COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF)
NEW CINGULAR WIRELESS PCS, LLC,)
A DELAWARE LIMITED LIABILITY COMPANY,)
AND TILLMAN INFRASTRUCTURE LLC, A DELAWARE)
LIMITED LIABILITY COMPANY)
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC) CASE NO.: 2024-00284
CONVENIENCE AND NECESSITY TO CONSTRUCT)
A WIRELESS COMMUNICATIONS FACILITY)
IN THE COMMONWEALTH OF KENTUCKY	
IN THE COUNTY OF GRAYSON)

SITE NAME: FALLING BRANCH

* * * * * * *

SUPPLEMENTAL 2024 RADIO FREQUENCY ENGINEERING STATEMENT IN SUPPORT OF APPLICATION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

New Cingular Wireless PCS, LLC, a Delaware limited liability company, and Tillman

Infrastructure LLC, a Delaware limited liability company ("Applicants"), by counsel, hereby

submit the 2024 Radio Frequency Engineering Statement attached hereto as Exhibit A in

support of their request for issuance of a Certificate of Public Convenience and Necessity

("CPCN") from the Kentucky Public Service Commission ("PSC") to construct, maintain,

and operate a Wireless Communications Facility ("WCF") to serve the customers of the

Applicants with wireless communications services.

CERTIFICATE OF SERVICE

We hereby certify that the within was served on Interveners Roger & Janelle Nicolai 2663 Blue Bird Road, Falls of Rough, KY 40119, by First Class U.S. Postal Service Mail, postage prepaid, and via e-mail to janelle.nicolai@gmail.com on this 12th day of December 2024.

Respectfully submitted,

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David A. Pike and T. Keits Brown

F. Keith Brown

Pike Legal Group, PLLC 1578 Highway 44 East, Suite 6 P. O. Box 369 Shepherdsville, KY 40165-0369 Telephone: (502) 955-4400 Telefax: (502) 543-4410 Email: dpike@pikelegal.com kbrown@pikelegal.com

EXHIBIT A



2024 Radio Frequency Engineering Statement

in support of Application for

Proposed Wireless Communications Facility 2589 Blue Bird Road, Falls of the Rough, KY 40116 PSC Case No. 2024-00284

Site Name: Falling Branch

(Site Location Moved from location proposed in Case No. 2021-00398)

BACKGROUND

New Cingular Wireless PCS, LLC ("AT&T") is an FCC-licensed wireless communications service provider that provides essential wireless voice and data services to residential and commercial customers. AT&T delivers these services over a network of sites (i.e., antennas mounted on a support structure, with associated radio transmitting equipment) which are linked to one another and which transmit and receive signals to and from mobile phones and other wireless communication devices.

Each site provides coverage for users located in a particular area. The geographic area covered by a given site is determined by factors such as site elevation, local topography, relative location and elevation of adjacent sites and customer usage patterns for the area. The volume of usage that can be handled by an individual site is limited, and sites must be carefully located to provide sufficient coverage for users in a given area. Sites must also be located with reference to other sites in the network to provide seamless mobile connectivity while also avoiding interference with one another.

There is a significant gap in AT&T's wireless coverage in the vicinity of the proposed site. The gap exists because there is insufficient wireless service infrastructure in the subject area. As part of AT&T's overall plan for the county, a new wireless communications facility is needed to substantially close this gap so that quality service may be provided to wireless service users.

To remedy this problem, new wireless communications antennas and associated equipment must be located geographically (as discussed further below) and placed at a specific elevation in order to be integrated into AT&T's existing network to provide coverage in the subject area. Accordingly, AT&T proposes to locate its equipment on a 111-foot tall monopole tower proposed for construction on property located at 2589 Blue Bird Road, Falls of the Rough, KY 40116 (the "Proposed Facility"). Said location has been moved approximately 240 feet further from the Intervenors' residence compared to the location originally proposed in Case No. 2021-00398. The proposed tower height and selected location are necessary for the Proposed Facility to function properly within AT&T's network to substantially close the coverage gap, and AT&T's equipment will be installed and operated in compliance with applicable Federal Communications Commission regulations.

The proposed location is a compromise site. It may not provide the same coverage as the location proposed originally in Case No. 2021-00398. However, it will provide adequate coverage to substantially reduce the significant gap in AT&T's coverage for the subject area.

BENEFIT TO THE COMMUNITY

In addition to voice service in the subject area, AT&T provides high speed data service, with the goal of providing the most advanced personal wireless experience available to AT&T customers. Phones, tablets and even laptop computers now access the internet quickly and efficiently without the need to be connected to a cable or restricted to a small Wi-Fi hotspot as was the case in the past. This has brought about many new innovations, including devices such as parking meters that can report their status, vending machines that can report their inventory levels, delivery vehicles

that report package delivery and receipt and the "connected car," which will not only stream audio but also be able to share diagnostic information, provide real-time traffic updates, report accidents and caution its owner about speeding or aggressive driving.

