



Virginia Department of
Emergency Management

Commonwealth of Virginia 9-1-1 Services Board FY 2020 Annual Report

October 1, 2020



The *Code of Virginia* (§56-484.14) requires the 9-1-1 Services Board (the “Board”) to report annually to the Governor, the Senate Committee on Finance, the House Committee on Appropriations, and the Virginia State Crime Commission on the following:

- (i) the state of enhanced 9-1-1 services in the Commonwealth,
- (ii) the impact of, or need for, legislation affecting enhanced 9-1-1 services in the Commonwealth,
- (iii) the need for changes in the E-911 funding mechanism provided to the Board, as appropriate, and
- (iv) monitor developments in enhanced 9-1-1 service and multi-line telephone systems and the impact of such technologies upon the implementation of Article 8 (§ 56-484.19 et seq.) pursuant to subdivision 6.

➤ *The state of enhanced 9-1-1 services in the Commonwealth*

The 9-1-1 Services Board is leading Virginia’s efforts to transform an outdated 9-1-1 system into a digital network that is faster, more efficient, and has greater Public Safety Answering Point (PSAP) capabilities to better serve its citizens and visitors for years to come. Overall the 9-1-1 system relies on technology that is decades old and tied to voice-centric communications. This outdated infrastructure is being replaced by newer and more resilient technology. The commonwealth must move forward in its evolution of enhanced 9-1-1 technology in order to ensure high-quality, state-of-the-art services to its citizens and visitors.

To accomplish these goals, the Board has planned for and initiated the processes (Figure 1) for moving Virginia PSAPs 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 as needed, interconnect with other public safety systems and databases, and to securely receive multimedia communications like text, photos and videos in an efficient and timely manner. As service providers begin abandoning the legacy circuit-switched technology, there is an urgency to update the 9-1-1 infrastructure to NG9-1-1. Actions to transform the outdated system to a new digitally-based network that is faster, more efficient, and has greater capabilities to serve Virginia’s citizens, has begun. The *Code of Virginia* [§56-484.16](#) requires full implementation of NG9-1-1 by July 1, 2023.

Another legislative requirement is related to the deployment of Text-to 9-1-1. *Virginia Code* [§56-484.16](#), section B states in part that, “on or before July 1, 2020, each PSAP in the Commonwealth shall deploy equipment, products, and services necessary ... to enable the PSAP to receive and process calls for emergency assistance sent via Short Message Service (SMS) text messages...”. This service is available to provide more access to 9-1-1 for people with disabilities, and to those in situations where it is dangerous to make a voice call to request help.

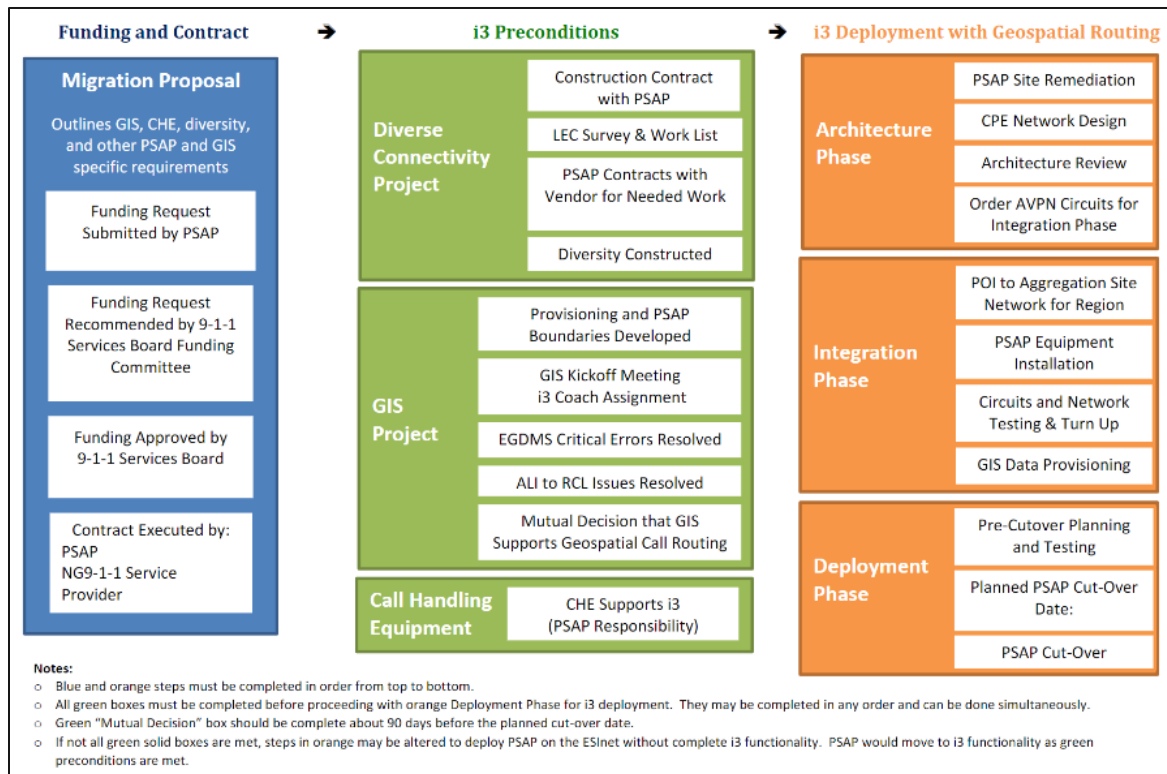


Figure 1: Overall NG9-1-1 Deployment Steps

Throughout FY 2020, the Board has had a number of accomplishments to support legislative requirements. Below is a partial list of these accomplishments:

