



Delivering on the Promise: Deploying the Nationwide Public Safety Broadband Network

FISCAL YEAR 2023 ANNUAL REPORT TO CONGRESS

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Submitted to the United States Senate Committee on Commerce, Science, and Transportation and the United States House of Representatives Committee on Energy and Commerce



Prioritized service enables first responders to access network resources during times of high network congestion. When hundreds of thousands of people gathered in Times Square on New Year's Eve, FirstNet gave first responders the resources they needed to communicate.



This Annual Report to Congress is issued pursuant to Section 6210 of Public Law 112-96 and reflects the operations, activities, financial condition, and accomplishments of the First Responder Network Authority (FirstNet Authority)¹ for fiscal year 2023.²

¹ Public Law 112-96 established the FirstNet Authority as an independent authority within the United States Department of Commerce's National Telecommunications and Information Administration (NTIA).

² Fiscal year 2023 is the period from October 1, 2022, through September 30, 2023.

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LETTER FROM BOARD CHAIR CHIEF RICHARD CARRIZZO AND EXECUTIVE DIRECTOR AND CEO JOE WASSEL

We are pleased to report to Congress that Fiscal Year (FY) 2023 was one of achievement and continued progress for the First Responder Network Authority (FirstNet Authority).

First, we reached a consequential benchmark in the implementation of the nationwide public safety broadband network (NPSBN). In FY 2023, the initial five-year network deployment of the NPSBN was completed in all 50 states, five territories, and the District of Columbia (DC). These deployment goals had been memorialized in state plans, coordinated with public safety organizations and officials, and approved by governors in each state and territory.

In just a few years, working through our public-private partnership with AT&T, we have fulfilled the objectives set forth in our founding legislation and established an operational network, providing life-saving communications technology to first responders across the country. Further, the FirstNet Authority remains a financially self-sustaining program. Thanks to the unique framework established under our enabling statute, the Middle Class Tax Relief and Job Creation Act of 2012 (P.L. 112-96, Title VI, the Act), the Authority is funded by fees collected through the public-private partnership, at no direct cost to U.S. taxpayers. This is a distinctive accomplishment, which benefits public safety and the American people, in the service of a bold congressional vision.

Second, we were pleased to see the collective stewardship of the FirstNet Authority over its first decade recognized when the Federal Communications Commission (FCC, the Commission) approved the renewal of our Band 14 spectrum license. Since its inception, the FirstNet Authority has worked to minimize and mitigate risk through robust oversight and program management. In its Order approving license renewal, the FCC concluded that the FirstNet Authority had met its duties and obligations set forth in its founding legislation.

The FCC license, however, is only one of two pillars required to ensure the continued operation of the FirstNet Authority. Without congressional reauthorization, the FirstNet program will sunset in February 2027. According to the Government Accountability Office (GAO)³, if Congress does not take action to reauthorize the Authority before the sunset date, the program will not be able to provide the dedicated network services that millions of first responders have come to rely on each day. Early reauthorization by Congress will provide FirstNet subscribers in the public safety community across the U.S. with the assurance they need to know that FirstNet services will be there for them in the years to come. We welcome the opportunity to work with Congress toward this goal.

¹ FirstNet Authority validated completion of the initial buildout in early FY 2024.

² The mayor of the District of Columbia approved its plan as the executive equivalent.

³ Government Accountability Office (GAO) Report 22-104915, <u>Public-Safety Broadband Network: Congressional Action Required to Ensure Network Continuity | U.S.</u> GAO.



Third, during the last fiscal year, we continued our vital work to support public safety, 24 hours a day, 7 days a week, and 365 days during the year. In FY 2023, public safety relied on FirstNet services during a variety of emergencies across the country – including natural disasters such as wildfires, hurricanes, and infrastructure failure – and large-scale planned events as well as for day-to-day communications capabilities that help keep our nation's communities safe. We also continued to engage in close coordination with public safety to catalyze innovation in broadband technology, and to provide first responders with the very best tools as we continue to upgrade the FirstNet network to meet the challenges of the future. This commitment was embodied in a public safety innovation summit, jointly sponsored by the FirstNet Authority and the National Institute of Standards and Technology's (NIST) Public Safety Communications Research (PSCR) Division, which brought together leaders in the public safety space to collaborate on first responder communications technology. We are committed to continuing these efforts to remain at the cutting edge of public safety communications innovation.

Board Chair

We have come a long way in a short time. The ingenuity and foresight that Congress brought to its careful statutory design of the FirstNet Authority has paid tangible dividends for first responders and the American people, whom they protect. Today, we are at the threshold of a new chapter in our story. Through our innovative public-private partnership with AT&T, and our close affiliation and collaboration with public safety nationwide, the FirstNet Authority is instilled with a renewed sense of commitment and purpose in serving the public safety community and leading the transformation of broadband public safety communications.

We know that first responders give us their all every day. At the FirstNet Authority, we believe they deserve nothing less in return.

Sincerely,



CHIEF RICHARD CARRIZZO



JOE WASSEL
Executive Director and CEO



EXECUTIVE SUMMARY

The First Responder Network Authority (FirstNet Authority) is an independent authority within the Department of Commerce's National Telecommunications and Information Administration (NTIA) tasked by Congress to ensure the establishment and continuing operation, maintenance, and improvement of a nationwide, interoperable public safety broadband network. Created in the Middle Class Tax Relief and Job Creation Act of 2012 (the Act), Congress allocated \$7 billion and 20 megahertz of broadband spectrum to establish the network for first responders. In 2017, following an open, transparent, and competitive procurement process, the FirstNet Authority awarded a 25-year contract to AT&T to build, operate, and maintain the network, creating a first of its kind public-private partnership to support public safety. Shortly thereafter, in 2018, AT&T commenced deployment of the FirstNet network to bring network coverage, services, and capabilities to public safety nationwide. The FirstNet Authority is now funded by fees collected through the public-private partnership, at no direct cost to U.S. taxpayers.

In FY 2023, the FirstNet Authority reached a substantial milestone in the deployment of the nationwide public safety broadband network (NPSBN) – also referred to as "the FirstNet network," "FirstNet," or "the network." The FirstNet Authority and AT&T completed all contract milestones for initial network deployment that had been agreed to in 2017, including targets for rural and non-rural deployment.

Also in FY 2023, the Federal Communications Commission (FCC, the Commission) approved the FirstNet Authority's application to renew its Band-14 radio spectrum license, the dedicated spectrum allocated by Congress for the NPSBN. Consistent with the requirements of the 2012 Act, the FirstNet Authority submitted its application in August 2022. After thorough consideration, the FCC's Order concluded that the FirstNet Authority had met its duties and obligations set forth in its founding legislation.

Congress should note, however, that the Act that created the FirstNet Authority contains a provision that sunsets the organization in February 2027. Without congressional action to reauthorize the authority before then, the FirstNet Authority will be unable to continue its role managing and overseeing the NPSBN to ensure public safety has the broadband communications tools it needs to perform its critical mission. The uncertainty among public safety created by the absence of clear congressional direction to extend the FirstNet Authority can create a chilling effect among existing users and negatively impact the decision of other first responders to join the network.

In FY 2023, the FirstNet Authority continued its leadership in public safety communications through implementation of strategic investments and innovative partnerships with other federal entities and the public safety community. The rapid deployment of the network and extensive engagement programs have resulted in current use by more than 26,000 public safety agencies and organizations nationwide, with a total of 5 million connections on the network.

To best serve public safety, the FirstNet Authority has integrated outreach and engagement as a central component of its operations. This outreach serves as an opportunity to engage public safety and learn more about user experiences, which supplement technical analysis of the network as part of the FirstNet Authority's program oversight. These engagements also provide users with the opportunity to work with the FirstNet Authority to resolve any issues with the network and to contribute directly to the planning for improved operations and future innovation.