Expanded wireless communications services are also important to businesses that use these services to support their operations. It is becoming common for AT&T to receive service quality inquiries from businesses when they are planning to locate to a new area. They want to know what infrastructure and technology is in place prior to making a move decision. Wireless carriers also provide real-time internet access for law enforcement, fire and medical transport vehicles, which not only allows immediate access to information when needed, but can also help determine the closest unit to an area of need and help determine the fastest route to the site of an emergency based on current conditions.

FIRSTNET

AT&T is pleased to have been selected as the nationwide public safety broadband network provider for the First Responder Network Authority ("FirstNet"), an advanced broadband network dedicated specifically to public safety communications. Congress created FirstNet to address emergency response communications shortcomings that were initially identified in the aftermath of the September 11, 2001 terrorist attacks.

All 50 U.S. states and 2 territories have opted in to FirstNet, which means that this will truly be a national network that is completely interconnected and will not stop at any state lines.

The proposed site is designed to be part of FirstNet and will provide coverage and capacity for the FirstNet platform. Availability of FirstNet in the subject area improves public safety by providing advanced communications capabilities to assist public safety agencies and first responders.

The following documents are attached as addenda to this report to provide the Commission with additional information regarding the benefits of FirstNet:

- 1. AT&T Press Release: *AT&T Selected by FirstNet to Build and Manage America's First Nationwide Public Safety Broadband Network Dedicated to First Responders*
- 2. FirstNet Authority Top 10 Frequently Asked Questions
- 3. FirstNet Authority FirstNet for 911 Telecommunicators
- 4. FirstNet Authority Press Release: *FirstNet Authority, AT&T Announce 10-Year Investment to Transform America's Public Safety Broadband Network*

5G (FIFTH GENERATION MOBILE NETWORK)

The proposed facility will also support the addition of 5G (Fifth Generation Mobile Network) service to provide significantly enhanced data speeds, as well as network capacity and efficiency to carry more traffic than conventional 4G wireless facilities. The data speeds are significantly higher than comparable 4G sites and provide a "fiber like" mobile experience that improves speeds for uploading, downloading, streaming, and sharing content for area users. The increased bandwidth and capacity, reduced latency, and enhanced support for edge computing from AT&T 5G coverage can provide coverage and support for cities and areas where the deployment of smart devices for public safety and convenience will provide a new level of connectivity.

Adding 5G coverage to the AT&T network will also support improvements to FirstNet to meet first responders' needs and support innovative new technologies to help them stay mission ready. Because reliability is critical, first responders will maintain access to AT&T's LTE spectrum bands, with "always-on" priority and preemption, while also gaining access to AT&T's 5G spectrum for enhanced speed and capacity. The Proposed Facility will be a key network component of the dedicated FirstNet network core for reliable, secure 5G service to support public safety.

SERVICE COVERAGE GAP

AT&T uses industry standard propagation tools to identify the areas in its network where signal strength is too weak to provide reliable in-building service quality. This information is developed from many sources, including terrain and clutter databases which simulate the environment and propagation models that simulate signal propagation in the presence of terrain and clutter variation.

The extent of service coverage provided by existing AT&T sites in the subject area is shown on the map included as Exhibit A (page 6) with this Report. The green shading indicates areas with a signal strength level that provides acceptable in-building service coverage (i.e., where users are able to place or receive a call on the ground floor of a building). The blue shading indicates areas with a signal strength level that provides acceptable in-transit service coverage (i.e., where users should be able to place or receive a call from within a vehicle). The red shading indicates areas with a signal strength level where a customer might have difficulty receiving consistently acceptable service, and white indicates areas where there is little or no measurable signal strength.

The quality of service experienced by any individual customer can differ greatly depending on whether the user is indoors, outdoors, stationary, or in transit. AT&T strives to provide consistent service to all users within a coverage area. Accordingly, the blue, red and white areas on Exhibit A are areas where there is currently inadequate service coverage, and a new facility is needed to close the coverage gaps that affect these areas.

AT&T proposes to construct the Proposed Facility to substantially remedy the service issues and substantially close the coverage gaps illustrated by Exhibit A. The map attached as Exhibit B (page 7) depicts coverage in the subject area once the Proposed Facility is built and integrated into AT&T's existing network. A comparison of Exhibit A (i.e., existing coverage) with Exhibit B (i.e., proposed coverage) clearly shows that gap areas will be significantly reduced once the Proposed Facility is operational, and this will expand coverage and improve service quality and availability in the subject area.

