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February 9, 2018

VIA MESSENGER

Chairman William Rice and
Members of the Zoning Board of Appeals
Village of Nelsonville
258 Main Street
Nelsonville, NY 10516
Phone: (845) 265-2500

RE: Homeland Towers, LLC New York SMSA Limited Partnership d/b/a/ Verizon
Wireless and New Cingular Wireless PCS, LLC d/b/a AT&T
Proposed Public Utility Personal Wireless Telecommunications Facility

Dear Chairman Rice and Members of the Zoning Board of Appeals:

This letter and attachments are respectfully submitted on behalf of New Cingular Wireless PCS, LLC ("AT&T") in furtherance of the above captioned matter and in support of the proposed facility.

First Responder Network & Need

On December 28, 2017 the State of New York opted in to the First Responder Network (known as "FirstNet") a new interoperable public safety network created for the benefit and use of first responders and the public safety community. It will provide a seamless communication network throughout the entire state and nation built out through a public-private partnership between AT&T and the First Responder Network Authority ("FirstNet Authority") an independent authority within the United States Department of Commerce.

To implement the FirstNet Plan in New York, AT&T is charged with building, operating, and maintaining a highly secure wireless broadband communications network in the state. Additional information regarding New York's participation in this program is



outlined in the governor's press release included as Attachment 1. Additional information is also included in the attached letter from AT&T's consulting RF Engineer Daniel Penesso included as Attachment 2 along with FirstNet's FCC license included as Attachment 3 and "Top 10 Frequently Asked Questions" included as Attachment 4.

Now that New York State has opted into FirstNet, a portion of the equipment and antennas included in AT&T's proposed array in this application will include technology to transmit and receive communications signals utilizing Band 14 spectrum. This Band 14 spectrum will be deployed in conjunction with the construction of the nation's first nationwide wireless broadband radio access network designed and built for first responders. The Band 14 spectrum is licensed by the FCC to the FirstNet Authority. Pursuant to federal law, the FirstNet Authority entered into an agreement with AT&T in which the FirstNet Authority authorizes AT&T to use the spectrum to operate a radio access network for the benefit of AT&T's end users which includes both its commercial customers and first responders who will be AT&T FirstNet customers. First Responders will have priority access to FirstNet.

This FirstNet service will be in addition to the commercial customer-only Personal Wireless Service to be provided at this site 700 MHz and the 1900 MHz as per §332(c)(7)(C)(i) of the Telecommunications Act. As the information and data included herein confirm, including the drive test data mapping included as Attachment 5, AT&T continues to have a need to provide reliable service in Nelsonville. Such need has also been confirmed by the Village's own independent RF consultant. Notably, the plots previously submitted as well as the drive test data are the most accurate and data-based depictions of existing and proposed AT&T service in the area and are not superseded nor replaced by online coverage mapping tools provided for customers and potential customers that depict areas where service is possible generally.



Attachments

In further support of the application please find the following attachments:

1. Governor Cuomo's December 28, 2017 press release;
2. Letter from RF Engineer Daniel Penesso;
3. Copy of FirstNet license;
4. Top Ten Frequently Asked Questions (Regarding FirstNet); and
5. Drive test mapping for AT&T.

Conclusion

In light of the foregoing as well as the record provided in this matter by Verizon and confirmation of the need as outlined by the Village of Nelsonville's own independent RF consultant, we continue to maintain that the need for the facility and the ability of the proposed site to fulfill that need is substantially supported by the record. We thank the Zoning Board of Appeals for its continued review of this matter. Please do not hesitate to contact me with any questions or if you need something further.

Very truly yours,

A handwritten signature in blue ink, appearing to read "D. Laub", with a long horizontal flourish extending to the right.

Daniel M. Laub

Attachments

cc: Village of Nelsonville Planning Board (7 copies)
Ronald J. Gainer, P.E., Consultant for the Village
Ronald Graiff, P.E., Consultant for the Village
Robert D. Gaudio, Esq.
Homeland Towers

ATTACHMENT 1



DECEMBER 28, 2017 Albany, NY

Governor Cuomo Announces New York State's Participation in FirstNet First Responder Network

Network Will Deliver a State-of-the Art, Wireless Broadband Network to the State's Public Safety Community

AT&T will Build, Operate and Maintain the Network at No Cost to the State

Governor Andrew M. Cuomo today announced that New York will join the FirstNet First Responder Network - a nationwide, high speed, wireless broadband network that was created exclusively for first responders and the public safety community. The network, which was created through a public-private partnership between AT&T and the federal government, will put advanced technology, and devices into the hands of first responders to give them the tools they need to better communicate and share information in emergency situations.

