

# **STATEMENT FOR THE RECORD**

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*An Update on FirstNet*

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## **Introduction**

Chairman Wicker, Ranking Member Schatz, and distinguished members of the Subcommittee, thank you for the invitation to appear before you today to discuss furthering the effort to enhance emergency communications for public safety. I bring you greetings on behalf of Governor Terence R. McAuliffe the 72<sup>nd</sup> Governor of the Commonwealth of Virginia, and Virginia's first Secretary of Public Safety and Homeland Security Brian Moran. Governor McAuliffe and Secretary Moran, along with Virginia's public safety professionals on the state and local levels, are proud that Virginia has become the first state in the nation to opt-in to FirstNet's National Public Safety Broadband Network. Last week, the Governor was joined at FirstNet Headquarters by public safety personnel from law enforcement, fire, EMS, and emergency management who hailed the decision as a continuation of Virginia's leadership in the advancement of public safety interoperable communication. We see this as critical to our ability to provide public safety with the tools they need to carry out their mission and protect lives in the event of an emergency.

Virginia did not arrive at the decision to opt-in haphazardly. For many years, since the tragic events of 9/11, Virginia public safety professionals have been actively engaged in the efforts to improve emergency communications and fully leverage the technological advancements of mission-critical broadband. A coordinated and collaborative approach with local government public safety representatives was utilized to make sure that the decision was informed by the individuals who are the subject matter experts for public safety communication and stand on the frontlines of all-hazard emergency response. The decision to opt-in was based on the desire to ensure as quickly as possible that public safety is able to leverage the benefits of priority and preemption service, as well as to prevent costs to the Commonwealth, and move forward with the collaborative process of building the network to meet the Virginia-specific needs of public safety.

## **Integrated and Collaborative Emergency Response**

When a major incident or disaster occurs the resources of one jurisdiction are quickly overwhelmed. These types of events necessitate coordination among all surrounding jurisdictions. Integrated response thus requires disparate public safety agencies to be able to communicate with each other. Virginia is committed to doing everything possible to save the lives of citizens, support emergency response, and protect our public safety responders.

The attacks on 9/11 highlighted the inability of first responders to communicate with one another. Lives were lost due to incompatible and inadequate technology. Virginia experienced this with the attack on the Pentagon in Arlington. The Pentagon response involved four preeminent jurisdictions: Arlington County, Fairfax County, the City of Alexandria and the District of Columbia. Each jurisdiction used its own radio channel for communication and had no way to communicate with each other despite teams being deployed to work on the same tasks. Cellular telephones were useless within the first few hours because the towers were inundated and cellular priority access service was not provided to emergency responders.

FirstNet and the Nationwide Public Safety Broadband Network are the result of the 9/11 Commission's recommendation. The goal was, and is today, to ensure continued and interoperable communication among our first responders during a disaster or other large-scale event. Now, nearly 16 years later, Virginia has helped make this a reality in the Commonwealth by opting-in to the Nationwide Public Safety Broadband Network.

## Overview of Virginia

The unique geography and infrastructure of the Commonwealth of Virginia enhances our risks to the many hazards we face. Over 8.4 million people reside in Virginia. The population is largely concentrated in the eastern corridor of the state, including the Hampton Roads and Richmond metro areas, with the largest concentration in Northern Virginia. However, a significant portion of the state is rural.

The geographic diversity of the mountains in the west and the 3,315 miles of shoreline along the eastern border creates the opportunity for many natural hazards. The entire state is vulnerable to hurricanes, tropical storms, and flooding, as well as the potential for tornadoes and earthquakes. The mountainous western portion of the state is susceptible to wildfires, and both the western and northern portions of the state experiences severe winter storms. In 2016, the Commonwealth experienced the fourth largest snowstorm in the last century, the deadliest tornado event in Virginia since 1959, and multiple hurricane and flooding events that produced record amounts of rainfall and flooding.