A particular benefit of this proposed facility will be the expansion of coverage and improvement of service quality and availability for a portion of Rough River Lake, a popular boating and recreation area.

EXHIBIT A

Existing Service Coverage Without Relocated Proposed Site

This map illustrates existing coverage in the subject area. Note the clear gap in coverage in the vicinity of the Proposed Site location.



Best Signal Level (dBm) >=-75 Best Signal Level (dBm) >=-85 Best Signal Level (dBm) >=-95

EXHIBIT B

Proposed Service Coverage With Relocated Proposed Site

This map illustrates coverage improvements that will be realized with the addition of the Proposed Facility.



Best Signal Level (dBm) >=-75
Best Signal Level (dBm) >=-85
Best Signal Level (dBm) >=-95

AT&T SEARCH AREA

The following Search Area map included as Exhibit C below shows the area within which an AT&T wireless communications facility should be located in order to function optimally within AT&T's network and fulfill the coverage objectives and network design criteria discussed herein.

Whenever possible, AT&T seeks to co-locate its equipment on existing structures, since colocation speeds deployment of new facilities and reduces tower proliferation. However, there are no reasonably available opportunities to co-locate AT&T's antennas on an existing structure within the Search Area that will satisfy the service objectives for this site.

Falling Branch & b b b b c c interso

Search Area Map

EXHIBIT C

Lat: 37.596529 Long: -86.484175 Radius: .35 miles Falling Branch Search Area

CONCLUSION

The Proposed Facility will provide necessary infrastructure as part of AT&T's wireless network. The location for the Proposed Facility was chosen to address the service issues described in this report, and the height of the tower proposed as part of the Proposed Facility will provide and improve the wireless communications services in the area, and the Proposed Facility will be constructed and operated in accordance with all applicable FCC regulations and requirements.

Sherri Lewis RAN Engineer

ADDENDUM 1

AT&T Press Release: *AT&T Selected by FirstNet to Build and Manage America's First Nationwide Public Safety Broadband Network Dedicated to First Responders*

AT&T Selected by FirstNet to Build and Manage America's First Nationwide Public Safety Broadband Network Dedicated to First Responders

Our Company / Dallas, Texas, Mar 30, 2017

Public-Private Infrastructure Investment Helps Police, Firefighters & Other First Responders Keep America Safe

FirstNet Investments Expected to Create 10,000 Jobs

AT&T* has been selected by the First Responder Network Authority (FirstNet) to build and manage the first broadband network dedicated to America's police, firefighters and emergency medical services (EMS). The FirstNet network will cover all 50 states, 5 U.S. territories and the District of Columbia, including rural communities and tribal lands in those states and territories.

This is a much needed investment in America's communications infrastructure to support millions of first responders and public safety personnel nationwide who protect and serve more than 320 million people across the U.S. This significant public-private infrastructure investment is expected to create 10,000 U.S. jobs over the next two years from AT&T's work for FirstNet. The network buildout will begin later this year. Randall Stephenson, AT&T chairman and CEO, said, "We are honored to work with FirstNet to build a network for America's police, firefighters and EMS that is second to none. This is an unprecedented public-private investment in infrastructure that makes America a leader and public safety a national priority."

"Today is a landmark day for public safety across the Nation and shows the incredible progress we can make through public-private partnerships," said U.S. Department of Commerce Secretary Wilbur Ross. "FirstNet is a critical infrastructure project that will give our first responders the communications tools they need to keep America safe and secure. This public-private partnership will also spur innovation and create over ten thousand new jobs in this cutting-edge sector."

Today, first responders use commercial networks – the same ones used by consumers and businesses – for mobile data and applications. That can be an issue when a significant public safety crisis happens and commercial networks quickly become congested. It makes it difficult for first responders to communicate, coordinate and do their jobs.

Plus, first responders use more than 10,000 networks for voice communications. These networks often do not interoperate, which severely limits their ability to communicate with each other when responding to a situation.

FirstNet's mission is to fix this. Through this new public-private partnership with FirstNet, AT&T will deliver a dedicated, interoperable network and ecosystem that will give first responders the *technology they need to better communicate and collaborate across agencies and jurisdictions – local, state and national.*

"There's no connection more important than one that can save a life," said Kay Kapoor, president, AT&T Global Public Sector. "FirstNet is unprecedented in its vision, scope and importance to our nation and the future of public safety communications. We're honored to be selected for this historic and critical initiative."

"This partnership brings together FirstNet as the voice of public safety and a global technology team with a proven track record and commitment to public safety," said FirstNet CEO Mike Poth. "Together, FirstNet and AT&T will move with precision and urgency to deliver this much-needed infrastructure to those who need it the most: the first responders we rely on in disasters and emergencies."

