

**COMMUNICATING WITH THE PUBLIC DURING  
EMERGENCIES: AN UPDATE ON FEDERAL ALERT  
AND WARNING EFFORTS**

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON EMERGENCY  
PREPAREDNESS, RESPONSE,  
AND COMMUNICATIONS  
OF THE  
COMMITTEE ON HOMELAND SECURITY  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED TWELFTH CONGRESS  
FIRST SESSION  
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## COMMUNICATING WITH THE PUBLIC DURING EMERGENCIES: AN UPDATE ON FEDERAL ALERT AND WARNING EFFORTS

Friday, July 8, 2011

U.S. HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON EMERGENCY PREPAREDNESS,  
RESPONSE, AND COMMUNICATIONS,  
COMMITTEE ON HOMELAND SECURITY,  
*Washington, DC.*

The subcommittee met, pursuant to call, at 10:00 a.m., in Room 311, Cannon House Office Building, Hon. Gus M. Bilirakis [Chairman of the subcommittee] presiding.

Present: Representatives Bilirakis, Richardson, Clarke, and Hochul.

Mr. BILIRAKIS. Good morning. The Subcommittee on Emergency Preparedness, Response, and Communications will come to order.

The subcommittee is meeting today to receive an update on the efforts of Federal agencies to work with each other and emergency management, emergency response providers, and with industry to create and implement a Nation-wide alert and warning system that will provide timely and accurate alerts to the public during an emergency.

I now recognize myself for an opening statement.

The various disasters we have had in this country thus far this year have served to illustrate that timely communication is vital in an emergency and the availability of critical information can help individuals protect themselves from harm. Be it through television, radio, mobile devices, the internet, social media, reverse 9-1-1, or warning signs, emergency managers, and emergency response providers must have prompt and reliable means to provide information to their citizens.

At a joint subcommittee hearing last month, Sheriff Richard Berdnik of Passaic County, New Jersey, when I asked him a question, he noted the challenges his jurisdiction faces in alerting the public to an impending hazard. He told us that it would take 7 days to reach all of the residents of his county using their reverse 9-1-1 system. In my opinion, that is unacceptable. This is why I am pleased to hear from our witnesses today about advancements in alert and warning capabilities.

This November, FEMA and the FCC will hold the first-ever National test of the Emergency Alert System. Following on successful tests in Alaska in 2010 and earlier this year, this National test will

demonstrate the ability to quickly disseminate messages Nationally across broadcast media.

FEMA and the FCC are also working to deploy a system to send geographically-based alerts to cell phones, very exciting. It is required by the WARN Act. This system known as CMAS or PLAN now is required to be deployed Nation-wide by April, 2012. Early deployment in New York City and Washington, DC, will occur this November.

At a field hearing in my district last month, we received testimony from State and local emergency managers. They are very optimistic about the implementation of CMAS or PLAN, especially because of its ability to reach commuter and tourist populations.

I will note that there have been some privacy concerns raised about PLAN, and I will ask the panel to elaborate on that. I am interested to hear from our Federal witnesses about the privacy safeguards for the system.

I would also like to hear about the training that will be provided to message originators to ensure proper use of the system. It is very important the system be used in a targeted way to ensure that when an eminent threat alert is sent people take notice.

As we work to ensure that we reach as many individuals as possible through our alert and warning systems, I am interested in hearing how the needs of individuals with functional needs, such as hearing and visual impairments, are incorporated into those efforts. I think we can all agree that the more notice and information we can give to citizens to help them get out of harm's way of course the better.

I thank our witnesses for appearing here today, and I look forward to your testimony.

I now recognize the Ranking Minority Member, Ms. Richardson from California, for any statements she would like to make. You are recognized.

Ms. RICHARDSON. Thank you, Mr. Chairman.

Good morning to all of you, and I want to thank you in particular, our witnesses, for the service for our country that you have done for participating in today's hearing.

For the record, I want to advise you that at this exact same time I am supposed to be in Transportation and Infrastructure where we are going to have a markup on votes which may require me to depart. So I wanted to make sure that you knew that that would be the only reason why I would not be here present today.

Getting back to the point of our hearing, a key component of emergency preparedness is the ability to alert and warn the public of an impending disaster. The Integrated Public Alerts and Warning System, IPAWS, has been designed to do just that by enabling alerts to be sent via audio, video, text, and data alert messages. These alerts will have the ability to be sent to our residential telephones, websites, pagers, email accounts, and cell phones, in addition to the traditional broadcast media. I don't want to steal too much of Mr. Penn's thunder.

We all know the important role that emergency alerts play in saving lives. Most recently, it played a key function in alerting local citizens about the devastating tornados in Missouri and Alabama.

As a representative of the 37th Congressional District, I represent a large number of constituents whose families were directly affected by the Tsunamis that occurred in 2009 in American Samoa. I have heard numerous stories about families having little time to respond to the massive waves that headed to the island.

Sadly, failures in providing sufficient warning systems have led to less people having the ability to seek shelter prior to a storm surge. Examples here at home and abroad echo the need for enhanced alert and warning capabilities that can leverage the numerous ways citizens receive information, including through text, email, TV, and social media.

Through a fully functioning IPAWS system and the coordination between our Federal, State, and local governments, commercial carriers, broadcasters, and other preparedness stakeholders, we will be in a better position to utilize this innovative technology and ultimately save lives, which is all of our goals.

I am aware of the good work FEMA has done with IPAWS through our oversight efforts last year in Congress. Last fall, I was proud to host an IPAWS demonstration event for my colleagues; and that was the second opportunity I had to work in partnership with Mr. Penn. The demonstration provided a clear example of the capability of IPAWS, and I look forward to hearing more of how we have progressed.

I continue to encourage the efforts of FEMA's Office of Disability and Integration Coordination and other disability stakeholders to ensure that new alert and warning technologies meet the needs of all of our Americans. Individuals with disabilities are often the most at risk at times of crisis. That is why I plan on sharing with our Chairman a legislation called the Disability Integration and Coordination Improvement Act, which will ensure that the Federal Government has the resources it needs to protect all Americans from impending disasters, including our Nation's most vulnerable. The importance of protecting these communities is critical to our emergency preparedness goals.

Unfortunately, the great progress of IPAWS over the past 2 years can be derailed due to budget cuts on the Federal, State, and local levels. The IPAWS reduction proposed in FEMA's full year 2012 budget request will delay retrofitting Primary Entry Points, PEP, stations, including one in Los Angeles that will directly affect my district and over 20 million citizens. PEP stations serve as the primary source of initial broadcast for a Presidential or National EAS message.

I am interested in hearing from those who are testifying today how we might move forward and how you view some of the budget cuts that will impact the work that we need to do.

Additionally, this Congress has proposed a number of devastating cuts to grant programs, and your thoughts on those areas would be welcomed as well.

The increased intensity of National disasters, combined with our need for continued readiness for potential terrorist attacks, requires investments and not cuts to our State and local partners. I am interested in learning how these capabilities will be affected and what suggestions you might give us on how we can help.

I thank you for your testimony and for you being here today, and I look forward to everyone's participation.

I yield back.

Mr. BILIRAKIS. Thank you very much.

I would like to first welcome Representative Hochul from the great State of New York to the subcommittee. I look forward to working with you. If you would like to say a few words, you are welcome. You are recognized.

Ms. HOCHUL. I am a representative from upstate New York. We have Lake Erie and Lake Ontario and four border crossings with Canada. So anything related to Homeland Security is critically important.

I come from local government as well. I was a Town Board member and oversaw our police department, our emergency operations at the local level, and also was a county official. So I come with a various diversity of perspectives to this so I am anxious to learn more from this hearing, and I am very delighted to be a Member of this committee.

Thank you.

Mr. BILIRAKIS. Thank you.

Other Members of the subcommittee are reminded that opening statements may be submitted for the record.

Before I introduce our first panel, I ask unanimous consent to insert in the record a statement from Mr. Jeff Littlejohn of Clear Channel Broadcasting, Inc.

Without objection, so ordered. Thank you.

[The statement of Mr. Littlejohn follows:]

STATEMENT OF JEFF LITTLEJOHN, EXECUTIVE VICE PRESIDENT, DISTRIBUTION DEVELOPMENT, CLEAR CHANNEL BROADCASTING, INC.

JULY 8, 2011

My name is Jeff Littlejohn. I am executive vice president for distribution development for Clear Channel Broadcasting, Inc. Clear Channel Broadcasting is a subsidiary of CC Media Holdings, Inc., and is licensed to operate 892 radio stations in the United States. We operate stations in 47 of the top 50 radio markets and 89 of the top 100 radio markets. According to Arbitron our weekly listening base is nearly 120 million Americans.

Congress has long recognized the importance of radio during times of crisis. It passed the "Radio Act of 1912" in the aftermath of the sinking of the *Titanic* to require U.S. ships to be equipped with ship-to-shore radios and have trained operators on board around the clock. While much has changed in the last 100 years, radio remains an important link to the American public when disaster strikes. Radio provides the public with advance warning of a pending natural disaster; it informs the public while a disaster is occurring, and afterwards it helps listeners recover from a disaster.

Radio is uniquely effective for emergency communications. Radios can operate on battery power, so they work even if the electricity fails. Virtually every home and automobile in the country has a radio. They are portable. And they are inexpensive.

The Federal Communications Commission ("FCC") has required radio stations to comply with emergency broadcast regulations for years. Many of us remember the weekly tests that interrupted the programming we were listening to while local radio stations fulfilled their obligations to the FCC. In 1997 the Commission updated the old Emergency Broadcast System with a new Emergency Alert System ("EAS"). The new EAS enables the President, State and local governments, and the National Weather Service to override local broadcasts to send emergency information to the public. Its digital architecture improves crisis communications by enabling radio stations to send and receive emergency information quickly and automatically.

Every one of Clear Channel Broadcasting's 892 stations complies with the FCC's EAS regulations. We look forward to working with the Federal Government as it conducts the Nation's first-ever Nation-wide EAS test on November 9th of this year. We take our responsibility seriously and look at this testing as a great opportunity to assess the effectiveness of the EAS system and seek ways to further improve upon it.

We at Clear Channel regard the FCC's EAS requirements as a floor, and not a ceiling. We take extreme pride and honor in our ability to help our neighbors in an emergency. Following Hurricane Katrina and other local crises that affected other parts of the country, Clear Channel determined that we should always strive to do an even better job serving the public during an emergency. We have thus established our Emergency Operations Center ("EOC" or "Center") and have customized emergency plans for every market in which we operate.

The Center is located in Cincinnati, Ohio, and is staffed around the clock by trained personnel. It serves several functions that improve our ability to respond to a crisis and get important emergency information out to the public in a timely manner.

It serves as a "backstop" to our personnel in local markets during a local emergency. It provides enhanced access by community leaders and first responders during a crisis. It is in a position to assist local markets to deliver critical information to the public on an "as needed" basis. In fact, it has the capability to create and air local emergency announcements and originate EAS messages during an emergency, if the local markets need that assistance. To effectively do this, the EOC staff monitors EAS, EMnet, NOAA Weather and news events, as well as critical internal broadcast systems to improve the overall availability of emergency information in each market. In the event that an alert is issued, EOC staff can listen to the program content of any of our local stations and monitor the transmission of EAS Alerts in response.

While our local stations are primarily responsible for EAS, our EOC is an ideal location to centrally monitor the effectiveness of our stations' EAS activity and we hope that during this November's Nation-wide EAS test we will have public officials visit the Center to witness Clear Channel's performance.

Let me give you an example of the EOC in action. In an emergency, station personnel may not always be available. The telephone lines may be down, or they may be on the phone with police, fire, or other public officials, or perhaps moving from the station to a safer location. We have established a local "hot line" phone number which is given to our local community leaders as a single place for them to call to reach station management. If the mayor of a city calls the hot line and the Manager is unavailable for any reason, the mayor's call is automatically routed to our 24/7 EOC where a trained staffer will handle the call and make sure that whatever emergency information the mayor has is relayed to the local management team and if appropriate is broadcast out over the air. EOC personnel have the home and cell phone numbers of our key local market personnel and can quickly connect with them at any time of the day or night.

This past winter our investment in the Center paid off for the people of Somerset, Kentucky. Local law enforcement wanted to close a particular street late one night, and need to get the word out to the public. They called the GM, who wasn't available, so after about 5 rings the call was automatically rolled over to the EOC, thus avoiding what could have been a never-ending game of phone tag. After speaking to the local officials and connecting with local management, the EOC staff created a short announcement about the street closing, and shipped it back to our local Kentucky station where it went out over the air—all within 10 minutes of the initial call to the station. EOC assisted our local stations carry out this important task while it was also focusing on other local efforts; local law enforcement was assisted in its efforts to protect the public, and the local community was informed and assisted in a time of emergency.

If any Member of the subcommittee or its staff has an interest in coming out to Cincinnati and seeing the Center first-hand, we would be glad to show you around—we're very proud of this facility and the trained personnel dedicated to running it.

In addition to our EOC, Clear Channel has created and maintains its "Disaster Assistance and Response Plan"—we call it "DARP"—that has amassed and deployed reserve radio transmitters, emergency power generators and news-gathering equipment, satellite phones, fuel supplies, mobile housing and even a portable tower, all ready to move on short notice to help restore operations in one of the cities where we operate. When disaster strikes we have the ability to quickly and efficiently supplement or replace equipment so we can stay on the air and get information out to the public.

The transmitter site of an AM station in Minot, North Dakota (KRRZ) has been under the floodwaters that struck Minot in late June. We were able to send the necessary equipment to Minot and keep KRRZ on the air broadcasting from a different—and drier—location, providing the residents of Minot with needed information on the levels of the Souris River; as well as information regarding the availability of emergency assistance.

Because our DARP program has warehoused reserve equipment in several cities across the country, when there is an emergency we are able to get it to a locality that is in need in a relatively short period of time and keep the emergency information flowing to the public. We have built and selected the storage facilities so that at least one is within no more than a day's drive from each of the local markets that Clear Channel serves.

I am proud to say that Clear Channel has shared our DARP resources with our radio industry brethren in times of need. Most recently, Clear Channel donated use of our DARP RV to several Zimmer Radio employees in Joplin, Missouri who had lost their homes.

One of the company's primary focuses in the area of emergency preparedness has been on the facilities and equipment that Clear Channel has deployed to enhance our ability to respond in the event of a crisis. In my view these are making a very real contribution to improving the ability of civil authorities to communicate with the public before, during, and after a disaster strikes. But I would be remiss if I didn't take a moment to comment on the commitment of all of our employees to the communities that they serve.

This past April, a tornado ripped through Tuscaloosa, Alabama, killing 43 and leveling substantial parts of the city. Clear Channel operates four stations in Tuscaloosa. Immediately after the extent of the damage became evident, our market manager for Tuscaloosa made the decision to pre-empt the normal broadcasts of these stations and instead set up a relief clearinghouse through simulcasts. People would drop off home-cooked meals at the stations' doors, and our disc jockeys delivered them to people who had nothing to eat. *The Wall Street Journal* ran a story on the Clear Channel clearinghouse. The article appears at the end of my statement. To quote the story:

"In a typical pattern, someone calls in to express a need for a particular area or group. Fifteen minutes later, the same listener relates that 10 people showed up and offered their services. Churches and other groups often call in to specify a shortage of particular goods, such as bug spray and suntan lotion for volunteers, and an excess of others, such as diapers. This allows givers to tailor their donations. Wal-Mart and other businesses call in to offer free prescriptions, charging stations for cell phones, and trucks to remove debris upon request."

I am extremely proud of all that Clear Channel is doing to enhance communications with the public during emergencies. Our Emergency Operations Center has added substantially to our ability to support our local stations in their communities. And our DARP program helps to ensure that Clear Channel stations can remain on the air during and after disaster strikes, getting important information out to their communities to assist in relief efforts. Most of all, I am proud of the people of Clear Channel. They care deeply about the communities where they live and work, and when disaster strikes, they respond appropriately.

I will be happy to answer any questions that the subcommittee may have, and I appreciate the opportunity to submit this testimony to you and assist the subcommittee in compiling a record.

#### ATTACHMENT

##### TALK RADIO RIDES TO THE RESCUE

*How Clear Channel Stations promoted a remarkable network of volunteers for tornado relief*

*May 7, 2011, David T. Beito, The Wall Street Journal*

The tornado that tore through here late last month left 41 dead and 12 still missing. Whole neighborhoods now resemble bombed-out postwar Tokyo or Berlin. But this devastation is only part of the story. Tuscaloosa is now the scene of an inspiring volunteer relief effort taking place without the guidance of any central planner.

Instead of going home for break, for example, students in the Greek system at the University of Alabama and historically black Stillman College stayed to cook more than 7,000 meals per day. Local churches have assembled armies of volunteers and vast stores of goods, ranging from dog food to child car seats, and are dispersing

them with no questions asked at “free department stores.” It is doubtful that a more secular city could have fared as well.

Other than churches, much of the strength of Tuscaloosa’s extensive mutual aid comes from an unlikely source: Right wing talk radio. The four Tuscaloosa Clear Channel stations have pre-empted their normal fare of Rush, Hannity and top 40 songs to serve as a relief clearinghouse through simulcasts. Gigi South, the local market manager for Tuscaloosa Clear Channel, says that it was her decision to begin the simulcasts.

It was hard to do otherwise. Employees saw demolished neighborhoods outside their windows and the desperate calls for help came in almost immediately. Because many residents lost power and were unable charge cell phones, battery-operated and car radios often became their only form of communication.

These stations have only 12 full-time employees among them, but they’ve had a vast impact. The on-air jocks have taken on grueling shifts, sometimes working 10 hours straight.

The goal of the simulcasts is simple: Connect givers and victims and allow them to exchange information. According to Ms. South, “this whole thing has been about connecting listener to listener. They are the ones doing this. We’re just the conduit.”

Ms. South is being modest. In many cases, people have dropped off goods—sometimes dozens of cooked meals—at the station’s door. The on-air jocks have rushed them to those in need. The higher-ups at Clear Channel have fully supported the local initiative to pre-empt normal programming and have provided generators and engineers to keep the stations on the air ’round the clock.

In a typical pattern, someone calls in to express a need for a particular area or group. Fifteen minutes later, the same listener relates that 10 people showed up and offered their services. Churches and other groups often call in to specify a shortage of particular goods, such as bug spray and suntan lotion for volunteers, and an excess of others, such as diapers. This allows givers to tailor their donations. Wal-Mart and other businesses call in to offer free prescriptions, charging stations for cell phones, and trucks to remove debris upon request.

In one particularly moving case, a worn-out relief coordinator for an outlying trailer park broadcast a desperate appeal. She had been cooking meals for several undocumented Hispanics living in tents who were afraid to go to the authorities. She was heartbroken because she wanted to visit her mother in Mississippi who had suffered a stroke, but she feared leaving her neighbors unaided.

Within minutes, two nurses, translators, and other volunteers were on the scene. The simulcast now includes brief Spanish language announcements. And listeners, even if they are normally angered about illegal immigration, show no hesitation in lending a hand in such cases.

Callers unable to get through because of tied-up phone lines can make use of associated Facebook pages and Twitter accounts. Tuscaloosa Clear Channel’s tweets now reappear, along with announcements from the local government, on outdoor electronic message boards throughout the city and the University television station carries live feeds of the simulcast.