FirstNet by the Numbers

- FirstNet Response Operations: FirstNet made a significant impact nationwide by completing milestones for state deployment, including targets for rural and tribal areas. Today, the FirstNet network provides coverage over more than 2.91 million square miles. In FY 2023, the network deployed over 1,450 solutions for public safety during emergency situations.
- Connections: There has been significant, continuing adoption of FirstNet by public safety. In FY 2023, there were approximately 26,000 public safety agencies and organizations subscribed with 5 million device connections to the network.
- Applications: There are more than 215 unique apps available in the FirstNet app catalog, vetted for security.
- Devices: First Responders can choose from over 821 FirstNet Ready™ devices, which undergo a rigorous certification process, from regular commercial phones to specialized and ruggedized equipment for activities such as search and rescue.
- Deployables: Recognizing that natural disasters and other events can cause cell towers to go offline, and emergencies can occur in remote areas, the FirstNet Authority and AT&T developed a mobile broadband solutions capability. In FY 2023, FirstNet expanded its fleet of these deployables to over 180, from Satellite

Cell on Light Trucks (SatCOLTs), vehicles with mobile cell sites, to compact rapid deployables (CRDs), which are small, highly portable cell sites that can be owned and controlled directly by subscribing public safety agencies.

Notable Successes

In addition to the network operations, expansion, and features noted above, the FirstNet Authority had several other notable successes in FY 2023 including:

- Roadmap: The FirstNet Authority Roadmap (The Roadmap) is designed to guide the growth, evolution, and advancement of FirstNet, identifying public safety's operational needs and areas the FirstNet Authority will focus programs, activities, and investment resources. In FY 2023, the latest version of The Roadmap was released, focusing on the continued evolution of a Dependable Network, which enables Connected Responders, and ultimately allows for Operationalizing Advanced Technologies. These areas represent end goals that enhance public safety operations today and into the future.
- Investments: The FirstNet Authority continued to operationalize investments to improve the FirstNet network. This included evolving the network to support full 5G capabilities in a multi-year, multiphased effort, expanding the fleet of deployables to enhance network coverage, capacity, and flexibility, and enhancing In-Building coverage capabilities, to provide coverage where public safety operates indoors, such as police headquarters, fire stations, and emergency communications centers.
- **Engagement:** To continually serve public safety, the

FirstNet Authority conducted nearly 1,600 engagements, reaching more than 45,000 public safety stakeholders nationwide to gain insight and collect feedback regarding the network. In addition, with the completion of the initial five-year network buildout, the FirstNet Authority, in cooperation with AT&T, launched a series of progress update meetings in the 50 states, 5 territories, and the District of Columbia (hereinafter collectively referred to as "states and territories") that opted into FirstNet in 2017. During FY 2023, meetings were held with 27 of the 56 states and territories, with the remainder scheduled for early FY 2024.

- Contract Deployment and Oversight: The FirstNet Authority continued to ensure the successful execution of the contract with AT&T to build, deploy, operate, and enhance the FirstNet network.
- Technology and Innovation: The FirstNet Authority continues to serve as a conduit between public safety users and the industries that operate and develop innovative communications tools to advance public safety communications and their mission.
 - In June 2023, the FirstNet Authority partnered with NIST's Public Safety Communications Research (PSCR) Division to jointly sponsor the inaugural "5x5: The Public Safety Innovation Summit." More than 400 public safety, federal government, industry, and academia stakeholders came together to exchange ideas and discuss the future of public safety communications.
- Financial Sustainability: The FirstNet Authority continues to effectively manage its finances to remain self-sustaining as required by Congress.



computers and cellphones, allowing responders to make phone calls, use apps, and coordinate resources.





throughout the racecourse to keep residents and visitors safe.

FIRSTNET AUTHORITY MILESTONES

In establishing the FirstNet Authority in 2012, Congress prescribed a bold and challenging mission – to build from the ground up a single, nationwide, interoperable broadband network designed exclusively to serve the needs of public safety. After more than a decade of hard work, engaging with public and private partners, and collaborating with public safety organizations at all levels, the promise of FirstNet has been realized for first responders nationwide.

From Founding to Operational – The FirstNet Network

The genesis of the FirstNet network, and its foundation for success, can be defined by collaboration and partnership. Immediately following its creation, the FirstNet Authority engaged in extensive, years-long consultation with Federal, regional, state, tribal, and local jurisdictions across the country to fully understand public safety's needs for coverage, capacity, and broadband applications.

After the selection of AT&T as the FirstNet Authority's private sector partner, the considerable data resulting from the FirstNet Authority's collaboration informed the creation of detailed state plans, blueprints for the proposed deployment of the FirstNet network within the geographical boundaries of each state and territory, which were provided to state and territory executives. In a testament to the wide-ranging consultation conducted by the FirstNet Authority and AT&T, all states and territories approved the state plans, and optedin to the FirstNet network, enabling a master plan for the initial deployment of the FirstNet network nationwide in the first five years.

In FY 2023, AT&T completed the build out of all state plans, including rural coverage requirements.⁴ The impact has been transformative. For example:

- In Washington State, Band 14 has been deployed on over 1,000 cell sites. First responders in more than 130 communities are using FirstNet to stay mission ready, including those in Seattle, Tacoma, Olympia, Richland, and Spokane County, among others.
- In Colorado, first responders in more than 110 communities, both rural and urban, are using FirstNet, where coverage has grown more than 50 percent since deployment began.

- In Pennsylvania, Band 14 has been deployed on nearly 2,000 cell sites, connecting first responders in more than 500 communities. In Huntingdon County, a purposebuilt cell site was constructed in Shade Gap, near the Shade Gap Volunteer Fire Company. It is one of 13 purpose-built FirstNet sites in Pennsylvania.
- In Minnesota, FirstNet connects public safety agencies and organizations in more than 190 communities, from Minneapolis, St. Paul, and Duluth, to Brainerd and Angle Inlet.
- In West Virginia, direct feedback from public safety and local stakeholders had been instrumental in deploying Band 14 across the state and has driven the launch of purpose-built FirstNet sites in rural and remote areas, including Tucker County.
- In Arizona, Band 14 has been deployed at over 1,000 sites, nearly doubling the coverage area since FirstNet deployment began.

Overall, at the end of FY 2023, FirstNet coverage extends to more than 99 percent of the U.S. population, covering 2.91 million square miles. From the tragic failure of communications on September 11th, America's first responders now have a deployed nationwide broadband network that they can depend on and call their own.

Band 14 License Renewal – Meeting the Terms of the Statute

Under the Act, Congress directed the FCC to grant an exclusive renewable license to the FirstNet Authority for the use of the 700 MHz D block and existing public safety broadband spectrum (Band 14) for a period of 10 years. This spectrum license is the cornerstone of the FirstNet network that serves more than 26,000 public safety agencies nationwide.

Consistent with the Act, the FirstNet Authority filed an application with the FCC to renew its Band 14 license in August 2022. In May 2023, the Commission concluded that the FirstNet Authority had satisfied the statutory renewal standard set forth in the Act and renewed the spectrum license for a period of ten years.⁵

⁴ FirstNet Authority validated completion of the initial buildout in early FY 2024.

⁵ The ten-year term is contingent upon Congress reauthorizing the FirstNet Authority on or before February 2027.

The findings contained in the FCC's license renewal Order are noteworthy, as the Act required the Commission not simply to evaluate the FirstNet Authority's management of the Band 14 license, but rather to consider whether the organization had met all the duties and responsibilities assigned to it by Congress in the enabling statute.

