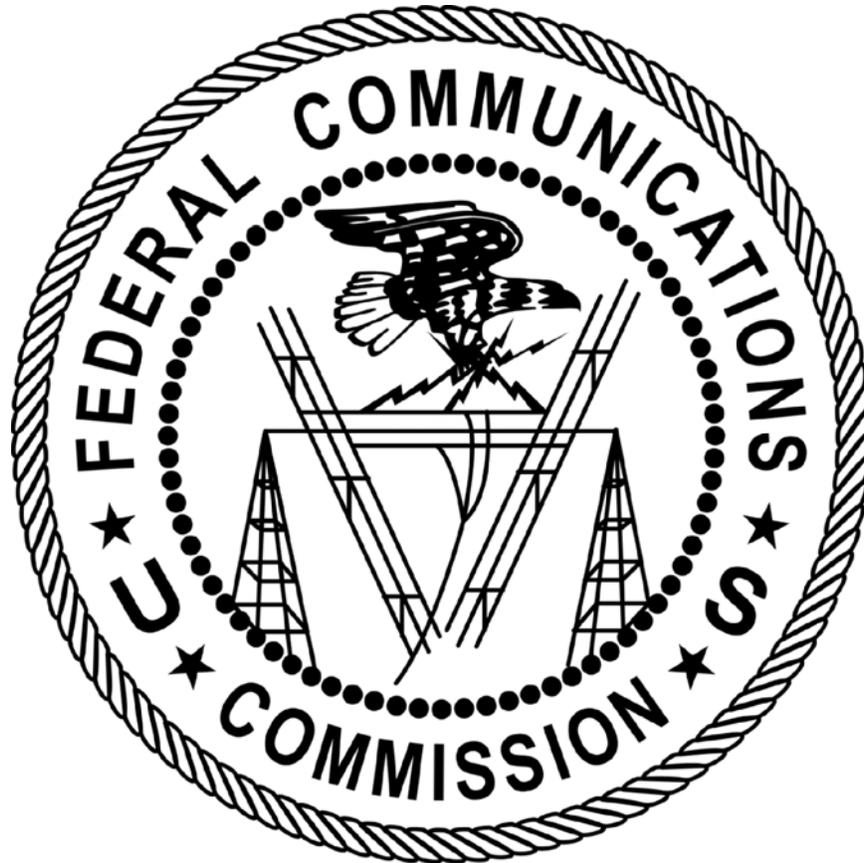


**PUBLIC SAFETY AND HOMELAND SECURITY BUREAU
Federal Communications Commission**



**Gulf Coast Outreach Tour – Public Safety Communications
FIVE-STATE, FIVE-CITY INITIATIVE
June 8 – June 12, 2009**

Introduction

In June 2009 the Federal Communication Commission's (FCC's) Public Safety and Homeland Security Bureau (PSHSB) sent an outreach team, comprised of Shawn Lapinski, Director of Emergency Operations; Todd Mitchell, Outreach Specialist, and Robert Kenny, Director of Media Relations; to five Gulf Coast cities to meet with state, county and local public safety officials about public safety and emergency response communications issues. The team conducted site visits in Houston, TX; Baton Rouge, LA; Biloxi, MS; Mobile, AL; and Tallahassee, FL. Each of the visits included introductory meetings with public safety officials and tours of state or county emergency operations centers and Public Safety Answering Points (PSAPs)/911 Call Centers, as well as area hospitals. Over five days (June 8th - 12th), the outreach team met with more than 350 public safety officials and healthcare representatives, and conducted 26 meetings in the five cities.

Overview

It is an FCC priority to ensure that communications at all levels of government and within the public safety community are reliable, redundant and efficient in any emergency situation.

Regardless of what kind of emergency or disaster strikes a community or region, it prompts an immediate local public safety response. In times of crisis, there are many moving parts at any given time within a community, including county governments, local first responders and hospital emergency departments. As part of a local response, there are a number of different ways that situational awareness is initially reported to government representatives at the local, state and federal levels – depending on the kind of incident or situation.