In addition to creating a nationwide seamless, IP-based, high-speed mobile communications network that will give first responders priority access, the network will help:

- Improve rescue and recovery operations to help keep first responders out of harm's way
- Better connect first responders to the critical information they need in an emergency
- Further the development of public safety focused IoT and Smart City solutions such as providing near real-time information on traffic conditions to determine the fastest route to an emergency
- Enable advanced capabilities, like wearable sensors and cameras for police and firefighters, and camera-equipped drones and robots that can deliver near real-time images of events, such as fires, floods or crimes

FirstNet and AT&T will innovate and evolve the network to keep the public safety community at the forefront of technology advances. For example, as 5G network capabilities develop in the coming years, FirstNet and AT&T will work together to provide the exponential increases in the speed with which video and data travel across the FirstNet network.

To help FirstNet achieve its public safety mission, AT&T has assembled a team that includes Motorola Solutions, General Dynamics, Sapient Consulting and Inmarsat Government.

The broad terms of this 25-year agreement between FirstNet and AT&T are:

- FirstNet will provide 20 MHz of high-value, telecommunications spectrum and success-based payments of \$6.5 billion over the next five years to support the network buildout; FirstNet's funding was raised from previous FCC spectrum auctions.
- AT&T will spend about \$40 billion over the life of the contract to build, deploy, operate and maintain the network, with a focus on ensuring robust coverage for public safety users.
- Additionally, AT&T will connect FirstNet users to the company's telecommunications network assets, valued at more than \$180 billion.

The strong participation of states in the FirstNet network will help make this significant investment in America's communications infrastructure a reality. As states join FirstNet, investment in infrastructure and job creation will follow.

For more information on AT&T's selection, please visit att.com/FirstResponderNews. For more information about FirstNet, please visit FirstNet.gov/mediakit.

*AT&T products and services are provided or offered by subsidiaries and affiliates of AT&T Inc. under the AT&T brand and not by AT&T Inc.

ADDENDUM 2

FirstNet Authority Top 10 Frequently Asked Questions



FirstNet Authority

Top 10 Frequently Asked Questions

1. What is the First Responder Network Authority?

The First Responder Network Authority is the independent authority established by Congress to deliver a nationwide broadband network dedicated to public safety. The network is strengthening public safety users' communications capabilities, enabling them to respond more quickly and effectively to accidents, disasters, and emergencies.

The First Responder Network Authority is led by a Board of leaders and executives from the public safety community; federal, state, and local governments; and the technology, finance, and wireless sectors. It has a staff of about 200 employees with expertise in public safety, telecommunications, customer service, technology, procurement, and other areas needed to develop the network.

It is headquartered in Reston, Virginia, and has a technology center and lab in Boulder, Colorado.

2. What led to the creation of the First Responder Network Authority?

The 9/11 terrorist attacks brought to the forefront the many communications challenges that first responders face during emergencies and disasters. These issues were captured in the 9/11 Commission Report, which identified gaps in emergency communications and recommended a nationwide network for law enforcement, fire, and emergency medical personnel communications.

The public safety community united to fulfill the 9/11 Commission's recommendation. Public safety organizations and associations advocated before Congress for a dedicated, reliable wireless network for first responders. Their advocacy efforts led to the passage of legislation in 2012 to create the agency to deploy the Network in all U.S. states and territories, including rural communities and tribal nations.

3. How has public safety been involved in the vision for the FirstNet network?

Public safety officials have worked closely with the First Responder Network Authority since its inception in 2012 to ensure the network meets first responders' needs – today and in the future. The agency's outreach and consultation efforts have connected the organization to more than 3 million first responders and state public safety and technology executives across the country.

Specifically, the First Responder Network Authority has consulted extensively with **state single points of contact (SPOCs)** in each of the 50 U.S. states, 5 territories, and the District of Columbia, as well as local/municipal, tribal and federal public safety leaders. It also coordinates with public safety through the **Public Safety Advisory Committee (PSAC)**, which provides guidance and subject matter expertise from a first responder perspective. Public safety leaders at the national, state and local levels continue to advocate for and support deployment of the network.

4. How was AT&T selected to build, operate, and maintain the FirstNet network?

The First Responder Network Authority and the Department of Interior made the 25-year award based on the determination of the overall best value solution for FirstNet and public safety. The buildup to the award included a fair, competitive procurement process that began in January 2016 with **release of the Network RFP**.

The procurement process followed the Federal Acquisition Regulation (FAR) and encouraged offerors to provide innovative solutions that could meet or exceed the needs of public safety.

