



2011 Regional Urban Areas Security Initiatives & Planning Workshop

Summary Findings Report • March 21-22, 2011





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The **Regional UASI Workshop/Report** is an outcome of the AHC's new regional integration strategy. This strategy focuses on integrating the public and private sector planning efforts and systems within the region.

In its second year, this regional workshop brought together the region's state, local and federal government leadership along with the private sector owners/operators to begin to frame the issues and conversations that impact the UASI's.

The topics addressed reflected the interests of federal/state/local government and the private sector owners/operators when they begin to plan, respond and coordinate at state/county borders after a catastrophic event.

The purpose of this report is to provide all stakeholders in the region with a baseline of information and terms relating to key regional public/private initiatives. The report's findings may then be used to promote awareness, education, and integrated planning/systems, and to better coordinate research efforts and future projects.

The states of the AHC believe that in the long run, integrated public/private systems and planning will lead to a more prepared region and safer citizens.

On behalf of the Board, let me thank everyone who worked to make this regional effort a success.

Respectfully,

Joe Picciano
President
AHC Board of Directors





For any community, state and region to have an effective capability to response to and recover from a major disaster, emergency or catastrophic event requires planning that is fully inclusive of not only public sector agencies but also the private sector. This includes all areas of the private sector, from small businesses necessary for community resiliency to large owners and operators of facilities and the systems necessary for the overall long-term recovery of any state or region.

Recognizing public sector agencies are responsible for the protection of life and property in their communities, our states and this nation, the AHC would like to establish the framework that would further promote the integration of public preparedness efforts with the private sector. This approach would identify areas of common activity that would benefit both the private sector and public sector in building further capability and resiliency. These can include continuity of operations planning, security improvements, information sharing, system resiliency, recovery readiness, and other projects that would serve both the public and private sector. In the end, our goal is to identify opportunities that enhance efforts in building capability for the restoration of critical businesses, supporting lifeline sectors and other planning that would build a more resilient community and allow for a more efficient and successful response, better information sharing and identification of threats.

In 2011, the states of the All Hazards Consortium launched a strategic regional initiative: *The Regional Integrated Systems and Planning Initiative*. This initiative is built upon the need to better integrate the private sector owners/operators of critical infrastructure into the federal/state/local government "regional" planning efforts. The goal of this effort is to begin to integrate the region's public and private sector people, systems, planning efforts, and projects in order to pursue our common goals of protecting our citizens/workers, property/facilities along with the businesses, industries and critical infrastructure that makes our nation strong and allows businesses and communities to grow.

The Regional Integrated Systems and Planning Initiative is consistent with FEMA Director Craig Fugate's Strategic Plan that addresses the "whole of communities" approach and the "maximum of maximums" framework going forward.



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On March 21-22, 2011, the AHC states and urban areas from the Mid-Atlantic and North East Regions held the 2nd Annual Regional Urban Areas Security Initiative and Planning Workshop to focus on coordinated planning and projects between government and private sector owner/operators within several industry sectors.

The Need

The DHS-sponsored UASI Grant Program (Urban Areas Security Initiative) has provided the major urban areas in the U.S. with funding to conduct planning, projects, procurements, training and exercises since 2003. These urban areas are referred to as “UASIs”. Over the past several years, the major UASIs of New York City, Northern New Jersey, Philadelphia and Washington D.C. have been working on many similar issues including Catastrophic Event Planning, Fusion Centers/Information Sharing, Critical Infrastructure Protection and Regional Collaboration.

At the same time, the private sector owners/operators of industry have been planning and investing in projects and initiatives of their own design to understand their threats, protect their assets and people, promote information security, and support their business continuity efforts. Many of these government and private sector initiatives are “interdependent” upon each other. Coordinating these public and private efforts is a fundamental step towards improved regional coordination.

The First UASI Workshop Findings

Since the first Regional Urban Areas Security Initiative (UASI) Workshop in May 2010, several important and longstanding issues remain unresolved:

- Understanding risks, needs, priorities and improving collaboration between public and private stakeholders still remains a complex, unresolved issue
- Not all geographic regions face the same risks and threats. National companies are affected by all threats, yet have to coordinate regionally with state/local and federal governments to ensure business continuity before/during/after an event
- Expectations of government’s ability to provide information with the resources they have available is too high and creates confusion and barriers to partnerships and collaboration efforts
- For sustained partnerships with government, private sector operators need sustained, trusting relationships, clear governance and fast/accurate information
- Relationships are key to information sharing, yet turnover impacts sustainment of public/private efforts
- The private sector has interest and resources to contribute and invest, yet doesn’t always know how/where to coordinate these types of efforts with state/local government
- Millions of dollars are being spent on projects conducted around the region by both public and private sector organizations, yet duplication, overlap and lack of integration with state/local government still exist in many areas
- With federal “grants” potentially being reduced over time, the need for partnerships with the private sector are a key sustainment strategy
- With the current economic challenges facing state/local government, the need for new strategies to address the “25% grant match” requirement, that is inherent in some grant programs, has become a top priority for the states and urban areas



The 2011 AHC Approach

Based on their combined experience over the past six years, the states and urban areas of the All Hazards Consortium have adopted a new “integrated planning and coordinated investment” strategy with the private sector designed to integrate owner/operators into the planning and project development efforts with some of the regional states/UASIs and the federal partners. The 2011 Regional Urban Areas Security Initiative & Planning Workshop was the first workshop under the AHC’s new long-term “integrated planning” strategy.

