



Pennsylvania (PA)

PSIC Federal Award: \$34,190,555

(Awarded September 30, 2007)

Summary

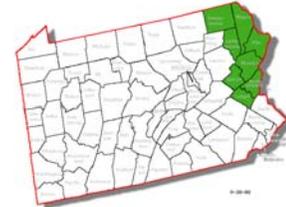
PSIC Investment Justification	Federal Funds
Northeast Pennsylvania Emergency Response Group (NEPAERG) VHF, UHF Gateway Overlay System and Microwave Upgrade for Interoperability	\$2,648,008
Commonwealth of PA Tactical Video and Data Interoperability System	\$4,105,713
Commonwealth of PA. Interface of the PA STARNet System With all Public Safety Answering Points (PSAP), Statewide	\$875,000
North Central Task Force (NCTF) Mutual Aid Gateway Systems and Console Interfaces With PA STARNet	\$750,000
Northwest Central Emergency Response Group (NWCERG) Deployable Interoperable Communications Systems	\$750,000
Northeast Pennsylvania Emergency Response Group (NEPAERG) Public Safety Answering Point (PSAP) Console Interface with the PA STARNet Statewide Radio System	\$2,030,000
Southeast Pennsylvania Regional Task Force (SEPARTF) and City of Philadelphia	\$8,350,994
Southeast Pennsylvania Regional Task Force (SEPARTF) PA STARNet Deployable Tactical Interoperability Systems and Radio Caches	\$1,099,006
South Central Task Force (SCTF) Microwave and Gateway Network	\$4,000,000
Pennsylvania Region 13 (PAR 13)	\$8,253,718
Management and Administration (M&A)	\$1,025,716
Statewide Planning	\$302,400
Total PSIC Award	\$34,190,555

Pass Through: The State of Pennsylvania entered into Memoranda of Understanding with the Regional Counter-Terrorism Task Forces. These agreements authorize the State of Pennsylvania to expend PSIC grant funding on behalf of these jurisdictions.

Strategic Technology Reserve (STR): Pennsylvania submitted a written STR waiver request based on the fact that Pennsylvania has previously invested in an STR. The State currently maintains adequate mobile and deployable communications resources to reestablish communications if existing critical infrastructure is damaged, and was therefore granted a full waiver.

Investments

Northeast Pennsylvania Emergency Response Group (NEPAERG) VHF, UHF Gateway Overlay System and Microwave Upgrade for Interoperability



Federal Amount:	\$ 2,648,008
Non-Federal Match Amount:	\$ 1,606,992
Total Project Cost:	\$ 4,255,000

96%* Acquisition & Deployment	2% Training & Exercise	2% Planning & Coordination
--------------------------------------	-------------------------------	-----------------------------------

**Percentages include both Federal and non-Federal Match funds.*

Local agencies in Northeast Pennsylvania operate on VHF and UHF, while State agencies operate on the 800 MHz trunked digital network, called Pennsylvania Statewide Area Network (PA-STARNet). Operating on disparate systems has hindered interoperability between State and local public safety agencies. This Investment will address these interoperability gaps by implementing a statewide overlay system of VHF and UHF base station/repeaters mapped to PA STARNet system talkgroups. Currently, a network of 50 gateways and base stations exists throughout the State with National Police VHF frequency installed and active. This Investment adds four additional gateway/VHF base stations and two UHF repeaters on National Mutual Aid frequencies at each of the PA STARNet gateway locations. All sites will be backhauled to the PA STARNet master controller via microwave technology, which will allow access to and from any site. These improvements will provide statewide interoperability between VHF, UHF, and PA STARNet units anywhere in the State.

Commonwealth of PA Tactical Video and Data Interoperability System



Federal Amount:	\$ 4,105,713
Non-Federal Match Amount:	\$ 2,053,988
Total Project Cost:	\$ 6,159,701

99%* Acquisition & Deployment	<1% Training & Exercise	<1% Planning & Coordination
--------------------------------------	-----------------------------------	---------------------------------------

**Percentages include both Federal and non-Federal Match funds.*

Currently, there is a lack of interoperability between Incident Commanders, off-site support, and airborne observers, which has impeded communication during emergency incidents. This Investment will implement deployable air-to-ground video/data systems to provide data and video at the scene of an incident to Incident Commanders and ground tactical units. The units can be quickly deployed to a scene by aircraft and video and data will be routed from the aircraft to the nearest PA STARNet radio system tower, which is equipped with the data system receivers. This allows Commanders, as well as remote support agencies and personnel, to exchange information and have a real-time view of an incident. Therefore, this Investment will benefit public safety agencies across the State.

