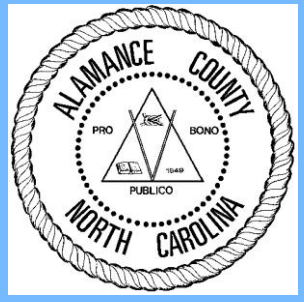
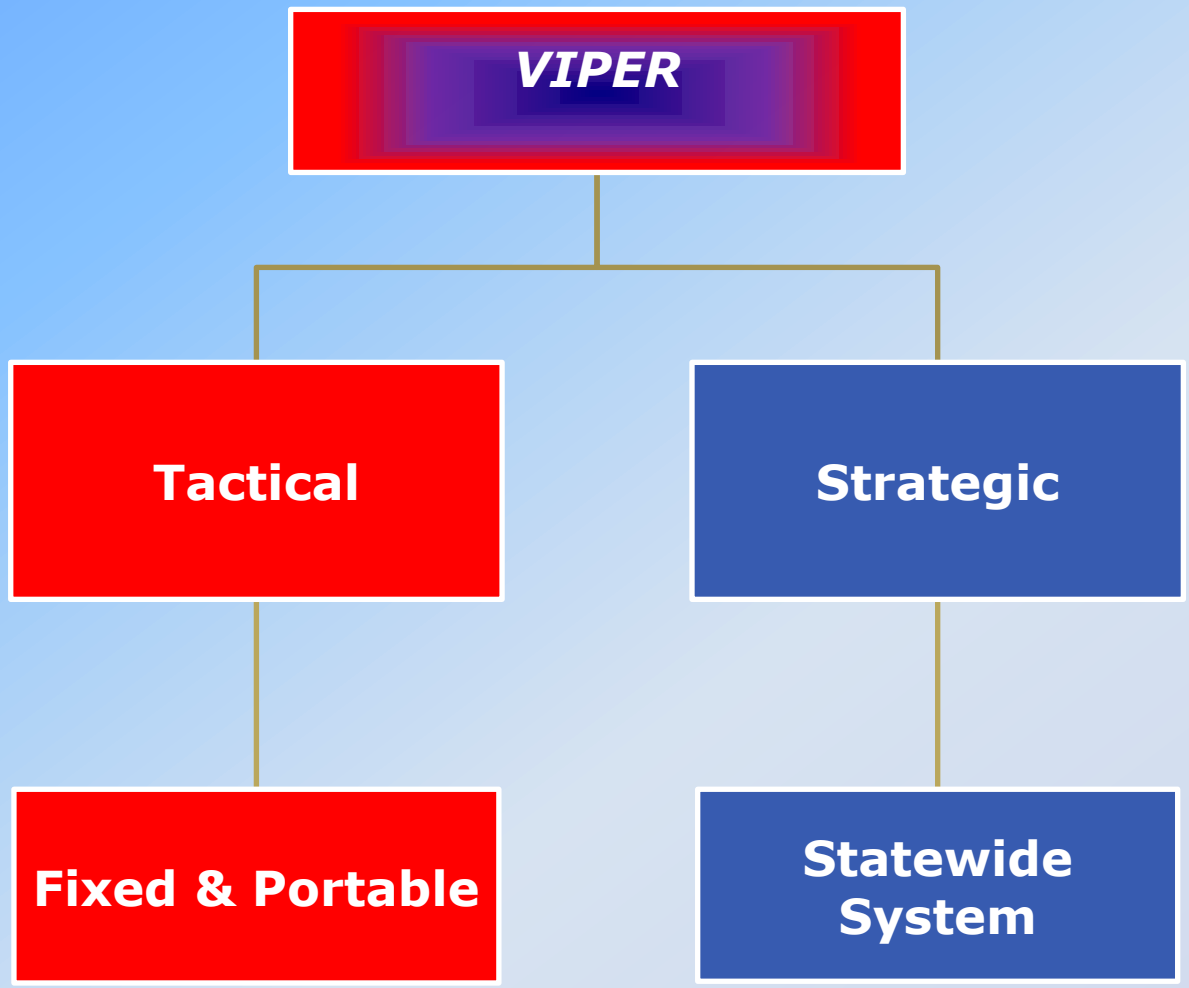
Voice Interoperability Plan for Emergency Responders