Importantly, the Commission Order included findings that the FirstNet Authority met all statutory requirements including those related to governance, state and local consultation, network deployment, network safety, security, and resiliency, interoperability, rural coverage, and promoting integration of the FirstNet network with "9-1-1" centers (Public Safety Answering Points [PSAPs]) or their equivalent, among other achievements. The FCC evaluation was in effect a review of the performance of the FirstNet Authority over its first decade.

Ultimately, this comprehensive review and license renewal by the FCC recognizes and reflects the success of the FirstNet Authority as it undertook the tasks of standing up a new agency, creating a public-private partnership, and deploying an interoperable, secure, and resilient nationwide network to meet the operational needs of public safety responders in rural, suburban, and urban areas.



From data sharing to mobile dispatching and redundancy for 9-1-1 agencies, the Kansas 911 Coordinating Council is using FirstNet to enhance the delivery of 9-1-1 services for telecommunicators, responders in the field, and the public.



After a briage collapse causea a train carrying nazaraous materials to derail in Montana, first responders usea a Firstinet deployable to support communications and access critical tools.

FIRSTNET IN ACTION

FirstNet is the only nationwide public safety communications platform built with and for first responders, utilizing licensed and dedicated spectrum. Below are some examples of FirstNet's usage by public safety agencies from around the country.

Connecting First Responders for Maui Wildfires

In early August 2023, a series of wildfires broke out on the island of Maui in Hawaii. The wind-driven fires caused significant loss of life as well as damage to land and infrastructure, prompting extensive evacuations. The FirstNet Authority and the FirstNet network were there to support the emergency response.

FirstNet maintains deployable network assets in Hawaii yearround, with one of these assets housed on Maui. The FirstNet cell site was able to provide first responders in Lahaina with dedicated connectivity to carry out their missions. FirstNet had liaisons working with officials to safely deploy additional network assets and expedite network restoration in areas affected by the wildfires. The FirstNet Response Operations Group (ROG) team in Maui provided hands-on support to organize deployment of additional assets from neighboring islands, including a dedicated FirstNet COW (Cell on Wheels) and a Flying COW® (Cell on Wings).

Additionally, the FirstNet Authority deployed staff to Hawaii to assist on-site, with team members providing support to the Maui County Emergency Operations Center (EOC) and engaging directly with Emergency Support Function (ESF) representatives. The team also served as a liaison with the Federal Emergency Management Agency (FEMA) Urban Search and Rescue (US&R) teams to understand issues and translate them to specific FirstNet communications needs for the FirstNet ROG team.

The FirstNet Authority's presence in the EOC and embedded with the US&R teams allowed for direct, clear communication of needs from responder agencies and a thorough understanding of on-island resources and capabilities to the ROG. The FirstNet Authority identified many lessons learned specific to this incident and plans to gather additional feedback from local, state, and federal agencies and other representatives that utilized the network in the areas of operation.

Supporting First Responders After Montana Bridge Collapse

In June 2023, a bridge collapse caused a train derailment on a crossing over the Yellowstone River in Montana. Public safety officials in Stillwater County requested FirstNet support, and a SatCOLT was deployed to augment FirstNet coverage in the area. This deployment supported public safety in their emergency response.

Tennessee leads nation in statewide adoption of FirstNet for 9-1-1

In FY 2023, Tennessee became the first state in the nation to initiate a full wireless backup of its 118 primary public safety answering points (PSAPs) or 9-1-1 call centers with FirstNet, increasing its reliability and resiliency. Wireless backup means that even during the toughest strains and worst-case scenarios, network connectivity will be available for 9-1-1 service calls in Tennessee. With the FirstNet deployment, when disruption to the primary 9-1-1 center connections is detected, the calls are automatically re-routed over the FirstNet network to ensure they are answered.

For Tennessee 9-1-1 centers, migrating to FirstNet means greater capacity to support elevated call volumes, increased interoperability among agencies, advanced reporting solutions to help increase operational effectiveness, and more reliability.

Looking ahead to when the deployments are completed for all PSAPs, Curtis Sutton, Executive Director of the Tennessee Emergency Communications Board, said, "It'll be a huge benefit to have a statewide network from Memphis to Mountain City. Everybody's going to have the same FirstNet connection along with two fiber connections."

FirstNet Connects Ambulances at the Network's Edge with HPUE in Illinois

The Bristol Kendall Fire Protection District, near Yorkville, Illinois covers nearly 81 square miles with 40,000 people. The district is unique because it encompasses everything from urban subdivisions to farm communities.

"We have a diverse geographic area, including a river valley that impedes communication where you tend to drop off the radar for cellular communication," said Lieutenant Humza Shamsuddin, Technology Director for the District. Beginning in FY 2023, to augment coverage where geography makes

cellular coverage challenging, Lieutenant Shamsuddin relies on FirstNet's MegaRange™ high power user equipment (HPUE), which can boost signal power up to six times its normal strength.

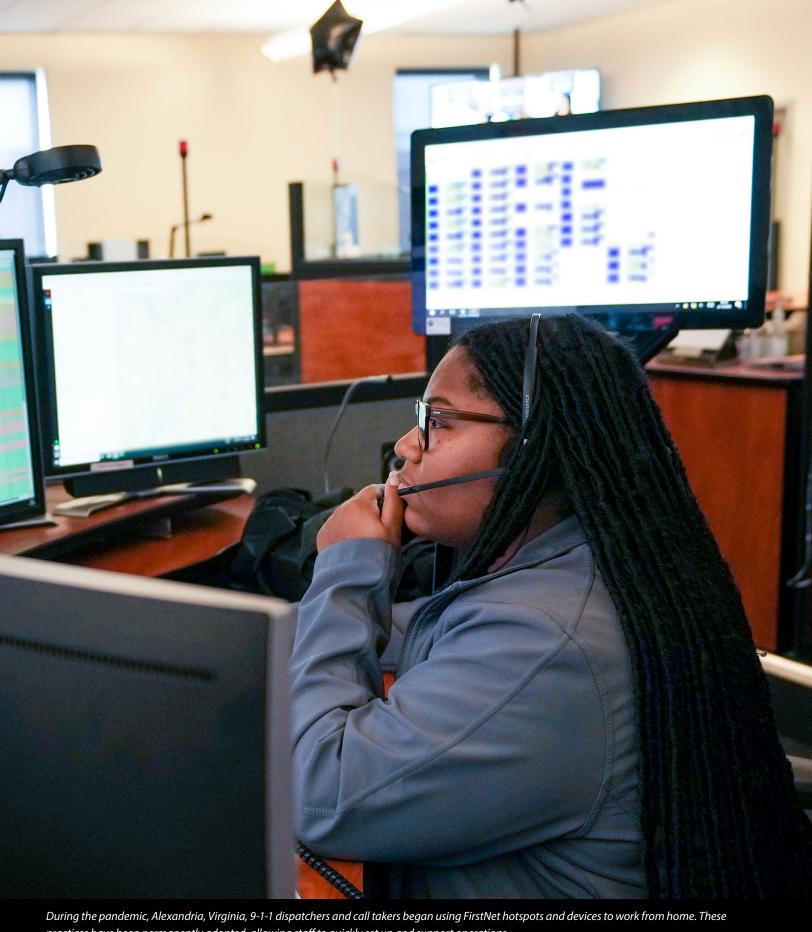
At the edge of the network's reach, HPUE can improve connectivity and uplink data speeds to keep first responders communicating. HPUE gives public safety devices the power to punch through and maintain connection to the network when traditional devices might slow or drop off entirely. Lieutenant Shamsuddin said that this enhanced experience makes a difference for his agency's operations. "There were still areas that had issues because of geography. Once we brought in HPUE, it helped to fill in those gaps because we can transmit at a higher power."