"During emergencies and disasters, every second counts, and ensuring our first responders have the tools they need during a crisis is vital to the safety and security of all New Yorkers," Governor Cuomo said. "The entire state, from the Great Lakes to the most remote areas of the Adirondacks to New York City, must have seamless communication for our public safety community so that they can get more information quickly, make better

informed decisions, and save lives."

FirstNet, an independent authority within the U.S. Department of Commerce was born out of a recommendation from the 9/11 Commission to enhance communications used by fire, police and EMS to develop, build and operate the first nationwide, broadband network that modernizes communications used by the public safety community. Since that time, the FirstNet-AT&T partnership worked with New York public safety officials to design an implementation plan for New York.

The final, accepted plan states that AT&T will build, operate and maintain the highly secure wireless broadband communications network at no cost to the state. It was also designed to address the state's unique communications needs, including:

- Expanding coverage in rural areas such as the Adirondacks, in urban areas such as in buildings and the subway system and along waterways such as the Great Lakes and Long Island Sound
- Improving interoperability to support better coordination with border states and Canada
- Making the cost of services and devices more affordable for smaller communities.

Specifically, the network will transform the way New York's fire, police, EMS and other public safety personnel communicate and share information by:

- Connecting first responders to the critical information they need in a highly secure manner when handling day-to-day operations, responding to emergencies and supporting large events like New York City's New Year's Eve celebration which attracts over 1 million spectators to Times Square, the New York City Marathon that attracts over 50,000 runners and nearly 2.5 million spectators each year, and the Great New York State Fair which welcomed over 1 million fairgoers in 2017.
- Creating an efficient means of communication for public safety personnel in agencies and jurisdictions across the state during natural disasters and emergencies.
- Enhancing network coverage across New York's diverse landscape, benefitting first responders and residents throughout the state's densely populated metro areas to

rural areas and tribal lands.

- Providing first responders with access to dedicated network assets that can be deployed for additional coverage and support when needed.
- Driving infrastructure investments and create jobs across the state.
- Ushering in a new wave of dependable innovations for first responders. This will create an ever-evolving set of life-saving tools for public safety, including public safety apps, specialized devices and Internet of Things technologies. It also carries the potential for future integration with NextGen 911 networks and Smart Cities' infrastructure.

Division of Homeland Security and Emergency Services Commissioner Roger L. Parrino, Sr. said, "It is important to recognize that our first responders need reliable tools to complete their mission at all times and this is especially true when communicating important information with our local, state and federal partners during a disaster or emergency. I look forward to the completion of the nationwide public safety broadband network and its ability to provide dedicated access to the first responder community when it is needed most."

First Responder Network Authority CEO Mike Poth said, "It is especially meaningful to welcome New York into FirstNet as it was a recommendation of the 9/11 Commission that led to our very creation. Governor Cuomo's decision will bring expanded and enhanced communications capabilities to the great state of New York. From giving public safety in New York City dedicated spectrum to bringing a reliable, high speed wireless connection to rural and remote areas of the state, FirstNet will improve connectivity and foster innovation for law enforcement, fire, and EMS."

"This is a special day for the brave men and women that serve New York. And I applaud Governor Cuomo for his leadership and commitment to public safety," said Marissa Shorenstein, president, Northeast Region, AT&T. "Opting in to FirstNet will put New York's first responders on the cutting-edge of innovative communications, helping them operate faster, safer and more effectively when lives are on the line. We're honored to bring this life-saving solution to the state."

By opting in to FirstNet, fire, police, EMS and other public safety workers subscribing to the service will have dedicated access to the information they need, 24/7/365, when and where they need it. For more information on FirstNet, please click [here](#). For more about the value FirstNet will bring to public safety, please go to FirstNet.gov.

Contact the Governor's Press Office



Contact us by phone:

Albany: (518) 474 - 8418

New York City: (212) 681 - 4640



Contact us by email:

Press.Office@exec.ny.gov

ATTACHMENT 2

Daniel Penesso
650 From Road
Paramus, NJ 07652

February 6, 2018

William Rice, Chairman
Village of Nelsonville Zoning Board of Appeals
258 Main Street
Nelsonville, New York 10516

Re: The application of Homeland Towers, LLC, New York SMSA Limited Partnership d/b/a Verizon Wireless and New Cingular Wireless PCS, LLC (AT&T") to construct a wireless telecommunications facility
Premises: 15 Rockledge Road, Village of Nelsonville, New York

Dear Chairman Rice and Members of the Zoning Board of Appeals:

On behalf of New Cingular Wireless PCS, LLC ("AT&T"), I respectfully submit this letter which pertains to the application of Homeland Towers, LLC before The Village of Nelsonville located at 15 Rockledge Road, which consists of a new 110ft tower ("Facility") which is to be utilized by Verizon Wireless and AT&T.

DAS Not a Viable Alternative to Serve the Area of Need

Comments from the public have queried whether a Distributed Antenna System would be a viable alternative to the proposed Facility. A Distributed Antenna System ("DAS" for short), are systems comprised of a series of radio head "nodes" strategically placed around a targeted location where there is a need for additional cellular coverage. Each of the radio heads within the DAS system are routed to a centralized communications hub via fiber-optic cable backhaul to allow the signal to be processed by a cellular base station. DAS networks are typically implemented in locations such as shopping malls, school campuses, office buildings, larger venues such as sports stadiums and event arenas as well as nodes attached to utility poles in street right-of ways.

AT&T requires a macro cell site for this target area because of the large geographic area of unreliable coverage that needs to be fulfilled as was described above a DAS network for this geographic area

would not be able to provide the level of coverage that the proposed macro site can provide this is due to a number of limiting factors the distance between the nodes, including, topography, physical obstructions, foliage, antenna height, and line-of-site. Indeed, DAS typically requires utility structures to support the node equipment with antennas mounted to the top of the poles. This generally limits the antenna height to approximately 30'-35' AGL. In most areas, including Nelsonville, this would place the antennas below the tree-line and drastically hinder the coverage provided from each node location. The utility and light poles are located directly along the roadways therefore, the coverage from each node would be somewhat restricted to line-of-sight areas along the roads only, and would be severely limited to homes and other buildings set back from the tree-lined roads.

Height limitations are a key drawback to making DAS a substitute to a macro-site. A properly designed macro-site, as proposed, will be tall enough to support antennas at heights above the surrounding trees and other obstructions and covers a broad area by allowing the RF signals to reach distant areas without being attenuated by the nearby, surrounding obstructions. Typical tree heights and the heights of some structures limit the coverage provided from DAS nodes to directions that are unobstructed, i.e. directly up and down the adjacent roadways. The coverage objectives of typical macro sites, including the one proposed here, is to provide needed service to a broad geographic area and not limited to just select roadways. A wide area DAS is likely to create coverage gaps compared to a macro site throughout the coverage objective area as a result.

The facility as proposed will meet the primary objectives of AT&T's search area because it will provide LTE 700MHz and 1900MHz wireless signal coverage to a significant portion of one of AT&T's critical gaps in service coverage in the Village.

First Responder Network Authority ("FirstNet")

The First Responder Network Authority ("FirstNet") is an independent federal authority within the U.S. Department of Commerce created by an Act of Congress. FirstNet was issued a single nationwide license by the Federal Communications Commission ("FCC") for the establishment of a nationwide public safety broadband network ("NPSBN"). Frequencies licensed to FirstNet by the FCC are in the 700 Mhz range, often referred to as "Band 14", and for use in deployment of a NPSBN. Pursuant to the authority set forth in federal legislation, FirstNet and AT&T have entered into a public-private partnership to build, operate and maintain the NPSBN. The NPSBN to be

constructed by AT&T must meet various federal requirements, deploy Band 14 spectrum licensed to FirstNet and can be used for public safety and commercial purposes, with prioritization of first responder communications.

For more information about FirstNet, please visit its website at <https://www.firstnet.gov/>, and please find included with this submission a frequently asked questions information document provided by FirstNet available at https://www.firstnet.gov/sites/default/files/TopTenFAQs_180107.pdf which describe its public-private partnership with AT&T. Specific information about FirstNet's FCC license and the frequency bands can also be found on the FCC's website at <https://www.fcc.gov/public-safety/public-safety-and-homeland-security/policy-and-licensing-division/public-safety-spectrum>. A copy of the FirstNet license is also included. Please also refer to The Middle Class Tax Relief and Job Creation Act of 2012 (Pub. L. No. 112-96, Title VI, 126 Stat. 156 codified at 47 U.S.C. §§ 1401-1457) for more information about FirstNet and the NPSBN to be constructed and operated by AT&T.