Workshop Major Themes

- Partnerships – beginning to define and develop a mutually beneficial relationship between the industry sectors, state/local government, and federal government
- Projects – to focus on what projects organizations are currently spending their money/resources on instead of what they might do in the future
- Dialogue – facilitate a two-way discussion on projects, gaps, opportunities for partnerships in planning and future projects
- Coordinated Planning – begin to form a regional framework that supports joint planning sessions and coordinated project support/investment
- Sustainment – sustaining the conversation between all parties on the important issues year round

Workshop Goals & Objectives

- To discuss current projects in both public and private sectors
- To identify gaps and opportunities for coordinated projects in the future
- To provide recommendations to government and the private sector on specific projects/initiatives to improve future planning, project coordination, and sustainment
- To better understand the federal role and support programs in this integrated planning strategy
- To discuss specific future partnerships and “match” opportunities
- To gain commitments on joint participation going forward

Workshop Deliverables and Output

- Production of a 5-6 page summary report that captures the project related information, gaps & recommendations, opportunities, and next steps
- Formation of a regional owner/operator working group to plan and coordinate with government on specific projects in the future
- Creation and maintenance of a regional database of contact information, projects and solutions to inform future planning efforts

This report intends to provide education and awareness of regional multi-state planning efforts, regional success stories and challenges, and recommendations for future opportunities to continue coordinating regional planning efforts. The report provides an opportunity for the region to gain a better understanding of where the region is today, where it wants to go and suggestions for how to get there. The final section of this report provides case studies developed and shared by some of our private sector partners.

For more information about any of these projects or to connect with any of the project contacts, please contact the AHC at info@ahcusa.org!



Recommendations

Public Sector

- Engage the private sector in all phases of planning
- Public sector should communicate needs, not the solutions it thinks it needs
- Focus equally on resiliency and recovery
- Reach out to umbrella groups, associations and trade unions more effectively to engage the private sector
- Adopt a common regional approach of how to engage public/private collaboration
- Develop standardized formats for information sharing purposes
- Develop recovery and restoration decision tools that allow critical infrastructure owners and operators to begin business recovery activities essential to the overall recovery. This would include efforts in prioritization of lifeline sector restoration in the areas of transportation, communications, water supply, energy and other essential support services.
- Encourage greater utilization of wireless priority service and Governmental Emergency Telecommunications Services calling cards to strengthen communication capabilities
- Address cyber security
- Utilize DHS's Unified Incident Command and Decision Support (UICDS) for the integration of varying emergency management and homeland security management systems, GIS data and other supporting systems presently utilized by both the private sector and public sector
- Look at implementing Federal agency private sector initiatives similar to Whole of Community, DHS Voluntary Private Sector Preparedness Accreditation and Certification Program (PS-Prep) and other related efforts
 - “Steps to Success for Integrated Planning Between Private and Public Preparedness”
 - Allow opportunities for integration on projects at future workshops
 - Government recognizing their primary responsibility is “outside the fence” – 80% of resources are controlled by the private sector, but a successful recovery of these resources will be dependent on government's role outside the fence in insuring roads are cleared, security exits and key workers have a place to live as starters.
 - Broaden information systems as it pertains to emergency management across public and private sector – sharing data both before and after incidents
 - Joint planning efforts to bring business back to business in the event of emergency

Private Sector

- Adopt a common regional approach of how to engage public/private collaboration
- Attend regular UASI and regional meetings to become part of the emergency management community



Opportunities

Public Sector

- To take advantage of present federal outreach, training and coordination activities with critical infrastructure and the private sector. Examples would include DHS's Protective Security Coordination Division (PSCD) training classes, FEMA's new Whole Community outreach effort and other ongoing activities being managed by the DHS Infrastructure Protection Directorate.
- To integrate existing private sector security systems with existing public sector systems, allowing for the expansion of present capacity, benefiting both, while maintaining independent operational costs
- To ensure ongoing regional planning is considering private resiliency, business recovery and resource sharing strategies required for the recovery of critical services, goods and lifeline support needed by impacted communities
- Continue and improve methods of information sharing and fusion between the private and public sector, taking advantage of the reach of large corporations and businesses along with established public information systems

Private Sector

- To work with public law enforcement officials and build an understanding of the fusion center process and assist in identifying opportunities
- To understand how fusion centers/sector coordination councils and industry BC/DR initiatives interact

Public Private Collaboration Opportunities Considering UASI and State HS Investments in:

- Information Sharing
The Private Sector and Critical Infrastructure owners and operators can be given insight to state intelligence/threat collection systems and products to identify information sharing opportunities for the enhancement of security and preparedness
- Protection & Security
The Private and Public Sectors should identify opportunities for the integration of security systems. This may include sharing system information in real time to improve county or state security.
- Response
With large public financial investments in equipment, training and security systems, the private sector and public sector should identify opportunities for sharing resources, trained personnel and other similar assets, building joint capacity that could assist in response operations that will allow for quicker public recovery and related business operations



- **Communications**
With large financial investments from public agencies and owner/operators in building emergency communication and notification systems, any that can be integrated to improve overall UASI/ state communications and critical business recovery should be identified. Potential resulting projects could enhance both owner/operator and public sector communications during critical operational periods.
- **Preparedness**
Engaging the private sector into UASI/state ongoing planning will provide both the private sector and public sector the opportunity to develop operational goals that will bring back businesses and government quicker after a major event. Examples could include enhanced planning with the food and building supply sectors that are, at varying degrees, being completed in some areas.