Virginia's proximity to the nation's capital, and the fact that it is home to many federal agencies and more than two dozen military installations with the second largest military presence in the nation, make it a prime target for terrorist activity and cyber attacks. Virginia is rich in economic and defense infrastructure including the world's largest naval base, the biggest internet exchange point in the world, the fifth largest U.S. port, the nation's only manufacturer of nuclear naval aircraft carriers, and one of only two nuclear submarine manufacturers. As such, homeland security a major priority here in Virginia.

The Commonwealth partners with federal, state, and local public safety entities to ensure a collaborative response to incidents that brings together all capabilities for a quick and integrated response to emergencies and disasters. From the evolving threat of terrorism to extreme weather caused by the changing climate and rising sea, Virginia's public safety community must be prepared for all hazards.

Combined, there are thousands of public safety agencies at the local, county, state, and federal levels in Virginia that are potential users of the Nationwide Public Safety Broadband Network.

- **Law Enforcement and Corrections:** Virginia has approximately 370 law enforcement agencies and 24 prison/detention facilities. In March 2017, there were a total of 21,838 law enforcement officers employed in various state and local agencies. In addition, the state has a total of 7,268 correctional officers working in state, county, and private detention centers and prisons throughout the state.

- **Fire Service:** Virginia is home to 730 career and volunteer fire departments and has approximately 38,000 certified firefighters across the state. Fire Service personnel responded to 28,562 fires in 2016.
- **Emergency Medical Services (EMS):** In 2016, Virginia had 34,000 licensed EMS providers operating throughout the state that answered nearly 1.5 million EMS incident calls for service. There are currently 22,772 Certified Emergency Medical Technicians and 6,296 Certified Paramedics in the Commonwealth of Virginia.
- **Emergency Management:** Each of the 134 counties and cities in Virginia has an emergency manager, along with the several large towns.
- **Secondary responders:** Beyond the traditional first responders described above, this network will likely support non-traditional agencies such as those related to transportation, public works, and utilities. These agencies may be permitted to use the network on a secondary basis and would contribute to emergency response in the event of an incident that required their services, such as the clearing of roads or restoration of power.

### **Current Use of Technology**

Many public safety agencies within the Commonwealth of Virginia currently use data applications via vehicle mounted mobile data devices, ruggedized computers, as well as handheld devices and smartphones. Some of these applications operate over legacy private Land Mobile Radio (LMR) networks, while the majority utilize commercial 3G and 4G services. Applications in use today include, but are not limited to: Inter/Intranet access, Automatic vehicle location (AVL), access to local networks via a virtual private network (VPN), computer-aided dispatch and records management systems, sharing of reports and photos, access to criminal database information, automotive and driver license checks, weather reports, river-level monitoring, aerial and scene video, applications supporting the Incident Command System (ICS), Intelligent Transportation System (ITS) applications, such as traffic cameras and road signage, messaging, geospatial access for mapping and infrastructure plans, and systems management/monitoring tools.

In addition to the vehicle-mounted devices, users would also utilize handheld and tablet devices to access these types of applications as well as voice, text, VoIP, video services, and group communications.

## **Virginia's Decision Making Process**

### **Engagement with FirstNet & AT&T**

Virginia has been engaged on this issue from the very beginning. Since FirstNet was created, Virginia has been in continuous contact with the agency; there have been countless meetings,

briefings, calls, and emails. Virginia's SPOC has ensured continued communication throughout the process so that Virginia remained informed of developments as they occurred.

Since the announcement of FirstNet and AT&T's public/private partnership, Virginia's SPOC has facilitated numerous briefings for Virginia public safety leaders and the Commonwealth's senior leadership in the Governor's Office and the Attorney General's Office.

### **Engagement with Stakeholders**

Thanks to the State and Local Implementation Grant Program, Virginia has held over 60 state, regional, and local engagements with our stakeholders to make sure they are informed and involved in the process. These meetings engaged subject matter experts to help identify Virginia's needs and priorities. This process helped to ensure state and local officials outside of public safety understood the role of FirstNet and the implications it would have on them.