Catalyzing Innovation Through the 5x5 Public Safety Innovation Summit

The FirstNet Authority co-hosted with the National Institute of Standards and Technology (NIST) Public Safety Communications Research (PSCR) Division for the inaugural "5x5: The Public Safety Innovation Summit" in San Diego, California, from June 28-30, 2023.

More than 400 public safety, federal government, industry, and academia stakeholders came together to exchange ideas and discuss the future of public safety communications. Over the course of two and a half days, stakeholders attended plenary and breakout sessions, participated in technology demonstrations, and shared key insights and feedback with the FirstNet Authority and PSCR to support investment and research activities. Deep dive sessions included topics such as indoor mapping, location tracking, and data security in support of pre-incident planning; agency-deployed mobile applications; wearables for public safety; integrating uncrewed aircraft systems into the first responder's toolbox; and FirstNet coverage for public safety incidents and events.

Forums such as the 5x5 Summit are an essential channel to consult with public safety and drive innovation in the public safety communications space.



 $practices\ have\ been\ permanently\ adopted,\ allowing\ staff\ to\ quickly\ set\ up\ and\ support\ operations.$



The FirstNet Authority has a legislative mandate and self-sustaining business model that requires it to invest program generated funds back into the network. This model enables the network to continually improve and advance to meet the needs of public safety. FirstNet Authority staff work with public safety stakeholders to gather their feedback on network needs.

THE FIRSTNET AUTHORITY ROADMAP AND INVESTMENTS

The Roadmap

The FirstNet Authority Roadmap guides the FirstNet Authority's strategic efforts to meet the needs of public safety through innovation and investment. In keeping with our organizational promise to sustain and enhance our strategy as technology and public safety needs evolve, the FY 2023 Roadmap represents a significant update from its 2019 inception and 2020 revision.⁶

Building upon the domain-specific focus of previous Roadmaps, the FY 2023 iteration established goals and identified three key focus areas for enhancing public safety operations to ensure that solutions are effective for first responders through the continued evolution of a **Dependable Network**, which enables **Connected Responders**, and ultimately allows for **Operationalizing Advanced Technologies**. This approach allows the FirstNet Authority to contextualize technology solutions within the ultimate operational goals of first responders.

Since 2020, the FirstNet Authority has participated in thousands of engagements with public safety, academia, and industry to gather input that informs The Roadmap. With the FY 2023 Roadmap publication, the FirstNet Authority continues to guide the deployment and operationalization of FirstNet to stand as a differentiated solution designed to meet the unique requirements of first responders in the field.

During FY 2023, the FirstNet Authority conducted thorough, targeted analysis and engagement efforts to refine the focus areas of The Roadmap and to advance the technologies available for end users on FirstNet. These initiatives concentrated on assessing current operational challenges across public safety disciplines and considering the potential impact of emerging communication technologies on our ability to meet those challenges. Examples of this work include:

- Conducting feasibility assessments to evaluate technology considerations for FirstNet to potentially support air-to-ground operations and provide connectivity in maritime areas.
- Examining public safety considerations for prioritizing coverage gaps, in support of the FirstNet Authority's investment decisions.

- Leading focus groups and field trials to understand needs and gaps in Mission-Critical Services (MCS) to better address public safety challenges in this area.
- Holding tabletop exercises with public safety stakeholders to gain insights into operational needs, challenges, and communication capabilities in the larger context of evolving broadband technologies and future desires.

The FY 2023 Roadmap efforts reaffirmed that first responders place a high priority on enhancing the communication technologies they rely on for daily operations. Within the FirstNet network, their immediate concerns include coverage improvement, availability of MCS, and an enhanced user experience for better data and information integration and sharing. Overall, these efforts, along with other research initiatives, enable the FirstNet Authority to incorporate collective feedback from public safety into its strategic planning, operational engagements, and reinvestment strategies.

Investments

The innovative public-private partnership that the FirstNet Authority entered into in 2017 provides \$18 billion in fee income from AT&T over the 25-year duration of the contract to operate, maintain, and improve the NPSBN to meet the evolving needs of public safety. The Act requires the FirstNet Authority to reinvest those funds back into the network, and as such, the FirstNet Authority is committed to being a responsible steward of its investment resources and ensuring transparency with respect to how those resources are used to evolve the network.

The FirstNet Authority has developed a structured and rigorous investment process that drives disciplined investment of the FirstNet Authority's financial resources. The investments align with the FirstNet Authority's Roadmap, which outlines the key priorities and activities for advancing and evolving the network beyond current contractual commitments. Additionally, to guide the FirstNet Authority's investments, the FirstNet Authority Board adopted Resolution 98, "The FirstNet Authority's Investment Principles," which states that investments must:

- Be derived from and benefit public safety;
- Maintain and advance the foundation of the FirstNet network;

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⁶ See: FirstNet Authority Roadmap 2023

- Consider a balanced approach and provide value to public safety; and
- Be fiscally responsible and reflect strong financial management.

Public safety is at the center of the FirstNet Authority's investment process, which is guided by the Act, the FirstNet Authority's investment principles, and public safety's priorities as reflected in the FirstNet Authority Roadmap.

The FirstNet Authority Board previously approved three major investments to evolve the FirstNet network:

Initial upgrades to enable 5G network capabilities (FY 2020-2023). Evolving the network to support full 5G capabilities is a multi-year, multi-phased effort, beginning with initial upgrades to FirstNet's network Core. The Core acts as the nervous system of the network, separating all public safety traffic from non-public safety user traffic, and enables differentiated services like quality of service, priority, and preemption. In the future, 5G is expected to drive major increases in the quantity and types of connected devices for FirstNet users, as well as significant increases in throughput and dramatically reduced latency.

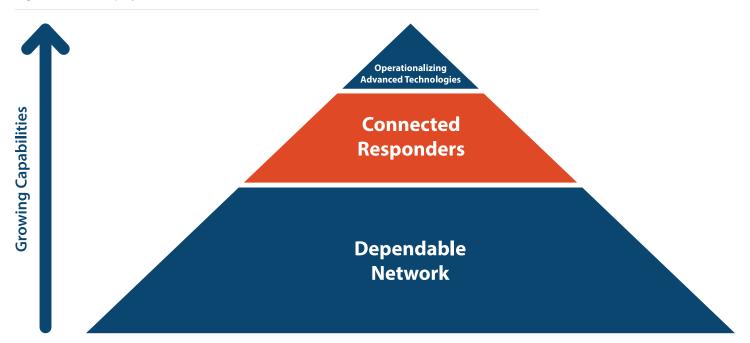
Expanding the fleet of FirstNet deployables to enhance network coverage and capacity for public safety during emergencies and events (FY 2020). Public safety turns to FirstNet deployables for additional support in hundreds of operations around the nation annually. These

assets supported public safety communications during the COVID-19 response; at large pre-planned events; during major emergencies; and throughout responses to disasters, including wildfires, tornados, and hurricanes. The FirstNet fleet currently includes more than 180 deployables such as SatCOLTs, flying COWs, and Compact Rapid Deployables to support first responders in all U.S. states and territories.

Enhancing In-Building coverage capabilities (FY 2022-2023). Public safety often operates in locations with indoor coverage challenges. This investment adds an important capability to provide enhanced coverage where public safety agencies operate indoors, such as police headquarters, fire stations, emergency communications centers, and other critical sites. This service enables more resilient in-building access to the network, including MCS, and priority and preemption. FirstNet subscribers can deploy this capability where and when they need it to enhance in-building Band 14 coverage where they operate, including temporary field locations.

These expenditures represent continued strategic investments toward advancing the network beyond its contractual baseline and responding to first responders' evolving operational needs. During FY 2023, the FirstNet Authority developed requirements to identify and prioritize additional network investments to ensure the NPSBN remains relevant and technically innovative to support public safety stakeholders across all states and territories.