The procurement was open to all entities, whether traditional wireless companies or new entrants, provided their proposal could meet the RFP's statement of objectives. AT&T was selected on a best-value award that considered financial sustainability and was based on more than just a technically acceptable solution at the lowest cost. The evaluation of proposals assessed the offerors' ability to submit a cost-effective and innovative model, and to meet or exceed the 16 objectives and evaluation factors outlined in the FirstNet RFP.

5. Why is the Network being built and operated through a public-private partnership?

The First Responder Network Authority and AT&T are modernizing and improving public safety communications by leveraging private sector resources, infrastructure, and cost-saving synergies to deploy and operate the network. This public-private model also helps keep costs down for American taxpayers. To do this, Congress used the sale of communications airwaves (or spectrum) to fund FirstNet's initial operations and help start network deployment; the \$7 billion FirstNet received in initial funding came from FCC spectrum auction revenue, not taxpayer funds.

If the federal government were to build, maintain and operate this network, the estimated cost would be tens of billions of dollars over 25 years. **The Government Accountability Office has estimated** it could cost up to \$47 billion over 10 years to construct and operate the Network.

With this partnership approach, the First Responder Network Authority and AT&T do not need any additional federal funding to build and operate the network – it is a fully funded and self-sustaining. In return, America's first responders get services far above and beyond what they have today over a first-class broadband network dedicated to their communications needs.

6. What are the key terms this public-private partnership?

Congress intended for the network to be built and operated as a public-private partnership that brings together the best of the private sector, including commercial best practices, infrastructure, and resources – with the First Responder Network Authority's public safety expertise. This approach will lead to a fully-funded, self-sustaining Network that will serve public safety for years to come. This business model is built upon the efficient use of resources, infrastructure, cost-saving synergies, and incentives, including:

- 20 MHz of federally owned spectrum and \$6.5 billion in initial funding to the partnership; in return AT&T will deploy and operate a nationwide high-speed broadband network for public safety over 25 years.
- AT&T will invest about \$40 billion over the life of the contract to build, operate, deploy, and maintain the Network, and together with the First Responder Network Authority will help ensure the Network evolves with the needs of public safety.
- AT&T can use FirstNet's spectrum when it is not being used by public safety for other, commercial purposes. The company will prioritize first responders over any other commercial users.
- First Responder Network Authority will oversee the contract to ensure it delivers innovation, technology and customer care to public safety through various mechanisms, including subscriber adoption targets, milestone build-outs, disincentive fees and other mechanisms outlined in the contract.

7. What will the FirstNet Network provide first responders that they don't have today?

Today, in emergencies and at large events, heavy public use can lead to wireless communications networks becoming overloaded and inaccessible. In those instances, public safety users are treated the same as any other commercial or enterprise user, and communications can be limited due to congestion and capacity issues.

With the FirstNet network, public safety get a dedicated "fast lane" that provides highly secure communications every day and for every emergency. It delivers specialized features to public safety that are not available on wireless networks today – such as priority access; preemption; more network capacity; and a resilient, hardened connection. The network also delivers more than just a public-safety-dedicated wireless connection – it creates devices and apps ecosystems that connect first responders to innovative, life-saving technologies.



8. How will the Network benefit first responders and help them do their jobs better?

FirstNet improves communications, response times and outcomes for first responders from coast-to-coast, in rural and urban areas, inland and on boarders – leading to safer, and more secure communities. The network provides first responders with innovation and robust capacity so they can take advantage of advanced technologies, tools and services during emergencies, such as:

- Applications that allow first responders to reliably share videos, text messages, photos and other information during incidents in near real-time;
- Advanced capabilities, like camera-equipped connected drones and robots, to deliver images of wildfires, floods or other events;
- Improved location services to help with mapping capabilities during rescue and recovery operations; and
- Wearables that could relay biometric data of a patient to the hospital or alert when a fire fighter is in distress.

Network technology will also be tested and validated through the **FirstNet Innovation and Test Lab**, located in Boulder, Colorado, so first responders will have the proven tools they need in disasters and emergencies.

9. What's happening with FirstNet now?

All 50 states, five U.S. territories and Washington, D.C., have "opted in," to FirstNet, meaning each has accepted its individual State Plan detailing how the network will be deployed in their state/territory.

The First Responder Network Authority's public-private partnership with AT&T provides first responders with immediate access to missioncritical capabilities over the FirstNet network. This includes priority and preemption features that give first responders their own "fast lane" on the public safety network to communicate and share information during emergencies, large events, or other situations when commercial networks could become congested. FirstNet is the only broadband network with dedicated spectrum for public safety (Band 14) and 'always on' priority and preemption for access to the network even during times of network congestion.

Key FirstNet activities include:

Expanding the network and building out Band 14: The First Responder Network Authority has issued work orders to deploy the RANs. This gave AT&T the green light to expand FirstNet's footprint and deploy Band 14 capacity and coverage throughout the nation, providing first responders with the bandwidth, capacity, and public safety features they need to communicate, share information, and use innovative technologies every day and in every emergency.