Although Tuscaloosa Clear Channel normally caters to a white, conservative audience, grateful listeners often make tearful calls from predominantly black and Hispanic neighborhoods like Alberta that bore the brunt of the tornado. No other radio or television stations in the community, public or private, have come close to matching this effort.

More than a week after the tornado, the calls continue to flow into the stations. But Ms. South worries that many Americans are forgetting Tuscaloosa as other stories, such as the raid on Osama bin Laden, increasingly dominate the news. “This is like nothing I’ve seen before. This is awful. We’re going to need help outside of our town. The bottom line is that here the people that we are talking to on air are the people that have no homes. They have no home, they have no phone service. They have no television. Nothing except the radio.”

Mr. BILIRAKIS. I would like to welcome our first panel here today.

Our first witness is Mr. Damon Penn. Mr. Penn is the Assistant Administrator of the National Continuity Programs Directorate within the Federal Emergency Management Agency, FEMA. He is currently overseeing the development of FEMA’s Integrated Public Alert and Warning System, IPAWS. Mr. Penn joined FEMA in 2004 as a defense coordinating officer in Florida, my home State. He also served as the DCO the following year in support of Mississippi’s efforts during Hurricane Katrina.

Prior to joining FEMA, Mr. Penn served 30-plus years with the U.S. Army, holding numerous leadership positions. We thank you for your service.

Mr. Penn studied at the U.S. Navy War College, earning a master's degree in national security and strategic studies. He also earned a master's of science administration from Central Michigan University in 1993 and a bachelors of science degree in criminal justice from UNC Charlotte.

Our next witness is Rear Admiral James Barnett.

Welcome, Admiral.

Admiral Barnett is the Chief of the Federal Communications Commission, FCC, Public Safety and Homeland Security Bureau. In this capacity, he is responsible for overseeing the FCC activities pertaining to public safety, homeland security, emergency management, and disaster preparedness and represents the Commission on these issues before Federal, State, and industry organizations.

Chief Barnett served over 30 years in the U.S. Navy and Naval Reserves retiring in 2008. Before joining the FCC, Chief Barnett was a Senior Research Fellow at the Potomac Institute for Policy Studies, a policy think tank that focuses on science and technology issues, primarily cyber conflict and cybersecurity. Chief Barnett was also a senior partner in Mitchell, McNutt, & Sams, P.A. in Tupelo, Mississippi.

Welcome. Your entire written statements will appear in the record. I ask that you each summarize your statements for 5 minutes.

We will begin with Administrator Penn. You are now recognized, sir.

I also want to tell the panel that we probably will break around 10:45 or so for votes; and, of course, we will come right back after votes.

You are recognized, sir.

**STATEMENT OF DAMON PENN, ASSISTANT ADMINISTRATOR,  
NATIONAL CONTINUITY PROGRAMS, FEDERAL EMERGENCY  
MANAGEMENT AGENCY**

Mr. PENN. Good morning, Mr. Chairman and Ranking Member Richardson and Members of the subcommittee. Thank you for the opportunity to appear before you today to discuss the Integrated Public Alert and Warning System, or IPAWS, and to update you on the significant progress we have made with our partners in the Federal Communications Commission, the National Weather Service, and private industry over the past 2 years.

Our vision of IPAWS has not wavered since the program's inception. It must have the capability to notify the American public, under all conditions, with a reliable, integrated, flexible, and comprehensive system. We must be able to do this by redundant means assure everyone is contacted.

What has changed is our population and how they receive and process information. No longer do people solely rely on a single source of information. Our reliance on wireless devices, internet, social media, and others increase daily.

Alerting techniques and procedures have changed with matched rapidity. Our emergency managers rely on a host of alerting meth-

ods, including sirens, digital signage, weather radios, and others, to communicate critical information to their populations.

These two factors expanded our vision to not only alert by multiple means but to be able to incorporate existing equipment emergency managers are using while ensuring compatibility with emerging technologies. This led us to a basic change in our methodology. We found we could no longer rely on the requirements-based approach, but IPAWS needed to turn to an applications-based approach. This approach sets common standards and compliance parameters and allows developers to use their imaginations to develop solutions to problems that we didn't even know that we had. In the alerts and warnings field, this allows us to use existing technologies in use by the State and local officials and opens doors for continued development of applications.

If I could ask for your attention to the chart that we provided. This depicts the alerting process. You will note that the alerting authorities are on the left and the American public is on the right with the message dissemination platforms in the middle.

The keystone is the box at the bottom left of the page. This is the Common Alert Protocol, or CAP. This is a messaging standard that ensures all equipment involved with alerts and warnings is interoperable. This is what makes it possible to use existing technical solutions on the far right of the chart with IPAWS. Emergency managers can upgrade the tools they use to become compliant with CAP or purchase new devices with confidence that they will work with the Federal backbone. The approval of this standard in 2010 was a major breakthrough for IPAWS and alerts and warnings.

Another critical path for FEMA was development of the IPAWS open aggregator that you see near the center of the slide. This is a platform that takes the CAP-compliant messages and distributes them to the alert disseminators that you see. This allows emergency managers at all levels to send a single message via IPAWS through all the disseminators to the public simultaneously. What you see depicted on the slide is not a test, it is not a pilot, and it is not a concept. It is a fielded capability that we continue to refine.

Over the past 2 years, FEMA has established interoperable standards and interfaces as I just described. We created a dissemination network with redundancy, and we integrated disparate message distribution paths.

I would like to take just a few moments to tell you what we have done and where we are going with each disseminator you see.

First, the Emergency Alert System. EAS has its roots back in the 1950s, and this is the part of IPAWS that communicates over radio and television through primary entry points, as the Ranking Member mentioned earlier. We have expanded our original 36 stations to 49 and will reach our goal of 77 by the end of calendar 2012. With the overwhelming support that we received from our partners in the broadcast industry, this will improve our direct coverage to the American people by radio and television from 67 percent to over 90 percent.

We are also updating existing stations to improve reliability. Our EAS upgrades extend past the continental United States and include the territories of Puerto Rico, the U.S. Virgin Islands, Amer-

ican Samoa, Guam, Saipan, and the Marianas. I would be happy to expand on those later if you would like.

The Commercial Mobile Alert System, or CMAS, is the wireless component of IPAWS. The public-friendly acronym that we have adopted with the FCC is PLAN. As mentioned before, this system provides Federal, State, territorial, Tribal, and local governments the ability to send 90-character text message transmissions to mobile devices. The capability is geo-targetable and is disseminated directly from the wireless tower, eliminating concerns for call congestion.

Currently, 142 providers have agreed to participate in the program, and several have already completed testing with us to ensure people with disabilities who subscribe to a wireless service, receive emergency alerts. Wireless carriers are required to transmit messages with both vibration cadence and audio attention signals.

Our coordination with the FCC and the National Oceanic and Atmospheric Administration continues to produce geo-targeting capabilities and will allow specific targeting methods to be used.

We are currently working on the ability to geo-target messages based on plume and weather modeling. Coordination with inter-service providers continues, and several of the major internet service providers have developed applications and tested software with us.

Two major milestones that we have in the upcoming year have already been mentioned. That is the CMAS rollout in New York City. Mr. Chairman, we thank you for your support and leadership and for that of the Mayor and the Commissioner of Emergency Management in New York to make that a reality, as well as the support of wireless community. Then the other pivotal accomplishment, as you mentioned, Mr. Chairman, was the Nation-wide test that will be held 9 November.

I am proud to serve with a dedicated team of professionals at all levels of government throughout the private sector and all have worked diligently to ensure that we live up to our responsibilities to the American public. I would like to thank them and thank the committee for unwavering support.

I also would like to thank you for the opportunity to testify today, and I look forward to any questions that you may have. Thank you, sir.

[The statement of Mr. Penn follows:]

PREPARED STATEMENT OF DAMON PENN

JULY 8, 2011

INTRODUCTION

Good morning Chairman King, Ranking Member Thompson, and Members of the committee. My name is Damon Penn, Assistant Administrator of the Federal Emergency Management Agency (FEMA) National Continuity Programs (NCP) Directorate. As a U.S. Army Colonel prior to joining FEMA in August 2009, I served as the Director of Operations for the Joint Force Headquarters (JFHQ) at the National Capitol Region of the United States. While leading the JFHQ, I oversaw intelligence, operations, force protection/anti-terrorism, planning, the operations center, training, ceremonies, and security. I have also served as the Defense Coordinating Officer for Florida and was responsible for all Department of Defense assets mobilized to assist Florida and Mississippi's emergency management efforts during Hurricane Katrina. Now as the Assistant Administrator of NCP, I am charged with

managing the Federal Executive Branch Lead Agent for continuity of National essential functions and the Integrated Public Alert and Warning System (IPAWS). I want to thank you for the opportunity to appear before you today to discuss our accomplishments, challenges, and vision.

It is my privilege to lead the dedicated professionals with whom I work at FEMA. FEMA serves as the Nation's focal point for Government continuity planning, guidance, and operations support, and is also responsible for ensuring the President is able to address the Nation under the most extreme circumstances. The technology used to fulfill this central mission has undergone many changes, beginning in 1951, when the Control of Electromagnetic Radiation system, or CONELRAD, was the chief method of Federal communication during a disaster. CONELRAD was replaced by the Emergency Broadcast System in 1963, followed by the Emergency Alert System (EAS) in 1994. IPAWS is a modernization and integration of the Nation's alert and warning infrastructure.

Under 47 U.S.C. § 606 and regulations implemented by the Federal Communications Commission (FCC) (47 CFR Part 11, et seq.), broadcast radio and television stations, cable television stations, direct broadcast satellite services, and satellite radio operators are all required to carry National (Presidential) EAS alerts and support State and local EAS alerts and tests. In support of these requirements, Executive Order 13407 states, "It is the policy of the United States to have an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people."<sup>1</sup> FEMA created IPAWS to be a system of systems to: (1) Modernize the EAS and expand the Primary Entry Point (PEP) station system; (2) create an Open Platform for Emergency Networks, or IPAWS-OPEN, which can be used at no cost by State, local, territorial, and Tribal public safety partners; (3) promote collaboration with industry to leverage existing or develop new standards and to integrate current and future technologies seamlessly into IPAWS; (4) expand traditional alerting and warning communication pathways; and (5) working with the Department of Commerce and the National Oceanic and Atmospheric Administration (NOAA) to deliver alerts through NOAA Weather Radio All-Hazards.

#### IPAWS' SIGNIFICANT PROGRESS IN THE LAST 2 YEARS

The IPAWS program has made significant progress over the past 2 years, and FEMA is on schedule to achieve our IPAWS vision in fiscal year 2012 by having established the following:

1. Interoperable standards and interfaces;
2. Redundancy in the dissemination network;
3. Integrated disparate message distribution paths, meaning that one message can travel many paths to reach the American public; and
4. Direct coverage for 90 percent of U.S. residents by at least one means of communication.

We have cleared several significant hurdles in order to ensure success moving forward, yet challenges remain. By the end of this calendar year, we will roll out the Commercial Mobile Alerting System (CMAS) in New York City and Washington, DC in conjunction with the major cellular providers. CMAS will enable wireless carriers to provide customers with geo-targeted, timely, and accurate emergency alerts and warnings to their cell phones and other mobile devices. We are also scheduled to conduct the first ever National Test of the Emergency Alert System on November 9, 2011, at 2:00 p.m. EST. In parallel with the technical challenges and accomplishments, the IPAWS Program Management Office (PMO) works closely with industry, State, local, and territorial emergency managers, and our Federal interagency partners at the FCC and NOAA to help further our mission.

The IPAWS PMO continues to: (1) Train the alerting community, including public safety officials, industry partners, and the American public; (2) implement and expand new communications paths; (3) provide—at no cost to State, local, territorial, and Tribal public safety officials—the capability to use IPAWS-OPEN to send alerts and warnings through multiple communication pathways to individuals within their jurisdictions; and (4) ensure an environment suitable for innovation of new alerting capabilities.

#### THE IPAWS VISION

We remain steadfastly committed to our vision for IPAWS as a timely and accurate alert and warning to the American people in the preservation of life and property. In the coming months IPAWS will create an integrated capability accessible to all levels of public safety officials, allowing State, territorial, Tribal, and local offi-

<sup>1</sup>Executive Order 13407, Section 1.

cial to issue public alerts and warnings for all hazards. Next, IPAWS will expand beyond radio and television, alerting over multiple communications channels while maintaining the EAS as an all-hazards alerting component. Finally, IPAWS will retain a capability to foster growth and development of future alerting capabilities through the adoption and promotion of common technical standards and protocols.

#### INNOVATIVE AND ADAPTABLE TECHNOLOGIES

IPAWS has moved from a requirements-based, single technology network approach to an applications-based, open standards platform approach. This ensures that IPAWS is accessible to a broad range of information processing technologies, networks and equipment so that existing private sector alerting and communication systems can easily integrate with IPAWS-OPEN. While even basic phones with texting capability can receive an alert from IPAWS-OPEN, the open standards platform will also allow for future technologies to integrate with IPAWS.

IPAWS-OPEN supports an environment which leverages the industry-adopted Common Alerting Protocol (CAP) Emergency Data Exchange Language standard to improve interoperability across a wide variety of technologies and other solutions. As a result, there are 46 private sector vendors and 12 public sector organizations currently developing and testing products to leverage the IPAWS-OPEN application capabilities. The National Public Radio (NPR) also uses CAP messages from IPAWS to deliver alerts to people with visual or hearing impairments by providing alerts directly to prototype devices that activate a bed shaker, display an audio alert in text, or output the text to a Braille printer.

IPAWS' OPEN provides our industry partners with flexibility in the development of new types of technologies and fosters greater competition and innovation in the development of public alert and warning tools.

#### IPAWS' MILESTONES

IPAWS has achieved notable accomplishments since the beginning of fiscal year 2010, including adopting CAP, expanding the PEP station system, conducting two successful live code EAS tests in Alaska, developing the Commercial Mobile Alert System (CMAS) in partnership with the Department of Homeland Security's Science and Technology Directorate (S&T), and supporting individuals with access and functional needs. These accomplishments are a result of the consistent vision of IPAWS, support from authorizing authorities such as this committee, and the strong relationships IPAWS PMO has established with our public and private partners.

#### COMMON ALERTING PROTOCOL

FEMA IPAWS officially adopted the CAP Standard on September 30, 2010, after it was developed by a partnership between S&T and the Organization for the Advancement of Structured Information Standards, an international standards body. Similarly, FEMA IPAWS adopted the CAP to EAS Implementation Guide in May 2010 after it was developed by the EAS to CAP Industry Group. The FCC regulates CAP compliance actions by EAS participants (such as radio, cable, and television providers, etc.). FEMA contracted with Eastern Kentucky University to test vendor products for CAP compliance. Vendors' test results are posted on the FEMA Responder Knowledge Base website.<sup>2</sup> The FEMA Responder Knowledge Base benefits State, local, territorial, and Tribal public safety officials, as well as EAS participants, because it confirms whether equipment they are considering purchasing will work with the modernized EAS.

#### PRIMARY ENTRY POINT

The PEP system is a Nation-wide network of broadcast stations and other entities that is used to distribute a message from the President or designated National authorities in the event of a National emergency. The IPAWS Program Management Office continues to expand the number of PEP Stations across the United States. In August 2009, the system originally had 36 PEP stations providing direct coverage to 67% of the American people. Currently, there are 49 operational PEP Stations and five PEP Stations under construction, resulting in direct coverage of 75% of the American people. By the end of 2012, the number of PEP Stations will increase to 77 and will directly cover over 90% of the American people.

<sup>2</sup>The FEMA Responder Knowledge base website at <https://www.rkb.us/> provides emergency responders, purchasers, and planners with a trusted, integrated, on-line source of information on products, standards, certifications, grants, and other equipment-related information.

New PEP Stations use a standard configuration, saving maintenance costs and ensuring an ease of movement between stations. The stations have double-walled fuel containers with spill containment and a modern fuel management system and Electromagnetic Pulse-protected backup power and transmitters. Legacy stations are being retrofitted to meet current PEP Station resiliency standards.

While EAS is currently being used in Puerto Rico, FEMA is working with the Puerto Rican government so they can locally generate island-wide alerts. In the U.S. Virgin Islands (USVI), FEMA has already begun the process of helping the USVI Government locally generate territory-wide alerts, as well as assisting them with EAS testing. The IPAWS PMO is installing PEP Stations in other territories, including American Samoa, in fiscal year 2011 while Guam and Saipan are still in the planning phases.

#### LIVE-CODE EAS TESTS IN ALASKA

The IPAWS Program Management Office worked closely with the Alaska Association of Broadcasters, the State of Alaska, the FCC, and other key public and private sector partners to conduct two successful live-code tests in Alaska in January 2010 and January 2011. The purpose of these tests was to establish an EAS capabilities baseline and set the stage for the first ever National Test of the EAS. The live-code tests in Alaska helped FEMA and EAS participating stations refine equipment installation/maintenance and standard operating procedures, and clarify certain alerting procedures.

#### COMMERCIAL MOBILE ALERT SYSTEM

Using IPAWS-OPEN, CMAS sends non-subscription based 90-character text messages directly from wireless towers and targets phones in the geo-targeted area. State, local, territorial, and Tribal public safety officials can, at no cost, alert or warn individuals affected by an imminent threat or Presidential Message. CMAS mitigates wireless call congestion and individuals can receive the alert even if wireless towers in their location can no longer support subscriber-to-subscriber messaging.

The IPAWS PMO works closely with S&T, commercial mobile service providers, and the FCC to realize our mutual goal of expanding the number of communication pathways for alerts and warnings. For example, the commercial mobile industry is developing cellular broadcasting technology to support Nation-wide alert delivery. As authorized by the Warning, Alert, and Response Network Act, S&T is providing the research, development, testing, and evaluation support necessary to fully implement CMAS.

The IPAWS PMO adopted industry-developed CMAS interface specifications in December 2009, and made the IPAWS CMAS Gateway available to carriers for testing in February 2011. Since May 2011, most major carriers have or are in the process of completing development and testing on the IPAWS CMAS Gateway. The IPAWS Program Management Office began C-Interface testing with tier 1 carriers in March 2011, over a year ahead of schedule. Since then, Sprint has completed testing, and US Cellular, AT&T, T-Mobile, and Verizon Wireless are currently undergoing testing, with other providers planning to test in the near future.

CMAS alerts will be transmitted to cell phones within the area of a disaster and are by design sent only to phones within the affected area. FEMA IPAWS is working with NOAA to develop software for State, local, Tribal, and territorial emergency managers that will allow alerts and warnings to be geo-targeted. The Geo-Targeted Alert System software models the forward progress of a chemical cloud or toxic spill, for example, so emergency managers can specifically warn those in its anticipated path.

Our industry partners have reported that some mobile user devices currently on the market are already CMAS capable, with all other commercially available devices capable by 2014.