Figure 1: Roadmap Pyramid





rather than transporting patients to a hospital over an hour away.



























The FirstNet Authority co-hosts 5x5: The Public Safety Innovation Summit with the National Institute of Standards and Technology's Public Safety Communications Research Division. This summit brings together leaders in public safety, academia, government, and industry to look at current and emerging public safety communications technologies.

STAKEHOLDER ENGAGEMENT

The FirstNet Authority continues its robust engagement with public safety stakeholders.

In FY 2023, the FirstNet Authority conducted nearly 1,600 engagements, reaching more than 45,000 public safety stakeholders across the 56 states and territories, the federal government, and tribal jurisdictions. Through the engagements, public safety was briefed on the FirstNet solution and its latest innovations, received support to operationalize FirstNet within their agency, and gained access to new and enhanced FirstNet services, features, and capabilities based on their input. Formal and informal engagements across the spectrum of public safety disciplines and command chains allow public safety to provide feedback and recommendations to influence network updates and investments in the future.

In early FY 2023, the FirstNet Authority gained insights regarding the views of public safety by conducting a broad stakeholder survey. Specifically, the FirstNet Authority learned that public safety familiarity with FirstNet Authority and FirstNet products and solutions has grown significantly, that a growing share of public safety stakeholders report their organizations are using FirstNet products and solutions, and the perception of FirstNet products and services had improved significantly from prior years' results. Network coverage was again the most discussed topic during stakeholder engagements in FY 2023. Feedback on coverage included praise for the FirstNet Authority's investments into in-building coverage and deployable assets, within an overall favorable view of network coverage. The inputs provided during stakeholder engagements continuously inform the FirstNet Authority's investments, programs, and activities.

State FirstNet Progress Updates

With the completion of the initial five-year network buildout in 2023, the FirstNet Authority, in cooperation with AT&T, launched a series of progress update meetings for the states and territories that had opted-in to FirstNet in 2017. In FY 2023, the meetings were conducted with local, state, tribal, and federal representatives in 27 of the 56 states and territories, providing information regarding the network and coverage commitments memorialized in the FirstNet state plans. The remainder of the meetings will be held in FY 2024.

Public Safety Advisory Committee

Consistent with its authorizing statute, the FirstNet Authority established a Public Safety Advisory Committee (PSAC) in February 2013. The PSAC consists of members representing all disciplines of public safety as well as state, territorial, tribal, and local governments. The PSAC also has at-large members and federal members. The mission of the PSAC is to assist the FirstNet Authority in carrying out its duties and responsibilities.

In FY 2023, the PSAC conducted more than 35 engagements, including business meetings, bi-monthly webinars addressing network developments with FirstNet Authority staff experts, focus groups and interviews targeted at gathering feedback on potential investment topics and priorities, and monthly Tribal Working Group (TWG) meetings.

These regular meetings enabled strong working relationships among PSAC members and the FirstNet Authority to discuss and address topics such as FirstNet adoption and use, FirstNet-branded applications, disaster response and deployable use, MCS, and association engagement. Throughout the year, the PSAC carried out its statutory responsibility to assist the FirstNet Authority by contributing to key discussions, including considerations for future coverage expansion.

PSAC Tribal Working Group

Federally recognized tribal jurisdictions span the country, where telecommunications capabilities are vitally important to first responders in these areas. Broadband availability and connectivity represent essential infrastructure that is economically important to Tribal nations. Increased connectivity and coverage improve the impact for surrounding first responder agencies as well as nearby, non-Tribal communities. Engaging with these nations and organizations is essential to FirstNet's success and the welfare of American Indian, Alaska Native, and Native Hawaiian (AI/AN/NH) communities.

The PSAC's TWG was established to provide advice on Indian Country outreach, education, and inclusive engagement strategies. The intent is to inform and involve federally recognized Tribes as it relates to their use of the FirstNet network. In FY 2023, the FirstNet Authority continued its outreach with Tribal communities with 164 engagements involving Tribal participation.



Facing challenges in communicating on the water and throughout the town as the population swells and ebbs, the Hyannis Fire Department turned to FirstNet to connect personnel. FirstNet supports the department through hotspots, agency cell phones, tablets, and wireless routers on fire apparatus.

Operationalize FirstNet for Public Safety: The Network Experience Engagement Program

At the request of public safety agencies, the FirstNet Authority established the Network Experience Engagement Program (NEEP), which aids first responders in their planning for network coverage and capacity needs for large scale events. Through the pre-incident/event planning, the FirstNet Authority's goal is to augment public safety's user experience with the FirstNet network before, during, and after an event, and support agencies so they receive the maximum benefit that public safety broadband can offer to their respective operations.

Stakeholders have provided positive feedback regarding the program, including the FirstNet Authority's support for pre-planning and post-incident/event reviews. Stakeholders note during pre-planning engagements that the discussions prompt them to consider communications and coordination challenges they have either not previously considered or had not revisited. These discussions often lead agencies to plan more dynamically, integrating various applications for broadband use into event and incident support, resulting in more comprehensive planning.

In FY 2023, the FirstNet Authority supported agencies through pre-planning and on-site support, including Super Bowl LVII, Waste Management Phoenix Open, the Maui wildfire response, Tennessee State Fair, and Bataan Memorial Death March in New Mexico.

Post-incident/event review engagements offer an opportunity for public safety agencies to analyze and inform the FirstNet Authority of successes, challenges, and concerns related to an incident or event where the FirstNet network was used. These engagements are set up like "after action" reviews that agencies are accustomed to conducting but with a broadband-specific focus. During FY 2023, the FirstNet Authority conducted post-incident/event engagements following the 2023 PGA Championship in Monroe County (New York) and Golden Fire (Oregon), as well as many other incidents across the country. The post-incident/event engagement findings not only help agencies continue to enhance their own future planning but also inform FirstNet Authority activities. When appropriate and with an agency's prior consent, the FirstNet Authority will share information with its network contractor, AT&T, to enhance planning and response for future incidents.



Elbert County is a fast-growing, rural community in Colorado. Public safety relies on FirstNet to keep responders connected across the county's 1,800 square miles.

CONTRACT DEPLOYMENT AND OVERSIGHT

Contract Overview

One of the FirstNet Authority's primary responsibilities is to manage and ensure the successful execution of the contract with AT&T to build, deploy, and operate the FirstNet network. Signed in March 2017, this 25-year indefinite-delivery/indefinite-quantity (IDIQ) services contract was designed to ensure the FirstNet network meets the rigorous communication needs of the nation's first responders and continues to improve and evolve to meet their changing requirements over time.

Under the contract, AT&T must build, operate, maintain, and enhance the network for 25 years while achieving public safety user adoption targets and maintaining a minimum number of devices connected to the network. The contract also guarantees the FirstNet Authority's continued financial sustainability over the life of the contract through annual payments from AT&T to the FirstNet Authority, fulfilling Congress' vision that the FirstNet Authority be financially self-sustaining.

