



# North Carolina (NC)

**PSIC Federal Award: \$22,130,199**

(Awarded September 30, 2007)

## Summary

PSIC Investment Justification	Federal Funds
Strategic Technology Reserve (STR) – Improvements and Augmentation of Current Deployable Assets	\$1,350,000
Expansion of VIPER 800 MHz Infrastructure	\$20,073,946
The Enhancement of Interoperable Communications with Bridging and Patching Equipment in Areas Where VIPER (800 MHz) Alone Will Not Be a Total Solution for the Region	\$275,000
Enhancement of Control Center Communications Capabilities	\$359,551
Management and Administration (M&A)	\$66,702
Statewide Planning	\$5,000
<b>Total PSIC Award</b>	<b>\$22,130,199</b>

**Pass Through:** The North Carolina Division of Emergency Management entered into Memoranda of Understanding with local counties. The agreements authorize the North Carolina Division of Emergency Management to expend PSIC grant funding on behalf of these jurisdictions for the management of the VIPER 800 MHz Expansion project.

**Strategic Technology Reserve (STR):** North Carolina submitted a written partial STR waiver request based on the fact that North Carolina has invested previously in efforts to establish an STR. The State currently maintains adequate mobile and deployable communications resources (e.g., mobile communications towers, deployable cache radio trailers, generators, radio chargers) to reestablish communications if existing critical infrastructure is damaged, and was therefore granted a partial waiver.

## Investments

### Strategic Technology Reserve (STR) – Improvements and Augmentation of Current Deployable Assets

Federal Amount:	\$ 1,350,000
Non-Federal Match Amount:	\$ 337,500
<b>Total Project Cost:</b>	<b>\$ 1,687,500</b>



<b>100%*</b> Acquisition & Deployment	<b>0%</b> Training & Exercise	<b>0%</b> Planning & Coordination
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*\*Percentages include both Federal and non-Federal Match funds.*

Recent natural disasters have exposed the vulnerability of North Carolina's local communications infrastructure and demonstrated the need for a reliable backup system. This Investment will assist North Carolina in providing each of the seven Domestic Preparedness and Response Regions (DPRR) with one portable tower and related equipment, including VHF/UHF/800MHz conventional repeaters, a gateway, radios, and a generator. In addition, each DPRR will receive a customized trailer containing a radio cache. This Investment satisfies the program requirement to develop and implement an STR that is pre-positioned, deployable, and able to reestablish communications when critical communications equipment is damaged or destroyed.

### Expansion of VIPER 800 MHz Infrastructure

Federal Amount:	\$ 20,073,946
Non-Federal Match Amount:	\$ 5,018,486
<b>Total Project Cost:</b>	<b>\$ 25,092,432</b>



<b>100%*</b> Acquisition & Deployment	<b>0%</b> Training & Exercise	<b>0%</b> Planning & Coordination
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*\*Percentages include both Federal and non-Federal Match funds.*

Many of North Carolina's 101 jurisdictions are utilizing legacy communications systems that are antiquated and do not address capacity and coverage needs. Those systems do not afford users the ability to communicate with other disciplines or agencies during responses. North Carolina has begun the development and implementation of the Voice Interoperability Project for Emergency Responders (VIPER) to improve interoperable communications across the State. This Investment supports the expansion of the VIPER project by constructing communications towers in 34 NC Jurisdictions. This Investment seeks to continue to build and expand on the 800 MHz infrastructures, making it easier and more advantageous for first responder agencies to connect to and use a single, uniform system. The development and construction of these new radio tower sites will assist in producing a radio system with statewide coverage. It will also provide the communications backbone needed for public safety agencies to communicate with each other using a single, common radio system.

**The Enhancement of Interoperable Communications with Bridging and Patching Equipment in Areas Where VIPER (800 MHz) Alone Will Not Be a Total Solution for the Region**



Federal Amount:	\$ 275,000
Non-Federal Match Amount:	\$ 68,750
<b>Total Project Cost:</b>	<b>\$ 343,750</b>

<b>100%*</b> Acquisition & Deployment	<b>0%</b> Training & Exercise	<b>0%</b> Planning & Coordination
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*\*Percentages include both Federal and non-Federal Match funds.*

Due to technical difficulties caused by geography, numerous North Carolina agencies use different radio frequencies, causing a lack of seamless communications across the State. North Carolina seeks to quickly improve the lack of communication between legacy communications systems operated by Federal, State and local agencies, by providing interconnections between the different radio frequency bands. Interconnect systems allow radios to communicate even if they are on different frequencies or have the same frequency band but different protocols. These systems can link emergency responders using an older legacy radio system with responders using a newer technology or radios from a different vendor. This Investment looks to connect VHF, UHF, and 800 MHz radios by providing agencies with bridging and patching equipment in areas where VIPER (800 MHz) is not currently a comprehensive solution for the region.

**Enhancement of Control Center Communications Capabilities**



Federal Amount:	\$ 359,551
Non-Federal Match Amount:	\$ 89,887
<b>Total Project Cost:</b>	<b>\$ 449,438</b>

<b>100%*</b> Acquisition & Deployment	<b>0%</b> Training & Exercise	<b>0%</b> Planning & Coordination
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*\*Percentages include both Federal and non-Federal Match funds.*

Many State agencies in North Carolina do not have the capability to communicate directly with other public safety entities due to limited access to mobile 800 MHz radios. Equipment within communications centers and control stations is often shared and limited to one conversation at a time. In addition, communications within the centers can be limited due to the number of talk groups programmed into a single radio. Until the strategic solution has been fulfilled throughout the State, numerous agencies need 800MHz radio consoles and consolettes to grant them appropriate access to the VIPER Network. This Investment seeks to provide 2 consoles for the North Carolina Division of Emergency Management and 45 consolettes to local jurisdictions.

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## PSIC Administration and Statewide Planning Costs

### Management and Administration (M&A)

Federal Amount:	\$ 66,702
Non-Federal Match Amount:	\$ 13,340
<b>Total Project Cost:</b>	<b>\$ 80,042</b>

The State was allowed to retain up to three percent of the total PSIC award for costs associated with the administration of the State's PSIC Investments. The M&A costs could include hiring full-time or part-time staff or contractors for grant management services related to reporting, monitoring and audit compliance, and associated travel and meeting expenses.

### Statewide Planning

Federal Amount	\$ 5,000
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The State was allowed to retain up to five percent of the total PSIC award for Statewide Planning costs associated with the incorporation of the PSIC criteria into the Statewide Communication Interoperability Plan (SCIP). The Statewide Planning period of performance was April 1, 2007– December 3, 2007, with the submission of the SCIP.

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