#### SUPPORT FOR PEOPLE WITH ACCESS AND FUNCTIONAL NEEDS

The IPAWS Program Management Office has remained engaged with agencies, organizations, conferences, and private industry to promote IPAWS capabilities and opportunities for the integration of alert and warning technologies for people with access and functional needs. We have partnered with private organizations such as Signtel, Deaf-Link, Alertus, NPR, Readspeak, Roam Secure, VPN Voice Corp, and public organizations such as NOAA, to demonstrate products that incorporate CAP-enabled technologies for alerting persons with access and functional needs. These technologies and products are routinely incorporated into IPAWS demonstrations and have been displayed at such events as the International Association of Emer-

gency Managers (IAEM) Annual Conference, National Association of Broadcasters Show, National Council on Independent Living Annual Conference, the IPAWS Congressional Demonstration, and the National Disabilities Rights Network Annual Conference. The IPAWS PMO has also participated in such events as the Inter-agency Disability Educational Awareness Showcase, FEMA Getting Real Conference, and IAEM's Special Needs Committee meeting.

The IPAWS Program Management Office also partnered with FEMA's Office of Disability Integration and Coordination and initiated a semiannual outreach roundtable for Federal partners and industry experts on disability-related issues. The roundtable includes representatives from over a dozen leading organizations representing Americans with access and functional needs; it is intended to provide periodic updates to our industry Federal partners, as well as elicit information on emerging technologies and systems that can integrate CAP.

#### THE FUTURE OF IPAWS

Two major milestones remaining for this calendar year include the: (1) CMAS roll-out in New York City and (2) the first ever National EAS Test. The IPAWS Program Management Office is actively implementing strategic technical and outreach plans to communicate with and engage stakeholders and partners to ensure successful implementation and testing of both CMAS and the EAS.

We have already had exceptional cooperation from the wireless industry in adapting CMAS. While participation by commercial mobile carriers is voluntary, 142 mobile service providers have already filed their intent to participate, with the major wireless carriers providing CMAS capability 4 months ahead of schedule.

In addition to the strong working relationship between the wireless community and the IPAWS Program Management Office, there has been great cooperation from S&T, the New York City Mayor, city leadership, and NYC Office of Emergency Management in advance of the first large-scale integration test of CMAS between local authorities and IPAWS. We plan to make CMAS available in New York City and Washington, DC by the end of this calendar year, with the expectation that CMAS will be operational throughout the United States in April 2012.

The National EAS Test is scheduled to take place on Wednesday, November 9, 2011, at 2 p.m. EST. The date and time for the test was coordinated with the cooperation of numerous public and private partners—most notably the broadcast industry and the FCC—to take place after peak hurricane season and outside of rush hour on both coasts.

The National EAS Test will help determine where adjustments need to be made. We anticipate the test will help us establish an effective baseline for future tests, devise mitigation strategies for common issues, and assess and adjust training and standard operating procedures.

The 2011 National EAS Test will not incorporate IPAWS system technologies. It is an end-to-end test of our Nation's alerting capability to demonstrate the readiness and effectiveness of the National EAS. The National EAS Test on November 9 will use the legacy EAS infrastructure to deliver television and radio alerts across the Nation.

#### CONCLUSION

The IPAWS vision of providing timely alert and warning information to the American people in the preservation of life and property remains clear and consistent. FEMA is fully committed to IPAWS and recognizes its importance to the American public.

Between now and the end of calendar year 2012, the IPAWS PMO will continue to work with State and local alerting authorities to help them leverage the IPAWS system and capabilities, including providing the certification tools State, local, territorial, and Tribal public safety officials will need to have authenticated for access to IPAWS-OPEN. The IPAWS PMO will also continue to conduct extensive outreach and training to State, local, territorial, and Tribal public safety officials.

We will continue to work with industry and academia for the development of capabilities to alert people with access and functional needs and those whose primary language is not English. We will also continue our work with the FCC to evolve alert and warning regulations to encompass whole of community alerting capabilities, and will work with NOAA to fully integrate their alert and warning systems with IPAWS.

The IPAWS PMO will complete the EAS Modernization and PEP Expansion program through 77 PEP stations directly covering 90% of the American people, retrofitting legacy PEP stations to current specifications for all-hazards, resilient capa-

bility and modern environmental protection configuration. IPAWS will also incorporate back-up EAS through satellite messaging capability within the PEP system.

We will continue to increase the IPAWS-OPEN Alert Aggregator's resilience through greater accessibility, reliability, and redundancy. We will continue to work with S&T, industry, and other partners to explore means of providing alerts through internet services and "new media" in a secure and integrated fashion. We will continue to promote IPAWS standards and CAP, and will encourage the developers of future technologies to provide IPAWS capable alerting tools to America's public safety officials.

I thank the committee for the opportunity to testify and I am pleased to take any questions.

Mr. BILIRAKIS. Thank you, sir. Appreciate it.  
Chief Barnett, you are recognized for 5 minutes.

**STATEMENT OF RADM JAMES ARDEN BARNETT, JR., CHIEF,  
PUBLIC SAFETY AND HOMELAND SECURITY BUREAU, FED-  
ERAL COMMUNICATIONS COMMISSION**

Admiral BARNETT. Good morning, Chairman Bilirakis and Ranking Member Richardson and Members of the subcommittee. I really appreciate the opportunity to come talk to you about the Federal Communication Commission's recent work in alerting and warning the public.

With over 1,400 tornados and widespread flooding, we have already seen too much loss of life from natural disasters this year. A bright spot from these terrible reports occurs sometimes when we hear survivors say, I got the warning and I got to safety.

This is the crucial premise of all alerts and warnings. We may not be able to protect every single person from every disaster, but if we can get timely, accurate information about imminent danger to people in harm's way, they can take action to save themselves and their loved ones. Alerts provide the information that turns precious seconds into survival.

One of SEC's primary statutory obligations is to promote safety of life and property through the use of wire and radio communications, and we are committed to this responsibility.

We recognize that this would be a team effort, and that is why I am pleased to be here with my friend and colleague, Damon Penn of FEMA. The FCC works closely with FEMA to bring the future of emergency alerting to citizens now.

Pursuant to the WARN Act, the FCC in 2008 adopted rules allowing wireless carriers to voluntarily transmit emergency text like alerts to subscribers' cell phones. Since then, the FCC, FEMA, the wireless industry, State, and local governments have all worked together to make Personal Localized Alerting Network, or PLAN, a reality. Four carriers—Sprint, AT&T, T-Mobile, and Verizon—have committed to making PLAN available in New York City by the end of year, and these carriers and others will begin to deploy PLAN in other parts of the country by April 7, 2012, which is the deadline set by the FCC.

PLAN will serve as an important complement to other alert systems like the Emergency Alert System, or EAS, by using new cellular broadcast technology that will allow Government officials to send this text-like emergency alert to everyone in a targeted geographic area who has an enabled mobile device. This will ensure that alerts reach only the people in danger, and there is no charge to the consumer for receiving these alerts.

PLAN creates a fast lane for emergency alerts so critical information is guaranteed to get through, even when there is congestion on a carrier's network. Moreover, with PLAN, neither the alert initiator nor anyone administering the system will know who receives the alert. PLAN cannot be used to monitor wireless devices or a consumer's location.

The FCC has also adopted rules to enhance the reliability of EAS. EAS requires radio and television broadcasters, cable operators, and satellite providers to have equipment that can deliver emergency alerts to the public. Although the State and local components of EAS are tested regularly, to date EAS has never been tested on a Nation-wide basis. To remedy this, FEMA and the FCC have announced the first top-down Nation-wide test of all the components of the EAS for November 9 of this year. The agencies will also work together to be sure that the public is aware of the Nation-wide test before it occurs.

Another key element of public safety communications is the ability for someone to call first responders for help. Today, the average American sends about 20 texts per day. If you are a teenager, that is over 100 texts a day. Almost all mobile phones now have cameras, and most of these can shoot video, too. But when I tell people that you can't text or send pictures to 9-1-1, they are incredulous.

The sad truth today is that if your child winds up in an emergency situation and texts 9-1-1 for help, that call for help will go unanswered. This is why the FCC is doing all that it can to promote the evolution of a broadband-based, next-generation 9-1-1 system. As recommended in the National Broadband Plan, the FCC has initiated proceedings to have all of the 9-1-1 centers, the PSAPs, have access to broadband technologies to communicate with 9-1-1 dispatchers and to accelerate the deployment of next-generation 9-1-1 which would allow the public to send those text messages, video, and photos to 9-1-1.

Once again, I appreciate the opportunity to appear before you today. This concludes my testimony. I look forward to your questions.

[The statement of Admiral Barnett follows:]

PREPARED STATEMENT OF JAMES ARDEN BARNETT, JR.

JULY 8, 2011

Good Morning Chairman Bilirakis, Ranking Member Richardson and other Members of the House Subcommittee on Emergency Preparedness, Response, and Communications. Thank you for the opportunity to appear before you on behalf of the Federal Communications Commission (FCC) to discuss the FCC's recent work in alerting and warning the American public and our partnership with the Federal Emergency Management Agency (FEMA) and other Federal partners in this vitally important area.

#### INTRODUCTION

National Weather Service preliminary reports show that over 1,400 tornados have occurred in the United States already this year. We have seen many disasters in 2011, and too much loss of life and property. In some of the news reports, though, there is a hopeful note. We occasionally hear a disaster victim report, "I got the warning, and I got to safety." This is the crucial premise of all alerts and warnings. We may not be able to protect every single person from every disaster, but if we can get timely, accurate information about imminent danger to people in harm's way, they can take cover, they can move to safety, they can save themselves, they

can save their families. This is truly a situation in which seconds count and can make the difference between life and death.

One of the FCC's primary statutory obligations is to promote the safety of life and property through the use of wire and radio communications, and the FCC has a singular commitment to the protection of the American public through constantly evolving alert and warning systems. We recognize that this should be a team effort, and I am pleased to be here with my friend and colleague Damon Penn of FEMA. The FCC works closely with FEMA, the National Weather Service and other Federal partners to bring the future of alert and warning systems to consumers now.

An essential element of that FCC obligation is the ability to alert the American public in times of emergency. Through various initiatives, the FCC continues to take significant steps toward implementing one of its highest priorities—ensuring that all Americans can receive timely and accurate emergency alerts and warnings over each communications platform they use.

Today, I will discuss the FCC's efforts to date regarding the Personal Localized Alerting Network, or PLAN, (also known as the Commercial Mobile Alerting System, or CMAS) and the Emergency Alert System (EAS). I will also discuss briefly our next steps in ensuring that the public can receive alerts over multiple communications technologies. Finally, I will update you on our efforts to ensure that the public has access to more advanced 9–1–1 systems. Like emergency alerting, these initiatives are all part of our comprehensive commitment to promoting public safety through communications.

#### THE PERSONAL LOCALIZED ALERTING NETWORK (PLAN)

Wireless devices have become ubiquitous across our Nation and, as such, provide a particularly effective means to reach the American public quickly and efficiently in an emergency. Accordingly, in 2006 Congress passed the Warning, Alert, and Response Network (WARN) Act. The WARN Act sets forth a process for the creation of a warning system whereby commercial wireless carriers may elect to transmit emergency alerts to their subscribers. This legislation required the FCC to undertake a series of actions to accomplish that goal. I am happy to report that the FCC has met all of its WARN Act deadlines, and in conjunction with FEMA and the wireless industry, has taken significant steps to develop PLAN.

On December 12, 2006, the FCC established and convened an advisory committee to recommend technical requirements by which commercial wireless carriers could voluntarily transmit emergency alerts—the Commercial Mobile Service Alert Advisory Committee (CMSAAC). The CMSAAC consisted of 44 members representing State, local, and Tribal governments; wireless providers; manufacturers; commercial and noncommercial broadcasters; the disabilities community; FEMA; and other organizations. By the time it had concluded its work, this unique Government/industry partnership had overwhelmingly approved a set of recommendations for technical requirements for what would become the PLAN. On October 12, 2007, the FCC received these recommendations. On April 9, 2008, the FCC adopted requirements that would govern the voluntary transmission of emergency alerts by commercial wireless carriers.

Under these rules, participating wireless carriers must begin PLAN deployment by April 7, 2012. In May of this year, Chairman Genachowski, FEMA Administrator Craig Fugate, New York City Mayor Michael Bloomberg, and top executives of the four major Nation-wide carriers—AT&T, Sprint, T-Mobile, and Verizon Wireless announced that PLAN would be available in New York City by the end of this year, months ahead of schedule.

PLAN is a new technology and service that will turn mobile devices into emergency alert devices with transmission of potentially life-saving messages when there are threats to public safety. It will serve as an important complement to other alert and warning systems like the EAS. PLAN will allow Government officials to send text-like emergency alerts to everyone in a targeted geographic area who has an enabled mobile device. Since the alerts will be geographically targeted, they will reach the right people, at the right time, with the right messages. A PLAN alert will be accompanied by a unique attention signal and vibration, which is particularly helpful to people with hearing or vision-related disabilities, and there is no charge to the consumer for receiving alerts.

Unlike other wireless-based alerting systems that require subscribers to sign up for the service, subscribers will automatically receive PLAN alerts as long as they have a PLAN-capable mobile device and their carrier participates in PLAN. Alert originators can send three types of alerts using PLAN—alerts from the President regarding National emergencies, alerts about other emergencies involving imminent

threats to life or safety, and Amber alerts. Pursuant to the WARN Act, subscribers may opt out of receiving all but the National emergency alerts.

PLAN creates a fast lane for emergency alerts, so vital information is guaranteed to get through even if there's congestion in the network. As we have learned from past large-scale emergencies, a spike in customer calls and text messages during emergencies can overload communications networks. PLAN effectively addresses this problem by using a technology that is separate and different from that used for voice calls and traditional text messages, allowing PLAN alerts to get through as long as the network is operating.

It is also important to note that with PLAN, neither the alert initiator nor anyone administering the system will know who receives a particular alert. Accordingly, PLAN cannot be used to monitor wireless devices or a consumer's location or track where someone is. The technology is similar to a portable radio—someone receives the radio station's broadcast, but the radio station doesn't know where that person is or even if she is listening.

The FCC's partnership with FEMA has been essential to the rollout of PLAN and will help ensure a successful Nation-wide launch of PLAN. As reflected in the diagram attached as Appendix A, the PLAN architecture consists of two major components—the Alert Aggregator/Gateway and the Carrier Gateway and Infrastructure. The Alert Aggregator/Gateway is administered by FEMA as part of its Integrated Public Alert and Warning System (IPAWS). This component will receive and authenticate alerts from Federal, State, Tribal and local governments; verify the originator of the alert; and send the alert over a secure pathway to gateways and infrastructure administered by participating wireless carriers. These gateways and infrastructure will receive alerts and push them out to any PLAN-capable handsets and other mobile devices within the alerts' targeted geographic area.

Over 100 commercial wireless carriers have elected to participate in PLAN, so by next April, PLAN will be deployed in cities across the country not only by the four major Nation-wide carriers, but also by many small and regional carriers. I want to note that, pursuant to the WARN Act, participation in PLAN by wireless carriers is completely voluntary. Thus, some carriers will offer PLAN over all of their service areas, others over parts of their services areas, and others over all or only some of their wireless devices. Ultimately, we expect that market forces will encourage carriers to make PLAN available in most of the country. In the mean time, and starting right now, the FCC recommends that consumers ask their carriers whether and where they will offer PLAN alerts to PLAN-capable handsets. For more information, we encourage the public to visit our website at [www.fcc.gov/pshs](http://www.fcc.gov/pshs).

#### THE EMERGENCY ALERT SYSTEM

I also want to report about steps the FCC is taking to better evaluate and enhance the reliability of the Emergency Alert System (EAS). For over 50 years, what we now call the EAS has provided emergency alerts to the American people, including the ability for the President of the United States to deliver a message to the public in the event of a National emergency. The EAS requires broadcast and satellite radio and television service providers, cable systems, and wireline video systems ("EAS Participants") to install and operate equipment capable of delivering emergency alerts to their viewers and listeners. The current EAS has been in existence for over 15 years and is used successfully and extensively by State and local authorities for weather-related and other emergency warnings. The FCC, FEMA, and the National Weather Service are charged with maintaining the EAS.

State and local components of the EAS are tested, respectively, on a monthly and weekly basis. However, to date, the EAS has never been tested on a Nation-wide basis. EAS is a significant National asset, yet we do not know how well the system will work on a National scale. Only a top-down, simultaneous test of all components of the EAS can provide an appropriate assessment of system performance.

To remedy this situation, FEMA and the FCC, in conjunction with other stakeholders, are now planning to conduct a truly Nation-wide test of the EAS. This past February, the FCC issued a rule mandating Nation-wide testing, and on June 9, 2011, FEMA and the FCC announced that this first test will take place on November 9 of this year.

In addition to ensuring that the EAS works as intended, the FCC continues to make improvements to the EAS. These include expanding the traditional analog EAS to digital technologies, including digital radio and television, digital cable, satellite radio and television, and wireline video systems. The FCC has also required all EAS Participants to be able to receive EAS alerts in the Common Alerting Protocol ("CAP") standard adopted by FEMA. CAP is a standard alert messaging protocol that allows alert originators to, among other things, send a single emergency

alert over multiple communications technologies, thereby increasing the efficiency of sending alerts and expanding the ways in which consumers can receive them.

#### NEXT STEPS FOR EMERGENCY ALERTING

Looking to the future, the FCC will continue to explore whether other communications technologies can provide ways for Americans to receive alerts and warnings about imminent threats to safety of life. For example, as recommended in the National Broadband Plan, the FCC will examine the role that broadband technologies, social networks, and other internet-based tools can play in emergency alerting. We will continue to learn from experiences at home and abroad. For example, earlier this year, Japan experienced a devastating earthquake and tsunami that resulted in significant loss of life and damage to property. Although these losses were severe, they may have been greater if not for Japan's earthquake detection and warning system, which relied on elements of broadband technologies to alert the public. These experiences can inform our own thinking about how to leverage communications technologies to warn the public about impending disasters.

The FCC will continue to take steps to ensure that the public has access to emergency alerts and warnings over multiple communications technologies. We will continue to work closely with FEMA, the National Weather Service, industry, and State and local governments to ensure that the benefits of PLAN are available to consumers in all parts of the country and to ensure that the EAS continues to provide a reliable and effective method to transmit timely and accurate emergency alerts to the public. We will aggressively pursue technologies that convey information about imminent danger to Americans in harm's way so they can take action to save themselves and their families.

#### 9-1-1 DEVELOPMENTS

Another key element of public safety communications is the ability of someone to alert first responders of a need for assistance. It is critical that we take steps to ensure that today's 9-1-1 system supports the communications tools of tomorrow. The communications world has changed in so many dramatic ways in recent years, with the dramatic growth in the use of mobile phones and broadband. In 2005, not that many Americans sent text messages, and the average cell phone subscriber typically sent less than two texts a day. Today, it's about 20 texts a day, and the average teenager sends over 100 a day, which tells you something about the direction that this is going.

In 2005, only 18 percent of U.S. cell phones had cameras. Now almost all of them do, and a growing number can also shoot video. Five years ago, if I had told people you can't text 9-1-1 or send pictures to 9-1-1, they would have said, so what? Today, they think I can't be serious. But that's the sad truth. There is a gap between what ordinary people do every day with communications technology and the capabilities of our emergency response network. That gap is unacceptable and cost lives. Right now, if your child winds up in an emergency situation and texts 9-1-1 for help, that call for help will go unanswered, even though it may never occur to your child that emergency responders cannot receive text messages. When texting is the primary way that many people use their mobile devices that doesn't make any sense. Fixing this will require a sustained team effort, and we're actively working with our Federal, State, and local partners to make this a reality.

