



FirstNet[®]



Use of State and Local Infrastructure, Rural Coverage, “Early Builders” and Pilots

Frequently Asked Questions (FAQs)

State and Local Infrastructure

HOW AND WHEN DOES FIRSTNET INTEND TO USE STATE AND LOCAL INFRASTRUCTURE TO BUILD THE NATIONWIDE PUBLIC SAFETY BROADBAND NETWORK?

FirstNet will look to leverage existing infrastructure wherever economically desirable to drive down costs and expedite deployment of the network. However, FirstNet has learned from providing technical support to the “Early Builder” LTE public safety network projects – the four NTIA Broadband Technology Opportunities Program (BTOP) and Harris County, Texas – that identifying, negotiating access to, and using state and local infrastructure can take a long time and, in many instances, be a complicated effort. For example, negotiating leases with and obtaining approvals from state and local governmental bodies can be a lengthy process. Some such infrastructure has never been used for wireless transmissions (e.g., public rooftops), and the issues associated with the use of such assets are complex and can result in substantial delays. Valuing such use is also difficult in some instances.

Further, FirstNet will use infrastructure for both public safety services and selling excess network capacity to commercial entities, and such dual use of state and local infrastructure may not be permitted or may require regulatory changes in some cases. When multiplied by the tens of thousands of sites that FirstNet will need across the country to deploy a nationwide network, we believe the piecemeal use of state and local infrastructure alone could introduce unreasonable delays and transaction costs and complexities.

Where the above issues have been addressed (such as where public infrastructure is being used by commercial providers) or where a third party has aggregated such infrastructure, FirstNet believes it may be able to initially use such government infrastructure to speed network deployment. Our Requests For Proposals (RFP) process will not discriminate for or against public infrastructure, but will seek the best solutions in terms of speed and costs for public safety.

However, *beyond initial deployment*, our current belief is that we will require our network partner(s) to facilitate the evaluation of use of state and local infrastructure for expansion where, for example, commercial infrastructure does not exist or is unduly expensive. Our expectation, subject to the results of the RFP process, is that it will prove economically desirable in the early stages to leverage primarily commercial towers and infrastructure for higher-density areas of the country, where many LTE wireless carriers currently operate, and explore both rural carrier and public infrastructure for other areas.

WHY CAN'T I NEGOTIATE A SPECIAL DEAL WITH FIRSTNET FOR MY CITY OR COUNTY TO TRADE INFRASTRUCTURE USE FOR DISCOUNTED SERVICE?

As discussed above, in addition to the potential complexities with such piecemeal negotiations, FirstNet's duty is to use the RFP process and competition to obtain the best deal - both economically and from a speed of deployment perspective - for public safety nationwide. When a city or local entity wishes to become a FirstNet supplier of infrastructure (i.e., in addition to being a customer), FirstNet then has an obligation to ensure the best deal for public safety and must evaluate such offers against other available suppliers. Any potential special arrangements with a locality in one area of the country will affect funding available for localities in other areas of the country.

Rural Areas

HOW WILL FIRSTNET ENSURE THAT RURAL AREAS ARE COVERED BY THE NETWORK?

In our second public notice (Second Notice), we preliminarily conclude that FirstNet has a duty to protect the fees generated in high-density areas in excess of those needed to reasonably maintain the radio access network - for example, from excess network capacity and subscribers - for use in building out rural areas. Our preliminary modeling indicates that these fees will be essential to pay for network coverage in many, if not most areas of the country outside of urban areas.

WILL FIRSTNET COVER ALL OF THE COUNTRY?

The FirstNet program has a defined set of funding resources, primarily including \$7 billion in cash provided by the Federal government; fees from selling excess network capacity to commercial entities; and public safety subscriber fees. The RFP process will determine how far these resources will take us in terms of coverage, which will be informed in part by the coverage priorities communicated to FirstNet through consultation. At a minimum, we must by law include substantial rural milestones in each phase of network deployment. Our preliminary modeling and analyses indicate we will be able to cover more than commercial networks, but not all of the landmass of the country. Only time will tell whether we will generate sufficient fees to cover the entirety of the nation. Coverage can also come in different forms, such as terrestrial, deployable, satellite-based backhaul, and self-organizing networks.

HOW DOES FIRSTNET'S DEFINITION OF "RURAL" AFFECT COVERAGE OF THE NETWORK?

The definition of rural does not determine coverage; rather, our available resources and the consultation process will determine coverage. The definition of rural will be used to measure whether substantial rural milestones have been included in each phase of deployment as required by law. Being included in the definition of rural does not guarantee coverage, nor does being excluded from the definition deny coverage.

"Early Builder" Projects & Pilots

WHAT IS FIRSTNET'S ROLE IN THE "EARLY BUILDER" PROJECTS? ARE THEY PART OF FIRSTNET?

FirstNet is providing technical assistance support to the five Early Builder projects - including the four NTIA Broadband Technology Opportunities Program (BTOP) projects and the Harris County, Texas, project. These projects cover a wide variety of network-related issues important to the ultimate FirstNet nationwide network, including basic Band Class 14 LTE functionality for public safety, deployable LTE technologies, use of local, state, and federal infrastructure to deploy LTE for public safety, operational and business aspects of such a network, border issues, and interoperability.

FirstNet entered into spectrum lease agreements with these five projects, which are financially supported by federal grants made prior to the legislation that created FirstNet, in order to gather key lessons learned that will help inform FirstNet as it develops its plan for the nationwide network. FirstNet does not provide funding to these projects, nor are they themselves part of “FirstNet.” Whether these projects may at some time be leveraged by FirstNet in connection with its Network deployment will be based on several factors, including for example financial sustainability, compatibility with FirstNet’s ultimate network partner(s)’ networks, quality and reliability of the resultant systems deployed under the projects, and the costs of integration with the FirstNet network, including any impact to economies of scale that may be available through network partnerships.

DOES FIRSTNET SUPPORT EXPANSION OF THE EARLY BUILDER PROJECTS OR CONDUCTING PILOT PROJECTS?

FirstNet has assessed the feasibility and practicality of both expanding current public safety LTE projects and conducting pilots. FirstNet has a limited set of resources to construct and operate the nationwide network. To provide public safety with the lowest possible subscriber fees, FirstNet must leverage the potential economies of scale related to purchasing equipment and services, and leasing excess capacity, on a national scale. Thus, any decision to expend funds or lease spectrum on a smaller scale must be carefully considered relative to the effect on program costs nationally.

Further, under limited circumstances FirstNet will support special temporary authorities (STAs) for use of its spectrum. These STAs, which are sometimes used to test services and equipment being designed for use on the FirstNet network, are of a short duration (typically measured in days or weeks). Please contact FirstNet with regard to the coordination of any such requests.

Congress specified a well-known technology (LTE) for FirstNet to deploy in order to lower costs, ensure interoperability, and speed deployment. The technology is being deployed and used today on a grand scale. Even a modestly sized wireless broadband pilot could take a year or likely more to plan and operate. With limited resources and a variety of existing early builder projects, FirstNet is focusing on completing the process prescribed by its enabling legislation to begin deployment on a national basis.

Also, the Act that created FirstNet requires FirstNet to follow a carefully crafted RFP process followed by an opportunity for States, after certain criteria are met, to assume financial and operational responsibilities for a portion of the network in such States. FirstNet cannot provide spectrum leases, funding, or take other actions that would interfere with this sequence of required steps.