Commonwealth of PA Interface of the PA STARNet System With All Public Safety Answering Points (PSAP), Statewide



Federal Amount:	\$ 875,000
Non-Federal Match Amount:	\$ 215,000
Total Project Cost:	\$ 1,090,000

99%* Acquisition & Deployment	1% Training & Exercise	0% Planning & Coordination
--------------------------------------	-------------------------------	-----------------------------------

**Percentages include both Federal and non-Federal Match funds.*

Many local communications systems are not currently linked to the statewide system (PA-STARNet), which hinders interoperability, impedes a coordinated response, and hampers multi-jurisdictional support and mutual aid. This Investment modifies the dispatch consoles in each public safety answering point (PSAP) to allow access to the talk groups on the PA-STARNet system and the ability to create console patches between State talkgroups and the local channel. Additionally, this Investment will facilitate communication between and among jurisdictions and disciplines and will link disparate systems to support coordinated response to emergencies and disasters.

North Central Task Force (NCTF) Mutual Aid Gateway Systems and Console Interfaces With PA STARNet



Federal Amount:	\$ 750,000
Non-Federal Match Amount:	\$ 177,500
Total Project Cost:	\$ 927,500

95%* Acquisition & Deployment	3% Training & Exercise	2% Planning & Coordination
--------------------------------------	-------------------------------	-----------------------------------

**Percentages include both Federal and non-Federal Match funds.*

First responders in the North Central Task Force region are currently operating on disparate radio systems and frequency bands, resulting in a lack of interoperability between jurisdictions and disciplines. This Investment will fund the installation of a network of gateways equipped with VHF, UHF, and 800 MHz National Mutual Aid frequencies to facilitate interoperability between local and out-of-region responders. The gateways will be interfaced with PA-STARNet and will be capable of interfacing with the seven regional PSAPs. This Investment enhances the ability of regional communications centers and first responders to interoperate.

**Northwest Central Emergency Response Group (NWCERG)
Deployable Interoperable Communications Systems**



Federal Amount:	\$ 750,000
Non-Federal Match Amount:	\$ 185,000
Total Project Cost:	\$ 935,000

99%* Acquisition & Deployment	<1% Training & Exercise	<1% Planning & Coordination
--------------------------------------	-----------------------------------	---------------------------------------

**Percentages include both Federal and non-Federal Match funds.*

Currently, the Northwest Central Emergency Response Group (NWCERG) region lacks deployable communications assets and resources that would provide for effective disaster recovery and interoperable voice and data communications. This Investment provides for the purchase of four deployable Mobile Communications Trailers (MCT) equipped with gateways and radio equipment (VHF, UHF, 700 MHz, and 800 MHz) that will support interoperability across different frequency bands. The mobile units will also have the capacity to interface with the statewide system and will be capable of narrowband analog, OpenSky and P25 digital operation. The deployable units are self-sustaining with antennas and mast, generator, fuel, and shelter, and the unit will be available to all 146 jurisdictions and 63 Public Safety agencies throughout the NWCERG region. This Investment will improve communications at large-scale incidents and events; provide capabilities to restore voice and data communications if the fixed primary assets are destroyed; provide relay capabilities to bring voice and data communications into remote sections of the region as needed; and enhance the region's ability to pass data and voice over the PA-STARNet system during major incidents.

Northeast Pennsylvania Emergency Response Group (NEPAERG) Public Safety Answering Point (PSAP) Console Interface with the PA STARNet Statewide Radio System



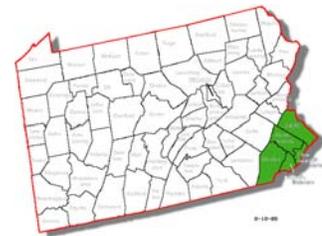
Federal Amount:	\$ 2,030,000
Non-Federal Match Amount:	\$ 481,250
Total Project Cost:	\$ 2,511,250

96%* Acquisition & Deployment	2% Training & Exercise	2% Planning & Coordination
--------------------------------------	-------------------------------	-----------------------------------

**Percentages include both Federal and non-Federal Match funds.*

The Northeast Pennsylvania Emergency Response Group (NEPAERG) region's PSAPs lack the ability to link to the statewide system (PA-STARNet). As a result, there is limited interoperability between jurisdictions and disciplines, which hinders multi-jurisdictional response efforts and mutual aid. This Investment will implement an interface of the PA STARNet System to existing County PSAP dispatch consoles. This configuration will provide each PSAP access to the talk groups on the PA STARNet system and the ability to create console patches between state talk groups and other local channel appearing on the PSAP console. To ensure adequate microwave backhaul capacity, Multiple Protocol Label Switching (MPLS) will be added to the PA STARNet microwave network as needed to link disparate local systems. Additionally, this Investment will provide eight vehicle-mounted mobile gateways throughout the region, equipped with VHF, UHF, 700 MHz, and 800 MHz National Mutual Aid frequencies to enable on-scene interoperability among responding units that may be operating on disparate systems. Overall, this Investment will improve interoperability and facilitate mutual aid between disciplines and across jurisdictions.