The FCC is doing everything it can to promote next generation 9-1-1. As recommended in the National Broadband Plan, the FCC has initiated a proceeding to ensure that the public has access to broadband technologies to communicate with 9-1-1 dispatchers and to accelerate the deployment of next generation 9-1-1, which could allow the public to send text messages, video, and photos to 9-1-1. The FCC has also taken actions to improve 9-1-1 by enhancing location accuracy requirements for wireless service providers, to be sure first responders can find those who call 9-1-1 from their mobile phones.

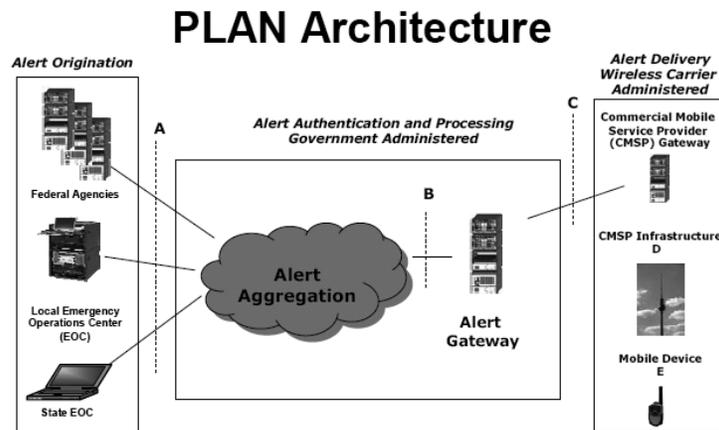
These efforts, like our emergency alerting initiatives, serve to ensure that the public has access to an effective and reliable public safety communications system and, ultimately, to provide for a safer America.

#### CONCLUSION

Public safety and homeland security depend on reliable public safety communications, which in turn depend on three key elements. First, is the ability of public safety officials and first responders to communicate with each other. Second, is the ability to provide timely, accurate warnings to the public of imminent danger. Third is the ability for the public to call for assistance when it is needed. The FCC is committed to ensuring the availability of all three elements. Thank you for the oppor-

tunity to appear before you today. This concludes my testimony, and I am pleased to answer any questions you may have.

#### APPENDIX A



To send a PLAN alert, an authorized local alert initiator enters descriptive data about an emergency into the PLAN-compliant alerting system ("A"). The information is sent to a FEMA Alert Aggregator, where it is authenticated and directed to a FEMA-operated Gateway ("B"), which reformats the data so it is useable by each wireless carrier, and sends it over a secure pathway ("C") to a wireless carrier's Gateway ("D"). The carrier then distributes the alert to all customers in the area affected by the emergency by sending it to the towers in that area ("E"). PLAN-compatible handsets in the area will receive the transmission, deliver the unique PLAN attention signal and vibration, and begin to scroll the 90 characters of text across the screen.

Mr. BILIRAKIS. Thank you very much.

I will recognize myself for questions, and I will stay within the 5-minute period.

Looks like we are going to have votes earlier than I thought. So we will try to get through—we will definitely get through the first panel. Thank you.

Administrator Penn, as I noted in my opening statement, I am interested in hearing more about CMAS training that will be provided to message originators. I am concerned that some alert systems currently in use by State and local emergency management officials, such as Alert DC, are used for more than just emergency alerts.

My concern is that if proper training is not provided, CMAS may be used to send messages that do not rise to the level of imminent threat alerts. This may result in message saturation, and individuals may ignore, unfortunately, important messages.

What outreach has FEMA conducted with State and local emergency managers to educate them on the upcoming deployment of CMAS? What training will FEMA provide to message originators to ensure appropriate use of CMAS? What steps will FEMA take as the message validator to ensure that the information arises to the level of CMAS alert?

Mr. PENN. Thank you, Mr. Chairman. Very good questions.

The next major step for us is training and certification of message originators, and the points that you mention are all valid. The challenge is to be able to provide them access to the system but be able to monitor their progress and be able to police the system if we get to a position where they are abusing the alerts of imminent threats. We have a program developed or are developing a program that is internet-based that will give them the basic knowledge that they need to be able to input the message and do the buttonology it takes to input into IPAWS.

Part of that certification also includes best practices that we have seen throughout the country and a clear definition of what imminent threat and what the intent of IPAWS is. So we think that is a start.

Mr. BILIRAKIS. Can you give us that definition now of imminent threat?

Mr. PENN. I don't have the exact verbiage here before me here, Mr. Chairman, but I will be more than happy to provide that.

Mr. BILIRAKIS. Yeah, could you provide that to the committee?

Mr. PENN. We have spent quite a bit of time drafting that to make sure the language is exactly what we want it to be. I will provide that.

Mr. BILIRAKIS. Please do, thanks.

Mr. PENN. The part that we can help to police ourselves as the system matures and it comes into use is we will be able to monitor each alert that has been sent by the originators, be they State and local or whatever level the alert has originated. We will be able to, by controlling access to the system, take anyone off the system that we find is abusing the intent and not using the imminent threat guidelines that we have laid down. So I think that we have the capability to do that, and I think we have a capability to monitor and protect the system.

The real challenge is that each jurisdiction is a little different and some of their requirements are a little different. We have to be very sensitive to the conditions of the State and locals and discuss these in some detail with the providers. We have met at several State and local emergency manager conferences. We continue to have daily contact with the emergency managers on this.

Again, we have shared some best practices, and we are assembling those, and those will be part of the training process, and through our outreach I think we can solve a good portion of the problem.

Mr. BILIRAKIS. Thank you.

Are we on time as far as I believe it is going to be implemented in the District of Columbia and New York by November and then in the spring of 2012 around the Nation?

Mr. PENN. Yes, sir. Actually, we are a little ahead of that. We will be able to start to certify initiators within the next 2 months or so and get that program started.

Mr. BILIRAKIS. Thank you.

Chief Barnett, some people have expressed privacy concerns about CMAS or PLAN technology including the ability to track cell phone users. You mentioned this in your opening statement, and I have concerns. Would you please elaborate on the privacy safety

guards in place for this technology? We obviously need to get the word out.

Admiral BARNETT. Yes, sir.

Sir, one of the great things about PLAN is the technology it uses really does not allow tracking or monitoring, neither by the system administrators—and the way that I would analogize it is it is more like your portable radio. In essence, the alert comes through the Federal aggregator, it hits the cell tower, and it goes out. You don't know who is there. The only thing we know is that that particular cell phone, enabled cell phone, is in that particular danger area.

But they receive it. There is no way to tell it has been received by the person. There is no way to tell where their location is. So think of it like a radio broadcast, and that way they can be assured that no one is tracking, no one knows the location for them.

Mr. BILIRAKIS. Very good. Thank you.

Well, I think I better yield to our Ranking Member, because we are running out of time. So I yield.

I recognize you for 5 minutes. Thank you.

Ms. RICHARDSON. Thank you, Mr. Chairman.

Mr. Penn, my first question is, in light of some of the budget cuts as I mentioned in my opening statement, do you anticipate any further delays for retrofitting the primary entry point stations due to these cuts?

Additionally, how do you see, if there are delays expected, that that would affect the overall progress of IPAWS?

Mr. PENN. Yes, ma'am. We currently have adequate funds to complete the program that we have scheduled for 2012. We did make a concession, as you mentioned, by moving the building of four primary entry point stations to the right into 2013. That, right now, is the only concession that I see that we are going to have to make in the program. The administrator of FEMA fully supports what it is we are doing, as does the director of Homeland Security, or the Secretary of Homeland Security, and they have been very judicious in protecting our program.

A critical path for IPAWS in general is 2012 as we continue to develop the aggregator, as we bring other capabilities on-line, and I think we have adequate funding to do what we need to do.

Ms. RICHARDSON. Okay. My next question is, how are the territories in the Tribal areas doing in terms of working with you to utilize all the available systems that we are developing?

Mr. PENN. Yes, ma'am.

We have done a lot of work with the territories in recent months. In fact, we have PEP stations now in Puerto Rico and the Virgin Islands. American Samoa, we have started PEP construction and will complete that in August of this year. We have surveyed sites for PEP stations in Guam, Saipan, and the Marianas. Those are part of our spring 2012 projects.

We have also worked with the territories to talk to them about emergency management and message distribution throughout the territory and how they can use best practices that we have seen here on the mainland to help communicate their messages better. They have all been very proactive and very excited about what we are doing and accepted everything that we have offered in the way of advice and in the way of best practices.

The last contact that we had was with the Puerto Rico Telecommunications Regulatory Board back in May when we discussed CMAS and talked to them about how to integrate CMAS into what they are doing.

So I am very confident that we made the progress that we need to make in the territories and we are moving forward. As you know, each are somewhat unique in their requirements, but everything that we can provide provides another level of alert and warning that they didn't have before we started the process. So I think it is going very well.

Ms. RICHARDSON. So could you please provide to the committee in writing what you just said? All of the territories, whether they have PEP stations or whether they don't, when they should be fully on-line and are there any other requirements or participation that we need of them to be fully up and running.

Mr. PENN. Yes, ma'am, would be my pleasure.

Ms. RICHARDSON. Thank you.

My next question is for our Rear Admiral, Mr. Barnett. When we talk about the WARN Act, how willing have you found that the wireless carriers have been in providing this service to their customers, given the fact that it is voluntary?

Admiral BARNETT. The wireless industry has really stepped up to the plate on this. It is voluntary, but currently we have carriers who indicate they will provide coverage, plan coverage for part or all of their carriers that we cover, some 95 percent of subscribers. I have a feeling that once that gets fully into place that that percentage is going to go up, and so we work very closely. This has been very much a collaborative effort between FEMA, the FCC, the wireless industries, and State and local government.

Ms. RICHARDSON. What is your plan—in your testimony, though, you referenced, as you just said now, that you think the market forces and as it has rolled out more will participate. What happens if they don't? What is the plan?

Admiral BARNETT. We will have to take that under advisement. I think the first thing is to get it up and running. I think the market pressures will do that. If they do not for some reason, if it does not roll out that way, we will certainly want to look at that. I really see PLAN as the next major step in alerting the public because of the near ubiquity, it seems, of mobile devices. So this is something that we will remain focused on.

Ms. RICHARDSON. If there is no objection from the Chairman, what I would like to request is that you come up with a plan if, in the event there was not the participation. Because what we don't want to do is wait 6 months or a year and then we find out various areas might be particularly vulnerable. Sometimes that happens in rural communities, in areas where traditionally rollout is a little slower. So if we could look at what is that plan now so we are ready so once you do the assessment and you know who is or is not participating we would be ready with next recommendations.

Thank you, sir. I yield back.

Mr. BILIRAKIS. Thank you. Appreciate it.

Now Ms. Hochul from the great State of New York, the gentlelady is recognized for 5 minutes.

Ms. HOCHUL. Thank you, Mr. Chairman.

Again, I am in a learning curve here, but I did want to follow up on the Ranking Member's question. Would you consider a proposal to make PLAN mandatory? I am sure there was a lot of give and take when this was passed. I wasn't here at the time. But is there an argument against making it mandatory so we ensure 100 percent coverage?

Admiral BARNETT. I am sure that was discussed when the WARN Act was passed. I think, after full deliberation, they decided to make it voluntary. Once the carrier signs up, they do have to comply with the FCC's rules. Certainly Congress can decide if they wanted to make it mandatory. However, I am very encouraged by the fact that under a voluntary basis that so many have signed up. You are already seeing devices that are PLAN capable that are on the market now. Others can be made capable through minor software changes. So I think with 95 percent of the subscribers it looks like it will be covered to some degree. That is a first big step.

Ms. HOCHUL. Thank you.

I am also concerned about the statements about not being able to send pictures or texts to 9-1-1. What steps do you think need to be taken? What do you need from the Federal Government? How do we make that happen?

Because, as you stated so accurately, that is the primary means for communication for young people. My kids go out in the car. They are not even going to know how to dial a phone number. All they know how to do is text. I think people would be surprised to find out they could not send a picture of an accident or a quick text that says, going off the road—

So I think, to me, there should be some sense of urgency with that. I am just wondering what your thoughts were on how we ratchet up the interest in that and make that happen a lot sooner. Because that is how young people communicate all the way up to—I think that is just the reality. We need to accept that. So—

Admiral BARNETT. I think you are exactly right. It was brought home to me during the Virginia Tech massacre, where you had people hiding, they had to be quiet, they were texting 9-1-1, and those texts never got through, because the system is simply not set up.

Because really what happened is that 9-1-1 was based on an old circuit-switched basis, and then when cell phones came along we just kind of modified it slightly. Next-generation 9-1-1 is the way we need to go. The Commission is very focused on this. We have already had a notice of inquiry that gathers a great deal of information. We intend—we are in preparation now for a notice of proposed rulemaking on that.

There is some very interesting technologies out there, and I am very excited about the aspect of being able to get texts, video, and pictures to 9-1-1. There is a lot of preparation—because the PSAPs, the 9-1-1 centers have to be ready to accept those and process.

But you are exactly right. The potential there for dealing with terrorists, for dealing with crime, for dealing with medical emergencies is vast. So that is why I think the chairman and the commissioners have been so focused on next-generation 9-1-1.

Ms. HOCHUL. Is there anything you need from the legislature, from Congress? Is there any assistance you need from us?

Admiral BARNETT. Well, the fact of the matter is some of the 9-1-1 centers—I guess most of them are not set up for this right now. There are going to need to be some funding questions that are addressed on this. The FCC right now is trying to get a picture on that.

During the National Broadband Plan we actually tried to look at how many PSAPs actually have broadband connection right now. We determined over half. It is certainly not much more than half at this point. So they need to be able to upgrade. That will take some money. There will need to be some training involved in that. We are trying to develop now kind of a cost model so that Congress will and other leaders will have something to go on to figure out what it will take to bring the entire country into the broadband world with regard to 9-1-1.

Ms. HOCHUL. That is encouraging that you are on it; and, hopefully, we can remedy that very shortly.

Mr. Chairman, I yield back the balance of my time. Thank you.

Mr. BILIRAKIS. Thank you very much.

Well, I think we can start a second round, if that is all right. Maybe a couple questions each before we dismiss the first panel.

I wanted to follow up on Ms. Hochul's question. When do you anticipate—on the 9-1-1 generation, very exciting and we want to be very helpful, when do you anticipate that being implemented?

Admiral BARNETT. We completed the notice of inquiry and got the information back—I think it was back in March. We are still moving through that, preparing the notice of proposed rulemaking.

While I don't like to speak for the commissioners as to when they take something up, I know that it is very high on the chairman's list, on the commissioner's list. I would hope before the end of this calendar year and maybe significantly before that we would be able to take that up.

Mr. BILIRAKIS. Very good.

A question for the entire panel. FEMA and the FCC have announced the first National test for the Emergency Alert System will be conducted, as you mentioned in your testimony, on November 9, 2011. Would you please discuss what each of your offices will be doing to ensure the success of this test?

Mr. PENN. Mr. Chairman, the requirement for the organization and the actual conduct of the test rests with our office. We are the ones that will initiate the message, and we are the ones that then will maintain contact with the industry and others to make sure that the message has properly been sent. We will gather information afterwards and determine what worked and what didn't work as part of the system.

So everything from the initial construct of the message, the initial broadcast, through the after-action review and the recommendations and findings all belong to FEMA as a responsibility for the test.

Mr. BILIRAKIS. Very good.

Chief.

Admiral BARNETT. The FCC adopted some rules that set up the National test and even required the EAS participants to report their information back in. Under the previous set of rules, when they did local tests, monthly tests, they just recorded it. It is some-

thing that our field agents would go around and check the logs every now and then.

We actually need to have all that information brought back so the FCC and FEMA can use it to improve the system. That is one thing already done.

We will work with FEMA to make sure that we get out information. Our side of it is primarily working with our licensees and regulatees—the broadcasters, the cable providers, satellite folks.

You will be talking to Suzanne Goucher in the second panel. She can tell you that the broadcasters are very excited about this.

The participants have stepped forward to do this. First with the tests that were conducted in Alaska January of this year, January the year before that, we learned a lot from that. We will be reaching out to groups that represent various disabilities, State and local government, any number of the 9–1–1 centers. We will be talking to State broadcast associations, everybody, so that they know what is coming and can understand it.

Now, for most Americans, they are going to just see this as another test of the Emergency Broadcast or Emergency Alert System—every now and then I say Emergency Broadcast because I grew up with Emergency Broadcast—Emergency Alert System. I think the only slight difference that they might notice in that and the previous one, this one will be a little bit longer. But we are working very closely with FEMA to get the word out.

Mr. BILIRAKIS. Very good.

One more quick question and I will yield to Ms. Richardson.

Why the name change from CMAS to PLAN with regard to the cell phone alerting system?

Admiral BARNETT. I think the thought on that—

Mr. BILIRAKIS. It creates a little confusion, in my opinion.

Admiral BARNETT. Right. Interestingly, I think the thought was cellular mobile alerting system or commercial and mobile alerting system was not seen as intuitive to the public. I think the Personal Localized Alerting Network and an easy acronym like PLAN was that. I will say this. In talking with the cellular industry and wireless industry, I think they are going to use wireless emergency alerts. So whether or not PLAN continues to be used—and you may ask Mr. Guttman-McCabe about that, about what their plans for that are.

Mr. BILIRAKIS. Thank you.

Now I would like to yield to the Ranking Member for a couple of questions.

Ms. RICHARDSON. Thank you, Mr. Chairman.

Mr. Penn, two witnesses on the next panel mention in their testimony the need for increased training for emergency managers as critical areas will be addressed. What steps are being taken to train these emergency managers on IPAWS?

Mr. PENN. As I mentioned before, one of the critical parts that we are doing is training the emergency managers on how to initiate messages; and part of that will also be them coming back to us and telling us who within their jurisdiction is authorized to be a message originator.

The training program I mentioned is mostly web-based, and we will certify them as being able to do the buttonology that it takes

to format the message. There is a pre-directed form where they just fill in the blanks to send out the message. Then it also tells them again what kinds of messages are to be sent and what imminent threat is and how that whole piece works together. So a lot of what we do will be centered around that and the training program associated with that.

Ms. RICHARDSON. Well, sir, if I can interrupt you for one second, because I only have 3 minutes and 49 seconds.

One of the problems with the way that we work is you testify. Oftentimes, the first panel leaves, and then the second panel comes in. What I am saying to you, though, is that the next panel of witnesses say that they need more training or that enough, sufficient training hasn't occurred. So can we have a commitment from you that you will go back and test and validate if in fact the appropriate folks who should be trained are getting the appropriate training or they know how to communicate with you guys to get that?

Mr. PENN. Yes, ma'am. I concur with their thoughts. We do not have enough training. We are trying the best that we can. We will expand it and will continue to do more. But I will work very closely with them to understand their concerns and that our program is headed in the right direction.

Ms. RICHARDSON. Possibly a schedule that they might be able to anticipate so if they are not in the first wave then they can catch into the second one.

Mr. PENN. Yes, ma'am. Just as an example, we have attended 125 events since January to try to do that very thing. So we will continue to work.

Ms. RICHARDSON. Okay. My next question is, what efforts are being made in regards to alerting individuals with disabilities, including those with hearing, vision, and other functional disabilities?

