



# Next Generation 9-1-1

Currently, the 9-1-1 system in the Commonwealth is dependent on decades old technology, and is tethered to voice-centric communications. It relies on an analog network that is quickly going out of service and places limitations on the reliable delivery of 9-1-1 service. The Commonwealth must act NOW to ensure quality, consistent 9-1-1 service to its citizens and visitors. To accomplish this, the Virginia E-911 Services Board has begun the planning and preparation to move to a Next Generation 9-1-1 (NG9-1-1) system. NG9-1-1 is based on a modern Internet protocol (IP) network, that has the ability to deliver calls to the appropriate 9-1-1 center faster, transfer 9-1-1 calls and associated data anywhere needed, interconnect with other public safety systems and databases, and securely receive multimedia communications like text messages, photos and videos. As service providers begin abandoning the legacy circuit-switched technology, the urgency to update the 9-1-1 infrastructure to NG9-1-1 will increase tremendously. Actions to transform the outdated system into a digital network that is faster, more efficient, and more capable of serving Virginia's citizens and visitors must begin now.

## Transition Planning

Recognizing the need to ensure a timely and comprehensive deployment of this important service, the Virginia E-911 Services Board contracted for the development of a Internet Protocol-Based 9-1-1 Network Feasibility Study. The study, developed through statewide stakeholder input, recommended the Commonwealth implement an Emergency Services Internet Protocol (IP) network (ESInet), to advance toward NG9-1-1. The ESInet is a network-of-networks much like the Internet. And like the Internet, standards need to be in place to ensure that all participants interoperate in a secure and appropriate manner. The study recommended over 100 tasks the Commonwealth needs to complete to accomplish this goal. Key among them was the establishment of governance for the required standards. Working with all stakeholder groups, the Board determined that it is in the best position to provide that governance, as well as to coordinate with surrounding states to ensure seamless interoperability. As a result, they have adopted guiding principles (below), and a legislative position to be considered for the 2016 General Assembly session. That legislation will define the Board's NG9-1-1 authority. In the diagram below, this authority would only include those areas within the red circle. All other areas are part of the existing 9-1-1 system and have governance through the State Corporation Commission (SCC), Federal Communications Commission (FCC) or local governments. As one of the Board's guiding principles states, it will take full stakeholder engagement for NG9-1-1 to be successfully implemented. While the Board's 2016 legislative position will address governance, it does not address sustainable funding for NG9-1-1, which will need to be resolved in the future.

### Guiding Principles

#### *For a Successful NG9-1-1 Transition*

- 9-1-1 is essential, local/regional, public safety services.
- Need to address ALL of 9-1-1 not just NG.
- Full stakeholder engagement is needed.
- Services must be not be degraded.
- Economies need to be leveraged.
- Doing nothing is NOT an option