Projects

- **“Access Control Guidelines”**
 - **Project Contact:** James Caverly, Director of the Partnership and Outreach Division (POD)
 - **Coordinating Organization:** Infrastructure Protection and National Protection and Programs Directorate (NPPD), Department of Homeland Security
 - **Project Description:** This project focuses on developing a common framework/guidelines across the region for access to restricted areas by those who are charged with both response and recovery.
- **“FRAC”(First Responder Access Card)**
 - **Project Contact:** Craig Wilson, F/ERO Coordinator
 - **Coordinating Organization:** FEMA Office of National Capital Region Coordination (NCRC)
 - **Project Description:** This project details a standard and process to provide first responders with the FRAC credential to reduce response/recovery times.
- **“New York Metropolitan Regional Catastrophic Planning Team GIS Data Inventory Project”**
 - **Project Contacts:** Randy Pullen, Project Manager & Kevin Switala, Director of Homeland Security and Public Safety
 - **Coordinating Organization:** New York City Office of Emergency Management
 - **Project Description:** This project is developing a database of geospatial data to map the NYC metropolitan area. A subsequent gap analysis identifies holes in the GIS picture where further work needs to be done and a recommendations report presents ideas for expanded use of the database and its future uses.



- **“Building Community Resilience through Integrated Regional Public & Medical Planning”**
 - **Project Contacts:** Joe Nadzady, Senior Technical Specialist & John Weber, Vice President
 - **Coordinating Organization:** ICF Consulting
 - **Project Description:** This project is developing Project Public Health Ready (PPHR) compliant public health plans to promote consistency and collaboration throughout the region and across state borders in an effort to build community resilience in the domestic healthcare delivery systems.

- **“Update on AHC Nine-State Information Sharing Project through UICDS”**
 - **Project Contact:** Jim Morentz, UICDS Project Community Outreach Director
 - **Coordinating Organization:** Science Applications International Corporation (SAIC) & Department of Homeland Security (DHS)
 - **Project Description:** UICDS exists as an information sharing middleware for NIMS incident management that continuously receives and shares standardized data among many organizations during an incident. This project allows for instant sharing of incident related information across the region while enabling agencies to use existing interfaces.

- **“Delaware River Infrastructure Protection Project (DRIPP)”**
 - **Project Contact:** Noreen Cardinali
 - **Coordinating Organization:** New Jersey DOT Office of Emergency Management
 - **Project Description:** This project aims to mitigate high priority gaps identified in the port-wide strategic risk management plan (SRMP) for Sector Delaware Bay. DRIPP will provide a regional, interoperable communications network that will allow agencies to share vital information on a real-time basis for threat detection, intelligence analysis and incident response management.

- **“Delaware Valley Intelligence Center”**
 - **Project Contacts:** Joe Liciardello, Southern Pennsylvania Regional Task Force Member & Captain Walter Smith, Commanding Officer
 - **Coordinating Organizations:** Southeastern Pennsylvania Regional Task Force & Philadelphia Police Department
 - **Project Description:** The Delaware Valley Intelligence Center will provide cross-border 24-hour/7 day-a-week all-hazards, all-crime operation staffed by member agencies that provide comprehensive and effective information sharing throughout the Delaware Valley Region. Partners include multiple agencies from four state as well as several universities and select private sector members from the financial, energy, transportation, retail and other industries.



- **“Private Sector / Fusion Center Information Sharing Project”**
 - **Project Contacts:** Mike McAllister, Deputy Assistant to the Governor for Virginia Commonwealth Preparedness
 - **Coordinating Organizations:** Virginia Department of Emergency Management (VDEM)
 - **Project Description:** This project utilizes a fusion center resource to determine a methodology to implement all mandated protocols to operationalize public/private information sharing in Virginia.

- **“National Capital Region’s Closed Circuit Television (CCTV) Integration Framework Project”**
 - **Project Contact:** John Contestabile, Assistant Program Manager
 - **Coordinating Organizations:** John Hopkins University Applied Physics Lab & NCR Critical Infrastructure Protection Working Group
 - **Project Description:** This NCR CCTV Integration Framework Project focused on developing a Concept of Operations (CONOPS) with the practitioners to share video images and providing strategic direction for future video system investments.

- **“Private Sector Integration Project”**
 - **Project Contact:** Ira Tannenbaum
 - **Coordinating Organizations:** New York City Office of Emergency Management
 - **Project Description:** This project is assessing the information sharing needs, requirements and capabilities of the private sector. This project also has a goal to develop a sustainable information sharing process with the private sector through the implementation of a Regional Business Coordination Center.