Mr. PENN. Yes, ma'am, that is a very good question as well.

We have done quite a bit of work with the access and functional needs communities. Our most recent engagement was at the semi-annual Conference For Federal Partners and Industry Leaders on Disabilities. We meet routinely with the National Center for Accessible Media, we meet with Gallaudet University as they are leveraging university work on emerging technologies, the National Organization on Disabilities, and several others. What I have learned from them is much different from what I thought I would learn.

The disabilities community isn't really faced with a lack of technology. The technology exists and a lot of things exist that can help them function from day to day. The problem that they really have is making the technology affordable.

To give you an example, when we went to the Association of Broadcasters convention we met with an engineer from National Public Radio, told him what we were doing, and he brought a system over that had he been working on that he connected to one of our radios. It took a test alert message that we sent, turned it from voice and turned it into text, and then turned it from text into Braille. The whole system worked with plug-and-play technology with no additional software needed. A great capability that we

didn't know existed that our applications-based approach helped us achieve that we found out just in a sidebar conversation.

The problem is that device, as an example, retails for over \$5,000. So we continue to work with the disabilities community and help to determine their needs. I was really surprised to find that their need is not in the technology but what the technology costs for the individual to be able to bring it into their home.

Ms. RICHARDSON. So if you could supply to this committee any cost of various things of technology that might be impeding folks within the disability community so that we might then look at other funding options that might assist as you roll out your program.

Mr. PENN. Yes, ma'am, I will.

Ms. RICHARDSON. Finally, the current state of local broadcasters of emergency management are private-owned systems, and they pay for EAS through their own budget. This is a question now for our other witness. How do you view that people are really going to be able to switch over to this new program? I mean, are you getting any pushback in terms of economic impacts?

Admiral BARNETT. We are certainly hearing it from some smaller broadcasters, for instance. But a good number have already made the switch. One of the things that I have been amazed, the broadcasters and the EAS participants really see this as a civic duty. It is a civic duty that costs money. These new units can cost from \$2- to \$4,000. FCC is not a grant agency and does not provide grants on this, but primarily I think they do see this as an advantage and something that the transition is already occurring. So while we recognize that it does cost money, I think that the transition will go smoothly.

Ms. RICHARDSON. Thank you. I yield back.

Mr. BILIRAKIS. Thank you very much. Appreciate it.

I thank the witnesses for their testimony and the Members, of course, for their questions.

With that, I will dismiss the panel. Thank you so much for being here. Appreciate it.

What we will do, we are expecting a lengthy series of votes. They called the votes already. I understand it is eight votes. The subcommittee will stand in recess until the conclusion of the votes. We will convene immediately following the last vote. Thank you very much.

[Recess.]

Mr. BILIRAKIS. The subcommittee will come to order.

I welcome our second panel. I understand other Members are on their way, but we will get started. Thank you for your patience. I appreciate it very much.

Our first witness is Mr. Christopher Guttman-McCabe. Mr. Guttman-McCabe is the Vice President, Regulatory Affairs, at CTIA—The Wireless Association. Since joining CTIA in 2001, he has worked on a wide range of issues, including spectrum and homeland security. In his current capacity as vice president, he oversees and coordinates the Association's regulatory policy advocacy.

Prior to joining CTIA, Mr. Guttman-McCabe worked as an attorney at a D.C.-based law firm and served as an associate in the

Communication Practice Group advising clients on wireless and common carrier issues. Mr. Guttman-McCabe received his B.A. in economics from Swathmore College and his J.D. magna cum laude from Catholic University with a certificate from the Institute for Communications Law Studies.

Our next witness is Ms. Suzanne Goucher. Welcome.

Ms. Goucher is the President and CEO of the Maine Association of Broadcasters. She is testifying on behalf of the National Alliance of State Broadcasting Associations. Ms. Goucher joined the Maine Association of Broadcasters in 1994. She also served on the Maine Right to Know Advisory Committee and is co-chair of the Maine Business Association Roundtable.

Prior to joining the Maine Broadcasters, she was the news director of WFAU-AM and WKGC-FM radio stations. Ms. Goucher has a Bachelor's Degree in business administration from Babson College in Wellesley, Massachusetts, and a certificate from the Publishing Laboratory at Sarah Lawrence College in Bronxville, New York.

Finally, we will receive testimony from Mr. Allen Kniphfer. Mr. Kniphfer is the Emergency Coordinator for Jefferson County in Alabama. Prior to joining the Jefferson County Emergency Management Agency, he has worked in fire prevention and security at Hayes International. Mr. Kniphfer played a key role in developing Birmingham's action plan when Hurricane Katrina struck. Mr. Kniphfer earned his bachelor's degree in management from the University of Alabama, Birmingham.

Welcome. We look forward to your testimony. Thank you very much.

Mr. Guttman-McCabe, you are now recognized for 5 minutes, please. Thank you very much.

**STATEMENT OF CHRISTOPHER GUTTMAN-MCCABE, VICE PRESIDENT, REGULATORY AFFAIRS, CTIA—THE WIRELESS ASSOCIATION**

Mr. GUTTMAN-McCABE. Thank you and good afternoon, Chairman Bilirakis. Thank you for affording CTIA the opportunity to participate in today's hearing.

My name is Christopher Guttman-McCabe, and I serve as the Association's Vice President for Regulatory Affairs. In that capacity, I have been involved in the wireless industry's efforts to implement the commercial mobile alert service called for by the WARN Act, and I am pleased to have the chance to share with you today what the wireless industry is doing to begin delivery of a state-of-the-art alerting system by early 2012.

The WARN Act became law as Title VI of the SAFE Ports Act. CTIA strongly supported enactment of that legislation, which we believe struck a reasonable balance by attempting to augment the existing Emergency Alert System without imposing technology mandates on the wireless industry. This approach was consistent with and built upon previous public-private partnerships that led to the successful creation of Wireless Priority Service and wireless AMBER Alert programs.

In the WARN Act, Congress developed an innovative procedure to address the goals of emergency alerting by securing the partici-

pation of wireless companies in the development and deployment of what has been envisioned as a 90-character, geo-targeted, succinct alert capability that would let consumers carrying a wireless device know that there was an imminent threat to health or safety.

From CTIA's perspective, it appears that Congress' vision is working as designed. In the first year after the WARN Act became law, the FCC established the Commercial Mobile Service Alert Advisory Committee, comprised of more than 40 individuals representing Tribal, local, State, and Federal government agencies, including FEMA and NCS, communications providers, vendors, broadcasters, consumers groups and other technical experts. I served on that committee on behalf of CTIA. Over 11 months, the Advisory Committee generated more than 600 documents, held hundreds of meetings, and spent thousands of man-hours to develop a thorough, workable, commercial mobile alert systems plan.

The FCC has issued orders largely adopting the recommendations of the committee. Among other things, the FCC's orders set forth the alerting service architecture proposed by the Advisory Committee and concluded that a Federal entity should aggregate, authenticate, and transmit alerts to the participating wireless providers. As Administrator Penn has detailed, FEMA will play this role.

The FTC also has required that participating providers must transmit three classes of alerts—Presidential, imminent threat, and AMBER Alerts—and that consumers be permitted to opt out of the latter two but not the first. Importantly, the FCC agreed with the Advisory Committee that wireless providers opting to deliver alerts should “not be bound to use any specific vendor, technology, or device to meet their obligations under the WARN Act.”

Following issuance of the FCC's first report and order, wireless carriers had to elect whether they would participate in the delivery of CMAS messages well in advance of finalizing the technical specifications for implementing alerts. I am pleased to tell the subcommittee that mobile providers representing nearly 97 percent of wireless subscribers elected to participate and provide wireless emergency alerts, demonstrating the success of this public-private partnership. Moreover, this figure is likely to increase as additional carriers elect to offer the alerts to their customers once the system is deployed.

Since providers made their initial election, the wireless industry has been working in close consultation with FEMA and the FCC to make the investments and system modifications necessary to enable wireless carriers to begin deployment by April, 2012; and through advanced efforts by the industry, the FCC, and FEMA, CMAS capabilities will be available in New York City by the end of this calendar year.

While we believe the wireless industry is hitting all the marks necessary to deliver on the promise of the WARN Act, there are two areas beyond our control that must be addressed if a seamless National deployment is to occur and be operational next year.

First, FEMA must stand up its CMAS gateway and be capable of receiving and distributing alerts to participating carriers. Through our cooperative coordination with FEMA, we believe that is on track to occur in a timely manner.

Second, substantial and on-going care must be taken to ensure that potential alert originators at the State, county, and local levels are properly trained about how and when alerts should be originated. This is crucial, because it is these alert originators who are responsible for disseminating critical information to the public in a timely manner. If consumers receive confusing or unnecessary alerts, then even the best alerting system will ultimately fail. We urge you to exercise your oversight authority to ensure that these objectives are received.

The addition of wireless alerting capabilities to the Emergency Alert System will greatly enhance the ability to promote public safety and health in times of crisis. The wireless industry is committed to begin delivering CMAS capabilities next year and to working with FEMA and the FCC to ensure that subsequent generations of wireless alerts support additional functionality. We look forward to an on-going dialogue with the subcommittee as this process moves forward.

Thank you for the opportunity to appear on today's panel, and I look forward to your questions.

[The statement of Mr. Guttman-McCabe follows:]

PREPARED STATEMENT OF CHRISTOPHER GUTTMAN-McCABE

JULY 8, 2011

Chairman Bilirakis, Ranking Member Richardson, and Members of the subcommittee, thank you for affording CTIA<sup>1</sup> the opportunity to participate in today's hearing. My name is Christopher Guttman-McCabe, and I serve as the Association's Vice President for Regulatory Affairs. In that capacity, I have been involved in the wireless industry's efforts to implement the Commercial Mobile Alert Service ("CMAS") called for by the WARN Act, and I am pleased to have the chance to share with you today what the wireless industry is doing to deliver a state-of-the-art alerting system by early 2012.

The Warning, Alert, and Response Network or WARN Act became law as Title VI of the SAFE Ports Act<sup>2</sup> in October 2006. CTIA supported enactment of the legislation, which we believe struck a reasonable balance by attempting to augment the existing emergency alerting system without imposing new cost or technology mandates on the wireless industry. This approach was consistent with, and built upon, previous public-private partnerships that led to the successful creation of Wireless Priority Service (a collaborative effort between the National Communications System and the wireless industry) and the AMBER Alert program (a joint effort involving the Department of Justice, the National Center for Missing and Exploited Children, and the wireless industry).

In the WARN Act, Congress developed an innovative procedure to address the problem of emergency alerting by securing the participation of interested non-governmental parties in the development and deployment of what has been envisioned as a 90-character, geo-targeted, succinct alert capability that would let consumers carrying a wireless device know that there is an imminent threat to health or safety. From CTIA's perspective, it appears that Congress's vision is working as designed.

In the first year after the WARN Act became law, the Federal Communications Commission ("FCC") established the Commercial Mobile Service Alert Advisory Committee ("CMSAAC" or "Advisory Committee") comprised of more than 40 individuals representing Tribal, local, State, and Federal government agencies (including FEMA and the NCS); communications providers; vendors; third-party service bureaus; broadcasters; consumers' groups; and other technical experts. I served on

<sup>1</sup>CTIA—The Wireless Association® is a nonprofit membership organization that has represented the wireless communications industry since 1984. Membership in the association includes wireless carriers and their suppliers, as well as providers and manufacturers of wireless data services and products. Additional information about CTIA may be found at <http://www.ctia.org/aboutCTIA/>.

<sup>2</sup>Pub. L. 109-347.

the Advisory Committee on behalf of CTIA. Over 11 months, the Advisory Committee generated more than 600 documents, held hundreds of meetings, and spent thousands of man-hours to develop a thorough, workable, commercial mobile alerts system plan.

Following delivery of the Advisory Committee's recommendations, the FCC has issued orders largely adopting the recommendations developed by the CMSAAC. Among other things, the FCC's orders set forth the alerting service architecture proposed by the Advisory Committee and concluded that a Federal entity should aggregate, authenticate, and transmit alerts to the participating wireless providers. FEMA will play this role. The FCC also has required that participating providers must transmit three classes of alerts—Presidential, Imminent Threat, and AMBER alerts—and that consumers be permitted to opt-out of the latter two but not the first. Importantly, the FCC agreed with CMSAAC that wireless carriers opting to deliver alerts should “not be bound to use any specific vendor, technology . . . [or] device” to meet their obligations under the WARN Act.<sup>3</sup>

Following issuance of the FCC's first report and order, wireless carriers had to elect whether they would participate in the delivery of CMAS messages, well in advance of finalizing the technical specifications for implementing the alerts. I am pleased to tell the subcommittee that mobile providers representing nearly 97 percent of wireless subscribers elected to provide wireless emergency alerts, demonstrating the success of this public-private partnership. Moreover, this figure is likely to increase as additional carriers elect to offer the alerts to their customers once the system is rolled out.

Since providers made their initial elections in September 2008, the wireless industry has been working, in close consultation with FEMA and the FCC, to make the investments and system modifications necessary to enable the CMAS system to be operational by April 2012. And, through advance efforts by the industry, the FCC, and FEMA, CMAS capabilities will be available in New York City by the end of this calendar year.

While we believe the wireless industry is hitting all the marks necessary to deliver on the promise of the WARN Act, there are two areas beyond our control that must be addressed if a seamless National deployment is to occur and be operational next year. First, FEMA must stand-up its CMAS gateway and be capable of receiving and distributing alerts to participating wireless carriers. Through our cooperative coordination with FEMA, we believe that is on track to occur in a timely manner. Second, substantial and on-going care must be taken to ensure that potential alert originators at the State, county, and local levels are properly trained about when and how alerts should be originated. This is crucial because it is these alert originators who are responsible for disseminating critical information to the public in a timely manner. If consumers receive confusing or irrelevant alerts, then even the best alerting system will ultimately fail. We urge you to exercise your oversight authority to ensure that these objectives are achieved.

The addition of wireless alerting capabilities to the Emergency Alert System will greatly enhance the ability to promote public safety and health in times of crisis. The wireless industry is committed to delivering CMAS capability next year, and to working with FEMA and the FCC to ensure that subsequent generations of CMAS support additional functionality and granularity. We look forward to an on-going dialogue with the subcommittee as that process moves forward.

Thank you for the opportunity to appear on today's panel. I look forward to your questions.

Mr. BILIRAKIS. Thank you very much.

Ms. Goucher, you are recognized for 5 minutes.

**STATEMENT OF SUZANNE D. GOUCHER, PRESIDENT AND CEO,  
MAINE ASSOCIATION OF BROADCASTERS, TESTIFYING ON  
BEHALF OF THE NATIONAL ALLIANCE OF STATE BROADCASTING ASSOCIATIONS**

Ms. GOUCHER. Thank you. I am very honored to be here with you today to share the often lifesaving and valuable public service that full power local radio and television stations provide during times of crisis.

<sup>3</sup>In the Matter of The Commercial Mobile Alert System, PS Docket No 07-287, adopted April 9, 2008, at paragraph 33.

When disaster strikes, Americans know they can turn to their local broadcasters for news and information. When the power goes out, which it does, when phone service and the internet go down, which they do, broadcasters move heaven and Earth to stay on the air delivering vital information to battery-operated receivers. Wildfires, floods, tornadoes, chemical spills, no matter what the event, everywhere across our Nation local communities depend on their broadcasters to deliver on-the-ground, street-by-street coverage before, during, and after disaster strikes.

In addition to our on-going comprehensive news coverage of emergencies, broadcasters are also the backbone of our Nation's Emergency Alert System. As you know, EAS is a network that seamlessly connects public safety authorities to over-the-air radio and television stations and cable systems with the push of a button. EAS is used during sudden, unpredictable, or unforeseen events to alert people to take immediate action to preserve life and property.

Perhaps the most visible headline-grabbing and heartwarming use of EAS is for AMBER Alerts. Since broadcasters created this program in 1996, AMBER Alerts have helped to bring 523 children home safely after being abducted.

Radio and television stations are very proud of our keystone role in EAS. For 60 years, from CONELRAD through EBS to EAS and now on to the next generation of alerting, broadcasters stand ready to be America's first informers. We consider the delivery of timely alerts and warnings to be the highest and best use of our spectrum, our facilities, and our resources.

The hot new buzz in the alerting community is social networking, and broadcasters are also leveraging their news dissemination capabilities across these pathways. When you receive an email, a text alert, or a Facebook message from your local radio or TV station, you know you are getting reliable information from an authoritative source.

The on-going effectiveness of the EAS network depends on several important factors.

First, as previously mentioned, a training program for State and local public safety officials on how to use EAS is desperately needed. The knowledge and expertise of local authorities as to how and when to deploy EAS is currently at what we consider an unacceptable level. We stand ready to deliver the message, but first we need someone to deliver it to us.

We applaud our friends at FEMA for undertaking the development of a training program which will certify State and local officials to send alerts through the Federal IPAWS gateway. While this is a good first step, it does not address those State and local officials that don't have the fundamental understanding of or willingness to use EAS. Some sort of incentive for them to take this training, such as possibly tying it to grant funding, would encourage a greater understanding of the beneficial uses of the system.

Second, as you know, FEMA is in the midst of implementing the next generation of public alerting, which will modernize the technology used to deliver EAS messages through the introduction of the Common Alerting Protocol, or CAP. This will require most broadcasters to replace their EAS equipment at their own expense.

This may cost a broadcasting station anywhere from \$1,200 to \$3,000, but broadcasters will do this willingly because we consider EAS to be at the core of our public service mission.

We must ensure that as our stations are upgrading to receive and retransmit a CAP-formatted message, local and State jurisdictions have the proper training and funding to be able to send us a CAP-formatted message.

In addition, States and localities must purchase their own EAS origination equipment, and the Federal Government must ensure that its primary entry point network is fully built out. All of this will ensure that the public will indeed benefit from the next generation of public alerting.

We respectfully urge the committee to consider the creation of a National working group on emergency alerting. Governance authority for our National warning system is divided among several Federal agencies, while the primary use of the system is at the State and local level. At present, there is no mechanism to bring the message originators and the message deliverers together except on an ad hoc basis. As a result, the system is not being used as effectively as it could be. Creation of a National working group would help to ensure that problems get addressed, lines of communication remain open, and ideas for continual improvement of the system are brought to the fore.

Finally, broadcasters need credentialing from State and local authorities to allow them to access their facilities during times of emergency. Congressional action in this area could greatly enhance our ability to maintain operations and deliver vital information to our audiences.

I am so grateful for this opportunity to share my views on emergency communications to the public, and I look forward to working with you toward our shared goal of keeping the American people safe through timely alerts and warnings.

Thank you so much.

[The statement of Ms. Goucher follows:]

PREPARED STATEMENT OF SUZANNE D. GOUCHER

JULY 8, 2011

Good morning, Chairman Bilirakis, Ranking Member Richardson, Members of the committee. My name is Suzanne Goucher. Since 1994 I have been the President and Chief Executive Officer of the Maine Association of Broadcasters. Thank you for the opportunity to speak with you today about the valuable, often life-saving services that full power local radio and television stations provide during natural disasters and other crises.

