

FirstNet in North Carolina

Broadband Infrastructure Office Department of Information Technology

What is the need?

Priority Communications for Emergency Responders









Improve the reliability and resiliency of wireless broadband connectivity



Provide
prioritized access
to emergency
responders over
the general
public



Expand coverage into rural areas while increasing capacity in urban areas





Introducing FirstNet



- The Middle Class Tax Relief and Job Creation Act of 2012 establishes responsibility for building and operating a Nationwide Public Safety Wireless Broadband System
- The First Responder Network Authority (FirstNet) was created as an independent authority under the National Telecommunications & Information Agency (NTIA)
- FirstNet is responsible for overseeing a new nationwide wireless network
- The term FirstNet is used in reference to both the federal entity as well as the nationwide network





What is FirstNet?



4G LTE is **10X** faster than 3G wireless service



- ✓ DATA, VIDEO, IMAGE & TEXT
- ✓ HIGH SPEED
- ✓ PRIORITIZED FOR EMERGENCY RESPONDERS
- ✓ RELIABLE FOR

 ADVANCED

 COMMUNICATIONS

Who are the users?





Funding Deployment



Funding a Nationwide LTE Network

- \$6.5 Billion 'seed' money for deployment
 - Understood not to be enough to:
 - Build
 - Operate, and
 - Evolve a nationwide LTE Network
 - Funds received from FCC Auction



Funding Deployment

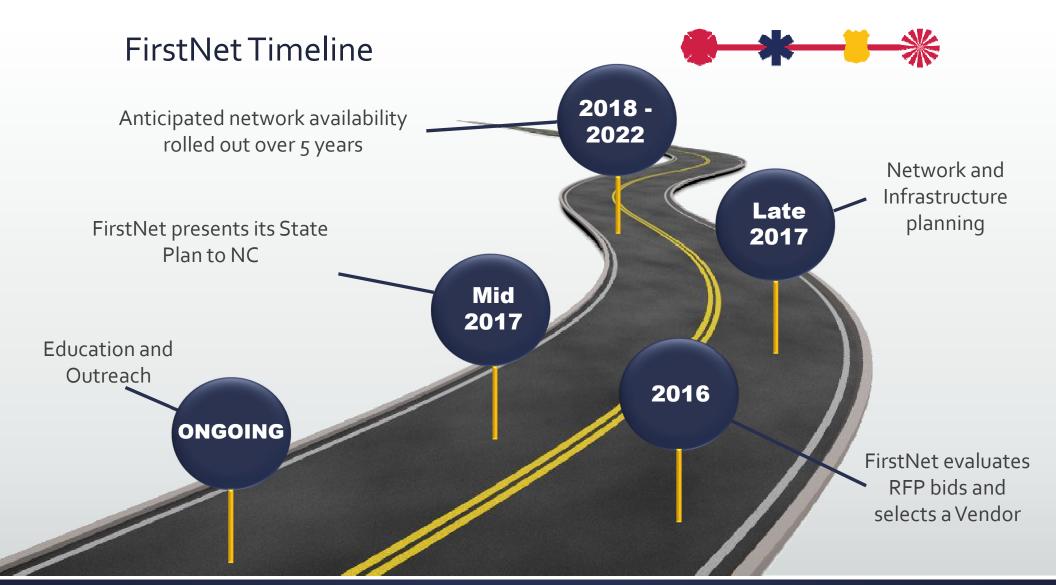


Funding a Nationwide LTE Network

• Additionally:

- Monthly Subscriber Fees
 - Competitive with current carriers
- Leasing excess capacity to commercial users
 - 20 MHz of "prime" cellular spectrum
 - Public Safety will maintain priority





