



North Carolina Department of Public Safety

State Highway Patrol

Roy Cooper, Governor
Eddie M. Buffaloe, Jr., Secretary

Freddy L. Johnson, Jr.
Commander

MEMORANDUM

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

From: Eddie M. Buffaloe, Jr., Secretary, DPS
Freddy L. Johnson, Jr., Commander, State Highway Patrol

Subject: VIPER Quarterly Report

Date: February 15, 2023

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 - Network Status - 241 total sites planned for statewide coverage of which 236 sites are constructed and on-the-air representing 98% completion. The remaining five sites are currently underway and in varying stages of the construction process, either site engineering, resolution of leases or the completion of site construction. All the remaining sites are fully funded for construction. The system currently supports 167,783 emergency users. This quarter gain represented slightly more than 4500 additional user radios. An additional statistic that we are also beginning to track is how many counties have directly connected consoles with VIPER network. The number currently stands at 41, with Gates, Halifax and Cumberland (back-up) being the latest additions. We have seven further counties with orders for consoles, which will bring the total in CY23 to 48. Integration of the direct connection consoles greatly enhances the ability for local PSAPs to be able to reroute VIPER radio calls in the event of the loss of a 911 PSAP during emergencies or other unusual occurrences.

New Tower Construction Progress – Five sites (5) are currently under construction, Hayesville (Clay County) has the tower erected and further equipment installation is ongoing with an end of Q1 site turn up. Hot House (Cherokee County) has foundations in the ground and tower and building installations are pending with an anticipated site turn up at the end of Q2 2023. High Top (Buncombe County) has civil work completed along with the equipment shelter install. Equipment installation is pending, and site turn up set for end of Q2. Jones Pond (Anson County) is awaiting the installation of lines and antennas and we anticipate the site to be online by the end of Q1. Finally, Hawshaw Mountain (Avery County) has the tower ordered and the foundation work is pending. Site is expected to be on the air by the end of CY23.

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Other 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 to Ethernet and the ability to manage our bandwidth needs more efficiently, the manufacturer (Alcatel) will no longer support our current MDR-8000 microwave radios past the end of CY2021. VIPER has been awarded \$19,325,000 from the Legislature, and supported by Governor Cooper, to move forward with this important project in CY2022. VIPER has submitted an Invitation for Bid (IFB), seeking competitive pricing for the replacement of the end of life (EOL) Alcatel MDR-8000 microwave radios. A similar IFB was submitted and awarded for service aggregate routers. In compliance with SL2021-180, S105 Section 19B.4(a), VIPER has submitted bid responses to the Legislature for approval prior to issuing purchase orders related to the project. VIPER expects to have contracts for the new hardware and radios in place by the end of Q2 2023.
- **VIPER Site Coverage Analysis:** With the upcoming completion of all the 241 Legislatively funded sites submitted as part of the 2004 VIPER study delivered to the Legislature, VIPER staff have begun to identify areas of the state where the minimum 95% portable radio in the street coverage has not been met. The 2004 plan provided a “best estimate” of the needed number of sites and now with the 241 sites fully located and under construction, it is now possible, aided by more modern and comprehensive coverage mapping programs, for VIPER to be able to identify these areas lacking sufficient coverage and to prepare a remediation strategy to bring back to the Legislature for consideration. VIPER anticipates being able to present that planning document to the Legislature for consideration in CY23 for a recommendation on potential future funding.