Voice Interoperability Plan for Emergency Responders

A CJIN Module



Voice Interoperability Plan for Emergency Responders



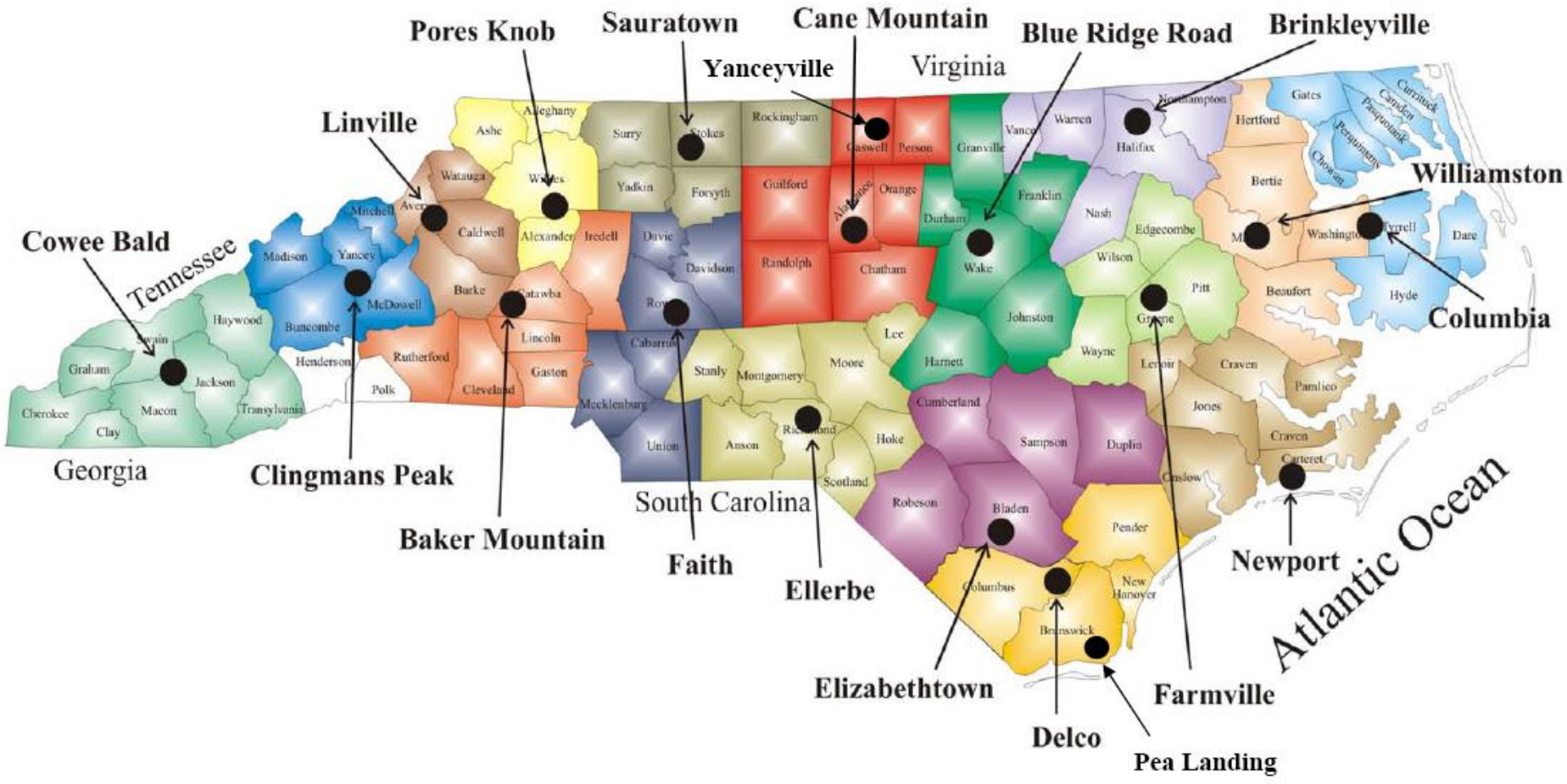
What is the VIPER Tactical Solution?

- Temporary solution for interoperable emergency communications
- 19 remote fixed sites with 2 pre-programmed radio's for each county
    1. Law Enforcement
    2. Fire/Rescue or EMS
- Patches are actually done at SHP Communications centers & State EOC
- System is in place now and costs locals $0 to use
- Support is currently provided by NC Highway Patrol

Who Can Authorize the Activation of a VIPER Tactical Patch?