Drive Test Data

Please find with this letter supplemental exhibits of drive test data of the existing AT&T network collected on January 26, 2018. The exhibit labeled Map 1 is the 700 MHz existing On-Air drive test data and the exhibit labeled Map 2 is the 1900 MHz existing On-Air drive test data. Foliage was not accounted for in this mapping. The drive test data substantiates the need for the proposed cell site. When reviewing the data one must account for some coverage being provided existing on-air site 321G4045 which is approximately 2.5 miles away across the Hudson River located in West Point, New York. While that facility on the western side of the Hudson does provide some service to the eastern side of the river, the network is not engineered to accommodate this distance and as such any service is considered unreliable without a dominant server (site location) on the eastern side of the Hudson. Please note the mapping does not account for foliage.

Clarification

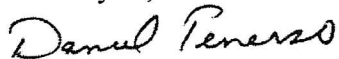
Please note that the plots provided in AT&T's December 28, 2017 were run at a lower height (76' centerline) than the proposed facility. At this height one can see where gaps are opened up along 301 and 9D and further substantiates that the proposed facility is the minimum height necessary.

Conclusion

It is my professional opinion that (1) There exists a significant un-served area of Radio Frequency signal coverage in the portion of the Village of Nelsonville where Homeland Towers proposes to construct the Facility; (2) Due to the topography and morphology of the Village, the proposed location represents the best available location for the Facility; and (3) The suitability of the proposed location has been confirmed by reliable computer modeling and data collection.

Therefore, it is respectfully requested that the Village grant Homeland Tower's Application in order to allow AT&T to collocate on the proposed Facility and to thereby comply with the mandates of its FCC license and otherwise conform to the FCC rules and regulations for wireless telecommunications providers.

Thank you,

A handwritten signature in black ink that reads "Daniel Penesso". The signature is written in a cursive, flowing style.

Daniel Penesso
AT&T RF Engineer
February 6, 2018

ATTACHMENT 3

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission
Public Safety and Homeland Security Bureau

RADIO STATION AUTHORIZATION

LICENSEE: FIRST RESPONDER NETWORK AUTHORITY

ATTN: UZOMA ONYEJE
FIRST RESPONDER NETWORK AUTHORITY
12201 SUNRISE VALLEY DRIVE
RESTON, VA 20192

Call Sign WQQE234	File Number 0008029447
Radio Service SP - 700 MHz Public Safety Broadband Nationwide License	
Regulatory Status PMRS	

FCC Registration Number (FRN): 0025487950

Grant Date 11-15-2012	Effective Date 12-29-2017	Expiration Date 11-15-2022	Print Date 12-30-2017
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Location: Nationwide

Frequency Bands: 000758.00000000-000769.00000000 MHz
000788.00000000-000799.00000000 MHz

Waivers/Conditions:

This authorization is subject to any rules the Commission may adopt pursuant to its authority under the Middle Class Tax Relief and Job Creation Act of 2012 or the Communications Act of 1934, as amended.

ATTACHMENT 4



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 will strengthen 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, VA, and has a technology center and lab in Boulder, CO.

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 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 1.8 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 FirstNet and support deployment of the Network.

4. How was AT&T selected to build, operate, and maintain the 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, FirstNet and AT&T do not need any additional federal funding to build and operate the Network – it is a fully funded, self-sustaining Network. 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 nation-wide high-speed broadband network for public safety over 25 years.
- AT&T will spend 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 buildouts, 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 will get a dedicated 'fast lane' that provides highly secure communications every day and for every emergency. It will deliver specialized features to public safety that are not available on wireless networks today – such as priority access; more network capacity; and a resilient, hardened connection. The Network will deliver more than just a public-safety-dedicated wireless connection – it is also creating devices and apps ecosystems that will connect first responders to innovative, life-saving technologies.

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

FirstNet will improve 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 will provide 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, CO, so first responders will have the proven tools they need in disasters and emergencies.

9. What's next for FirstNet and when is it available?

All 50 states, three 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. (Two other territories have until March 12, 2018, to make their determinations.)

The First Responder Network Authority's public-private partnership with AT&T provides first responders with immediate access to mission-critical 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 to provide ruthless preemption for public safety.

Key FirstNet milestones and activities planned for 2018 include:

Expanding the Network and Building Out Band 14: The First Responder Network Authority will issue work orders to deploy the RANs early 2018. This will give 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 and mission critical connections 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 store will be 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 will give first responders the dedicated, highly secure, non-commercial network they deserve. On schedule to be operational in March, the FirstNet public safety core will provide full encryption of public safety data over FirstNet and provide end-to-end cyber security. FirstNet subscribers will also have access to a dedicated Security Operations Center, offering 24/7/365 support.

