




**North Carolina Department of Public Safety**  
**State Highway Patrol**

Roy Cooper, Governor  
Erik A. Hooks, Secretary

Glenn M. McNeill, Jr.  
Commander

**MEMORANDUM**

**To:** Chairs of Joint Legislative Oversight Committee on Justice and Public Safety

**From:** Erik A. Hooks, Secretary, DPS  
Glenn M. McNeill, Jr., Commander, State Highway Patrol 

**Subject:** VIPER Quarterly Report

**Date:** February 15, 2021

*Pursuant to Session Law 2016-94, Section 17B.1, The Department of Public Safety shall report annually no later than March 1 and quarterly thereafter to the chairs of the Joint Legislative Oversight Committee on Justice and Public Safety on the progress of the State's VIPER system.*

Network Status - 241 total sites planned for statewide coverage of which 233 sites are constructed and on-the-air representing 96% completion. A total of five sites are underway but are waiting on site engineering packages, the resolution of leases, or the completion of site construction. Three sites will still require funding after the upcoming fiscal year. VIPER is moving forward with plans for these three locations to be in Buncombe, Jackson and Avery counties respectively. The system currently supports 141,501 emergency users. This quarter gain represented slightly more than 2,200 additional user radios.

SUA Status – The Service Upgrade Assurance (SUA) program with Motorola is a nine-year contract with subsequent system upgrades scheduled every three (3) years. This contract has a defined, recurring funding appropriation of \$1.5M from the Legislature, which began 1 July 2019, and will be due in equal installments of \$1.5M in each budget year through FY 27-28. Completion and installation of the new GTR base station equipment permits VIPER to move from Release 7.17 to Release 7.20 by Q4 2021. All VIPER local government partners with connected console equipment will upgrade to the latest release as well.

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February 15, 2021

Page 2

VIPER Quarterly Report

New Tower Construction Progress – Three (3) new sites previously identified as Charlotte (Mecklenburg County), Anson W/T (Anson County), and Hayesville (Clay County) are all under construction. VIPER expects to have the Charlotte site on the air in late Q1 2021, the Anson W/T site on the air in late Q2 2021 and the Hayesville site by the end of CY 2021, weather permitting. VIPER continues to perform engineering work at Aho in Watauga County and Hot House in Cherokee County.

Additional Significant Projects/Funding Needs:

- **Microwave Upgrade:** VIPER operates a statewide microwave network in conjunction with the University of North Carolina Public Television. This network utilizes T1 technology (circuit based) which has been the national standard for connectivity for over 50 years. With the transition over to Ethernet and the ability to manage bandwidth needs more efficiently, the Manufacturer (Alcatel) will no longer support our MDR-8000 microwave radios past the end of CY2021. As a result, funding will be essential to replace the current microwave radios beginning in FY2021 and concluding in FY2024. The total anticipated funding requirement for replacement of microwave radios is \$18,000,000. The cost would be split equally over four fiscal years at \$4,500,000 per year. The goal is to begin the project in FY2021. Since the 1990's the MDR-8000 microwave has provided sterling service to VIPER and UNC-TV however it can no longer support future needs.