- Agency Dispatch Center Supervisor
- State or Local E.M. Coordinator
- Event Incident Commander
- Any Technical Staff Member of the VIPER Group

VIPER Inter-Agency Interop Sites



Mobile Solution (Tactical)

- 7 mobile interoperable communications towers to eliminate diminished capacity for extended periods
- Pre-positioned across the state
- Long term incidents / events
  - More than 6 to 8 hours
- Enhanced unit to support 800 MHz systems and operate as a stand-alone communications system
- Large special events

VIPER
Strategic

Background

- Original CJIN Voice Trunking Network (VTN)- 1992
- Recommended in a CJIN Legislative Study by Price Waterhouse - 1995
- Re-Validated in a CJIN re-fresh study by the Gartner Group - 2002

Examples of Lack of Voice Interoperability

- American Eagle Commuter Crash at RDU 1994
- FBI Murrah Building, Okalahoma City 1995
- Hurricane Fran 1996
- Hurricane Floyd 1999
- Columbine High School 1999
- Twin Towers, New York City 2001

Strategic Solution Overview

- Statewide 800 MHz trunked radio system available for ***all emergency responders (local, State, Federal)***
- Goal: 95% in-street portable coverage based on a 3 watt portable radio
- Network infrastructure consisting of towers linked via microwave
- Implementation (build-out), Operations and Maintenance provided by NC Highway Patrol
- Compatible with 29 local, trunked voice systems throughout North Carolina
- End-user requirement to join the network – purchase their own radios

Partnerships

Progress Energy
Time Warner Cable
NC Electric Membership Co-ops
UNC-TV
NC Forestry Service
US Forestry Service
Dominion Power
Duke Energy
NC D.O.T.
NC Wildlife Resources Commission
Multiple Local Governments

Network Status

- 242 total sites planned for statewide coverage
- 189 sites constructed and on-the-air
- 30 sites under construction
- 23 sites remaining
- VIPER is 78% complete (number of sites) with 189 sites on-the-air
- 64,412 users are currently on the VIPER Network
  - 260 Emergency Responding agencies (including federal, state and local agencies) makeup the 64,412 radio users
- 37 counties use VIPER as their primary means of communication
- SC has the same type Interoperable System; NC/SC can talk to each other using the same type user device