In addition, more and more states and localities are beginning to plan and implement emergency protocols that can be applied to many different kinds of emergencies, under what is commonly termed an “all hazards approach.” This allows for better use of resources and looks at the long-term benefits of preparedness and response policies, protocols and capabilities.

Finally, whether local and state governments are tracking a gastrointestinal outbreak in a multi-county region or responding to a number of influenza cases in a specific geographic area, common principles and practices are applied. Similarly, whether preparing for a hurricane in a multi-state region or responding to naturally occurring flooding locally, common emergency response protocols are followed.

Outreach Goals and Objectives

The goal of the tour was to learn more about how first responders communicate with each other, as well as state, county and local officials. It provided the PSHSB outreach team with the opportunity to better understand the means of communication between first responders and hospital emergency departments – thereby creating a more complete picture of how advances in broadband networks and new communications technologies will eventually enhance their response capabilities.

The tour also provided the PSHSB outreach team with a unique opportunity to better understand what communications tools have worked well, how technological innovations are assisting their efforts and where gaps still exist. The facts, observations, perspectives and recommendations gathered and developed as part of this outreach tour have helped the PSHSB and the FCC better understand the communications needs of the public safety community during emergencies and in the course of their daily efforts to serve the public.

Information Sharing

The outreach team discussed a number of issues with the public safety community during the visits. Broadband deployment, the digital television transition and new technologies served as common threads throughout the presentations on pending FCC proceedings and ongoing initiatives. The outreach team consistently provided information on Enhanced 911 and Next Generation Technologies, Radio Communications (700 MHz and 800 MHz), interoperable communications, emergency alerts and warnings and communications priority services. The team also highlighted the FCC's emergency operations center and the Commission's coordination with the U.S. Department of Homeland Security (DHS), the Federal Emergency Management Agency (FEMA) and other federal and state agencies in response to a disaster or emergency under the National Response Plan framework. The topics covered included Project Roll Call and the FCC's Disaster Information Reporting System.

Discussions also centered on the deployment of FCC field office personnel and their tactical response efforts as part of the FEMA emergency response team; including the collaborative efforts to process requests with a direct impact on communications that require state government approval. These sessions focused on requests by broadcasters to gain access to storm-impacted areas, debris removal, refueling for industry, special temporary authority to use spectrum and other high priority requests.

In addition, the outreach team provided a brief presentation on the FCC's Rural Health Care Pilot Project and the Commission's overall coordination with U.S. Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) on healthcare and public health issues and initiatives.

The outreach team shared information on the PSHSB website calling special attention to the Clearinghouse information pages. The Clearinghouse web pages provide important information to first responders on emergency communications plans, interoperable plans, best practices in emergency preparedness, lessons learned and federal grant information. The outreach team highlighted the Clearinghouse pages as a valuable resource for the public safety community to utilize, provide feedback on and contribute to on an ongoing basis.

Finally, more than 100 CDs on communication priority services and 150 laminated cards with the PSHSB Emergency Operations Center (EOC) contact information and the link to the Bureau's Clearinghouse pages were distributed to state, county and local government officials, hospital personnel and first responders.

Facts and Observations

Cooperation and Coordination

Overall, in the five states the outreach team visited, the level of cooperation and coordination at all levels of government on emergency preparedness and response was notable and extraordinary. Many counties and localities are working hand-in-hand from a regional approach, pooling resources, including communications equipment (land mobile radios) and opening up access to towers and networks to ensure interoperable communications across jurisdictions. This is particularly important for day-to-day operations, and has proven effective in response to significant fires in residential areas near county lines or multi-county law enforcement efforts to apprehend suspected criminals.

E911 Services

The outreach team toured seven PSAPs during the five-city tour. All of these facilities indicated that they have had good experiences with E911 wireless caller-location accuracy data, and the Phase II compliance rate was very high among carriers that provide services in the call center service areas.

HOUSTON, TX – June 8th

Harris County PSAP and Emergency Operations Center – Houston Metropolitan Area

The Harris County PSAP and Emergency Operations Center are state-of-the-art. The facilities handle more than 9,000 calls daily and are equipped with traffic monitoring screens and LCD televisions to view local and national news.