Presentations were neutral regarding the opt-in/opt-out decision in order to elicit feedback that would enable an effective evaluation of each course of action.

By highlighting certain aspects such as rural coverage, network construction timeline, and the requirement to maintain LMR systems, these presentations helped manage expectations and enabled stakeholders to begin contemplating the advantages and disadvantages of subscribing to the network in the future.

FirstNet was encouraged to be involved in these stakeholder meetings and consistently participated. This facilitated the rapid transmittal of feedback from the field to FirstNet headquarters.

### **Engagement with Other SPOCs**

Virginia's perspective has always been, that in order for this to truly be a Nationwide Public Safety Broadband Network, states must work together to ensure the network meets everyone's needs. To this end, Virginia hosted a regional meeting with the Single Points of Contact from six states—both nearby and across the country—as well as the District of Columbia. This meeting produced valuable data and best practices to inform the plan evaluation and decision processes. It also served to allow states' subject matter experts to discuss their concerns and experiences, which were compiled and provided as feedback to FirstNet. This feedback directly contributed to the additional information states received after the FirstNet/AT&T SPOC conference in Dallas, TX at the beginning of July.

### **Statewide Interoperability Executive Committee**

In 2016, a Statewide Interoperability Executive Committee (SIEC) was reconstituted with 33 representatives from state agencies, tribal nations, the seven Regional Preparedness Advisory Committees for Interoperability, and key professional organizations including, the VA Association of Campus Law Enforcement, VA Association of Public Safety Communications Officials, VA National Emergency Number Association, VA Chiefs of Police Association, VA State Police Association, VA Association of Governmental EMS Administrations, VA Sheriffs Association, VA Fire Chiefs Association, VA State Fighter Association, State Council of Higher

Education, VA Professional Firefighters Association, VaLITE, VA Association of Counties ,VA Municipal League, Amateur Radio Emergency Service, and the Virginia Military Advisory Council.

The SIEC provides guidance to the state on interoperability throughout Virginia and was integral in developing the state plan vetting and recommendation process. These meetings helped ensure Virginia's public safety communications leaders were kept up-to-date on the latest developments pertaining to FirstNet's Request for Proposal process, and state plan development and release.

### **Request for Information (RFI) Review**

Virginia issued a Request for Information to ensure our ultimate decision was fully informed. Six responses were received and they were reviewed by both the Office of the Secretary of Public Safety and Homeland Security and the Office of the Secretary of Technology. The responses did not contain information to convince the state that opting-out was a viable endeavor Virginia should undertake.

### **State Plan Review**

All of the engagements above served to inform Virginia's review of the state plan. Before the portal was accessible, the Office of the Secretary of Public Safety and Homeland Security, the Virginia Information Technologies Agency, the Virginia Department of Emergency Management, the Office of the Attorney General, the Office of the Secretary of Commerce and Trade, the Department of General Services, the Virginia State Police, and the Statewide Interoperability Executive Committee were informed of their role in the state plan review process. Over 100 individuals from localities and state agencies have been given access to the state plan portal. It was our view that widespread engagement was essential to a thorough review of the plan.

Once the plans were accessed and reviewed, Virginia was surprised that the information contained in the plans turned out to be a lot of the same information that FirstNet and AT&T had already provided. There was no significant information to analyze. Besides the state coverage map and local data, most of the information is similar to the public site.

## **Decision to Opt-In**

Governor McAuliffe has decided to opt-in and opt-in now because it is the best decision for public safety in Virginia.

### **Virginia Public Safety is Now Better Off**

Opting-in now provides Virginia public safety personnel with an additional tool in the tool belt. Because AT&T is making available network capacity on all of its existing LTE bands, ahead of LTE deployment on FirstNet's 700 MHz Band 14 spectrum, public safety agencies who are current AT&T subscribers will have priority access on the network. This will be invaluable in the event of a crisis or emergency situation. Numerous public safety agencies in Virginia including

those in Fairfax County are current AT&T subscribers. Ensuring that our first responders have the right tools and resources available to do their jobs is a key component of a safe and secure Virginia.