Driving public safety innovation: FirstNet is also unlocking a new technology marketplace for public safety, enabling first responders to benefit from advancements in innovation. The FirstNet App Catalog is filling up with FirstNet-approved mobile apps that are optimized for public safety use over the Network.

Securing emergency communications: FirstNet's first-of-its-kind core infrastructure gives first responders the dedicated, highly secure, non-commercial network they deserve. The FirstNet Core, delivered in March 2018, provides encryption of public safety data over FirstNet and end-to-end cyber security. FirstNet subscribers also have access to a dedicated Security Operations Center, offering 24/7/365 support.

Creating a differentiated broadband communications experience for public safety: The First Responder Network Authority developed a new Roadmap to advance and evolve FirstNet beyond the current contractual commitments and to create opportunities for public safety to shape the future of their network. Based on input from the public safety community, the **First Responder Network Authority Roadmap** provides a view of emergency responders' critical communications needs and technology trends for mobile broad- band communications over the next five years. The First Responder Network Authority will use the Roadmap to prioritize its programs, activities, and investments to ensure first responders have the communications tools they need to save lives and protect communities.

Engaging with public safety: The First Responder Network Authority will continue to engage with public safety in the states, territories, federal agencies, and tribal nations to understand their trends, drivers and priorities and collaborate with them to realize the operational benefits of FirstNet's differentiated broadband communications experience. Input gathered from public safety on their critical communications needs will continuously be incorporated into the First Responder Network Authority's Roadmap to help guide the growth, evolution, and advancement of FirstNet.

10. How can I learn more?

Stay up-to-date on the First Responder Network Authority activities and the building and deployment of FirstNet at **FirstNet.gov**. Follow us on Twitter, Facebook and YouTube.



ADDENDUM 3

FirstNet Authority - FirstNet for 911 Telecommunicators



As a 9-1-1 Telecommunicator, you know that speed is of the essence. The faster you can deliver accurate, robust information to on-scene responders, the safer our communities are. FirstNet provides our nation's emergency communicators with a secure, reliable broadband connection to communicate with both the public and first responders.

Always-on connection, innovative tools

As the first touchpoint during an emergency, you need a network you can count on to relay information to first responders in the field. FirstNet provides a reliable network that includes priority, preemption, and quality of service—key features that ensure your communications are heard, even when networks are congested.

The FirstNet network also enables you to:

- Quickly and reliably connect to first responders in the field and other agencies and jurisdictions, as an emergency unfolds.
- Track assets and personnel.
- Have the ability to "uplift" all users, including extended primary users, to a higher priority status when needed.
- Stream high-volume data—including videos, photos, and texts—to and from your Public Safety Answering Point (PSAP) or Emergency Communications Center (ECC) to the field.
- Access 150+ FirstNet-dedicated network deployable assets, available at no cost to FirstNet subscribers, which can be used to reestablish a network connection to your ECC during a disaster that destroys existing infrastructure.

Quality of service, priority, and preemption

FirstNet's high-quality Band 14 spectrum is reserved for public safety. Because of FirstNet's built-in priority and preemption capabilities, first responders stay connected even when commercial networks are overloaded.

EX FirstNet Authority

FirstNet for 911 Telecommunicators

FirstNet supports:

Mission critical applications

- CAD
- Criminal queries/databases
- Incident Management
- Record Management Systems
- GIS/mapping
- Weather/traffic
- Video sharing
- Emergency guides
- Push-to-talk

Administrative applications

- Email/text/calendar
- Office tools (PDF, Word)
- Records management
- Reporting
- Database access
- Medical references

Secure connectivity

- Strong user authentication
- Application VPN
- Secure mobile gateway
- Mobile Device Management (MDM)
 policy controls
- End-to-end encryption



"FirstNet gives our tactical dispatch teams the ability to function in the field supporting the first responders on long-term, high-profile incidents with the same technical capabilities they would have if they were sitting in their dispatch center."

Andrew Knapp Executive Director Hamilton County, Ohio 911 Emergency Communications Center

Remote call-taking

You can combine existing E9-1-1/NG9-1-1 call handling remote laptop solutions with FirstNet Ready[™] smartphones and Wi-Fi devices for highly secure connectivity to set up remote call taking. This allows staff to handle dispatch and calls from home or other remote locations when physical access to the ECC is not possible.

Transport diversity for CAD and Call Handling

You can use the FirstNet LTE network to route calls if the terrestrial network fails. Systems can be designed to use FirstNet as a secondary or tertiary network for transport diversity.