The PSAP has three sections with 40 phones each to handle police, fire and other 911 calls. They also have a designated room that handles EMS and trauma calls. The features enable call-takers - all of whom are certified and credentialed paramedics - to triage patients with EMS personnel on the scene; share key patient information via a virtual private IP-Based Network; transport the patient via ambulance to the appropriate hospital based on the initial assessment; and share the patient's condition with the hospital before the patient arrives. This better prepares the hospital staff for a trauma victim and improves the speed of the medical response in these cases.

Tactical Mobile Command Center – 911 services

Harris County also has a tactical mobile command center. This mobile truck has landline, wireless and satellite communications, and microwave 911 signaling capabilities, as well as VHF and UHF radio dispatch functionality. **Note:** The Harris County Sheriff's Office expressed a willingness to deploy the tactical mobile PSAP to support emergency communications requests during times of disaster, even in cases not directly impacting the State of Texas.

Ben Taub General Hospital

Ben Taub General Hospital, a 600-bed, Level-1 trauma center, is considered to be one of the premier centers of its kind in the nation. The outreach team toured the hospital's emergency department and staged EOC for emergency response. The hospital has a sophisticated emergency response plan and discussed their incident command structure for both the medical system and Harris County -- including their direct responsibilities for public health and safety with Harris County's emergency operations.

The hospital, like many other medical institutions around the country, utilizes the expertise and resources of the **America Trauma Emergency Network** during crisis situations. The network is a RIM based, BlackBerry-driven virtual network responsible for the nationwide coordination of trauma-related activities for all forms of disaster and for day-to-day trauma requirements. This communications platform enables medical practitioners to receive and share real-time trauma-related data and rapidly deploy critical emergency response assets where they are most needed.

BATON ROUGE, LA – June 9th

Statewide Interoperable Radio Communications

The State of Louisiana has a statewide interoperable communications system on the 800MHz band and is aggressively working to transition the nine regions and 64 parishes statewide to the 700 MHz band for all radio communications within the next four to 10 years.

State Emergency Operations Center – Web EOC

Louisiana also has an impressive Web EOC, which is an IP-based emergency information management application that allows for secure Internet connections and enables real-time access to state and local weather trends. The applications also provides operational details from various government and public safety groups; and offers local regional and national resource profiles and updates so that state and local officials can rapidly deploy essential resources to disaster-impacted areas.

The State Office of Emergency Management uses a secure version of Google Earth for planning, operations, and recovery efforts, as well as for critical infrastructure assessments in the EOC. It is a web-based mapping/geographic information systems (GIS) software application that provides real-time visual data to state and local operations management teams.

Tactical Mobile Command Center – 911 services

Louisiana has a tactical mobile command center that operates on the 700 and 800 MHz bands and is equipped with several different radios, including VHF, UHF, aviation and High Frequency functionality. Louisiana can also deploy mobile trailers to provide immediate communications in an area where primary communications are down. The mobile center capabilities include radio communications, satellite connectivity, VoIP services and wireless internet connectivity.

Broadband Pilot Study – 4.9GHz Band

Louisiana is in the process of launching a pilot program in five parishes that would utilize mobile and fixed broadband communications on the 4.9 GHz band. The project is ongoing and state officials hope to roll it out in one or two parishes before year's end. Louisiana may seek guidance from the PSHSB as they proceed with this pilot program. State officials indicated that they are moving forward with the initiative in light of the revised rules adopted by the FCC earlier this year that allow for expanded use of the spectrum by public safety personnel, providing first responders with more flexibility to utilize mobile broadband.

Louisiana Emergency Response Network (LERN)

LERN is a secure web-based software tracking system that allows hospitals to share and update medical resources with the Louisiana State Department of Health and 911 dispatchers handling EMS calls. The system tracks each hospital's bed availability, number and type of surgeons, and other specialty services and medical supply cache (i.e. ventilators, anti-viral medications, etc). The system is also utilized by 911 dispatchers who use this real-time data to transport trauma victims to hospitals with appropriate services. Currently, 80 of 113 hospitals statewide use the service.