Gaps and Issues

- Although there are established regulatory requirements at the federal and state levels for developing and sharing emergency plans for several sectors including chemical, energy and nuclear power, there are only limited established channels for the private and public sectors to integrate common operational planning elements for the improvement of overall response to a catastrophic event or emergency
- Need to bridge efforts at state and local levels of government by identifying opportunities for operational and system integration
- Private sector companies, local government and state government would benefit from integrated planning efforts that promote open planning for those scenarios of specific concern to a given community
- There is a need to continue to improve private sector situational awareness as the public sector builds tools and capabilities for information sharing
- To enhance private sector coordination with states as it relates to regional operational planning, states should conduct catastrophic planning on a regional basis, addressing the requirements of supporting the resiliency of sectors that support multiple states for major recovery efforts
- Public sector organizations, with the support of the private sector, need to build mechanisms that promote awareness of opportunities for engagement of the private sector in ongoing emergency planning, systems development and security initiatives, which would enhance capability for both in supporting the general public

Next Steps

- Continue to integrate the private sector in planning efforts
- Conduct a regional inventory of projects
- Focus on a limited number of high priority projects that can connect the public and private sectors and address current gaps and issues
- Sponsor a workgroup and workshop to determine and discuss the high priority projects



The All Hazards Consortium (AHC) is a 501c3 non-profit focused on homeland security and emergency management issues, and guided by the regional states of NC, DC, MD, VA, WV, DE, PA, NJ and NY along with the urban areas (UASIs) of New York City-NY, Newark-NJ, Philadelphia-PA and the National Capital Region-Washington, D.C.

The AHC's vision is to support the efforts of organizations and individuals in the Mid-Atlantic and surrounding areas to improve their ability to handle emergencies.

The AHC's mission is to form a network of organizations and individuals who share a common interest in improving the capacity of our region to prevent, prepare for, respond to and recover from crises. We strive to unite these stakeholders around a common culture where public benefit takes priority over profit, politics or professional gain. The AHC engages and serves state and local governments. We welcome and encourage participation by businesses; education and research institutions; not-for-profit organizations throughout the region; and federal government agencies. Our programs are open to everyone whose interests align with our objectives. The AHC fosters relationships among participants; enhances regional planning; creates a common voice and enables the identification and sharing of resources and information that are needed in times of emergency. Our actions engage and complement existing organizations – including the Federal Government – which are working in this area.

Since 2005, working with its public and private sector stakeholders, the AHC states have directed the Consortium to focus on a variety of homeland security and emergency management issues. Using a proven collaboration and requirements development process, the AHC and its states/urban areas have produced the following results:

- Creation of a sustained governance structure of Regional Working Groups
- Produced ten (10) regional workshops resulting in reports outlining issues, gaps and recommendations for projects and initiatives in Catastrophic Planning, Fusion Centers, Communications Interoperability, Critical Infrastructure Protection/Resiliency, Geospatial Information Systems, Catastrophic Event Preparedness Planning, Port Security, Transportation, and Integrated Planning
- Millions in partner resources coordinated or donated to multi-state regional efforts
- Conducted first regional multi-state interoperability project in Appalachian region (PA-MD-VA-WV)
- Development of a Regional Procurement Policy to assist states with guaranteeing 25% match to meet UASI and state grant requirement
- Created regional policies for Donations, Conflict of Interest, and Communications/Media, amongst others
- Created Regional Strategic Plan to include integrated planning with private sector operators to help coordinate investments of federal, state, local and private sector organizations on key topic areas
- Conducted Integrated Planning meetings with federal government partners
- Involved in multi-state projects in Catastrophic Planning, Interoperability, Fusion/Information Sharing, Transportation Planning, Private Sector Integration
- Fostered new partnerships and agreements between states and private sector
- Conducted Public/Private sector training sessions and exercises

Acknowledgements



Thank you to all of our speakers, moderators and sponsors for helping us make this a successful event!

Speakers

Brian Schilling
Charles McKenna
Colin McWay
Dave Papas
Dennis Schrader
Fred Scalera
Gregory Ferris
Ira Tannenbaum
James Caverly
James Morentz
Jim Marks
Joe Nadzady
Joe Picciano
John Contestabile
John Weber
Joseph Liciardello
Kevin Switala
Kristina Simpson
Matt Frowert
Michael Ambrosio
Mike McAllister
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Richard Zinno
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Steve Davis
Walter Smith
William Ryan

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Skyline Network Engineering

A Network for the Long Haul

Statewide public safety network evolves to bring broadband to rural Pennsylvania.