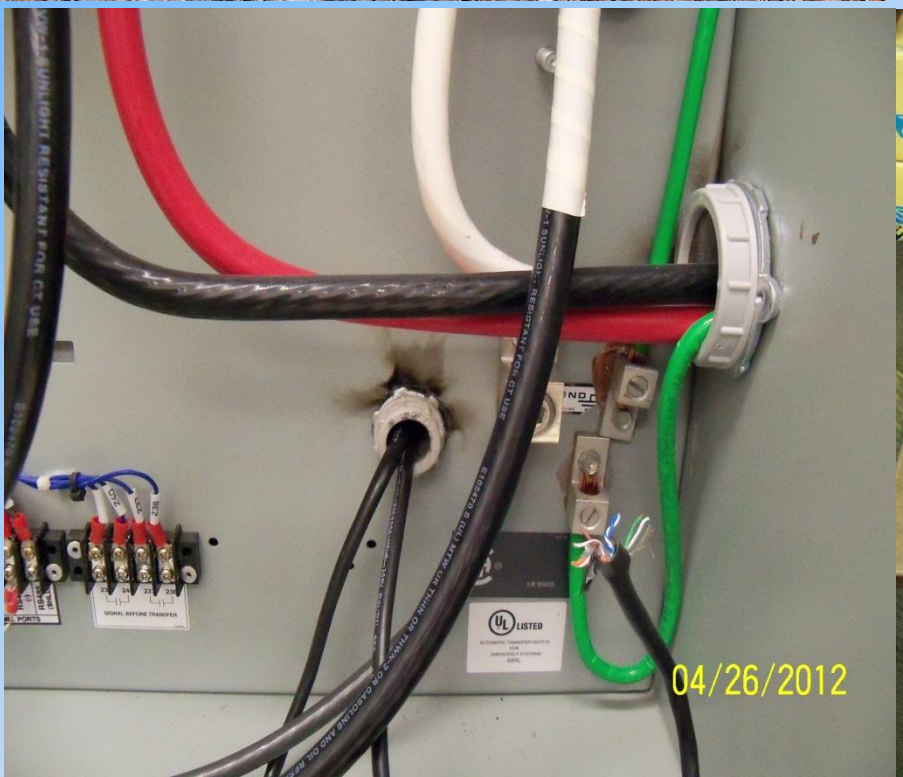
Funding

- Operations & Maintenance ($7.5M at the completion of VIPER)
  - Current: $2.5M recurring ($1.3M for positions and $1.2M for other O&M expenses)
  - Requesting: Additional $2.5M recurring to support the existing network
  - At completion of build-out: additional $2.5M to support the entire network

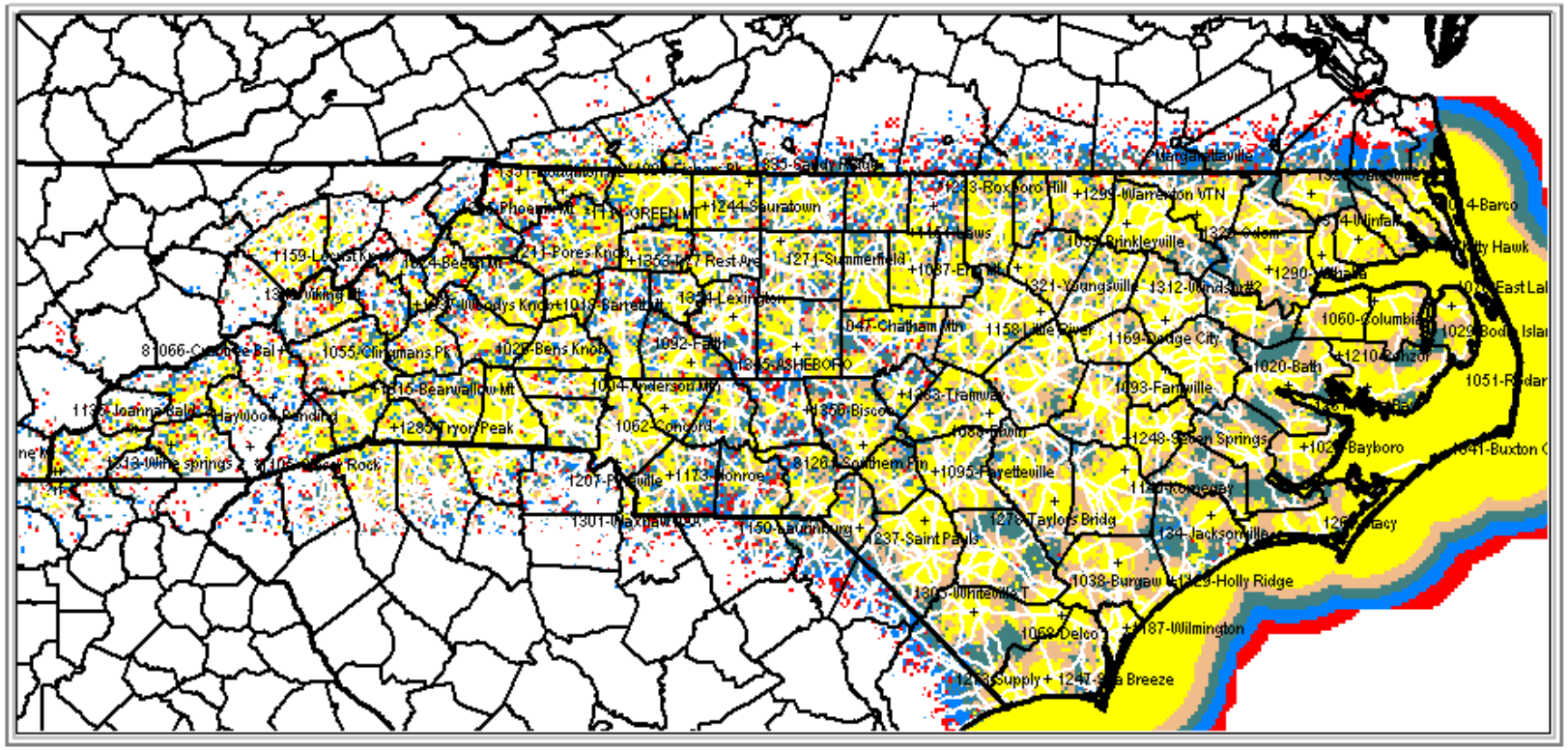
An example of recurring funds used to support VIPER:

Lightning damage sustained at the Hosley Forest VIPER site in Franklin County costing approximately $5k - $10k.