Lowered barrier-to-entry to cloud-based intelligent dispatching

You can tie into third-party, cloud-based solutions and applications that route video and IoT feeds back into the 9-1-1 Call Center for more intelligent dispatching and routing. Applications like cloud-based CAD solutions can have a direct connection back to the ECC and can also utilize FirstNet to deliver critical information out to the field.

Mobile communication directly with first responders in the field

FirstNet can connect your ECC to the people, units and resources in the field wirelessly. So, you can use FirstNet to relay critical information to first responders and complement existing radio network communications.

Additional information:

- For use cases and testimonials, visit **FirstNet.gov/FirstNetinAction**.
- For more info about how FirstNet serves the 911 Telecommunicator community, visit **FirstNet.gov/911**.
- Learn more about the First Responder Network Authority at **FirstNet.gov.**
- Learn about FirstNet products and services on FirstNet.com.



info@FirstNet.gov | FirstNet.gov 🛉 🎔 🔘 in 🕨 @firstnetgov

ADDENDUM 4

FirstNet Authority, AT&T Announce 10-Year Investment to Transform America's Public Safety Broadband Network





Springfield, Va., Feb. 13, 2024

FirstNet Authority, AT&T Announce 10-Year Investment to Transform America's Public Safety Broadband Network

First Responder Communications Stay at the Forefront of Innovation with 5G Upgrades, Coverage Enhancements, and Mission-Critical Services.

Key Takeaways:

- The First Responder Network Authority (FirstNet Authority) is launching the next phase of FirstNet through a series of strategic investments totaling more than \$8 billion over 10 years.¹
- Today, the FirstNet Authority and its network partner, AT&T, join to unveil the latest network investment of \$6.3 billion, delivering full 5G capabilities on FirstNet, expanded mission-critical services, and enhanced coverage. The FirstNet Authority anticipates an additional \$2 billion in ongoing investments dedicated to coverage enhancements, which is currently under discussion by the parties.
- Starting in March, FirstNet will provide America's first responders with *always*on priority and preemption across 5G, expanding to include all AT&T 5G commercial spectrum.
- AT&T is deploying a new standalone FirstNet 5G network core built on the latest industry standards with dedicated public safety functionality and features.
- The FirstNet Authority and AT&T will continue to work with public safety officials and government stakeholders to grow and enhance the network.

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What's the news? The FirstNet Authority and its network partner, AT&T*, are announcing a major investment in the future of public safety communications. The FirstNet Authority's 10-year, \$8 billion investment initiative will evolve and expand FirstNet® — America's public safety network. The FirstNet Authority plans to invest \$6.3 billion through its network contract with AT&T and anticipates an additional \$2 billion for ongoing investments in coverage enhancements for public safety, which is currently under discussion by the parties. These strategic investments will expand and evolve FirstNet so public safety stays at the forefront of innovative, lifesaving technologies.

As public safety's partner, AT&T has already grown FirstNet — the *only* network built with and for America's first responders and the extended public safety community — to cover more first responders than any network nationwide. With **more than 5.5 million connections and about 27,500 public safety agencies and organizations on FirstNet**,² first responders can reliably communicate with one another during everyday operations, big events, emergencies in the field, and more.

This landmark announcement launches the next phase of FirstNet with a 10-year investment initiative that will:

- Provide first responders on FirstNet with *always-on* **priority and preemption across all AT&T 5G commercial spectrum** bands, starting in March.
- Build thousands of new, purpose-built FirstNet cell sites across the country including **1,000 new sites within the next two years**. Beyond the initial \$6.3 billion investment, the FirstNet Authority anticipates additional investments over the next decade to deliver Band 14 coverage enhancements. These coverage investments will reflect public safety factors and network considerations, all in support of public safety response operations.
- Create a **standalone 5G core** to enhance current 5G functionality with specific public safety features on FirstNet and support the transition of public safety's Band 14 spectrum from LTE to 5G.



Built with AT&T



- Upgrade public safety's dedicated fleet of deployable network assets with
 5G connectivity to improve operational safety, security, and resiliency.
- Ready the network to **evolve beyond 5G**, while remaining focused on public safety's unique needs and emerging requirements when implementing future technological advancements.

Why is this important? FirstNet is a catalyst for technology and innovation for public safety. The network has created a robust ecosystem of mission-centric apps, solutions, and dedicated connectivity for public safety operations. This strategic investment initiative ensures FirstNet remains at the forefront of technology, continues to solve the communications challenges facing public safety today, and has the flexibility to adapt to public safety's future needs.