BILOXI, MS – June 10th

City of Biloxi 911 Call Center

This local PSAP has reliable and redundant communications capabilities ranging from LMR communications, to satellite back-up and Internet connections. All 911 call-takers are cross-trained to handle police and fire-related calls. EMS calls are routed separately to another local PSAP in the neighboring county of Jackson, MS so that trained and certified EMS personnel, including paramedics, can triage the emergency cases, obtain patient-related data on the scene, and route those patients to an appropriate hospital. **Note:** Mississippi has approximately 130 hospitals statewide, of which less than 20 are considered Level-1 or Level-2 trauma centers. This can, at times, create surge capacity issues in the four Level-1 designated trauma hospitals along the 30-mile Coastal area, from Biloxi to Gulf Port.

Overall, the 911 Call Center has incorporated a number of safeguards to protect their communications assets, including enrollment of all lines in communication priority services (TSP) and participation by several employees in Wireless Priority Services (WPS) so that they receive priority access on congested carrier networks when placing a call in response to an emergency.

Project Roll Call

The City of Biloxi and Harrison County are extremely interested in better coordinating with the FCC and FEMA on project Roll Call, prior to the expected landfall of an impending Hurricane (or 128 hours out). Early Coordination will allow them to better assess their communications systems pre-landfall and compare the data against a post-check following a hurricane. City and county officials believe this would help them act quickly and more efficiently in their collaboration with state and federal officials, as well as industry, to restore communications during rescue and recovery efforts by first responders and hospitals post landfall. They expect that interest in this federally-sponsored initiative will continue to grow as awareness of it increases among public safety organizations across the nation.

Biloxi Regional Medical Center

In the aftermath of Hurricane Katrina, the only sources of communications for this regional hospital were land mobile radios and amateur radio. The hospital maintained operations without interruption with the help of back-up generator power, enabling them to provided care and related medical services to more than 1,000 patients per day for more than 30 days consecutively. The hospital was also able to utilize the services of physicians from other parts of Mississippi who volunteered to assist in treating patients during this time.

MOBILE, AL – June 11th

State and Local Disaster Preparedness

During hurricanes, the Mobile County emergency management agencies work hand-in-hand with state, county and city officials. They use multiple levels of communications, including 800 MHz, UHF and VHF radio communications, satellite capabilities and IP-based platforms. They also utilize amateur radio communications, particularly in area hospitals.

Radio Communications in Emergencies

Mobile County has deployed more than 5,400 radios county-wide, which are used by fire, police, EMS, hospitals, and all schools (K-12). They have also established a special tactical team and larger talk-group to deal with import and export shipping of commodities, chemicals and other surplus. There is a high potential for hazmat spills and this special tactical team is in place to rapidly respond to any incident. The talk-group includes traditional county and local first responders, as well as officials from the U.S. Coast Guard and the shipping industry. The county also utilizes a global positioning system (GPS) overlay and mapping tools developed by ShipCom (a non-profit company specializing in port security and surveillance) that generates real-time data and assists with monitoring the daily activity in the ports.

Alabama Incident Management System

As part of the 911 and EMS services, the County Health Department utilizes Alabama Incident Management System (AIMS), which allows 911 dispatchers, county and state health officials and hospitals to route trauma cases to appropriate hospitals. The system is also utilized for public health outbreaks and other events that require a significant medical response. The AIMS serves 110 hospitals, 90 community health clinics and 400 nursing homes statewide.

Mobile Emergency Operations Center – Building in System Redundancy

The Mobile EOC has maintained its 1940s communications technology for redundancy in the communications system. They are currently updating their facilities with respect to primary communications, and have the full gamut of tools at their disposal, including, 800 MHz, IP-based platforms, microwave and satellite communications.

The Mobile EOC has a modern 400 foot tower with an advanced satellite dish affixed to it for radio communications. They have two back-up power solutions, including a VHF component and a generator with a 500-gallon diesel tank. The building structure is designed to withstand extremely high winds (e.g. Category-4 hurricane-force winds).