As discussed in detail below, local broadcasters are the most important source of vital emergency information for all Americans. In addition, local radio and television stations serve as the backbone of this Nation's Emergency Alert System (EAS). I am pleased to share with you today the views of Maine's broadcasters about how to improve our emergency communications system in the digital age.

To date, much of the discussion related to emergency communications has concerned improving interoperability among fire, police, and other public safety authorities and emergency operations; namely, the ability of these various authorities to communicate with one another during a disaster. While broadcasters support this laudable goal, we also believe the time is ripe to expand the conversation to include improved emergency notification to the public. To a significant degree, interoperability and public alerting go hand-in-hand, such that the success of each depends partly on the success of the other. For example, the lessons learned during 9/11 demonstrate that improved emergency communications among public safety officials certainly would have improved the critical, life-saving information that could have

been shared with the public. Below, I will focus my remarks on public alerting, and our efforts in Maine to improve emergency notification to the public.

I. BROADCASTING IS THE MOST IMPORTANT SOURCE FOR CRITICAL, LIFE-SAVING EMERGENCY INFORMATION FOR ALL AMERICANS

Broadcasters' commitment to public service is never more apparent than during times of crisis. During an emergency—particularly one that arises with little notice—no other industry can match the ability of full power broadcasting to deliver comprehensive, up-to-date warnings and information to affected citizens. Local television broadcasters reach 99% of the approximate 116 million households in the United States, while local radio reaches an audience of more than 243 million Americans on a weekly basis. The wide signal coverage of broadcasters ensures that anyone in a car, at home or even walking around with a mobile device can receive up-to-the-minute alerts when disaster strikes. As a ubiquitous medium, broadcasters understand and appreciate their unique role in disseminating emergency information. Radio and television broadcasters are first informers during an emergency, and Americans know to turn to their local broadcasters first for in-depth coverage.

Radio and television stations are also our Nation's most reliable network for distributing emergency information. Even if the electricity is out, causing the internet and cable television to go down, and phone service is lost because networks are clogged or cell towers or phone lines are down, free, over-the-air broadcasters can still be on the air. Our dedicated news and weather personnel use their familiarity with the people and geography of their local communities to provide the most useful, informative news to their audiences, whether that includes information on where to shelter-in-place, or which streets will serve as evacuation routes, or where local businesses may find fuel or generators.

Broadcasters deliver emergency information with passion. Let me give you some recent examples. In May of this year, in the town of Joplin, Missouri, local radio station KZRG began wall-to-wall coverage an hour and a half before the unprecedented tornado devastated this area.<sup>1</sup> Immediately after the tornado, cell phones, the internet and landline telephones went down. KZRG's one-story office building remained standing. Zimmer Radio, which owns KZRG and five other stations in Joplin, consolidated multiple broadcasts into a single feed of nonstop disaster coverage.<sup>2</sup> Music announcers and talk show hosts transformed into on-air first responders and informers.<sup>3</sup> Employees drove to the station immediately after the tornado in order to provide information on medical assistance, to help locating missing family members, and to direct residents as to where they could buy gas and groceries.<sup>4</sup> Seven of Zimmer Radio's staffers had lost their homes, but still they reported for duty to help their neighbors.<sup>5</sup> In nearby Springfield, Missouri, Clear Channel's five radio stations collected nearly 50,000 pounds of food and \$20,000 of cash for Joplin victims from listeners.<sup>6</sup>

A month after the Joplin tornado, flooding in Minot, North Dakota, has sent hundreds fleeing from their homes. Residents turned to local broadcast television stations for current information. One station, KXMC, has been replaying coverage of the floods over and over at the request of residents who want to see what is left of their neighborhoods. And as *The New York Times* said in an article last week, when the station "has not been showing viewers their submerged homes, it has been broadcasting news conferences, explaining the intricacies of dike construction and sharing viewer photos from around the town."<sup>7</sup>

Additionally, as a devastating storm developed near Springfield, Massachusetts, last month, all three local broadcast television stations went wall-to-wall with coverage. In an area not used to tornadoes, the stations captured dramatic images—including those from sky-cams of the tornado whipping up water from the Connecticut River—and broadcasting them to viewers. Following the storm, the stations continued to report on the damage and recovery and provided information on relief

<sup>1</sup>Moni Basu, "Radio Stations Chug Along 24/7 in tornado-devastated Joplin," *CNN* (May 24, 2011).

<sup>2</sup>Matt Pearce, "Joplin Radio Stations Become a Lifeline for Tornado-Stricken Residents," *L.A. Times* (May 25, 2011).

<sup>3</sup>*Id.*

<sup>4</sup>Doug Lung, "Broadcasters Inform Citizens During Weather Emergencies," *TV Technology* (May 26, 2011).

<sup>5</sup>"Radio's Multi-Platform Reach Informs, Alerts Joplin, MO Tornado Victims," *All Access* (May 25, 2011).

<sup>6</sup>"Radio Beams Regional Tornado Relief Message," *Inside Radio* (May 27, 2011).

<sup>7</sup>Brian Stelter, "This Just In: How Your House Is Faring," *The New York Times* (June 27, 2011).

and food supplies.<sup>8</sup> And the four local radio stations cut all music and gave continuous news updates, including live phone calls from the Governor and the head of the Red Cross. The news director and an announcer also took calls from dozens of listeners looking for information on what to do and where to go.<sup>9</sup>

Local stations also offer hyper local weather alerts and information on multicast channels. TV stations are in the process of rolling out innovative mobile DTV services, which will enable viewers to receive live, local broadcast television programming—including local news, weather, sports, emergency information, and entertainment programming—on an “on the go” basis on mobile-DTV capable devices such as smart phones, laptop computers, and tablets. Over 70 stations in Washington, DC, and elsewhere around the country have commenced offering mobile DTV service, and hundreds of other stations have announced plans to continue the Nationwide roll-out of mobile DTV in the near-term. Mobile DTV is a reliable and spectrally efficient (one-to-an-unlimited-number) means of disseminating emergency information to viewers. Following the devastating earthquake and tsunami in Japan, residents reported that the country’s mobile television service was a lifeline source of information, particularly in the wake of cellular network and power outages.<sup>10</sup>

In times of local crisis such as these, broadcasters provide astounding service to their communities.

Beyond anecdotal evidence, statistics paint a vivid picture of the power that the broadcast medium has to save lives. Following tornadoes that struck in Alabama in late April, Raycom Media conducted a survey of residents who were impacted. According to the survey results, a vast majority—71% of adults—said they were warned about the storm by watching television.<sup>11</sup> An additional 10% of those surveyed learned of the tornadoes via radio. A mere 6% of respondents learned of the tornadoes through internet, smartphones, or Twitter/Facebook.<sup>12</sup> This occurred despite the fact that 75% of those interviewed were at home during the tornadoes, presumably with access to the internet and other sources of information.<sup>13</sup> This reliance on radio and television for dependable, up-to-the-minute information was true even for young citizens ages 18 to 24. We might expect this demographic to rely more on the internet and social media for information, but fully 77% of them reported that they tracked the storms via radio or TV.<sup>14</sup>

And there are many more examples. Broadcast stations continue to provide emergency information and other services even though the costs—in overtime for personnel, in meals and hotels, in equipment, and of course in advertising lost due to providing wall-to-wall news and information coverage—are substantial. For example, one station reports that a single season’s hurricane coverage cost \$160,000 before accounting for lost advertising revenue.<sup>15</sup> Another station reports that it lost

<sup>8</sup> Scott Fybush, “Radio, TV React to Mass. Tornadoes,” *NorthEast Radio Watch* (June 6, 2011).

<sup>9</sup> “CC Cluster in MA. Superserves During Last Week’s Tornado,” *Radio Ink* (June 7, 2011).

<sup>10</sup> See, e.g., Michael Plugh, “What I Left Behind In Japan,” *Salon.com* (March 22, 2011), available at [http://www.salon.com/life/feature/2011/03/22/japan\\_i\\_left\\_behind/index.html](http://www.salon.com/life/feature/2011/03/22/japan_i_left_behind/index.html). See also Live Blog: Japan Earthquake, *The Wall Street Journal* (March 11, 2011, 8:06 a.m. posting of Chester Dawson) (“Unable to use cell phones, many used their smartphones to tune into television broadcasts and find out what had happened. ‘It’s very convenient being able to watch live TV when the phones are down,’ said Minoru Naito, an employee of Royal Bank of Scotland in Tokyo. ‘Otherwise, we’d have no idea what is going on.’”).

<sup>11</sup> Alabama Tornado Survey, Billy McDowell, VP of Media Research, RAYCOM Media (May 2011).

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> 2010 was also a critical year for local broadcasters and the communities they served. For example, in early May of 2010, as record rainfall hammered the State of Tennessee, every local news station in Nashville preempted regular programming in favor of continuous, commercial-free weather event content for almost an entire weekend. Local radio stations provided constant weather alerts. During the flooding, Dennis Banka of WUCZ in Carthage, Tennessee, managed to single-handedly keep his station on the air for almost 48 hours straight for the benefit of local listeners in need. Mr. Banka and his station had vital contacts with emergency personnel and other authorities and were able to report critical information about the known instabilities of two local dams in a timely manner. Here in Washington, during the blizzards that hit the East Coast in 2010, broadcasters provided up-to-the-minute information that was critical to affected residents. For instance, Washington, DC station WRC-TV’s wall-to-wall coverage and “potentially life-saving newscasts” were lauded by Maryland Senator Barbara Mikulski. John Eggerton, “As the Snowy World Turns,” *Broadcasting & Cable* (Feb. 10, 2010). As Federal Communications Chairman (FCC) Chairman Genachowski observed, “Not only were local broadcasters a lifeline for the community, WRC-TV used its robust website and Twitter feed to help residents who had lost power get up-to-the-minute information through their computers and phones.” Prepared Remarks of Chairman Julius Genachowski, NAB Show 2010, Las Vegas, Nevada, at 2 (April 13, 2010).

<sup>15</sup> *The Economic Realities of Local Television News—2010: A Report for the National Association of Broadcasters* (April 2010) at 24, attached to Comments of the National Association of

50 percent of its revenue for an entire month following the events of September 11, 2001, because its intensive news programming preempted so much of its normal programming.<sup>16</sup> Emergency journalism clearly requires the commitment of substantial resources from the Nation's local broadcasters.

## II. LOCAL BROADCAST STATIONS REMAIN THE BACKBONE OF THE NATION'S EMERGENCY ALERT SYSTEM

In addition to the on-going, comprehensive coverage that broadcasters provide during emergencies, we are also the backbone of the Emergency Alert System (EAS). EAS is a largely wireless network that connects over-the-air radio, television and cable television systems. The in-place infrastructure of EAS allows the prompt dissemination of alerts to the widest possible audience, or to target alerts to specific areas, as appropriate. EAS is intended for use during sudden, unpredictable, or unforeseen events that pose an immediate threat to public health or safety, the nature of which precludes any advance notification or warning.

Under EAS, local broadcasters put their facilities and their airwaves at the disposal of Government authorities to transmit life-saving emergency warnings. EAS can be accessed or triggered by the President, Governors, and local authorities under certain conditions. Most alerts are originated by the local and regional offices of the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS). Broadcasters typically work in partnership with State, county, and local emergency managers and public safety officials on how best to deploy EAS.

The content of EAS messages can vary depending on the nature of the emergency, but may include information on evacuation plans and routes, shelter-in-place instructions, storm paths, and America's Missing: Broadcasting Emergency Response Alerts, or Child Abduction AMBER Alerts, which help expand the eyes and ears of local law enforcement when a child is abducted. Nation-wide, since the inception of AMBER in 1996, AMBER alerts have helped safely recover more than 523 abducted children.<sup>17</sup> In fact, the Amber Plan was originally created by broadcasters with the assistance of law enforcement agencies in the Dallas/Fort Worth area.

Clearly, EAS participation is an important component of broadcasters' public service. Although participation in EAS on a local level is technically voluntary, virtually all radio and television stations participate, and do so proudly. All EAS equipment is purchased by broadcasters at their own expense. All stations must test their EAS systems on both a weekly and monthly basis. We have all seen or heard the familiar announcement: "The following is a test of the Emergency Alert System. This is only a test."

In January 2010, and again in January 2011, the Federal Communications Commission (FCC) and the Federal Emergency Management Agency (FEMA) jointly conducted State-wide tests of the EAS in Alaska.<sup>18</sup> Radio and television stations in Alaska coordinated closely with Federal and local authorities in Alaska to help ensure the success of these tests. Their efforts included a comprehensive public awareness campaign that provided Alaskans with repeated advance notice of the State-wide EAS tests, and helped to prevent any undue surprise or confusion.

Building upon the lessons learned in the Alaska tests, the FCC and FEMA announced that they would conduct a Nation-wide test of the EAS system on November 9, 2011.<sup>19</sup> The broadcast industry supports this National EAS testing. We are committed to working with our Federal and local partners to ensure that the National test is useful and informative. Broadcasters are also preparing for the National exercise by reviewing their internal EAS equipment and processes, and if appropriate, upgrading software or hardware in advance of the National test.

Although broadcasters provide EAS and in-depth emergency information as part of their service to the public, and do so enthusiastically, participating in a reliable, functional EAS is not without certain challenges. For example, in June 2006, President Bush issued Executive Order 13407, entitled *Public Alert and Warning System*, which states:

Broadcasters, Examination of the Future of Media and Information Needs of Communities in a Digital Age, GN Docket No. 10-25 (filed May 7, 2010).

<sup>16</sup>Id. at 24.

<sup>17</sup>See [http://www.missingkids.com/missingkids/servelet/PageServlet?LanguageCountry=en\\_US&PageId=2810#2](http://www.missingkids.com/missingkids/servelet/PageServlet?LanguageCountry=en_US&PageId=2810#2) (last visited June 28, 2011).

<sup>18</sup>See, e.g., *Alaska Plans EAS Test Using EAN Code*, Radio Magazine (Dec. 31.2009), available at [http://radiomagonline.com/studio\\_audio/EAS/alaska\\_ean\\_test\\_1231](http://radiomagonline.com/studio_audio/EAS/alaska_ean_test_1231).

<sup>19</sup>See Public Notice, Public Safety and Homeland Security Bureau Announces That First Ever Nationwide Diagnostic Test of the Emergency Alert System Will Occur On November 9, 2011 at 2 PM EST, EB Docket No. 04-296, rel. June 9, 2011.

“It is the policy of the United States to have an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people . . . establish or adopt, as appropriate, common alerting and warning protocols, standards, terminology, and operating procedures for the public alert and warning system to enable interoperability and the secure delivery of coordinated messages to the American people through as many communication pathways as practicable . . . administer the Emergency Alert System (EAS) as a critical component . . . ensure that under all conditions the President of the United States can alert and warn the American people.”

In response, FEMA has served as the lead Federal agency for developing this program, called the Integrated Public Alert and Warning System (IPAWS) Program. Among other things, IPAWS is designed to improve public safety through the rapid dissemination of emergency messages to as many people as possible over as many communications devices as possible. To do this, FEMA’s IPAWS program is planning to expand the traditional EAS to include additional technologies, to capitalize on recent shifts in how many Americans consume information. IPAWS will enable Federal, State, territorial, Tribal, and local emergency communication officials to access multiple broadcast and other communications pathways for the purpose of creating and activating alert and warning messages related to any hazard impacting public safety and well-being. Broadcasters are working closely with FEMA to ensure that EAS via free, over-the-air television and radio remains the essential backbone of the next generation of EAS and public alerting.

Broadcasters are also leveraging social media and other message pathways to broaden dissemination of alert messages. When you receive an emergency alert via email, text message, or Facebook from your local radio or TV station, you know you’re receiving reliable information from an authoritative source.

In Maine, and Nation-wide, radio and television stations do a commendable job assisting public safety officials in disseminating emergency information, whether through our on-air news programming, or through EAS. Regarding the latter, we fully intend to continue our efforts to devote personnel and attention to making sure that our internal EAS systems work properly. However, the on-going reliability of the EAS network will depend on the success of several important developments.

First, the success of EAS will largely turn on the expertise and ability of local authorities to fully deploy EAS and act as a “civil authority” with full access to the system. In the past, some of the isolated instances where EAS could have been used more judiciously directly resulted from a lack of awareness or expertise on the part of local officials concerning EAS. In this day and age, it is unacceptable that some local emergency managers remain unaware of the benefits of EAS, or how and when to trigger an EAS alert. Clearly, many State and local authorities need additional training on the proper use of EAS and the proper crafting of alert messages. At present, the only training they receive is the technical manual that comes with an EAS encoder-decoder. FEMA is taking steps to address this vacuum by creating a training and certification program for users of the system. We applaud this initiative.<sup>20</sup>

Second, as mentioned above, FEMA is in the midst of implementing a next generation of EAS. This new system will modernize the technology used to deliver EAS messages from public safety officials to EAS Participants. Under the Commission’s existing rules, broadcasters and other EAS Participants are required to process an EAS message that is formatted in this new “language,” known as the Common Alert Protocol (CAP).<sup>21</sup>

The FCC is in the process of reviewing its EAS Rules, including whether to extend the current September 30, 2011 deadline for all EAS Participants to install equipment capable of receiving a CAP-formatted message.<sup>22</sup> This will be a substantial burden for a number of broadcasters, as it will require the replacement of EAS equipment at most radio and television stations. The costs of such equipment are

<sup>20</sup>To this end, it is critical that IPAWS continues to receive full funding through the authorization and budgetary process to achieve and maintain its public alerting missions.

<sup>21</sup>CAP is a messaging structure that allows emergency managers to provide in a digital format (protocol) detailed descriptions of an emergency event. It is an open, interoperable standard. See *Second Report and Order*, 22 FCC Rcd. 13285 ¶¶ 22–25 (2007). CAP is also backwards-compatible to work with EAS and the NWS’ SAME (Specific Area Message Encoding) protocol. Id. at ¶ 5.

<sup>22</sup>See, In the Matter of Review of the Emergency Alert System; Independent Spanish Broadcasters Association, the Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council, Petition for Immediate Relief, *Notice of Proposed Rulemaking*, EB Docket No. 04–296, rel. May 26, 2011.

not insignificant, particularly to small radio and television stations,<sup>23</sup> still struggling from the recent severe recession. It is critical that, as Participants are required to upgrade their equipment to receive a CAP-formatted message, local and State jurisdictions have proper funding and training to be able to transmit a CAP-formatted message.<sup>24</sup> This will ensure that the public will benefit from the next-generation of public alerting.

Third, authority for EAS is spread across multiple Federal agencies with differing priorities, while the primary use of the system is by State and local officials. At present, there is no mechanism for the users of the system and the distributors of the messages to come together to discuss issues and work out problems. I respectfully request the committee to consider adopting language creating a National EAS Working Group, and directing it to meet on a regular basis and report back to this and other committees of jurisdiction, to ensure that the lines of communication remain open and that ideas for continuous improvement of the system have a forum in which they can be heard.

One other critical improvement can be achieved without expenditure of any funds. Specifically, broadcasters need credentialing from State and local authorities to allow them to access their facilities, such as studios and transmitter sites, during times of emergency. This will enable radio and television stations to repair or maintain their equipment and fully leverage their resources, local knowledge, and training to keep the public informed during emergencies. While certain States accommodate broadcasters who need to access their facilities, such cooperation is not universal. Congressional action in this area could greatly enhance our ability to maintain operations and deliver vital information to our audiences.