With the initial buildout of FirstNet complete - covering more than 2.97 million square miles - this investment initiative will expand access to public safety's Band 14 spectrum in the near term, with plans for additional coverage enhancements on a recurring basis. The FirstNet Authority will work closely with public safety across the states, territories, and tribal lands to identify areas that could benefit from broader coverage. The FirstNet Authority will take this information into account, along with other public safety factors and network considerations, to ensure future coverage enhancements maximize investment dollars and make the biggest impact to public safety operations.

The transition to a full 5G network will enable FirstNet to keep pace with current evolutions in technology and 3GPP standards-based mission critical advancements. The planned 5G network upgrades will generate faster speeds, increase capacity, enhance the quality of service for FirstNet users, and drive innovations in 5G mission critical services. Throughout this multi-year transition to a full 5G network, the existing FirstNet 4G LTE network will remain fully operational and maintain the high level of service that first responders have come to rely on.





This announcement does not change AT&T's financial guidance information provided during its January 2024 earnings.

Why does public safety need a unified, standalone 5G core? By delivering a standalone 5G core, FirstNet will be able to evolve with public safety-specific technological advancements in the coming years that simply aren't possible with 4G, while maintaining its *always-on* priority and preemption that is critical for mission-critical communications.

5G's ability to handle large amounts of data and connect more devices at once is essential to enabling the future of emergency response. From using drones to transmit high-definition video during search and rescue operations to opening the door to an influx of Internet of Things (IoT) data that will enhance situational awareness and improve emergency patient care, 5G is the foundation for the future of first responder-centric technologies.

Plus, by integrating 5G on FirstNet with 9-1-1, public safety will be able to leverage the full potential of this technology, allowing for a more informed and rapid response to emergencies.

What is FirstNet? FirstNet was shaped by the vision of Congress and the first responder community following the 9/11 terrorist attacks. Built in an unprecedented public-private partnership, FirstNet stands above commercial offerings. The FirstNet network provides first responders with truly dedicated coverage and capacity when they need it, unique benefits like mission-critical services, and high-quality Band 14 spectrum to help save lives and protect communities. The FirstNet Authority has a legislative mandate and self-sustaining business model that requires it to invest program generated funds back into the network.

Where can I find more information? Visit FirstNet.gov to learn more about the FirstNet Authority and how the federal government is delivering on its promise to public safety. For more about the value FirstNet is bringing to public safety, check out FirstNet.com. And go here for more FirstNet news.

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What are people saying?

Joe Wassel

Executive Director and CEO, FirstNet Authority

"We are dedicated to the future of public safety communications, and that starts with expanding and evolving FirstNet to meet first responders' needs. With this investment, we are ensuring FirstNet remains at the forefront of technology so that public safety can respond smarter, safer, and more effectively. I look forward to our continued partnership with the public safety community and AT&T to deliver the most reliable, innovative communications network for public safety."

Jim Bugel

President—FirstNet, AT&T

"Our partnership with the federal government has given us the distinct privilege of delivering America's public safety network. FirstNet is critical infrastructure that is reliably connecting those who tirelessly protect and serve. With 5G, public safety will unlock new and innovative tools to keep them mission ready — and we aren't stopping there. Together with the FirstNet Authority, we will continue to expand and enhance public safety's network based on their feedback, giving them the solutions and connectivity they need, both now and in the future. That's the FirstNet promise — continually prioritizing first responders and the communities they serve."

Chief John S. Butler

International Association of Fire Chiefs (IAFC) President and Board Chair and Fairfax County, Virginia Fire and Rescue Chief

"The IAFC is excited about today's investment announcement — the FirstNet Authority is listening to public safety's needs and putting resources to action to continue to improve the network for our nation's fire and emergency services. We look forward to seeing how these continued improvements and enhancements help us in our lifesaving mission every day."

¹Figure based upon ongoing sustainability payments.

² As of Q4 2023





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About the First Responder Network Authority

The First Responder Network Authority (FirstNet Authority) is an independent authority within the U.S. Department of Commerce. Created in 2012, its mission is to ensure the building, deployment, and operation of the nationwide broadband network that equips first responders to save lives and protect U.S. communities. Learn more at FirstNet.gov and follow the FirstNet Authority (@FirstNetGov) on LinkedIn, Facebook, Instagram, and Twitter for updates.

*About AT&T

We help more than 100 million U.S. families, friends and neighbors, plus nearly 2.5 million businesses, connect to greater possibility. From the first phone call 140+ years ago to our 5G wireless and multi-gig internet offerings today, we @ATT innovate to improve lives. For more information about AT&T Inc. (NYSE:T), please visit us at about.att.com. Investors can learn more at investors.att.com.

For more information, contact:

Ryan Oremland FirstNet Authority Communications Director Phone: 202.770.5761 Email: ryan.oremland@firstnet.gov Jeff Kobs AT&T Corporate Communications Phone: 214.236.0113 Email: jeffrey.kobs@att.com