- Awarded \$55.6 million to 111 PSAPs for NG9-1-1 deployment projects
- Assisted Fairfax County in its deployment of NG9-1-1 on June 3, 2020 – the inaugural NG9-1-1 deployment in Virginia
- Supported 110 PSAPs in their efforts to deploy Text-to-9-1-1 before the legislative mandate of July 1, 2020

The number of wireless 9-1-1 calls also continues to grow. Currently, almost 80 percent of all the 9-1-1 calls received by Virginia PSAPs are from a wireless device. In response to the fact that many more wireless 9-1-1 calls are made indoors, the Federal Communications Commission (FCC) in 2015, adopted a [Wireless Indoor Location Accuracy Report and Order](#). Improving wireless accuracy continues to be an ongoing issue monitored by the Board.

As a result of the above efforts, Virginia continues to be a nationally recognized leader in 9-1-1 and the Board is well positioned to address any emerging challenges to the commonwealth's 9-1-1 ecosystem.

➤ *The impact of, or need for, legislation affecting enhanced wireless emergency telecommunications services in the Commonwealth*

Currently, the Board has not proposed any legislation for the 2021 General Assembly session.

Earlier this year, Governor Northam approved the legislation, [House Bill 1003](#) (2020), effective July 1, 2020, transferring the Integrated Services Program (ISP) from the Virginia Information Technologies Agency (VITA) to the Virginia Department of Emergency Management (VDEM). Within the VDEM organization, the ISP has been rebranded as the 9-1-1 and Geospatial Services (NGS) Bureau.

The NGS Bureau provides a variety of data and information services to local, state, and federal stakeholders. The bureau is organized into three service units:

- Public Safety Communications (PSC) Division
- Virginia Geographic Information Network (VGIN) Division
- Regional Outreach Division

Collectively, the NGS divisions are prepared to assist any local or regional government, as well as state agencies' 9-1-1 or GIS program, to provide their essential services to the citizens of the Commonwealth of Virginia. The PSC Division supports local 9-1-1 programs through funding and technical assistance and provides staff support to the Board. The VGIN Division supports local and state agency GIS programs through technical and data assistance and provides staff support to the VGIN Advisory Board. Both divisions utilize a common outreach effort through the bureau's Regional Outreach Division.

➤ *The need for changes in the E-911 funding mechanism provided to the Board, as appropriate*

The 9-1-1 community has expressed concern over the amount of NG9-1-1 recurring costs. To address this concern, the Board directed the PSC Coordinator to form a committee from the extended 9-1-1 stakeholder community to develop recommendations on how to mitigate the financial burden of recurring NG9-1-1 costs on localities.

The committee in its report offered these four recommendations for the Board to consider:

1. Encourage the Board in its Annual Report to the General Assembly that the Communications Sales and Use Tax be modernized. A potential area for modernization is the removal of the existing exemptions for pre-paid wireless transactions and streaming video. Such modernization has the potential to offset this funding gap.
2. Evaluate the need of increasing the surcharge rates for postpaid wireless devices and prepaid wireless transactions to generate additional revenue to address the expanding gap that exists between 9-1-1 funding and PSAP operational and capital expenses. The additional revenue generated from an increase in the surcharge rates could be specifically earmarked to offset NG9-1-1 recurring costs. The case for change should be built on demonstrated financial need and the carrier community must be a partner in this effort.

3. Undertake a study using a third party to determine the statewide cost of 9-1-1 and identify potential efficiency improvements. In Virginia, 9-1-1 is a local service, but local 9-1-1 expenses are increasing much more rapidly than the Wireless E9-1-1 Fund, and distributions made from this fund to localities.
4. Establish an equity-based approach to statewide 9-1-1 funding that utilizes established metrics and criteria for determining local needs. Since funding decisions and standards are already established for the commonwealth by the Board, it would be appropriate for the Board to develop a “philosophy of funding” that could be used by the Board in evaluating funding strategies and making financial decisions. This would enable all subsequent funding models to reflect both fixed and variable PSAP costs.

➤ *Monitor developments in enhanced 9-1-1 service and multi-line telephone systems*

This is a duty of the Board that was enacted on July 1, 2007. Most of the provisions of Article 8 (§ 56-484.19 et seq.) of Chapter 15 of Title 56 took effect on July 1, 2009. The Board continues to monitor developments.