Finally, in Maine, we are undertaking an effort to substantially improve and modernize our emergency notification plan. Under this "perfect" notification plan, a managed "system-of-systems" would be created through which multiple systems would work together to deliver more alerts and warnings more securely, faster, and to more people. This State-wide program would be designed to take advantage of existing investments and future initiatives, including a modernized EAS system, and would be poised for connection to any National system that is developed. At the same time, however, the plan would maintain primary responsibility for alerting at the local level and would include the ability to target alerts geographically.

The goal of this Maine State-wide notification program would be to deliver alerts and warnings throughout the State with sufficient capability and speed, in advance of pending disasters, to help prevent loss of life and property. The program would be consistent with State and Federal initiatives and standards. This program will also require funding. These funds would be used to create and manage the program, facilitate collaboration, develop operational and governance guidelines and training, purchase technology, and conduct public outreach. Maine has recently undergone its third round of budget-cutting in the past 6 months. The State cupboard is bare, and a large question looms: How will the State pay for the system it needs to take advantage of these new technologies?

A properly working EAS is a fundamental and essential component of our Nation's Homeland Security. It is crucially needed in our State of Maine to respond to the myriad of potential man-made and weather-related threats facing our region. One of the 9/11 terrorists began his fateful trip at the airport in Portland, Maine, on his way to Boston. We share a long, rural border with Canada that is difficult to secure. We have a large oil depot in South Portland that provides our winter heating supply. Bath Iron Works is a primary defense contractor to the U.S. Navy. The Seabrook nuclear power plant sits just 15 miles below our southwestern border. And we are experiencing seemingly more severe weather events in recent years, including 25 tornado warnings between 2009 and last week, which have resulted in 15 confirmed tornado touch-downs. Even in a small, rural State like Maine, a hardened, fully capable alerting system is necessary to ensure the safety of our citizens and our infrastructure.

Maine is grateful to Chairman Bilirakis and this committee for hosting this hearing and for your interest in improving our communications to prevent the loss of life and property in the future. As we continue to discuss damage estimates, disaster-related costs, and rebuilding our communities after the recent severe floods, tornadoes, and wildfires around the United States, we must take care not to overlook this opportunity to improve public warning and emergency communications in advance of the next event, instead of during its aftermath. We should be planning for the next emergency, not preparing for the last one. Thank you.

<sup>23</sup>The cost for new CAP-compliant EAS equipment ranges from \$1,200 to over \$3,000 per facility.

<sup>24</sup>[sic]

Mr. BILIRAKIS. Thank you very much for your testimony. I appreciate it.

Mr. Kniphfer, you are recognized for 5 minutes, sir.

**STATEMENT OF ALLEN W. KNIPHFER, EMERGENCY  
COORDINATOR, JEFFERSON COUNTY, ALABAMA**

Mr. KNIPHFER. Mr. Chairman and Members of the subcommittee, good morning. On behalf of the 665,000 residents of Jefferson County, Alabama, thank you for this opportunity to testify today.

On April 27, 2011, our county, which is the most populous in Alabama, was struck by four tornadoes in a single day, destroying or heavily damaging nearly 5,000 homes and businesses and displacing thousands of residents. The cost of cleaning up the rubble alone will approach \$260 million, while total property damage is estimated at \$1 billion.

Our response to and recovery from this natural disaster has reinforced a lesson we already had learned from hard experience, that every emergency occurs at the local level. With this in mind, local officials must be prepared to respond quickly and effectively—especially in the initial phase of a disaster—before our State and Federal Governments provide supplemental assistance.

My office, the Jefferson County Emergency Management Agency, is responsible for ensuring that the citizens of our county are prepared to respond to, and quickly recover from, any emergency or disaster that confronts us. As a result of our preparations, we were ready to fulfill that mission when the April tornadoes hit.

The single most important aspect of any disaster recovery effort is the ability to communicate. Communication is not simply the ability to speak to others but also the ability to transfer data. By way of example, our neighbors in Tuscaloosa County had less than an hour before the same storm struck Jefferson County. All of the assets they owned for use in a disaster were destroyed. Cell phone towers were damaged, internet access was minimal, many roads were impassable, and communication was virtually non-existent. Tuscaloosa County's emergency responders found it difficult to communicate with each other and with the outside world.

We were more fortunate in Jefferson County. Our emergency operations center survived the storm intact. What we were not prepared for was the enormous amount of in-bound phone traffic that overwhelmed our telephone system and made out-bound calling difficult. But we had a unique asset, a mobile communications unit that gave our emergency management team immediate, full-time phone and internet service.

This mobile communications unit, developed and built, Mr. Chairman, by a small business called F4W, Inc., in your home State of Florida, was a lifesaver for the people of Jefferson County. It was up and running even before the tornadoes struck, providing fixed and mobile communications to our emergency responders throughout the entire recovery process.

Because we had the ability to communicate, we could execute our emergency operations plan immediately. Our first responders knew quickly what to do and where to go, and we were able to help our citizens to begin recovering from this terrible disaster quickly and efficiently.

In addition, we were able to increase our communications capabilities throughout the recovery process, to meet needs we had not previously anticipated. Because county residents had no access to cell phones or the internet for a considerable period of time, we established telecommunications registration centers throughout the county, giving residents the means and opportunity to make phone calls and report damage to the Federal Emergency Management Agency via the internet. To fulfill this need, we rented additional mobile communications units from F4W.

In our emergency operation center, we further expanded our abilities by installing, on the fly, a private branch exchange system that mirrored our fixed-wire telephone system, enabling our responders to speak to each other by dialing a four-digit extension code, no matter what unit supported their communications. They were also able to text-message, electronically chat, and email each other seamlessly. Today, this provides us with a redundant system in the event our primary system is off line for any reason. The back-up system kicks on, and we never miss a step. Once again, this was provided for us by F4W.

When we learned that Tuscaloosa County's emergency response team assets were destroyed along with their primary headquarters, we dispatched our mobile emergency management trailers there. With that support, their emergency management infrastructure was back on-line less than 36 hours after the storm hit. Again, the communication equipment we used to support Tuscaloosa were products we have purchased from F4W over the past several years.

Now that the emergency phase of the April 27 disaster has mostly passed, I am focused on continuing to enhance our ability to respond with optimal efficiency and speed, regardless of the situation. My organization embraces the standards established and administered by various Federal agencies, including SAFECOM, the National Emergency Communication Plan, the National Emergency Response Interoperability Framework, and the Resilient Communication System of Systems published under the DHS SECURE Program. We also support CAP, HIPAA, IPAWS, OASIS, and Sarbanes-Oxley.

As emergency responders, we embrace the new standards and technology developed from those protocols. But, regardless of these standards and new discoveries, I must, above all, perform the requirements of my position to serve the citizens of my county to the best of my ability. Our organization realizes that we cannot wait for decisions to be made in Washington when our people need protection of their lives and property in the immediate term.

The Emergency Broadcast Network, which has existed for decades, did save lives during our recent emergency. But I believe, in my county, that I require a more effective approach to alerting the general public, one that meets our requirements and one that we can afford. In that effort, budget cuts to Federal programs make no difference in our organization, because whatever happens we will find a way to acquire and implement the tools necessary to support our citizens and, when we can, our neighbors as well.

Another way of putting it is that, although budgets have shrunk, our responsibilities to our citizens have not. Disasters are going to continue to occur, regardless of how much or how little resources

are available to us. To the extent that adequate funding continues to be a challenge, we will continue to substitute innovation, longer work hours, and complete dedication to our life-saving jobs.

Having said that, I would add that, yes, cutting Federal grant funds to supplement the infrastructure of alert warning systems could impact many communities. But in considering that, we should also take the opportunity to ask how effectively those funds have been spent to date. In my view, it might make more sense, practically and financially, to target grant funds for regional projects that take into consideration the specific needs of affected communities, as opposed to using grant funding to leverage for imposing uniform standards that leave some critical needs on the local level unmet. This approach would allow committees such as this one to see first-hand how taxpayer dollars are spent and the results of successful implementations, as well as learning from failures.

Here is how we are investing in our future in Jefferson County: Our current system requires us to use specifically designated and configured phones to communicate with each other. We are now working with F4W on software that will allow any "smart" cell phone to make encrypted calls and send and receive text messages and data over the internet if the phone has the right application installed. We can do this with or without cellular infrastructure.

We are also working on the issue of persistent identity. Within a few months, F4W expects to deliver a software package that will allow people, not equipment, to determine access to their emergency communications system. In other words, an authorized emergency responder will be able to go to any terminal or use any smartphone device and, using their preset password or a device that identifies them, log in to any network and conduct safe, fully-encrypted voice communications and data sharing with others in their group.

In addition to improving our internal communications capabilities and processes, we are working to expand and enhance our ability to communicate with volunteer and nongovernmental organizations, particularly as it relates to credentialing of representatives of such organizations who have critical interaction with our emergency response and recovery efforts. At present, these organizations issue their own ID cards, and our agency has no way of verifying those credentials. There is a clear need to link their systems with ours, for us to have some input into how their credentials are created and the information that is provided on those credentials.

Prior to the April 27 storms, I had been working on development of such a system, utilizing a universal information format that would allow us, along with appropriate State and Federal agencies, to read and obtain information from cards issued by NGOs. Moreover, this system can be implemented at relatively low cost, utilizing existing bar code technology.

By way of further explanation, let me provide a little background. After September 11, 2001, the Bush administration issued Homeland Security Presidential Directive 12, the purpose of which was to develop a common identification standard while still ensur-

ing that Government facilities and sensitive information remain optimally protected.

Mr. BILIRAKIS. Excuse me, can you wrap up in the next 30 seconds, please? The testimony is submitted for the record as well.

Mr. KNIPHFER. Okay.

The cost of issuing the ID cards would have been \$140 per card. We got it at no money for us. We worked in those cards that way.

As previously stated, we incorporated FEMA's integrated processing efforts in our system, and each of these potential advances will help the Jefferson County Emergency Management Agency meet our responsibilities.

As we go forward in working with these systems, as we go forth on activities, we support everybody's work. We look forward to working with everybody and thank you again for the opportunity to testify and look forward to your questions, sir.

[The statement of Mr. Kniphfer follows:]

PREPARED STATEMENT OF ALLEN W. KNIPHFER

JULY 8, 2011

Mr. Chairman and Members of the subcommittee: Good morning. On behalf of the 665,000 residents of Jefferson County, Alabama, thank you for this opportunity to testify today.

On April 27, 2011, our county, which is the most populous in Alabama, was struck by four tornadoes in a single day, destroying or heavily damaging nearly 5,000 homes and businesses and displacing thousands of residents. The cost of cleaning up the rubble alone will approach \$260 million, while total property damage is estimated at \$1 billion.

Our response to and recovery from this natural disaster has reinforced a lesson we already had learned from hard experience: That every emergency occurs at the local level. With this in mind, local officials must be prepared to respond quickly and effectively—especially in the initial phase of a disaster—before our State and Federal Governments provide supplemental assistance.

My office, the Jefferson County Emergency Management Agency, is responsible for ensuring that the citizens of our county are prepared to respond to, and quickly recover from, any emergency or disaster that confronts us. As a result of our preparations, we were ready to fulfill that mission when the April tornadoes hit.

The single most important aspect of any disaster recovery effort is the ability to communicate. Communication is not simply the ability to speak to others, but also the ability to transfer data. By way of example, our neighbors in Tuscaloosa County had their Emergency Operations Center completely destroyed by an EF5 tornado on April 27, less than an hour before the same storm struck Jefferson County. All of the assets they owned for use in a disaster were destroyed. Cell phone towers were damaged, internet access was minimal, many roads were impassable, and communication was virtually non-existent. Tuscaloosa County's emergency responders found it difficult to communicate with each other, and with the outside world.

We were more fortunate in Jefferson County. Our Emergency Operations Center survived the storm intact. What we were not prepared for was the enormous amount of inbound phone traffic that overwhelmed our telephone system and made outbound calling difficult. But we had a unique asset: A Mobile Communications Unit that gave our emergency management team immediate, full-time phone and internet service.

This Mobile Communications Unit—developed and built, Mr. Chairman, by a small business called F4W, Inc. in your home State of Florida—was a lifesaver for the people of Jefferson County. It was up and running even before the tornadoes struck, providing fixed and mobile communications to our emergency responders throughout the entire recovery process.

Because we had the ability to communicate, we could execute our emergency operations plan immediately. Our first responders knew quickly what to do and where to go, and we were able to help our citizens to begin recovering from this terrible disaster quickly and efficiently.

In addition, we were able to increase our communication capabilities throughout the recovery process, to meet needs we had not previously anticipated. Because

county residents had no access to cell phones or the internet for a considerable period of time, we established Telecommunication Registration Centers throughout the county, giving residents the means and opportunity to make phone calls and report damage to the Federal Emergency Management Agency via the internet. To fulfill this need, we rented additional Mobile Communications Units from F4W.

In our Emergency Operation Center, we further expanded our abilities by installing, “on-the-fly,” a private branch exchange system that mirrored our fixed wire telephone system—enabling our responders to speak to each other by dialing a four-digit extension code, no matter what unit supported their communications. They were also able to text-message, electronically chat, and e-mail each other seamlessly. Today, this provides us with a redundant system in the event our primary system is off-line for any reason. The back-up system kicks on and we never miss a step. Once again, this was provided for us by F4W.

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Now that the emergency phase of the April 27 disaster has mostly passed, I am focused on continuing to enhance our ability to respond with optimal efficiency and speed, regardless of the situation. My organization embraces the standards established and administered by various Federal Agencies, including SAFECOM, the National Emergency Communication Plan, the National Emergency Response Interoperability Framework and the Resilient Communication System of Systems published under the DHS SECURE Program. We also support CAP, HIPAA, IPAWS, OASIS, and Sarbanes-Oxley.

As emergency responders, we embrace the new standards and technology developed from those protocols. But regardless of these standards and new discoveries, I must, above all, perform the requirements of my position to serve the citizens of my county to the best of my ability. Our organization realizes that we cannot wait for decisions to be made in Washington when our people need protection of their lives and property in the immediate term.

The Emergency Broadcast Network, which has existed for decades, did save lives during our recent emergency. But I believe, in my county, that I require a more effective approach to alerting the general public, one that meets OUR requirements—and one that we can afford. In that effort, budget cuts to Federal programs make no difference in our organization, because, whatever happens, we will find a way to acquire and implement the tools necessary to support our citizens—and, when we can, our neighbors as well.

Another way of putting it is that although budgets have shrunk, our responsibilities to our citizens have not. Disasters are going to continue to occur regardless of how much or how little resources are available to us. To the extent that adequate funding continues to be a challenge, we will continue to substitute innovation, longer work hours and complete dedication to our life-saving jobs.

Having said that, I would add that yes, cutting Federal grant funds to supplement the infrastructure of alert warning systems could impact many communities. But in considering that, we should also take the opportunity to ask how effectively those funds have been spent to date. In my view, it might make more sense, practically and financially, to target grant funds for regional projects that take into consideration the specific needs of affected communities, as opposed to using grant funding as leverage for imposing uniform standards that leave some critical needs on the local level unmet. This approach would allow committees such as this one to see first-hand how taxpayer dollars are spent and the results of successful implementations—as well as learning from failures.

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We also are working on the issue of persistent identity. Within a few months, F4W expects to deliver a software package that will allow people, not equipment, to determine access to their emergency communications system. In other words, an authorized emergency responder will be able to go to any terminal or use any smartphone device and—using their preset password or a device that identifies them—log in to any network and conduct safe, fully-encrypted, voice communications, and data-sharing with others in their group.

In addition to improving our internal communications capabilities and processes, we are working to expand and enhance our ability to communicate with volunteer and non-governmental organizations—particularly as it relates to credentialing of representatives of such organizations who have critical interaction with our emergency response and recovery efforts. At present, these organizations issue their own ID cards, and our agency has no way of verifying those credentials. There is a clear need to link their systems with ours—for us to have some input into how their credentials are created and the information that is provided on those credentials.

Prior to the April 27 storms, I had been working on development of such a system, utilizing a universal information format that would allow us, along with appropriate State and Federal agencies, to read and obtain information from cards issued by NGOs. Moreover, this system can be implemented at relatively low cost, utilizing existing bar-code technology.

By way of further explanation, let me provide a little background: After September 11, 2001, the Bush administration issued Homeland Security Presidential Directive 12 (HSPD-12), the purpose of which was to develop a common identification standard while still ensuring that Government facilities and sensitive information remain optimally protected. The directive required agencies to issue “smart” cards to Federal employees and contractors—a goal that was good in concept, but which proved difficult to implement beyond the Federal level, largely due to the cost involved.

The cost of issuing the ID cards mandated by HSPD-12 proved to be in excess of \$140 per card. The Federal Government was footing the bill for these, so few people complained, other than some contractors who had to buy their own cards in order to do their jobs. In response, in May 2009, the Federal Chief Information Officers Council issued a supplement to HSPD-12, titled “Personal Identity Verification Interoperability for Non-Federal Issuers.” This put the States into the Federally-compatible ID card business, with responsibility for providing first-responder authentication credentials (FRACs) that Federal agencies can read and honor.

But still, the cost issue remains a substantial hurdle to implementation. To have true interoperability as specified in the 2009 directive, the non-Federal cards were still required to incorporate a microchip with a format and security features approved by the Federal Government. This chip was only approved for use in February 2011, with the cost per card remaining roughly the same—in other words, prohibitively expensive for State governments, like ours in Alabama, operating under tight budgetary constraints. As coordinator of a county EMA, I have to struggle to find enough money for necessities, let alone funding the additional expense of Federally-interoperable ID cards.

So what did we do?

Working with ID card experts, I and others who work on the front lines of public safety and emergency management began developing an affordable FRAC system for State use. This system not only meets, but exceeds the standards set forth in the May 2009 directive. The card I wear each day contains my biometric data, my training certifications, and my medical information. It works with or without a network in place. It does not have a microchip—the single most expensive element in the Federally-issued cards—yet it is FIPS-201 compliant in every important way. It can even communicate with Federal systems for identity verification with a network system that links all emergency management agencies in every State of the Union. We call it NERVS, which stands for National Emergency Responder Verification System.

Perhaps most notably, NERVS does not cost so much that it is unaffordable to cash-strapped State and county governments. And it was developed without a dime of Federal money. This shows what can be accomplished through innovation and dedication to task. It has already been deployed in the State of Florida, and we are using it now in Alabama. It is worth noting that the use of this system in Florida began under Craig Fugate, before he became the head of the Federal Emergency Management Agency. In my opinion, his openness to and embrace of such innovative approaches to critical issues is a big reason he was appointed to his current position.

In working to develop and implement such approaches, F4W, others, and we are mindful of the standards established in Federal Information Processing Standard Publication 201 on Personal Identity Verification Standards for Federal employees and contractors. All of the work we do together will meet those standards.

As stated previously we incorporate FEMA’s Integrated Public Alert Warning System, or IPAWS, efforts. The mission of IPAWS is to provide integrated services and capabilities to local, State, and Federal authorities that enable them to alert and warn their respective communities via multiple communications methods. To help extend this technology to achieve the ultimate end solution meeting our needs not

defined in the standard published, F4W's engineers and ID software engineers are working on creating a "System of Systems," whereby Voice Over Internet Protocols will enable any emergency responder, using any commercially-available emergency communication system—not only F4W's—to speak and exchange data with those using all other communications systems. If they succeed, it will be a remarkable accomplishment for a small business with very limited research and development capabilities.