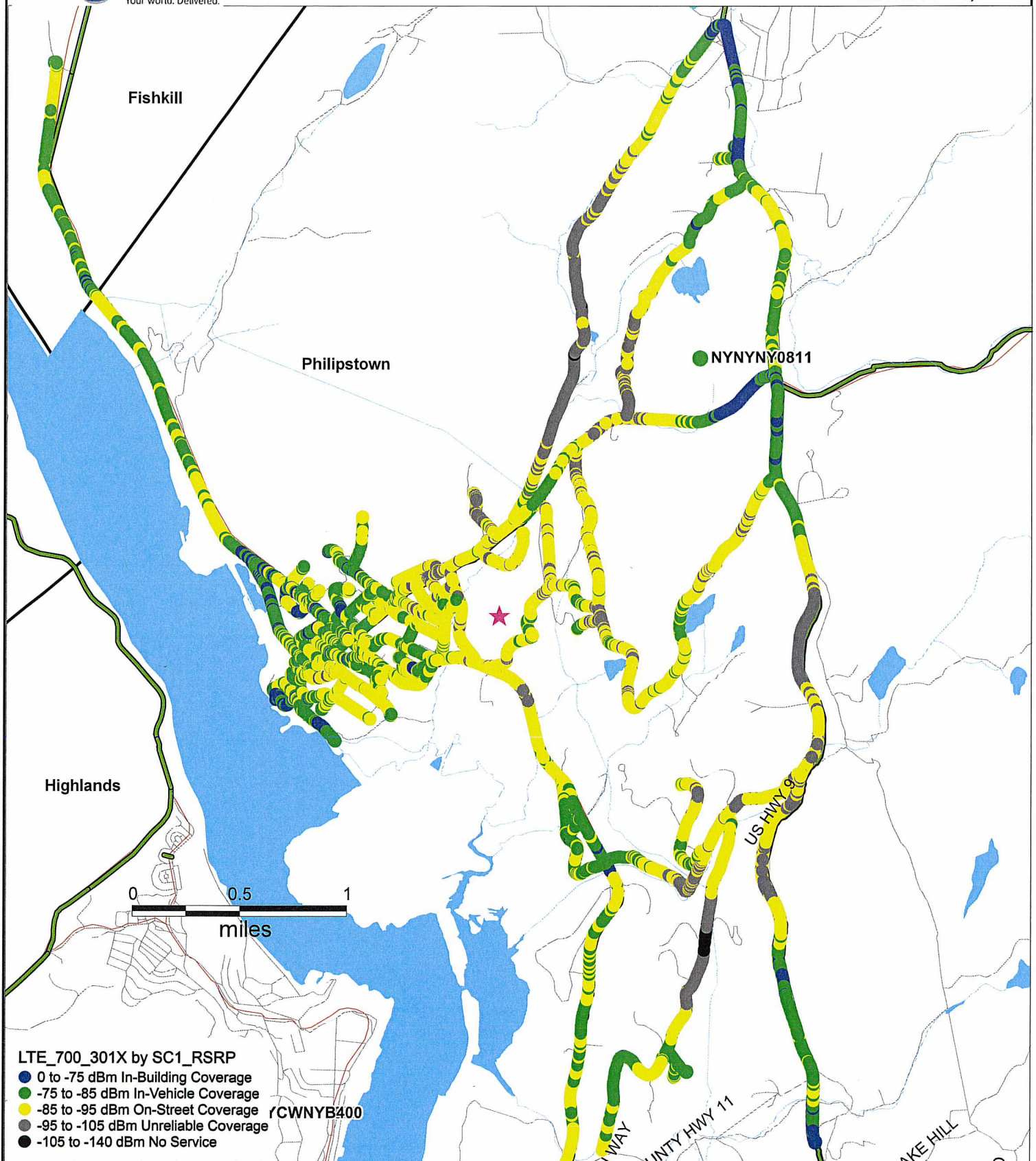
Engaging with public safety: The First Responder Network Authority will continue to engage with public safety in the states, territories, federal agencies, and tribal nations to ensure the network meets their needs and incorporate their feedback in the design of future FirstNet products and services.

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 www.firstnet.gov. Follow us on [Twitter](#), [Facebook](#) and [YouTube](#).



ATTACHMENT 5



Prepared By:
Daniel Penesso
RF Engineer for AT&T
February 1, 2018