The FirstNet Authority has issued ten task orders under the IDIO contract:

- Task Order 1 (TO1) required the development of a secure platform (the state plan portal) that delivered individual state plans to the states, territories, and District of Columbia (referred to herein as "states").
- Task Order 2 (TO2) required development of the individual state plans. These plans detail the Radio Access Network (RAN) deployment and operations for each of the states. While the state plans were delivered by AT&T and TO2 closed out (March 2018), the state plan portal (TO1) is still available (through the initial fiveyear buildout, plus one additional year, to March 2024) to allow governors and designated state stakeholders to access their respective plans. The state plans were developed in consultation with state officials and approved by the state's governor, a key aspect of the FirstNet Authority's focus on fostering a partnership with public safety and local authorities.
- Task Order 3 (TO3) requires AT&T to deploy, operate, and maintain the network's core and all its functions, and provide for the development of device and application ecosystems for the network. The FirstNet network has its own core, which processes and secures FirstNet users' traffic separate from the AT&T commercial network. The core is a critical piece of physical infrastructure that serves a telecommunications network in a way like

- a server or router for an office or home, respectively. AT&T deployed the FirstNet core in March 2018 and continues to operate and maintain it under the terms and conditions of the IDIQ contract and TO3.
- Task Order 4 (TO4) requires AT&T to deploy the network's Band 14 coverage nationwide (including the territories), while fulfilling the specific commitments made in the individual state plans. TO4 contains the requirements associated with constructing the RAN, which consists of cell towers, sites with RAN infrastructure, and other elements that connect public safety's devices to the core. In FY 2023, the initial network buildout of Band 14 was complete and validated by the FirstNet Authority in the first quarter of FY 2024. AT&T has met all contractual milestones to date — including rural and non-rural coverage requirements and adoption targets — and continues to deliver key services to the public safety community. The task order also requires AT&T to provide 72 transportable cellular assets dedicated solely to FirstNet (also known as deployables), and access to at least 300 other transportable cellular assets in AT&T's commercial fleet that can provide supplementary network coverage when needed. AT&T delivered the initial 72 deployables in September 2018.
- Task Order 5 (TO5) requires equipment and connectivity for the FirstNet Boulder Lab, located in the FirstNet Authority's office in Boulder, Colorado.
- Task Order 6 (TO6) requires AT&T to expand the FirstNet deployable solution acquired through TO4. TO6 includes adding more SatCOLTs to the FirstNet dedicated deployable fleet, as well as adding new deployable form factors to provide additional flexibility and variety to the services offered. TO6 further requires AT&T to examine their deployable storage and response plans to ensure the deployable fleet is optimized to meet the response requirements per the terms and conditions of the IDIQ contract and TO4. TO6 also created a new quality assurance performance metric to ensure that deployables are meeting the contractually defined response times. TO6 is one of two reinvestment task orders awarded in June 2020.
- Task Order 7 (TO7) requires AT&T to upgrade the FirstNet network so public safety begins to experience the throughput benefits of 5G while maintaining the overall FirstNet user experience. TO7 enables a smooth transition from 4G to 5G by leveraging some of the existing 4G network systems. Future task orders are

required to complete a full migration from 4G to 5G. TO7 is the second of two reinvestment task orders awarded in June 2020.

- Task Order 8 (TO8) requires AT&T to provide feasibility assessments as requested through specific work orders. These feasibility assessments will help the FirstNet Authority understand how new and evolving technologies, features, and functionality might be used to improve the ability of first responders to better support incident response, and whether implementation warrants potential network reinvestment.
- Task Order 9 (TO9) requires AT&T to extend NPSBN Band 14 coverage indoors to public safety facilities. TO9 enables agency-deployed RAN extension services to include Band 14 support, mission-critical service capabilities support, monitoring, and reporting, forward and reverse logistics, and customer care. These RAN extension services provide enhancements for FirstNet subscribers who experience coverage gaps, macro network outages, or require faster upload and download speeds than those provided by the NPSBN's fixed terrestrial network. TO9 is the third reinvestment task order awarded by the FirstNet Authority.
- Task Order 10 (TO10), which was awarded in September 2023, requires AT&T to further evolve the FirstNet Test Lab, located in the FirstNet Authority's office in Boulder, Colorado, as well as provide FirstNet network enabling services to allow for technology testing and public safety interactive experiences with the network.

Task Orders 1, 3, 4, 6, 7, 8, 9, and 10 are ongoing. TO2 was completed in March 2018 after all 56 governors (or appropriate territorial counterparts) opted into their respective customized state plans. TO5 has expired as of September 2023, and is currently in the process of being closed out. Additional activities were initiated in FY 2023 to develop two new requirements to further the deployment of the FirstNet network and evolve from LTE technologies to 5G and beyond.

Network Deployment, Operation, and Maintenance

Under the IDIQ contract, AT&T is required to deploy, operate, and maintain the FirstNet network. The FirstNet network is a standards-based, interoperable, reliable, and forward-looking nationwide broadband network that is redefining how the nation's public safety community communicates. With all states and territories opting into the FirstNet deployment, the FirstNet Authority has established a single, interoperable nationwide network as required by Congress, which the FCC confirmed in FY 2023 through its renewal of the FirstNet Authority's Band 14 license.

At the end of FY 2023, the initial five-year network deployment was 100 percent complete, and all contract milestones (including nationwide rural and non-rural coverage requirements / nationwide adoption targets) were validated by the FirstNet Authority in early FY 2024. Additionally, the FirstNet Authority has leveraged a process through which potential investment opportunities to further improve the FirstNet network are identified and evaluated on a rolling basis.

Measures for Success

In addition to key contractual deliverables, the FirstNet Authority uses standardized program management tools and contractual processes to track and evaluate all activities associated with the FirstNet network contract and program. The FirstNet Authority has developed and continuously strives to improve the rigorous contract management and administrative processes and tools used since the execution of the IDIQ contract to track network-related contractual activities to include the incorporation of additional on-site surveillance and contractor operational reviews.

As a result, the FirstNet Authority can minimize and mitigate risk while continuing to improve the network. The FirstNet Authority continued to utilize and improve upon these processes and measures in FY 2023, including the enhancement and automation of key contract oversight processes and workflows, to become more efficient and streamlined, allowing oversight personnel to have further insight into the progress of the NPSBN.

	2022	2023	2024
		J F M A M J J A S O	N D J F M A M J J A S O N D
TASK ORDER 1 State Plan Portal			e: 3/30/2017 – 3/30/2024 nd Maintenance
TASK ORDER 2 State Plan Development			e: 3/30/2017 – 3/30/2018 der closed
TASK ORDER 3 NPSBN Functions			hrough 2042 nd Maintenance
TASK ORDER 4 Coverage and Capacity	Task (Order 4 FOC Ongoin	ng through 2042 Operations and Maintenance
TASK ORDER 5 FirstNet Lab			2: 3/30/2018 – 9/30/2023 der Expired
TASK ORDER 6 Expanded Deployables		Task Order 6 Operat	ions and Maintenance
TASK ORDER 7 5G Network Enhancement		Task Order 7 Operat	ions and Maintenance
TASK ORDER 8 NPSBN Feasibility Assessments		ask Order 8 Option Period 1	Task Order 8 Option Period 2 Potential Additional Option Periods
TASK ORDER 9 RAN Extension Services		Task Order 9 Ongoing	RAN Extension Services
TASK ORDER 10 FirstNet Test Lab			Task Order 10 FirstNet Test Lab Services



The Boulder FirstNet Lab in Boulder, Colorado, serves as the FirstNet Authority's technical headquarters. Here, a team of engineers look daily at how the network operates, ensuring it provides key capabilities for first responders, like quality of service, priority, and preemption.

TECHNOLOGY AND INNOVATION

The FirstNet Authority serves as a conduit between public safety users and the industries that operate and develop innovative broadband communications tools to advance public safety communications and the capabilities available through the NPSBN. Enabling industry to recognize and understand the value and potential of the public safety communications market, the FirstNet Authority continues to:

- Ensure device and application ecosystems evolve to meet the needs of public safety;
- Establish innovative partnerships across government to stimulate the public safety ecosystem;
- Engage with telecommunications standards development organizations, such as the 3rd Generation Partnership Project (3GPP), the Alliance for Telecommunications Industry Solutions (ATIS), and the Telecommunications Industry Association (TIA);
- Manage spectrum to ensure the efficient utilization of the 700 MHz Band 14 Public Safety Broadband Spectrum in support of the NPSBN; and
- Ensure the long-term viability of the FirstNet network by exploring enhancements and generational upgrades.