This decision will undoubtedly stimulate competition among all wireless carriers, which will benefit public safety economically and influence further improvements for the network. Competition also drives innovation and we want to make sure our responders are in the best position to do their jobs effectively, maintain situational awareness, and communicate within and across jurisdictions.

### **No Cost to the Commonwealth**

Opting-in costs the Commonwealth nothing. Priority access on the network comes at no additional financial cost to subscriber nor to the Commonwealth. Opting-in does not commit the Commonwealth to any role in the FirstNet buildout. FirstNet and AT&T will build, operate, and maintain the Commonwealth's portion of the National Public Safety Broadband Network at no cost to Virginia.

There is no requirement for state agencies or localities to use the network or switch carriers, rather opting-in provides the option and benefits to those who do. State and local agencies still have the decision-making power to decide which carrier works best for them based on coverage, reliability, cost, etc.; this tool simply adds to that analysis.

### **Opting-In Now Provided Benefits that Waiting Did Not**

It was Virginia's assessment that the lack of specific information in the plan, in combination with the statutory constrained timeline, made it clear that this draft plan was in fact the ultimate, final state plan. This assessment is supported by the fact that because the Nationwide Public Safety Broadband Network will be self-sustaining, negotiating additional services means subtracting services from another state. This reality solidified Virginia's decision to opt-in now; there were only benefits to doing so, and none for waiting.

### **Opt-Out Consideration**

Opting out would have required accepting the unknown associated costs and risks for the ongoing deployment, operation, maintenance, and improvement of the network within the Commonwealth, which must be maintained in accordance with FirstNet's policies. Virginia would have had to oversee the buildout of a highly technical broadband wireless network and assume all responsibility, liability, and fiscal accountability, maintenance, and management of users and customer care.

The cost of what it would have taken to construct, maintain, and operate a public safety dedicated broadband network in the Commonwealth, that is interoperable with the National Public Safety Broadband Network and matches the quality of service, is unknown. No one has been able to assess the cost and unfortunately any profits from the network would have had to be

reinvested in the network and would not have been able to serve as a revenue sources for the state.

Based on the legislative constraints, in particular the time constraints, thoroughly vetting an opt-out proposal, to the extent necessary, was not realistic. Choosing to do so would have put the Commonwealth in untenable, ambiguous position. Opting out would have delayed the benefits of network access to Virginia's first responders for an unacceptable time, perhaps as much as two years.

### **Virginia Specific Constraints**

Virginia is the only state in the nation with a limit on consecutive gubernatorial terms. This puts Virginia in the unique position of a guaranteed administration change every four years. Moreover, Governor McAuliffe's term will end in January 2018. Making Governor McAuliffe, along with Governor Chris Christie, the only two to face this decision at the end of an administration. Attempting to oversee and execute a project of this magnitude and ambiguity within this context would have put the state on unsolid ground.

In addition, the Commonwealth is particularly and disproportionately affected by sequestration. Virginia has the second most federal civilian employees and is the number one recipient of Department of Defense spending. The effects of the 2013 sequestration resulted in less economic activity, lower-paying jobs, and less revenue for the Commonwealth. Since taking office, Governor McAuliffe has focused on building a New Virginia Economy, one that is aimed at private sector job growth and less reliant on federal spending. These changes, however, take time. All of which means, Virginia is not in the fiscal position at this juncture to fund an extremely expensive project, whose cost is ultimately unknown.

## **Virginia's Path Forward**

### **Continued Collaboration with FirstNet and AT&T**

We are continuing to work with FirstNet and AT&T to ensure we are able to maximize the benefits of the network to support the Commonwealth's public safety. This is just the beginning and there are certainly questions that remain; Virginia has no intention of ending discussions with FirstNet and AT&T.

