



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 *EAH*
Glenn M. McNeill, Jr., Commander, State Highway Patrol *GMM*

Subject: VIPER Quarterly Report

Date: February 27, 2020

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 228 sites are constructed and on-the-air representing 94% completion. A total of six sites are underway but are waiting on the resolution of leases or completion of site construction. Four additional sites have been identified for construction in the FY19/20 budget year. Four sites will still require funding after the upcoming fiscal year. 132,160 users are currently on the VIPER Network consisting of more than 182 Federal, State and County emergency responding agencies. This quarter gain represented slightly less than 6,000 additional user radios.

SUA Status - VIPER is currently operating at Release 7.17. The Legislature provided a one-time appropriation of \$1.5M for the Service Upgrade Assurance (SUA) program which allowed VIPER to enter into a nine year agreement with Motorola to provide a long-term SUA 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, with the approval of an FY19-20 mini-budget.

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New Tower Construction Progress –Four (4) new sites have already been identified for new construction. These four sites are located in Johnston, Sampson, Anson, and Clay Counties. The site slated for Newton Grove (Sampson County) will replace the current Newton Grove site where the tower lease has expired and will not be renewed. VIPER is also rebuilding three (3) sites in Chinquapin (Duplin County), Jacksonville (Onslow County) and Laurinburg (Scotland County) that sustained significant damage during Hurricane Florence.

Other Significant Projects:

- **GTR upgrade:** The end of life (EOL) has been reached for the current Quantar Base Stations and additional funds are needed to purchase replacement GTR Base Stations prior to the cancellation of product support scheduled for 31 December 2018. The anticipated cost for replacement of the Quantar Base Stations at the 187 affected sites is \$28,500,530. This, like the SUA upgrade represents the most critical of VIPER's current needs. Through SB99, we were provided \$8.7M for the GTR base station upgrade during FY18/19. All GTR replacement equipment funded from our FY18/19 appropriation has been installed. VIPER will still require an additional \$19,800,530 to complete the upgrade of the remaining Quantar stations statewide. Due to the Quantar EOL, it remains a critical need for VIPER to receive funding to complete the equipment changeover to the GTR Platform. The FY19/20 Legislative budget includes \$9,000,000 towards the replacement of Quantar base stations along with an additional \$9,000,000 for FY20/21. Due to VIPER's limited supply of parts to support the Quantar stations remaining in service, our ability to continue to support those sites with Quantar stations will cease at the end of CY2020. Beyond 2020, without replacement stations, VIPER anticipates degraded site capacities and the potential loss of sites once our spare parts inventory is depleted.
- **MOSCAD:** VIPER has completed the transition to its new network monitoring system replacing the previous MOSCAD technology.
- **Microwave Upgrade:** Finally, VIPER operates a statewide microwave network in conjunction with the University of North Carolina. This network utilizes T1 technology (circuit based) which has been the national standard for connectivity for over 50 years. With the transition over the 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. This will require the state to seek funding to replace the current microwave radios beginning in FY2021 through FY2024. The anticipated funding requirement for the replacement of the microwave radios is \$18,000,000 and would be split equally across the four fiscal years at \$4,500,000 per year. We hope to receive the funding to begin this project in FY2021 to avoid finding ourselves in the same situation that we are in now with the Quantar radio base stations.