

**PROGRAM EVALUATION DIVISION** North Carolina General Assembly

April 2018

Report No. 2018-02

## VIPER and FirstNet are Vital for Public Safety Interoperability, but VIPER Requires Upgrades

## Summary

Session Law 2017-57 directed the Program Evaluation Division to evaluate North Carolina's Voice Interoperability Plan for Emergency Responders (VIPER) and FirstNet technologies with an emphasis on the systems' current states, potential duplications, governance and financing structures, and upgrade needs.

No duplication exists between VIPER and FirstNet's major functions and services. VIPER and FirstNet share the common purpose of improving interoperability for public safety first responders, but the two systems complement rather than duplicate functionality. Each system possesses important capabilities for first responders that the other system does not offer. North Carolina's Statewide Interoperability Executive Committee, which monitors interoperable communications issues in North Carolina, will continue to report on the systems as their technologies evolve.

The VIPER system provides statewide voice interoperability to local, state, and federal entities in North Carolina, and stakeholders perceive it to be a reliable system. The State Highway Patrol distributes approximately 100,000 VIPER IDs statewide, approximately 78% of which are distributed to local government entities. Associations and county points of contact perceive that users are generally satisfied with VIPER, but these stakeholders have suggestions for improving the system.

The VIPER system is supported by equipment purchases and in-kind contributions from local agencies; charging user fees could reduce participation in the network and diminish statewide interoperability. Approximately 70% of VIPER's 220 sites contain infrastructure or equipment from non-state entities, and these partnerships are crucial to VIPER's success.

Failure to upgrade VIPER's base stations and related software will adversely affect VIPER's continued reliability and interoperability. Motorola will soon stop supporting VIPER's base stations, which will reach the end of their life cycles as of January 2019, as well as VIPER's current software, which is four years behind the most recently available version.

Based on these findings, the General Assembly should

- direct the Department of Public Safety (DPS) to increase its VIPER outreach programs to improve engagement of VIPER stakeholders,
- direct DPS to determine the value of in-kind contributions provided to the VIPER system, and
- consider appropriating funds to upgrade VIPER base stations and establish routine software updates.