Each of these potential advances will help the Jefferson County Emergency Management Agency better meet our responsibilities to our citizens. We are also increasing disaster awareness among our residents; continuing to train our emergency responders to meet any possible contingency; educating our residents, including our children on, what to do if disaster strikes—our next "Community Awareness Day" is scheduled for October 6 of this year—and offering even more resources to our population and our first responders through the internet and elsewhere.

Through these activities and others, we hope to make Jefferson County a model for the entire Nation in preparing for emergencies and disasters, mitigating them, responding to them, and recovering from them. Thank you again for this opportunity to testify. I look forward to your questions.

Mr. BILIRAKIS. Thank you very much, sir.

I would like to recognize myself for 5 minutes or so. The first question will be for Ms. Goucher.

Ms. Goucher, you testified that broadcasters must replace their own EAS equipment at their own expense in order to implement the Common Alerting Protocol, CAP, by September 30, 2011. That is the deadline. Can you help us understand the financial and logistical challenges that a typical broadcast station faces in complying with this mandate?

Ms. GOUCHER. Certainly. As I mentioned, the cost of the CAP-enabled boxes is somewhere upwards of \$2,000 to \$3,000. For many broadcasters, that is just a cost of doing business. They budgeted for it. They have known it was coming. For some of my smaller broadcasters, that is going to be a high hurdle for them to overcome. I have got some small stand-alone stations, some religious stations, some college stations that don't exactly have \$3,000 lying around not doing anything. My association is looking at creative ways to help them fund those purchases, and in the end they will all make the purchases because, as I mentioned, not only is it a mandate but it is core to our mission.

But we are also looking at some creative ways to fund the State piece of our Emergency Alert System. The State coffers are bare. In the State of Maine, we have had three rounds of budget-cutting in the past 6 months, and every time I go in to talk to my emergency management and public folks about this and say we are moving to this new CAP-enabled system and you need to buy some equipment in order to get on board with it, I get that deer-in-the-headlights look, like how much is this going to cost and where are we going to get the money.

We think in that regard that it would be most helpful if FEMA could specify in their grant guidance that EAS is a permissible use of grant funds. That would put it on the radar screen for these officials when they are applying for the grant money to specify that this is an acceptable use of that money. When those dollars come in the door, they are spent four or five or six times, but if it were in the grant guidance, it would put the States on notice that they could apply for the funds for this specific purpose.

Mr. BILIRAKIS. Thank you very much.

My next question is for Mr. Guttman-McCabe.

Recently, the Personal Localized Alert Network, PLAN, was unveiled in New York City. This new public safety program is to be initialized. Of course, it is to be deployed in New York City and Washington, DC, by November, with Nation-wide deployment in all major urban areas being completed by the spring of 2012. It seems that the majority of the cellular carriers have embraced the concept of the PLAN, which is great.

Can you please go into more detail of the impact of implementing PLAN on the wireless industry and why the name change? What is the purpose for the name change? Because it seems like it is very confusing.

Mr. GUTTMAN-McCABE. Sir, I will start with your last question first, Mr. Chairman.

I don't know the reason for the name change, to be honest. It didn't come from our side of the equation. I think the FCC was trying to come up with something that they thought was easier to comprehend or to understand and to promote, is my understanding.

As Admiral Barnett suggested, we had already gone down the path of trying to come up with a way to promote handsets that are capable of delivering alerts, and we reached out to our internal marketing department and we came up with something called Wireless Emergency Alert Capable. So, again, it wasn't sort of rocket science. We just tried to find a way that would convey a meaning. I think at the FCC that was happening simultaneously, and they came up with the acronym PLAN.

As long as there is an effort by the FCC, by FEMA, and by the industry to make sure consumers understand, I think we can bridge that gap of confusion that you and others suggest may exist. Our goal is to make sure that consumers are aware when the capability exists and which handsets have it, with the goal of having all handsets ultimately have the capability as they move through the production cycle.

You asked previously about the impact on the industry. This is something that we brought to—Steve Largent, my CEO, brought to my executive committee many years ago; and we embraced, knowing there would be some significant cost to it. But, like Ms. Goucher said, we recognize that this is something that is the right thing to do, to embrace this technology. So our industry is committed to it.

There were questions presented to the earlier panel about why yet hasn't there been 100 percent. I am actually very proud of the 97 percent that are represented. But one thing for the record that should be recognized is that carriers had to make a decision as to whether or not to participate voluntarily before there was any idea of what the technology solution would be. That was just one of the byproducts of the WARN Act. It was just an outgrowth of the timing. So nine of our ten largest carriers and a significant number of our smaller carriers immediately went on-board and said yes, but they didn't really know what they were saying yes to at that time. That is why we expect the number will go up, because now there is a greater understanding of what people were saying yes to.

You had asked Ms. Goucher about the cost. I think our smaller carriers will enjoy the benefits of the economies that are driven by

the larger carriers purchasing the technology and moving the handsets through the process.

So it is costly. It is significant, significant expense. But yet it is one that the industry is bearing with a good social responsibility that they have done many times. Whether it is this or Wireless Priority Service or wireless AMBER Alerts, it is something that the industry and particularly the leadership of these companies really recognizes is important.

Mr. BILIRAKIS. Is there an effort by the industry to educate people, the potential customers, with regard to the privacy issue?

Mr. GUTTMAN-McCABE. There will be an effort by the industry to alert consumers once the technology is up and running. The privacy issue I guess we are going to have to make people aware of. But it is not a concern from our perspective for the reasons that Admiral Barnett suggested, which is this is a broadcast-type technology, so the alert will be sent to a certain number of cell towers and in essence broadcast out sort of in concentric circles, and whichever devices are within that circle will get the alert.

The carriers won't be measuring who gets it or who doesn't get it. It is a whole new technology really for our industry, and it is not designed to say X or Y handsets are in this area. It is just to say any handsets that are in the alerting area will get it. There is not going to be tracking of who gets it and who doesn't.

Additionally, the wireless industry is subject to a range of rules regarding privacy that are sort of overarching, beyond just this WARN emergency alert effort. So those would still hold, sort of protecting the privacy of the consumers.

Mr. BILIRAKIS. I think it is great. It is wonderful. But the thing is we have to get the word out and educate the people. It is so important to save the lives.

Mr. Knipfer, last month, this subcommittee held a field hearing where we heard from emergency management officials from around the country. Actually, in my district we had the field hearing. When asked about the upcoming deployment of PLAN, the officials were supportive of this system because it will help reach them reach commuter and tourist populations in a way that reverse 9-1-1 systems cannot. You heard the story. It took 7 days in that particular community to notify them with the reverse 9-1-1. That is simply unacceptable, as far as I am concerned.

I am interested in your thoughts on the deployment of the cell phone alerting system. What information have you received from FEMA about this system? Do you believe that this system will help to enhance your ability to alert and warn citizens in your area?

Mr. KNIPFER. Sir, anything that will enhance the alerting of people in time of emergency is going to help us. My worry is what people do after we alert them. Will they take that alert seriously, that educational process on the tourists? That is my concern afterwards.

Those people in my area and yours in Florida, a lot of people come to Florida and don't know what county they are in, and we alert them through a cell phone that if you are in Lee County, Florida, or Lake County, Florida, or Jasper or Gadsden County, Florida, they are not sure what county they really are in. So we have an educational problem, too, that goes along with that. Do they

know where to go to their place of safety? That is an educational process that is going to have to go along with that alert system. Do they heed that warning?

After Katrina, I heard a lot of people talk that we survived a Cat-5 hurricane. There is nothing worse. When Katrina came on shore, it was not a Cat-5. So that is my situation.

Anything that is going to help us get an alert to the people is going to help us, and that is my concern: How do we get to everybody? As we move forward and as technology takes over, we have kids now that don't read emails anymore. They text and that is all they get on their cell phones. They don't even read emails. So that is what we have got to go to as a society, how do we get to them, and that is what we have to look at now.

Mr. BILIRAKIS. Very good. Thank you.

Mr. Guttman-McCabe, you talked a little bit about what is necessary and what is unnecessary as far as warnings and alerts. Elaborate on that.

Mr. GUTTMAN-McCABE. Certainly. I think I want to clarify that this is not an indictment of FEMA, because I think they have really aggressively tried to go out and provide education to the alerters. But at least from my perspective, and it may be similar from Ms. Goucher's, I am looking at the alert tools that are out there now, the alerting tools that exist now, including the county that I live in, which is right across the river but I won't say which it is because I am about to say something potentially negative. But I have a small sort of phone book here of alerts that I have received over the last 2 years, and I will give you a few examples of some of the alerts.

I was alerted to the existence of "a rapid fox." Not a rabid fox, but a rapid fox. I was alerted to the fact that there were going to be flyovers, that there was a cable outage, that there was going to be buildings demolished, that it was cold and flu season. I could go on and on, and these are all in here.

To Mr. Kniphfer's point, he is concerned about what they will do and will they take it seriously. Our concern is you can build the greatest system and if you overuse it you get immediately to what we call the car alarm syndrome. Nobody pays attention to car alarms any more.

So when I look at sort of what has come out of this alerting system, I think the last thing we want to do if we build this is pepper it with alerts that aren't necessary and then people just stop paying attention. The reality is, unfortunately, I have fallen into that camp. So when a serious one comes out, my wife sort of resends it to me to make sure. Because if you went through this list you would find maybe 3 percent that were really an emergency alert, and that can't be the case if we want to deploy this Nation-wide and we want people to really take advantage of it and take advantage of the ubiquity of mobile devices.

Mr. BILIRAKIS. Would you define, say, a storm, a major thunderstorm, a necessary alert? Or a major accident, what have you?

Mr. GUTTMAN-McCABE. I understand, and I completely recognize that there is going to be a cutoff point that is difficult to determine, and some alerts may fall on one side or the other. But what NOAA generally does and the National Weather Service, that completely

makes sense. Those are alerts that people should get, even though I know they have tiers of warnings and then watches and things like that. But I also think there are probably a significant percentage that you can cut off.

An accident, I would say no, unless there are noxious fumes or gasses or dangers. Anything involving traffic I would argue no. This is me speaking personally. Buildings being demolished or cold and flu season, that to me is really abusing the system or using the system in a way that isn't going to support when you really want people to respond to a very timely tornado, a significant tornado where you only have minutes to respond, or a tsunami.

You want people looking at these things every time they pop up in case they are getting one that is that timely, and you want to make sure that you don't overuse it such that people stop paying attention.

Mr. BILIRAKIS. Thank you very much. They need to take it seriously. There is no question.

This is for Ms. Goucher. In your statement you note your belief of the need of a National EAS working group and you mentioned that and maybe you can elaborate. If such working group were created, who do you believe should be members of the group?

Ms. GOUCHER. Well, as I mentioned, there are several Federal agencies that have governance authority for the system—the Federal Communications Commission, FEMA, the National Weather Service, the White House. There are also several EAS participants, broadcasters, obviously, the cable television industry, now the cellular telephone industry.

We just don't have a forum to get us all together in a room on a periodic basis to hash out issues with the system. So we think that some kind of formal structure for that process to take place would be enormously helpful.

As long as I have the microphone, Mr. Chairman, if I may, I would like to address the issue that—

Mr. BILIRAKIS. Absolutely. Proceed.

Ms. GOUCHER [continuing]. That my friend to the left here raised by about the education issue.

I do want to state for the record that broadcasters are not asking for a mandate for FM chips in cell phones, but we do think there is an enormous marketing opportunity here that is being lost because we all carry these devices around with us all the time. So if you receive a 90-character text message that says "tornado warning, Lincoln County, tune to local radio and TV," wouldn't it make sense to be able to do that right from the same device? So that now you have an all-in-one mechanism in the palm of your hand to get not only the initial alert, where it is and what it is, but the actual follow-on information that you need, tornado warning, is it my house, when is it touching down, how long do I have to grab Toto and get into the cellar?

Broadcasters can put that information in front of people. "Here are the evacuation routes." If I were Verizon or AT&T, I would be all over this, to say, look, here is an all-in-one device for you that will give you not only the initial alert but also the follow-on information you need. Again, not a mandate, but a little encouragement.

Mr. BILIRAKIS. Do you want to comment on that?

Mr. GUTTMAN-MCCABE. Certainly, if I may. There are 41 handsets in the United States that have FM chip sets. As we went through the process with the SimSac, the advisory group, we considered sort of what different potential solutions would be, and we had a similar request from the television broadcast industry to put a television chip and we had a request from the paging industry to put a paging chip and the satellite industry to put a satellite chip.

What we were looking at as an industry is let's not have a technology mandate. Let's let consumers decide what they want in their devices and give them options. Having a choice of 41 different handsets, if that is what you choose, I think that is a fair number of options.

We look at it, we are serving a wide range of consumers, everything from a standard flip phone to a smartphone to a tablet, and we try to make everyone happy. That is why there are a range of options and handsets and different price points. That is how we look at it.

NAB has moved away from the desire to have a mandate. I think that is a good thing. We talked with them maybe 2 years ago about this, and in that interim you have gone from a few handsets to 41. I think that is an evolution based on what consumers want.

Mr. BILIRAKIS. Mr. Guttman-McCabe again, with regard to CMS, PLAN, are you satisfied with the progress that is being made in regard to that and are there any improvements that can be made?

Mr. GUTTMAN-MCCABE. I think we are very satisfied. The FCC and FEMA have been extremely active under Admiral Barnett and Administrator Penn and their teams. We met with them last week. We have about monthly meetings, maybe 20 or 30 of us in a room, and we will have monthly meetings from now until the launch in New York and the beginning of next year and are very happy with how they are moving forward.

I do have to say FEMA in the last year or 2 years really has accelerated the process and their efforts. So I do think they are to be applauded for how much they have really focused on this.

So we don't have any issues right now with how it is moving forward. It is in our devices and being deployed in our devices. Networks are being upgraded with the technology. So this is a private-public partnership that we want to really hold up as one that is working and has worked.

Mr. BILIRAKIS. Good. Excellent.

Mr. Kniphfer, as you know, in November, FEMA and FCC will conduct the first-ever Nation-wide test for EAS. How is Jefferson County preparing for this test?

Mr. KNIPHFER. We will be ready for it, sir. We had equipment ready to do that. We are ready to go down to the level to put it out with our broadcasters. That is one of the things we are working with the broadcasters.

I think if you go back to April 27, if it had not been for our media, we would have lost a lot more lives. Like Ms. Goucher said, our media that day were outstanding. Our radio-TV were on the air 24/7 covering the tornadoes, and had it not been for them, there would have been more bodies that we would be counting today. They were a vital part of the alert warning system.

Any device you carry is only as good as the system as a whole. You have got to know what to do. Our four TV stations worked very good together that day in putting out the information. They tracked the storms coming out of Tuscaloosa County right through, and I think the people heeded the warning. Tuscaloosa County had a high death rate I think because they were hit quickly. Jefferson County saw it come through Tuscaloosa County and took the warning seriously and took shelter, and we only had 21 deaths because of that.

I would also like to address the concern of the wireless industry and the amount of notifications you get. We need to look at that situation as an alert warning notification system where people can opt into what is that. If you want a alerts, then you get emergency alerts. If you want warnings, you get warnings. If you want community notifications of events, then that is notifications of such things as buildings being torn down, roads, and detours.

You have to design the system. Some people want to know about every red light that is going to be tore down today, every street that is going to be blocked or anything. There is just news people out there wanting news information. They want to know what is going on all over town. Others just want to know if there is a storm in the area that is going to tear my house down, tell me. Don't bother me with anything else. So those people want to be alerted strictly to that type of information.

So there is things you can do to regulate what kind of information you send to people, and you can break it down to alert, warning, notification. Usually, these are what we write down. This is what we are going to put out for alert. If you have an abducted child, that is primary to me as an alert. Let's get that out as quick as anything. If we are going to be demolishing a building, then that is notification for people in an area that doesn't bother a lot of other people. So if you want that kind of notification, you opt into that stuff and not just the AMBER Alert.

Mr. BILIRAKIS. Thank you.

Actually, bringing up AMBER Alert, Ms. Goucher, would you provide the subcommittee with a better sense of the impact that local, even in general, local broadcasters have had in saving the lives of children through AMBER Alert?

Then I want to ask you about Silver Alert, too. Are you familiar with Silver Alert as well? If you can talk about that, too, define Silver Alert. I can define it, but you will probably do a better job.

Ms. GOUCHER. Sure. I will do both. I will do all the colors of alert.

Mr. BILIRAKIS. Okay, good.

Ms. GOUCHER. As I am sure you know, Mr. Chairman, the AMBER Alert program arose out of a terribly tragic situation in the Dallas-Fort Worth area where a young child named Amber Hagerman was abducted and murdered. The broadcasters in that area got together and went to local law enforcement and said, look, we have a tool that you can use to help prevent these situations. We can put the eyes and ears of everyone on the street at your disposal to try and find the vehicle, the abductor, the child. We have this Emergency Alert System. Why don't you use it?

So they developed the first AMBER Alert system. My dear friend, the late Carl Smith of the Oklahoma Broadcasters Association, was the first one to do a State-wide AMBER Alert program. The other State broadcast associations piggybacked on that, took the program, brought it home to our own States and developed it from there to the point where we now have AMBER Alert programs in all 50 States and the District of Columbia. It is not hubris on my part to say that we have an AMBER Alert program in Maine because of me.

We are now moving into Silver Alerts. Numerous States are bringing that idea forward. That is where we have an impaired adult, someone who doesn't necessarily meet the criteria for an AMBER Alert, which is an abducted child under age 18, generally for people who suffer from Alzheimer's disease or dementia who may wander away and be lost for a period of time. So, again, the media are stepping up to work with law enforcement to be able to get the word out quickly about these situations.

We passed a Silver Alert program in Maine last year. We had one just last week. Luckily, the woman was found safely after about a day and a half, but only because you put people's eyes and ears out there on the street to help in the search, to help in identifying what is going on and report back to law enforcement.

Mr. BILIRAKIS. It has been very successful, as far as I am concerned. I know it has been in my State of Florida.

Mr. Kniphfer, you wanted to comment as well on maybe Silver Alert or AMBER Alert?

Mr. KNIPHFER. Those two items right there we are working very closely with law enforcement and with the elderly people putting those notices out very quickly in the broadcast world. It has helped us on two occasions already find our elderly that have come up missing. We have a couple of people that keep walking off from nursing homes that way, and they have come very close to getting those where we don't have people we find later on in the wrong way. So that has helped us a lot with our broadcasts, getting the message out to people to locate those type of people.

That is the kind of things that we need. That is what I call a really quick alert to me, is get that information out quickly and get it back so we can find it.

If we can get that alert out to the people, they can get it on their devices, they can see pictures of the car or pictures of a kid that has been abducted. As quick as we can get a picture out there on a cell phone device, they can see what it looks like, a tag, a partial tag, they can get that information back to 9-1-1, to the dispatch centers, to law enforcement. We can capture that individual a lot quicker and possibly save lives. It is going to save a lot more lives.

Mr. BILIRAKIS. