critical push-to-talk solutions:** Equips officers with a reliable, robust communication tool that augments LMR and can transmit voice, data and live video. Capabilities also include location-sharing and tracking of officers when out of the vehicle, improving awareness and safety.

Mobile Office Environment

3. Tablet: A less expensive and highly versatile tool that augments traditional in-car MDT, delivering greater capability and mobility for officers. Through FirstNet, officers have connectivity that allows them to file e-citations, communicate with CAD and streamline incident reporting.

Health and Wellness

4. Smart Watch*: Receive notifications of an officer's heart rate, blood pressure and other health markers to identify risks and improve officer wellness. Wearables can also communicate man-down notifications and officers are able to transmit information using voice-to-text.

Location and Situational Awareness

5. Response for FirstNet®: A low-cost, simple-to-use web and mobile situational awareness platform for day-to-day and emergency operations. In one deployable solution, users get near real-time mapping, information-sharing, team mobilization, integrated IAP creation, ICS reporting and push-to-talk communication.

6. Smart Detection*: Communicates body armor notifications and sensors that indicate when a gun or TASER has been unholstered or fired, immediately starting live video and notifying dispatch, supervisors and/or commanders.

7. Body-Worn Camera*: Improves situational awareness, resulting in more effective policing and protection of officers, providing video of incident. Wireless upload of video.

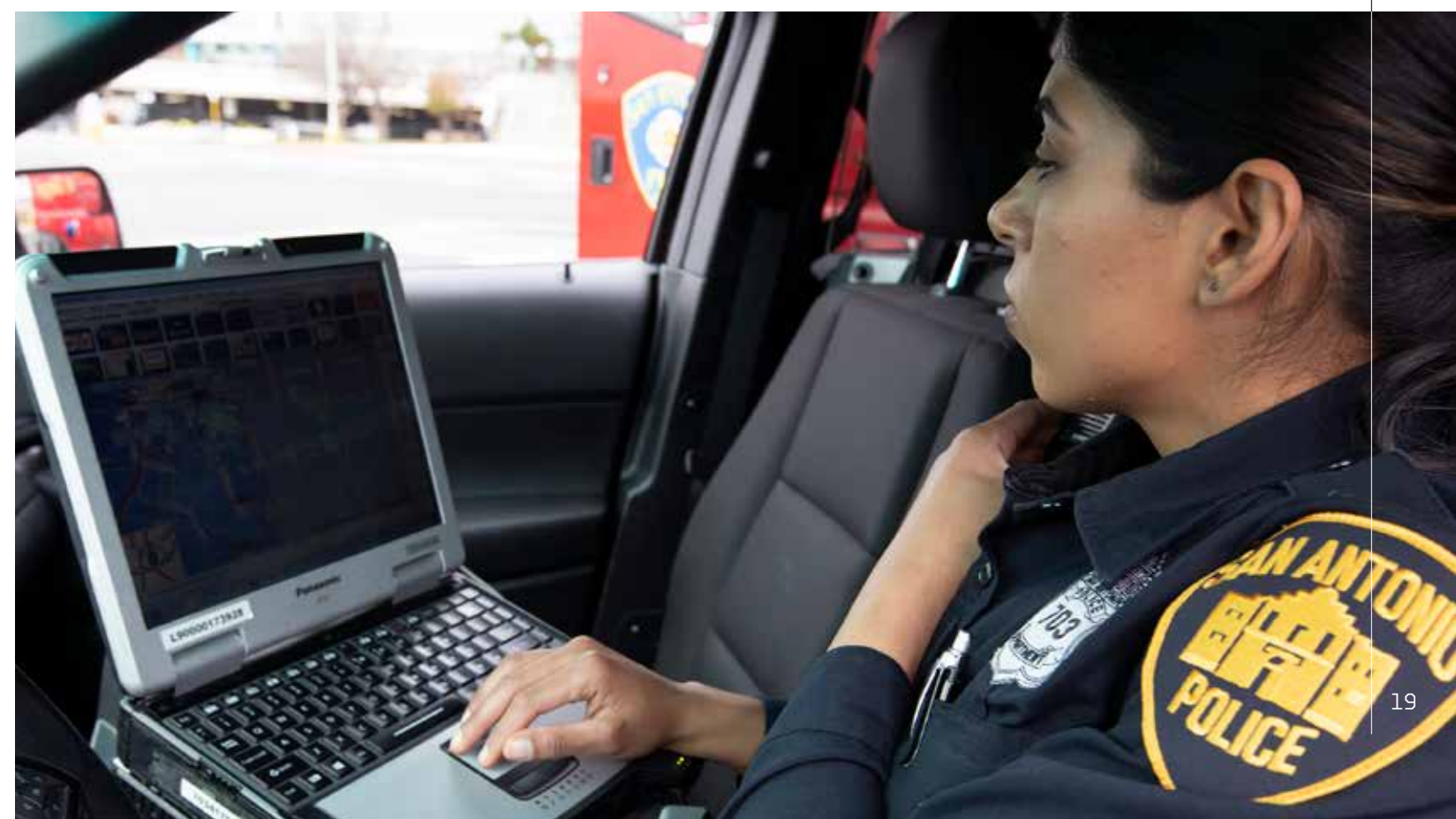⭐ These technologies are the foundation of Connected Response for Law Enforcement.

FirstNet does not sell all of the technologies outlined here. However, FirstNet Ready® and FirstNet Trusted™ devices sold by third parties have been through a rigorous device evaluation and testing process to provide first responders and those who support them with highly secure, high-performance devices ready for use on FirstNet.

Services can include setting up devices so every officer walks out with a working FirstNet device.

GETTING
STARTED

Now that you've seen the Connected Response Ecosystem and have an idea of how it helps law enforcement leaders and officers, chances are you have a few questions. Here are some answers to help you assess whether our solutions are right for you:

Q: Why do I need FirstNet?

A: The ability to communicate and connect reliably with fellow officers, leadership, neighboring agencies and beyond is foundational to law enforcement's ability to do their job. So is a platform that expands those capabilities and continues to reinvest in the network with public safety's input. That's what **FirstNet is and does**. Simply put, FirstNet was born out of necessity – to allow first responders to communicate in any situation.

> FirstNet, Built with AT&T uses Band 14, which is spectrum coverage set aside specifically for public safety.

Q: What does Band 14 spectrum coverage mean for me?

A: Think of **Band 14** as public safety's VIP lane. It's spectrum set aside for public safety and dedicated when first responders need it most. Band 14 provides FirstNet users with the confidence that they will get prioritized connectivity when and where they need it most.

Q: Our agency isn't on FirstNet or AT&T. How can I make sure the transition to a new network will be smooth?

A: Having worked with tens of thousands of public safety agencies of all sizes, we can say with confidence that we know how to make the move to FirstNet seamless for you and your officers. We can help you remotely or come to you on-site, if you prefer. Services can include setting up devices so every officer walks out with a working FirstNet device, saving you time and hassle.

Q: How can I be sure that FirstNet will work with the software we already use?

A: With more 660 **devices** and growing, chances are very good that FirstNet is compatible with your current infrastructure. As part of AT&T's contract with the **FirstNet Authority**, our devices are certified by the federal government's **National Institute of Standards and Technology (NIST)**.

Q: What about coverage where I am? How can I be sure I'll have the connectivity I need when I really need it?

A: FirstNet coverage has always been, and remains, a top priority. That's why AT&T spent the first five years building out Band 14 wireless coverage nationwide as well as providing connectivity through a **fleet of deployable assets** like SatColts (Satellite Cell on Light Trucks), CRDs™ (Compact Rapid Deployables) and FirstNet MegaRange, High Power User Equipment that can boost your signal at the edge of the coverage.

We know that without reliable communication, your mission can't be successful. To ensure you always know the status of your coverage, FirstNet provides the Advanced Network Viewer/**FirstNet Central** portal, which gives you visibility into everyone on your FirstNet system as well as network status and the ability to layer in external information like weather and traffic conditions, cell towers, outages and more.
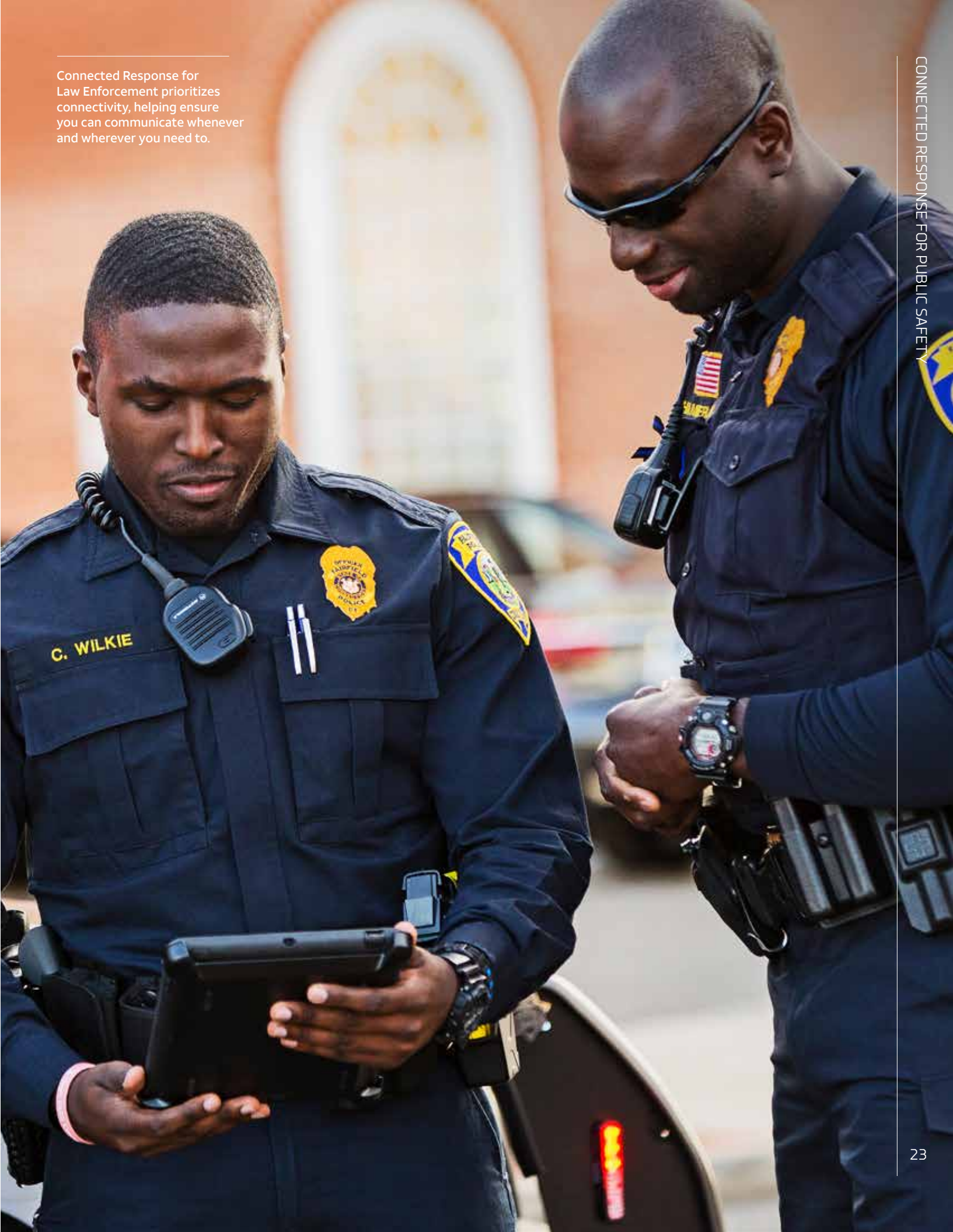
Q: You mentioned enhanced mutual aid. How does this work if another agency or jurisdiction doesn't have FirstNet?

A: FirstNet is inherently interoperable because it adheres to open international wireless standards (3GPP) as required by federal law. Interoperability means first responders can communicate (talk/text/share video/share photos, etc.) with one another regardless of factors such as responder location, jurisdiction, discipline, device, or even wireless carrier. It doesn't matter if a first responder on FirstNet gets a call from someone on a commercial network or from another FirstNet device, their traffic always has priority on FirstNet.

More questions? We'd love to answer them. Please **contact** *a FirstNet Solutions Consultant to learn more.*

"The Portsmouth Police Department works very closely with our sheriff's office here. They're shorthanded. We're shorthanded. So my guys go handle calls in the county, and their people come in and help us when we need them. I've been in law enforcement for 31 years, and going to FirstNet was probably the best enhancement to any communication that I've seen in all the years of my law enforcement career."

– Debby Brewer, Chief of Police, Portsmouth, Ohio

Connected Response for Law Enforcement prioritizes connectivity, helping ensure you can communicate whenever and wherever you need to.

**CONNECT WITH FIRSTNET,
BUILT WITH AT&T**

FIRST TO RESPOND.
FIRST TO CONNECT.

≡ FIRSTNET.
Built with AT&T

To learn more visit:
https://www.firstnet.com/campaigns/connected-vehicle.html

FPO