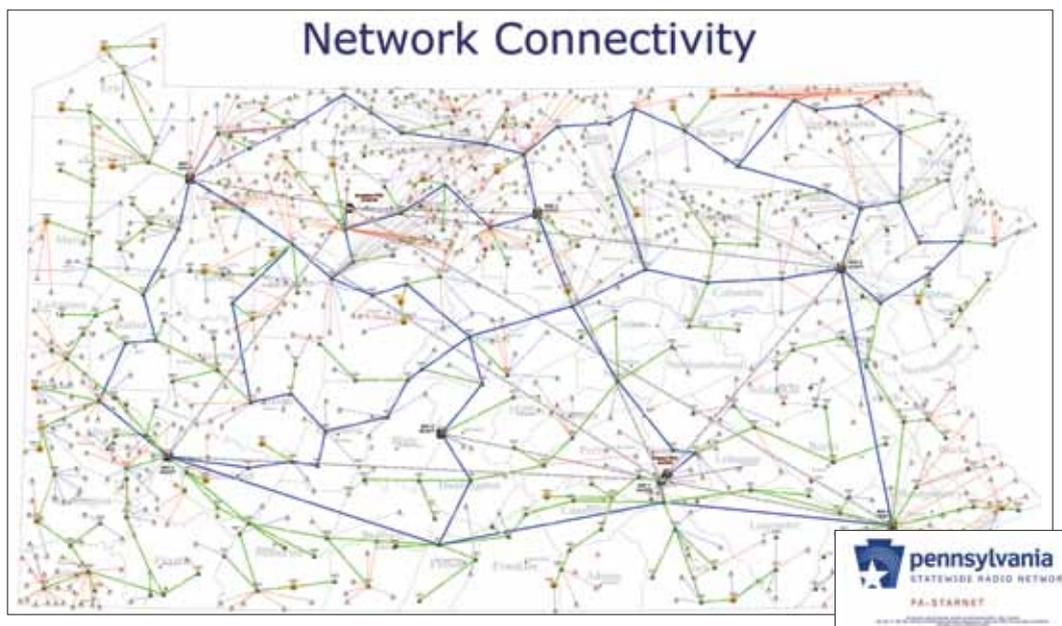
Pennsylvania has always been proactive when it comes to public safety communications. It was one of the first in the nation to create a statewide public safety network, and the state has continued to improve that network over the years to provide the commonwealth's first responders with the tools necessary to do their jobs. Now the state is expanding its public safety network, not only to provide law enforcement with the latest broadband applications in the field, but also to ensure that governments, citizens and businesses throughout Pennsylvania have access to broadband as well.

"The network itself is a tremendous asset. It was capable of doing a lot more than just supporting the public safety radio system," said Jim Parcels, Director of Systems Management for the Pennsylvania Office of Public Safety Radio Services (OPRS), which originally deployed the microwave network. "It's an IP network, which means it's capable of doing a lot more for the state."

The Original Public Safety Network

In 1999, Pennsylvania decided to create a consolidated public safety radio system for all state radio users. A single public safety radio system would help Pennsylvania resolve compatibility issues between jurisdictions, make data sharing easier among first responders, and simplify compliance with FCC and Department of Homeland Security standards. The state chose Alcatel-Lucent to build a new microwave system as the communications backbone to support this network.

"The microwave network was built to support the coverage requirements of the public safety radio system that serves all



the commonwealth agencies throughout all 67 counties," said Parcels.

Since 2000, when it was originally completed, the network has evolved beyond public safety radio communications, and it now carries other types of communications traffic, such as video and data information. Now Pennsylvania is adding features that will take the network to a new level.

Adding MPLS for More Function

In 2008, OPRS partnered again with Alcatel-Lucent to implement multi-protocol label switching (MPLS), which makes the network more efficient by managing and prioritizing network traffic. The state deployed MPLS to boost network performance and improve the network's automatic alternate routing and restoration capability, which is the process of rerouting network traffic when a component goes down.

"We had a very reliable network in place originally," Parcels said, "but in the event of a loss of a link on our backbone, the alternative routing and restoral process was fairly manual

and somewhat time consuming. For a public safety network, that was a bit worrisome."

Previously if something went wrong, a worker would have to go to the physical location on the network to get it running again. Now if a portion of the network goes down, it automatically reroutes traffic to another part of the network without compromising the system.

MPLS also saves the state money because it dynamically allocates existing bandwidth, rather than designating set amounts of bandwidth to each application, so the state didn't need to add bandwidth to support new applications.

Although the network was initially built to support the public safety radio system, adding MPLS gave the network more flexibility and the ability to support high-bandwidth applications like video. Because of this, OPRS decided to use part of a federal grant to implement aviation video, which provides the ability to stream live video to an incident commander via a camera on a helicopter to visually monitor areas during an emergency. This project was demonstrated

at the G20 Summit in Pittsburgh in 2009 with great success and is being implemented now.

The Pennsylvania State Police have been using the system for years to access information from their laptops in the patrol cars. "They're also moving into online reporting, where they take a report on their laptop computer in the car. They used to put the reports on their thumb drive and bring the thumb drive in at the end of the shift," said Charlie Brennan, Deputy Secretary for Public Safety Radio at OPRS. "Now they just pump them up through the network."

Since MPLS prioritizes network bandwidth for critical applications, such as the public safety radio system, and can ensure that certain types of traffic are securely separated from other network traffic, the state can also let non-public-safety users use the network without any impact on essential public safety applications.

Connecting Rural Pennsylvania

Alcatel-Lucent and the OPRS also have partnered on a project funded by the American Reinvestment and Recovery Act (ARRA). Pennsylvania's Middle Mile Project is slated for completion by the end of 2012. The project will use the \$28.8 million ARRA grant that the state received in February 2010 to increase broadband coverage in the most rural areas of northern Pennsylvania.