TALLAHASSEE, FL – June 12th

Florida Emergency Operations Center and Coordination

Florida coordinates well at all levels of government and in the communities in preparation and response to disasters and other emergencies, particularly hurricanes. Their EOC is state-of-the-art and utilizes a number of communications tools; including land mobile radios, satellite communications and web-based applications. The web-based features allow them to use sophisticated mapping and tracking features, via Google Earth and Web EOC.

Florida uses the 800 MHz band statewide for reliable and interoperable radio communications. It is in the process of making their 700 MHz system (via narrowbanding) more robust and better capable of providing interoperability across the state. As part of this effort, Florida expects to purchase thousands of new radios in the coming months to assist the public safety community.

Tallahassee 911 Call Center

The PSAP is structured in many respects very similar to other call centers on the Gulf Coast. Tallahassee officials have cross-trained Police and Fire call-takers and have dispatchers on-site to respond quickly to emergency calls. The city separates EMS services and also has paramedics on-site to take calls, assess each case and dispatch help to the scene, as well as transport patients via ambulance to the most appropriate hospital for care.

Conclusion

The dedication and commitment of these state, county and local officials to protecting the public is both profound and remarkable. Their leadership and expertise is notable and appreciated. During this tour, the outreach team was able to gather a wealth of information from the public safety community in coordination with FEMA, NCS and HHS. As part of this coordinated effort, the FCC and PSHSB, along with our federal partners, have further strengthened our relations with the public safety community in the Gulf Coast region, and particularly with representatives from the entities that participated in this endeavor.

PSHSB will continue to assist those who raised concerns or issues related to public safety communications and emergency preparedness and response. The Bureau will also work with these states, counties and localities in coordination with our federal partners going forward. The Bureau will continue to provide updates on public safety rules, policies and initiatives as the FCC acts on pending matters and update its Clearinghouse pages accordingly.

Outreach Recommendations

Overall

- Conduct outreach tours/site visits to various regions of the country to meet with the public safety community, government officials and industry to share information about public safety and homeland security issues and to learn more about their regional communications capabilities and overall coordination efforts during emergencies and disasters.
- Provide assistance, guidance and recommendations to public safety groups that raise concerns and may need immediate attention from the Bureau on issues that fall within the FCC's purview.
- Continue to host FCC summits on a variety of public safety and homeland security issues, with particular focus on common issues raised by the public safety community during FCC-led outreach tours and related activities.
- Communicate, via public affairs and media relations, with the public safety community on initiatives related to emergency preparedness and response, as well as new and innovative communications technologies for first responders.
- Continue to update and expand PSHSB's website and Clearinghouse pages, which serve as a valuable resource for first responders, healthcare, PSAPs, state, tribal and local governments, and persons with disabilities.
- Promote PSHSB's website and Clearinghouse pages with federal, state, tribal and local partners by developing email blasts highlighting key issues and initiatives on the website and request that other government agencies share the information with the public safety community, healthcare sector and persons with disabilities.

Broadband Access, Capabilities and Benefits

- Continue to host meetings in Washington D.C. and regionally with the public safety community, state and local officials, healthcare representatives and the communications industry on the development of a national broadband strategy, and particularly as it relates to public safety communications.
- Ensure that traditional public safety groups, state and local healthcare and public health officials, and hospitals are fully aware of and participating in the development of a national broadband strategy (via various outreach vehicles, including meetings, summits, public notices and website updates).
- Host a multi-agency summit on broadband deployment, public access, and technologies once the national broadband plan is in place (2010). The summits may include representatives from the U.S. Departments of Agriculture (RUS), Commerce (NTIA), DHS, HHS and the Department of Energy for the benefit of the public safety and healthcare communities.
- Continue to encourage state and local healthcare and public health officials to be aware of and participate in 700 MHz regional planning committees, particularly as it relates to a nationwide, interoperable, broadband network for public safety.
- Create a dedicated web page on the PSHSB web site on broadband for public safety and continue to promote best practices and lessons learned in the area of broadband communications on the Bureau's Clearinghouse pages.
- Disseminate public notices and press releases highlighting broadband initiatives that will be of benefit to first responders, 911 call centers, healthcare providers and persons with disabilities (with a particular focus on small cities and rural areas of the nation).

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