Putting FirstNetNC Together



What we've learned

Rural and Urban built out concurrently

20% Build Out per year for 5 years

Building Out

First Deployments in 2018

Projected between 4 million and 13 million public safety subscribers nationwide

Monthly subscription fee must be competitive

Covering the state



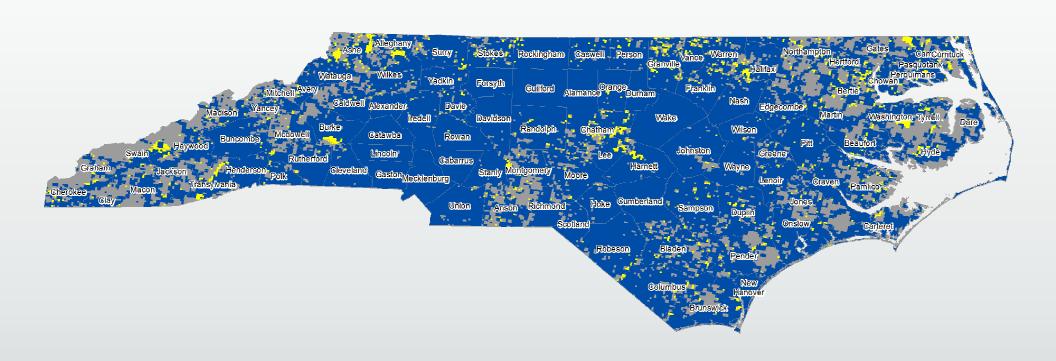
The challenge: Providing SUBSTANTIAL COVERAGE to 700+ emergency response agencies, 100 counties, and a federally recognized tribe in coverage areas including urban and rural

To meet this challenge, FirstNet will use land-based cellular, as well as satellite and deployable systems to provide coverage



Operational coverage needs





The State's Decision Governor must decide to: "Opt-Out" of the federal Accept the recommended OR plan and develop an FirstNet plan alternative plan State is responsible for North Carolina works with significant portion of the FirstNet to implement build-out costs Federal plan

The Adoption Decision

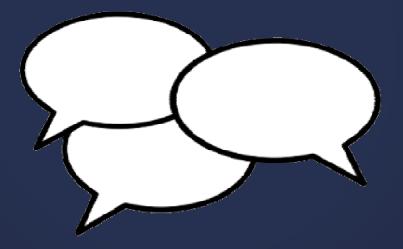


FirstNet service will be available to emergency responders in North Carolina regardless of the Governor's decision

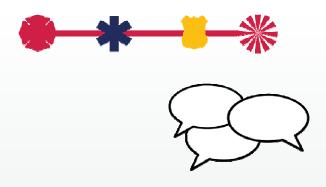
Every agency will have their own decision to make about signing up for service with FirstNet

Individual Responder's might be able to sign up even if the agency does not





Is this a mandate?



No. Every emergency response agency will have the choice to join FirstNet when it is available. FirstNet plans to have a compelling service and price to encourage agencies to join.



Who is going to build it?

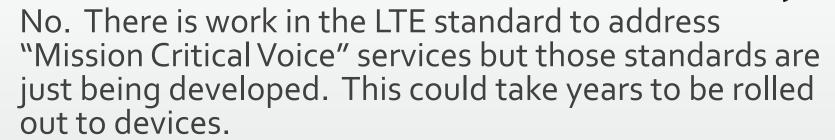


FirstNet is using the federal RFP process to select a vendor.





Will this replace my Land Mobile Radio?



Continued planning and funding for today's LMR is very important.









Won't it take forever to build new towers?

The expressed intent to use existing infrastructure where possible will increase the speed of deployment in a cost effective manner. This is a part of the RFP evaluation that the federal FirstNet team will conduct.



How will this effect NG911?



Next Generation 911 will connect Public Safety Answering Points (911 centers) with the public through an advanced network. Though these two networks are serving different purposes, FirstNet will need to be integrated with NG911 in order to be the most successful.





Stay in touch!

- FirstNet.NC.GOV
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- Text "FirstNetNC" to 22828 to receive updates