"In the northern part of Pennsylvania, there are not a lot of people who live up there, so there's not a lot of infrastructure. Although citizens may have broadband access at work or school, many might not have it readily available at their homes. Those who do may be paying substantially more than citizens in the more populous areas of the state," Brennan said.

As part of the project, Alcatel-Lucent and OPRS will increase the network's size and



build additional capacity on top of the existing network. The state can then lease network capacity out to vendors, such as AT&T, Verizon and Comcast, so they can provide broadband services to residents and businesses in underserved areas. The network will stretch from the Ohio border in the west all the way to the eastern side of Pennsylvania.

"We're trying to close the gaps in broadband in the north, and at the same time, attract additional broadband providers. The state will be a middle mile provider so consumers have additional choices," Brennan said.

The Middle Mile Project could also help the state's many energy companies situated in the north where there is a lack of available bandwidth. Since Pennsylvania is home to the Marcellus Shale Formation, the world's second largest natural gas deposit, a lot of drilling takes place in the state. By leasing bandwidth and tower rental services from the state, the Middle Mile Project can help gas drillers backhaul information to their headquarters via the network.

Brennan said the project includes building more towers and putting additional micro-

wave equipment on 71 sites. While the Middle Mile Project is far from completion, OPRS anticipates leasing out bandwidth as early as July 1, 2011, when parts of the network will be completed.

In its 10-year history working with Alcatel-Lucent, the OPRS has seen the network evolve to include much more functionality than originally intended. Brennan said Pennsylvania has just begun to realize what the network will do in the future, and it has the potential for many different wireless applications.

"We're looking at things for our Pennsylvania Department of Transportation, to measure things like how much salt they put on a roadway and the temperature of the roadway, and get that data back in real time," said Brennan. "In the future, public safety will send fingerprints across the network, and they will identify people on the spot. It's a big deal for our law enforcement people. Right now, we are providing automatic vehicle location (AVL) services to thousands of commonwealth first responders through the network. In the more remote areas of the state, there might not be a commercial provider available, so without the state's network, these services wouldn't be available at all to our users."

Parcels said the network has become a tremendous asset to the state. While OPRS values its partnerships with all of its vendors, he said Alcatel-Lucent stands out among them.

"Alcatel-Lucent is very professional in their approach to projects," Parcels said. "They bring all the required resources to the table when you partner on a project with them. And it does make you more willing to go back and look for other things to do proactively with a partner like that. It's been a very successful partnership."

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Eagles' Wings Foundation

Haitian Earthquake Relief Efforts



Hughes satellite broadband helps the Eagles Wings Foundation to deliver critical telemedicine and Internet services at the State University Hospital of Haiti.

It was a typical Tuesday afternoon in Haiti, with workers just beginning to pack up for their evening commutes home when the ground began to shake. At 4:53 p.m. on January 12, 2010, a 7.0 magnitude earthquake struck about 16 miles west of Port-au-Prince. The impact of the earthquake was immediate and devastating—230,000 people were killed, thousands were severely wounded, a quarter-million homes and 20,000 commercial structures had been destroyed, and the land-based network infrastructure was in ruins. The earthquake had created a disaster of catastrophic proportions in one of the Western Hemisphere's poorest countries.

Disaster Response

Thousands of people needed urgent medical care, but Haiti's hospitals and medical units were also in ruins. At the State University Hospital of Haiti in Port-au-Prince, the earthquake had rendered the hospital building structure completely unstable. Doctors and nurses were providing triage and emergency services to over one thousand patients per day in temporary shelters.

Communications with the outside world were nearly non-existent. The nation's fiber-optic network had been destroyed, and the few available cell towers were overwhelmed. At the moment when its patients most needed help, the hospital's doctors and nurses were cut off from the world, treating severe and unusual injuries without the ability to consult with medical experts or research treatment options. This small country, less than a thousand miles from the Florida coast, had become one of the most remote locations on the planet. Its doctors needed to get connected—fast.

Enabling Telemedicine at the Most Remote Location on Earth

Arriving soon to help was the Eagles' Wings Foundation (EWF), a faith-based, non-profit organization and part of the throngs of relief support that descended on Haiti in the earthquake's aftermath. Headquartered in Florida, EWF provides short-term relief and organizational leadership/coordination of volunteers and professional personnel/services immediately after a disaster. EWF personnel on the ground quickly assessed communications requirements and turned to ReponseForce1, a Hughes reseller, to provide the reliable, satellite broadband solution that was needed to enable telemedicine at the State University Hospital of Haiti.

Within days of the first discussion between Hughes and ReponseForce1, Hughes satellite broadband technology was up and running at the hospital. Doctors now had the ability to send X-ray images and critical information about local patients to specialists around the world for their diagnosis assistance.

"The activation of the satellite [service] will provide communications capabilities that will allow the hospital to



provide better care for our patients," wrote Dr. Alex Lassegne, Executive Director of the State University Hospital of Haiti, in a letter commending the EWF for its recovery and relief activities, citing the value of Hughes satellite technology. He added, "Most immediately it will afford us the capability of consulting with other medical experts worldwide."