Standardization

As required by Congress, the FirstNet network uses technology based on commercially available, open standards to achieve interoperability, speed to market, economies of scale, and cost efficiency. Using available commercial standards makes it easier for device manufacturers to participate in the public safety device market, thereby increasing competition and lowering device costs for public safety users.

The FirstNet Authority continues to prioritize the inclusion of public safety requirements in standards development, with efforts mainly focused on 3GPP, a partnership that unites seven global telecommunications standards development organizations to produce reports and specifications for evolving 4G LTE technology and 5G specifications. In coordination with AT&T, the FirstNet Authority has successfully ensured that 3GPP specifications address the needs of first responders. The FirstNet Authority is also active in representing public safety's requirements in the Next G Alliance⁷ work that seeks to outline the capabilities that will be needed in 6G.

The FirstNet Authority has employed a two-pronged focus in this work: 1) developing and evolving global specifications for mission-critical services (MCS) such as mission-critical pushto-talk (PTT), video, and data; and 2) developing specifications for interworking broadband MCS with legacy public safety technology, such as land mobile radio (LMR). The current specifications for MCS were originally targeted for 4G LTE technology. The FirstNet Authority continues active involvement to evolve these standards to support 5G technology.

During FY 2023, the FirstNet Authority worked together with suppliers and global public safety partners to progress 3GPP standards for mission-critical communications. Of particular interest to public safety were enhancements to mission-critical location services, including support for improved location services over both 4G and 5G. Another important effort for public safety is the update of the MCS standards to operate over 5G. This is critical for the continued evolution of MCS by allowing use of improvements only available in 5G, such as improved support for Quality of Service, Priority, and Preemption in the 5G core network. In FY 2023, the second phase 3GPP standards for MCS over 5G were completed, which add support for broadcast-multicast and off-network operations.

The FirstNet Authority participated in standards development in FY 2023 for other features essential to public safety, including new 5G Direct Mode capabilities to support public safety needs including user equipment-to-network relay to extend the network coverage to enable a remote mobile device to access the network. Progress on other important enablers for public safety include enhanced Multicast Broadcast Services for 5G (5MBS) with multicast service reliability in poorer radio coverage conditions, and 5G running over non-terrestrial networks (*i.e.*, satellites) to support both Low-Earth Orbit and Geosynchronous Equatorial Orbit operation. As a result of the FirstNet Authority's efforts, these critical public safety features are now planned for completion in 3GPP standards.

An important feature that the FirstNet Authority has continued to pay special attention to is Integrated Access and Backhaul that supports the ability to use 5G spectrum for backhaul in addition to access to another 5G base station in place of wired backhaul. Advancements in 2023 have added the ability to allow the Integrated Access and Backhaulattached cell to be mobile. These advancements led to the Vehicle Mounted Relay that can support a mobile 5G cell within a public safety vehicle.

7 See: https://www.nextgalliance.org/

The 5G Direct Mode feature will allow first responders to communicate when they are out-of-network coverage and 5MBS is critical to avoid network congestion especially with the new enhancement to support large public safety group communications. Vehicle Mounted Relay will support a 5G cell mounted on a fire truck that provides 5G service to first responders in its vicinity, thus extending coverage. Additionally, operating 5G over satellite systems could offer coverage extension for first responders in areas that do not have terrestrial wireless coverage. In disasters and major incidents, first responders can utilize PTT technology to communicate in groups of various sizes, even in a small area covered by only one cell. When utilizing LTE Multimedia Broadcast Multicast Service or the 5MBS capability, each communication group will utilize the radio resources of about two people communicating with one another, regardless of the number of users in the group. As technology advances for video group communications, which consumes significantly more radio bandwidth than voice, this feature will be even more important for conserving radio resources.

In FY 2023, the FirstNet Authority also continued working with 3GPP, ATIS, and TIA to support standards work involving the interworking between 3GPP-based mission-critical PTT systems and legacy LMR-based systems, such as Project 25 trunked and conventional systems. Through this effort, a wider adoption of mission-critical PTT will be possible as these interworking standards will permit an LMR user to talk to a FirstNet PTT user and vice versa. Work continues in ATIS and TIA, but most of the important interworking features have now been standardized end-to-end. This work will lead to improving interoperability between various radio technologies first responders use.

Spectrum Management

The FirstNet Authority continued to actively manage and maximize the utilization of the 700 MHz Band 14 Public Safety Broadband Spectrum in support of the NPSBN deployment and operations. During FY 2023, the FirstNet Authority and AT&T conducted the technical assessment of 16 commercial experimental license applications and five federal entity spectrum use requests. These applications and requests sought access to FirstNet Authority-licensed Band 14 spectrum on a secondary, not-to-interfere basis in support of public safety wireless technology research, experimentation, and national defense training and readiness programs. Additionally, the FirstNet Authority filed and coordinated the investigation of 14 public safety spectrum interference (PSIX) reports with the FCC Enforcement Bureau. These PSIX reports were filed to seek FCC assistance in resolving cases of radio frequency interference to the FirstNet Authority licensed Band 14 spectrum.

The FirstNet Authority's spectrum stewardship was also evident in the international arena. The FirstNet Authority continued to work closely with the FCC and the U.S. Department of State to resolve chronic radio frequency interference issues to FirstNet Authority-licensed Band 14 spectrum along the U.S.–Mexico border. The FirstNet Authority also supported the development of mutually beneficial long-term diplomatic and technical solutions for 700 MHz broadband spectrum sharing and utilization along the borders with both Mexico and Canada.

Device Ecosystem

The FirstNet Device Ecosystem continued to evolve during the past year to provide public safety with an ever-expanding list of devices for use on FirstNet. These devices include smartphones, tablets, routers, modems, and wearables that use FirstNet network capabilities to meet first responders' unique needs. From ruggedization features like impact resistance and being waterproof to built-in public safety features like push-to-talk, these devices are built to work for responders. The number of devices on the NIST list of approved devices for FirstNet grew from about 600 at the end of FY 2022 to over 820 at the end of FY 2023. The availability of FirstNet Ready (Band 14-enabled) devices from a wide range of leading manufacturers represents a significant accomplishment that benefits FirstNet users.

Application Ecosystem

FY 2023 continued to be another year of growth for the FirstNet App Ecosystem, with the number of FirstNet Verified apps growing to more than 215 in FY 2023. The FirstNet App Catalog only lists apps that have undergone a rigorous vetting and approval process. The apps certification process continues to evolve and be updated to incorporate scanning for new threats and concerns found in apps.

The FirstNet App Ecosystem supports areas of public safety operations including critical infrastructure, dispatch, EMS, fire and rescue, wellness/safety, hazardous materials, and law enforcement. Furthermore, apps in the FirstNet App Catalog are identified by categories to address public safety needs in the areas of cloud solutions, Computer-Aided Dispatch (CAD) systems, cybersecurity and fraud detection, device security, public safety community, secure connections, situational awareness and detection, video surveillance, public safety communication tools, in-building coverage, mapping, and forensic intelligence.

Safety and security on school campuses will always be a priority for the public safety community. To meet that goal, in FY 2023, AT&T and Intrado released a school



Executive Director and CEO Joe Wassel briefs the FirstNet Authority staff on his strategic vision.

safety ecosystem connecting staff, building infrastructure, emergency communications centers, and first responders during an emergency that leverages the NPSBN. Integral to the solution is a badge-sized FirstNet-connected wearable

panic button that, when activated, simultaneously submits location and incident details to 9-1-1 as well as silently notifying administrators and staff initiating lockdown.⁸

⁸ Press Release, "'Push' in Case of Emergency: AT&T Delivers New School Safety Solution, Powered by FirstNet, Intrado, and NextGen 9-1-1," Aug. 1, 2023, available at, AT&T Helps Deliver New School Safety Solution



























The First Responder Network Authority Board is a team of highly-skilled, highly motivated individuals with a cross-section of expertise who are committed to making the nationwide public safety broadband network a success.