- Left picture – tower foundation blown up
- Left bottom corner – transfer switch damage
- Right bottom corner – lightning arrestor damage

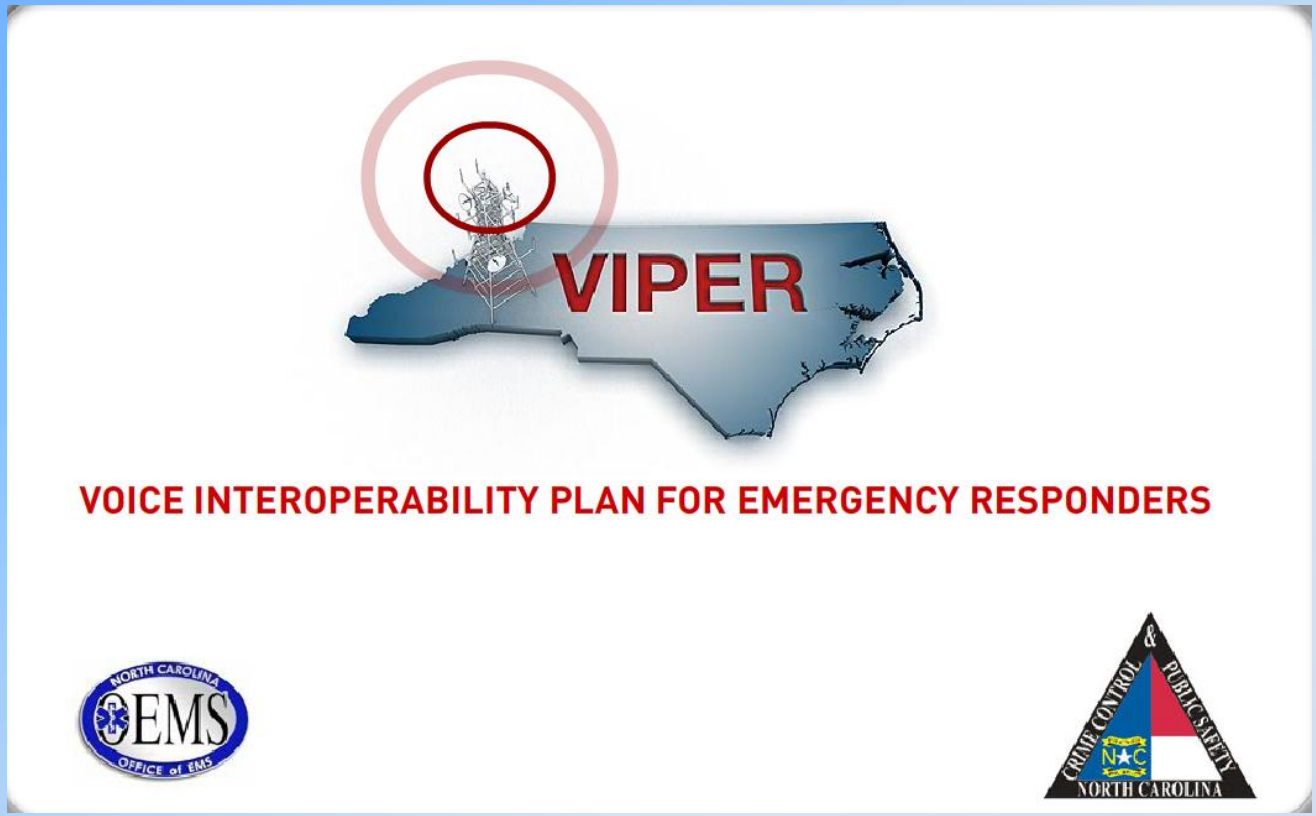


VIPER 800MHZ COVERAGE STUDY Rev 04/11/12



3 - WATT Portable Talk - Back Coverage Analysis

End User Training



http://smrs.emspic.org/viper/

QUESTIONS?

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www.nccrimecontrol.org/citizens/VIPER

24 Hour Network Operations Center
1-888-92-VIPER
(1-888-928-4737)