Connecting Even the Most Remote Locations in an Emergency

Unlike terrestrial technologies that rely on ground-based infrastructure such as cell towers that are vulnerable to being disabled or knocked out when disaster strikes, satellite broadband provides a true alternate and robust communications path that is easy to deploy and operates virtually anywhere using small dish antennas. Onsite support staff in Haiti rapidly deployed the Hughes Emergency Response solution—consisting of a high-performance HN7700S satellite router connected to a fixed 1.2 meter antenna and 2 watt radio. With this compact, though powerful, equipment and a clear view of the southern sky, EWF was able to deliver satellite broadband Internet access at speeds of up to 2 Mbps downlink and .5 Mbps uplink, which was more than enough to support the critical telemedicine application.

Throughout its valued mission, EWF leveraged the benefits of Hughes satellite broadband under extremely harsh circumstances and in varied terrains:

- Amid the rubble of Haiti's largest and most populated city, delivering telemedicine capabilities for the State University Hospital of Haiti
- In Haiti's remote, mountainous region of Tomassin, working with its Haitian partner, Mountain-Top-Ministries (MTM), to coordinate damage assessments and mass feeding operations as well as provide a vital lifeline to the outside world for MTM's 1300-student school

In both environments, Hughes satellite broadband provided a secure, reliable solution and demonstrated once again that—much like EWF—it supports effective emergency response in the most remote locations under the most difficult circumstances.

For more information, call 1-800-416-8679 or visit government.Hughes.com.

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National Capital Region Case Study:

Building Community Resilience through Integrated Regional Public Health and Medical Planning

Client:

Metropolitan Washington Council of Governments (MWCOC), National Capital Region (NCR); Washington, DC

Challenge:

In the NCR, disasters or emergencies with catastrophic health and medical consequences will rapidly overwhelm community public health and healthcare delivery systems. Effectively managing these types of incidents requires a coordinated effort between the affected jurisdiction, neighboring communities, Regional partners and the federal government in order to limit serious injury, permanent disability, and loss of life.

Solution:

MWCOG partnered with ICF International to implement and support the *NCR Health and Medical Planning Project*. Successful implementation of the project has allowed the Region to:

- Use an integrated approach to Regional public health and medical planning
- Achieve continuity among emergency response plans
- Build and maintain strong partnerships across jurisdictional and State borders
- Maintain accurate and consistent situational awareness
- Speak with a unified voice when messaging the community

In terms of staffing expertise and experience, ICF provided: 3 EMS Planners (NoVA, MD, DC); 3 Medical Surge Planners (NoVA, MD, DC); 8 Public Health planners (1 per public health jurisdiction); 1 Planning Supervisor, 1 Deputy Planning Supervisor, and 1 Program Manager.

Application:

Each ICF planner was embedded directly with their assigned jurisdiction. This allowed the jurisdictional points of contact (POCs) to collaboratively direct planning efforts with their Regional counterparts.

Result:

ICF delivered more than 50 NCR public health, EMS, and medical surge response plans that are consistent with established national standards and industry best practices. ICF also facilitated various workshops, exercises and planning activities that enhanced the regional capability of the NCR to respond to the public health and medical consequences of disasters or emergencies.

Regional Public Health and Medical Planning Benefits:

Several Regional benefits were realized through the implementation of this solution:

1. The Region achieved a consistent level of public health and healthcare preparedness.
2. Regional plans were aligned with national standards and planning guidance (e.g. Project Public Health Ready, Medical Surge Capacity and Capability, CPG 101).
3. The use of shared resources created efficiencies in plan research and development.
4. Collaborative planning facilitated the sharing of best practices and lessons learned and led to expanded opportunities for Regional training and exercises.

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Regional Urban Areas Security Initiatives & Planning Workshop Case Study

North New Jersey- Multi-Media Interoperability Communications Sharing Platform

Clients:

State of New Jersey- Northern Urban Area Security Initiative, City of Newark, Jersey City, University of Medicine and Dentistry, Private Sector

Challenge:

New Jersey's high population and transportation density and the resulting ever-present congestion, for the hundreds of different agencies responsible for responding to or participating in responses to emergency situations, and their timely coordination can quickly become overwhelming. This situation is complicated by the fact that most of the responding and participating agencies have difficulties communicating with one another due to disparate communications systems. Challenges were to create a multi-media communications solution, which is ad-hoc, end scale, and not to build a solution that has a stove pipe effect. While core response functions remain firmly in the hands of our professional and volunteer police, fire, and EMS first responders, the active involvement of other supporting agencies, non-governmental agencies and private sector is required to support emergency functions necessary to optimally handle response and recovery. Hospitals, transit, rail and port operators, arenas, shopping malls, schools and other places of mass gathering, electric, gas, and water utilities, other critical infrastructure companies/ agencies and private enterprises can all be affected by an emergency and in many cases engage in primary and secondary emergency support functions.

Solution:

IP-based multimedia communications overlay network, a system designed to leverage the use of existing radio equipment, including disparate systems, as well as next-generation voice, video and data communication technology on all forms of existing or new IP infrastructure. Mutualink was able to offer architecture to provide unmatched flexibility, reliability and control. Security and Public Safety agencies using Mutualink have the dual benefit of maintaining full control of their radio, voice, video and data resources, while making them available for interoperable connection with other agencies' systems with the click of a mouse. Interconnection with Mutualinks virtual network is achieved without impacting the operation of existing console and remote control equipment.