STATUTORY ISSUES

Under the Act, the FirstNet Authority is scheduled to terminate in February 2027, which would create a risk for continued network operations and result in a loss of service for public safety users. The Act directed the GAO to submit a report to Congress on what action Congress should take regarding this sunset provision.

In February 2022, the GAO published that report recognizing the need for Congress to act regarding FirstNet Authority's reauthorization to ensure network continuity and prevent significant disruption to first responders.

Specifically, the GAO stated: "The 2012 Act provided FirstNet with many powers, duties, and responsibilities to develop a nationwide public-safety broadband network. ...[W] ithout congressional action on FirstNet's key statutory responsibilities described in this report, it is unclear how the federal government will continue to oversee network operations and the network's required enhancements when FirstNet's authority sunsets. ... As Congress considers the various options for managing the network,...it will be

important to take some legislative actions, at the minimum, to ensure network continuity."

The GAO further stated: "Without any legislative action, the continued operation of the [FirstNet] network would be jeopardized and could result in significant disruption for first responders who rely on the network for emergency response."

The uncertainty among public safety organizations created by the absence of clear congressional direction to extend the FirstNet Authority has the potential to create a chilling effect among existing users and affect the decision of other first responders to join the network. The Department of Commerce, NTIA, and the FirstNet Authority therefore, welcome the opportunity to work with Congress to reauthorize the Authority at the earliest opportunity to ensure it has the tools required to continue to enhance the network to meet public safety's evolving broadband communications needs across the country.

⁹ Andrew Von Ah, "PUBLIC-SAFETY BROADBAND NETWORK, Congressional Action Required to Ensure Network Continuity," Government Accountability Office, Feb. 22, 2022, at 22-23, available at, Public-Safety Broadband Network: Congressional Action Required to Ensure Network Continuity



The Public Safety Immersive Test Center, a partnership between the FirstNet Authority and the National Institute of Standards and Technology, is a space where technology for public safety can be tested. During a prize challenge hosted by the National Institute of Standards and Technology related to tracking first responders indoors, finalists used the Test Center to test and gather data on their prototypes.

FINANCIAL CONDITION

In FY 2023, the FirstNet Authority continued its strong financial stewardship delivering continued expansion of FirstNet and the buildout of Band 14. Throughout FY 2023, funds were used to support our ongoing operations and execution of our strategic vision, which yielded network expansion and enhancements of the NPSBN. We incurred operating expenses during FY 2023 related to personnel compensation, contractual services for strategic and operational support, extensive stakeholder engagement, and update of the FirstNet Authority Roadmap. As of September 30, 2023, we had a cash balance of \$881 million. The FirstNet Authority's audited FY 2023 Financial Report, including Independent Auditors' Report, will be posted on the FirstNet Authority website at FirstNet.gov/reports.

Collections Data

The FirstNet Authority receives annual payments from AT&T for access to 20 MHz of spectrum and associated capacity for the 25-year term of the NPSBN contract. These annual payments from AT&T are the FirstNet Authority's source of revenue. As payments are received from AT&T, they are recognized as a contract liability and amortized on a straight-line basis over the applicable fiscal year. On September 15, 2023, the FirstNet Authority received \$195 million from AT&T as the FY 2023 payment due under the contract, to fund FY 2023 operations.

Changes in Assets, Liabilities, and Net Position

The FirstNet Authority had \$6.5 billion in total assets as of September 30, 2023, compared to \$6.4 billion for FY 2022. Total liabilities increased by \$347 million substantially due to a \$342 million increase in accruals for contractual Task Orders for the construction, operation, and maintenance of the NPSBN.

(\$ in Thousands)

1	As of September 30:	FY 2023	FY 2022 (Audited)	
Changes in Net Position				
	Total Assets	\$ 6,485,399	\$	6,361,274
	Total Liabilities	\$ 554,733	\$	208,082
	Net Position	\$ 5,930,666	\$	6,153,192



In order to validate and verify the initial buildout of the FirstNet network, the FirstNet Authority team traveled across U.S. states and territories, including Guam, as seen pictured, to ensure contract milestones were met.

CONCLUSION

In FY 2023, the FirstNet Authority achieved significant milestones. Consistent with the mandates established by Congress over a decade ago, the FirstNet Authority completed the initial deployment of the NPSBN and secured renewal of our Band 14 spectrum license – the spectrum Congress set aside for the network dedicated to our nation's public safety responders. Over the course of the year, the FirstNet network supported public safety response across the country, in matters large and small, demonstrating its flexibility, resilience, and relevance. The network continued to evolve reflective of the public safety community's voice. New FirstNet technology, for example, dynamically extended the range of the network's coverage, while other innovations enhanced capability and redundancy of traditional 9-1-1 systems. None of this was by accident, but rather design.

Today, the FirstNet Authority is at the cusp of a new chapter as it moves beyond the initial deployment phase, yet our overriding goal remains unchanged — to continue to meet the evolving communications needs of our nation's first responders. Through our partnership with AT&T, we remain committed to public safety and the innovation of the network to ensure that those who run into harm's way have a network that is worthy of their service and is there for them when they need it most.

APPENDIX A: FY23 FIRSTNET AUTHORITY BOARD





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Fire Chief, Southern Platte Fire Protection District, Missouri



RENEE GORDON (VICE CHAIR)

Director, City of Alexandria Department of Emergency & Customer Communications, Alexandria, Virginia



BRIAN CRAWFORD

Senior Vice President, Willis-Knighton Health System



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PETER KOUTOUJIAN

Sheriff, Middlesex Sheriff's Office, Massachusetts



WARREN MICKENS

Former Vice President of Wholesale Operations, Centurylink/Quest

SYLVIA MOIR

Undersheriff, Marin County Sheriff's Office, California

At the beginning of FY 2023, Stephen Benjamin, former Mayor, Columbia, South Carolina served as Board Chair; Karima Holmes, former Acting Director, Office of Unified Communications, Washington, D.C., served as a Board member.











JOCELYN MOORE

Independent Director, DraftKings

PAUL PATRICK

Director, Family Health and Preparedness Division, Utah Department of Health

SHALANDA YOUNG

Director of the Office of Management and Budget

JOE CARLILE (DESIGNEE)

Program Associate Director for General Government Programs (GPP), OMB

ALEJANDRO MAYORKAS

Secretary of the Department of Homeland Security

BILLY BOB BROWN, JR. (DESIGNEE)

Executive Assistant Director, Emergency Communications, Cybersecurity and Infrastructure Security Agency

MERRICK B. GARLAND

U.S. Attorney General, Department of Justice

ROBERT BROWN (DESIGNEE)

Executive Assistant Director, Science and Technology Branch, Federal Bureau of Investigation



The FirstNet Authority was established in light of 9/11 to lead the creation of a dedicated nationwide broadband network using spectrum set aside for the public safety community (Band 14). Through a combination of government, commercial, and public safety partnerships, we are committed to delivering a network and supporting ecosystem of apps, devices, and capabilities that are innovative, reliable, accessible and secure. By modernizing public safety communications with our partners, we can help responders keep America safe — every day and in every emergency.

To learn more, visit **FirstNet.gov**.



FirstNet Compact Rapid Deployables (CRDs) are built to be easily transported and quickly set up. When Hurricane lan hit Florida, roadways to Sanibel Island were destroyed, so a CRD was brought to the island via boat — providing responders with critical connectivity in the aftermath of the storm.





First Responder Network Authority

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