Southeast Pennsylvania Regional Task Force (SEPARTF) and City of Philadelphia



Federal Amount:	\$ 8,350,994
Non-Federal Match Amount:	\$ 24,911,551
Total Project Cost:	\$ 33,262,546

99%* Acquisition & Deployment	<1% Training & Exercise	0% Planning & Coordination
--------------------------------------	-----------------------------------	-----------------------------------

**Percentages include both Federal and non-Federal Match funds.*

In Southeast Pennsylvania, local public safety agencies cannot effectively interoperate with their municipal counterparts due to disparate radio systems; these jurisdictions include the Philadelphia Housing Authority (PHA), Philadelphia School District (PSD), Southeast Pennsylvania Transportation Authority (SEPTA), and the Philadelphia Regional Port Authority (PRPA). Additionally, communicating below ground in the Philadelphia subway network is difficult and presents a unique interoperability challenge. This Investment will upgrade the City of Philadelphia's legacy analog/digital 800 MHz system to an Internet Protocol (IP)-based, Project 25 (P25)-compliant, 700/800 MHz system capable of providing network level interoperability. The upgrade adds capacity for additional tower sites as needed, adds capability for 700 MHz frequencies when available, adds IP network control, adds gateways for network level interoperability with disparate systems, and creates a "system of systems" that facilitates interoperability between State, County and City agencies. The upgrade will also add bi-directional amplifiers and distributed antenna networks to below-grade subway transit stations to allow multiple agencies and jurisdictions at the Federal, State and local levels to communicate during incidents in the City, as well as in subway system.

Southeast Pennsylvania Regional Task Force (SEPARTF) PA STARNet Deployable Tactical Interoperability Systems and Radio Caches



Federal Amount:	\$ 1,099,006
Non-Federal Match Amount:	\$ 273,251
Total Project Cost:	\$ 1,372,257

100%* Acquisition & Deployment	<1% Training & Exercise	0% Planning & Coordination
---------------------------------------	-----------------------------------	-----------------------------------

**Percentages include both Federal and non-Federal Match funds.*

Public safety agencies in Southeastern Pennsylvania lack deployable tactical communications systems and are unable to connect to the statewide system (PA-STARNet). This Investment will provide for the purchase of a vehicular-mounted repeater and related mobile radio equipment that is compatible with PA STARNet. The deployable unit can function as an extender for the statewide system or function in a repeater mode to support multiple talk groups during an incident response, and the mobile transceivers will be installed in command vehicles throughout counties in the region. This Investment will provide a deployable communications system to support emergency communications and facilitate interoperability and mutual aid during major incidents. Overall, this Investment will benefit public safety agencies throughout the southeast region, including the Philadelphia UASI.

South Central Task Force (SCTF) Microwave and Gateway Network



Federal Amount:	\$ 4,000,000
Non-Federal Match Amount:	\$ 946,298
Total Project Cost:	\$ 4,946,298

96%* Acquisition & Deployment	<1% Training & Exercise	<4% Planning & Coordination
--------------------------------------	-----------------------------------	---------------------------------------

**Percentages include both Federal and non-Federal Match funds.*

The counties in south central Pennsylvania operate on various radio frequencies and cannot currently connect to the statewide system. There is also no interoperability with bordering Maryland counties. This Investment creates an overlay network of gateway systems with VHF, UHF, 700 MHz and 800 MHz National Mutual Aid frequencies installed. The Mutual Aid stations will be located at 10 tower sites throughout the region, linked through a digital microwave loop. A single hop microwave link is proposed to link the Maryland and South Central Task Force (SCTF) systems together. This Investment is expected to link disparate systems, improve interoperability between responders in all 316 jurisdictions and across all public safety disciplines, including law enforcement, fire, emergency medical services, hospitals, and transportation, and facilitate mutual aid response.

Pennsylvania Region 13 (PAR 13)



Federal Amount:	\$ 8,253,718
Non-Federal Match Amount:	\$ 1,955,160
Total Project Cost:	\$ 10,208,878

96%* Acquisition & Deployment	3% Training & Exercise	1% Planning & Coordination
--------------------------------------	-------------------------------	-----------------------------------

**Percentages include both Federal and non-Federal Match funds.*

In the Pittsburgh UASI, public safety agencies currently operate on disparate radio systems, and PSAPs cannot communicate with one another or provide backup when needed. This Investment will provide for the development and implementation of a countywide UHF, P25 standard-based, public safety communications system for Allegheny County. Additionally, the region will implement microwave connectivity to enable communications between PSAPs for radio and data interoperability, provide redundant dispatch and call-taking capability in the event of the loss of one or more of these PSAPs, and create a common network backbone for a merged regional radio system. The regional system is expected to provide seamless communications and the ability to interoperate across jurisdictions and disciplines operating in the region.

PSIC Administration and Statewide Planning Costs

Management and Administration (M&A)

Federal Amount:	\$ 1,025,716
Non-Federal Match Amount:	\$ 256,429
Total Project Cost:	\$ 1,282,145

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	\$ 302,400
----------------	------------

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.