Mutualink is an always on, always available interoperability solution that can dynamically bridge communications resources as and when needed. The solution blends IP and traditional radio networking technology with application software designed specifically to solve interoperability problems while delivering a solution affordable to everyone. Mutualink is highly scalable, supporting intra- and interagency interoperability scenarios across multiple disciplines and jurisdictions, and is equally applicable to private enterprises such as hospitals and corporations interested in integrating their security systems among themselves and with public safety agencies. The system is also applicable to, and deployed with, other public agencies and entities such as schools, transits, stadiums, parks, etc.

Application:

The New Jersey deployments consist of a network of over sixty facilities covering six counties representing 3.9 million people, or 39% of the State's population. Deployed at 2, Tier One UASI Cities, Newark, Jersey City Over 200 communications systems interfaces ("endpoints") are accessible through the 60 plus sites. The communications devices can be linked together which allows immediate, ad-hoc collaborative communications between the participants.

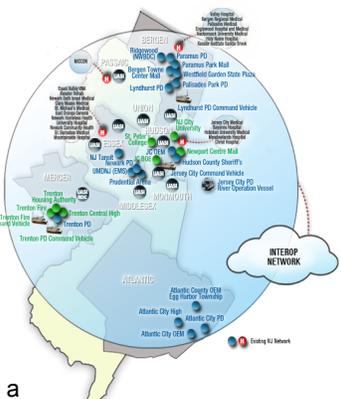
Result:

Local, State and Private Sector entities are provided with enhanced command and control at incidents, increased situational awareness, and a common operational picture during incidents with an improved collaboration between government and private sector agencies.

Regional Port Workshop Requirements/Recommendations Achieved:

Based on regional findings outlined in the AHC Regional UASI Workshop, the following recommendations have been or will be achieved by this solution:

1. Improved collaboration between the public and private stakeholders
2. Reduced costs by leverage existing systems and investments across the region
3. Increased collaboration by helping to formalize partnerships that share resources and data
4. Greater participation by regional Fusion Centers in the information sharing process



"The Mutualink system is a force multiplier that allows us to quickly muster the proper resources from the dozens of participants that are active members of our local and regional response partnership. By deploying Mutualink's Interoperability Workstation in both our Emergency Response Van and our Hudson River Operations Vessel, we can extend our multimedia communications capabilities where and when they are needed."

W. Greg Kierce, Director of the Jersey City Office of Emergency Management & Homeland Security and member of the Jersey City/Newark/ UASI Executive Board.

Public Safety Agencies Join Forces and Maintain Communications Coverage During Natural Disasters and Emergency Situations with Sprint.



The Sprint ERT is a group of over 1,000 expertly trained and certified communications professionals with extensive experience coordinating comprehensive field activities during emergencies, drills and field exercises. With an inventory of Sprint equipment and infrastructure available 24x7 they help ensure reliable, scalable and robust short-term communications for public safety and enterprise customers during any event – from planned, large scale events to emergency situations. The Sprint ERT has supported over 4,800 events and 700 Federal, State and Local Agencies.

Some of the most recent deployments include: Southeast Tornadoes, Red River Flooding, Ft. Hood Shooting, West Virginia Mine Disaster, Gulf Coast Oil Spill, Hurricane Ike & Gustav and the Virginia Tech Tragedy.

A Closer Look at Sprint ERT in Action

Clients: The Virginia Department of Emergency Management, Virginia State Police, Wythe County Sheriff's Office, Pulaski County Police Department

Challenge: On the morning of December 16, 2008, authorities commenced a multicounty search for Douglas Albert Jaccard, 58, who was suspected of shooting two neighbors and a sheriff's deputy, and of setting fire to his neighbors' house. Virginia State Police Sgt. Michael Conroy said police were searching rural Wythe and Pulaski counties.

When officers from the Pulaski and Wythe County Sheriff's Departments began a search in response to the report of an active shooter, the suspect fired shots from a remote wooded area, wounding one deputy. He then fled on foot. Houses in the area were evacuated. Five schools in Wythe County were locked down. Yet as law enforcement authorities from around the state converged on the rugged and remote area they realized they had poor radio coverage and no cell phone coverage.

Solution: The Virginia Department of Emergency Management activated the Sprint Emergency Response Team (ERT) to deploy cellular and emergency dispatch-capable radio communications equipment. Nextel direct connect devices were distributed to all search teams in order to provide a common means of communication between the teams and the Incident Command Center

"When you get into a tactical or emergency situation, communication can save lives. Without the Sprint ERT, the outcome would have been entirely different."

– Doug King, Sheriff, Wythe County Virginia

Application: Sprint Emergency Response Team (ERT) deployed an ERT SatCOLT to provide a bubble of cellular and Direct Connect Coverage, SatIP Equipment to provide LAN/WAN Capabilities and 100 handsets with unlimited service.

Results: With communications restored, the team of approximately 200 officers from at least 15 different agencies was able to:

- More effectively coordinate the response across multiple agencies
- Track and monitor officers to ensure their safety
- Cover more ground and shorten the length of the manhunt

The Wythe County Sheriff's Office apprehended the man on December 18. He was charged with capital murder, malicious wounding, arson, breaking and entering and other charges.