### **Continued Engagement with Stakeholders**

Virginia will continue to work with local partners to provide feedback to FirstNet and AT&T in order to ensure a viable network that will enhance public safety communications throughout Virginia. Dialogue with stakeholders has provided FirstNet and AT&T with insight as to Virginia's expectations for the network and the Commonwealth will continue to work closely with them to provide feedback and look ahead to enhancements that will build on its current success.



To this end, during August and September there will be seven regional day-long conferences conducted by Virginia's Single Point of Contact, FirstNet, and AT&T in order to provide the latest information and discuss the future.

### **Mission-Critical Capability Gaps<sup>1</sup>**

Virginia understands that the state plans are merely a base-line. As such we will continue to assess the gaps and issues to ensure Virginia has the full coverage and reliability that our first responders need and provide feedback to FirstNet and AT&T. There are capabilities that Virginia has already identified as crucial to the success of this network.

- **Coverage:** The public safety community is well aware that AT&T does not have sufficient rural and small market network coverage in Virginia. Virginia will continue to work with state and local partners to help AT&T identify and bolster its overall coverage.
- **Mission-critical voice:** It is not only the burden of needing multiple devices (one for voice, one for data) that demands this issue be addressed, but each state's economic burden as well, with the desire for new FirstNet data capabilities tempered by the ongoing need to maintain extensive separate voice networks across the same coverage area.

FirstNet's RFP includes a March 2019 milestone for the mission-critical-push-to-talk (MCPTT) technical capability to be implemented in its network, but more information is needed on specific, intermediate milestones for technology development, testing and validation, along with committed resources and actions to achieve those milestones.

- **Mission-critical, enhanced location (with z-axis, vertical capabilities):** Unlike mission-critical voice, enhanced location is a more near-term reality, with known technologies capable of rolling out during the same timeframe as the base FirstNet LTE deployment. These capabilities, including 3D geolocation, situational awareness, and incident management command and control, would be of extraordinary value to first responders, both in finding an emergency caller, by floor, in a high-rise building as well as in protecting their own safety in the event they become disabled or endangered.

The FirstNet board has stated that the contract requires that this capability be available by March 2022, but board members and staff have emphasized the need to implement it sooner, if the technology is ready. In fact, the latest FirstNet roadmap calls for "updated FirstNet location-based services" to be implemented in the network by June 2019. This is a much better timeline for first responders to receive this critical functionality. Deployment timeframes and coverage for each state's key markets with high-rise building concentrations is needed.

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<sup>1</sup> Charles Werner, Acting Virginia Department of Emergency Management Deputy Coordinator of Disaster Services, has been an integral part of the Virginia's public safety interoperable communications team. The following incorporates his expert opinions as outlined in his article, "FirstNet—Opportunities and Challenges" *National Public Safety and Telecommunications Council* (July 14, 2017), available at <https://blog.npstc.org/2017/07/14/charles-werner-charlottesville-va-fire-chief-emeritus-writes-on-firstnet-opportunities-and-challenges/>.

## **Conclusion**

Governor McAuliffe views protecting public safety and supporting first responders as his top priority. Each day, Virginia's first responders put on their uniforms and leave their families and homes to risk their lives to keep our communities, citizens, and visitors safe. We are thankful every day for their service and sacrifice, and in return, we must continue to do more to protect their safety.

Ensuring that our first responders have the right tools and resources available to do their jobs is a key component of achieving that goal. That is why Virginia is proud to be the first state to officially opt-in to the nationwide public safety broadband network, FirstNet. This innovative technology will improve public safety throughout the entire Commonwealth and better protect our men and women in uniform.

FirstNet's public safety broadband network marks another significant step forward with these wireless data capabilities. FirstNet and AT&T are committed to working with us to make sure Virginia will have the full coverage that our first responders need. We will continue to work closely with them to provide feedback on the network and look ahead to enhancements that will build on this current success.

Virginia intends to not only lead the nation in the support and deployment of the FirstNet broadband network, but also in support of the safety of its citizens and first responder community.

Thank you again for the opportunity to testify today and your support for our first responders.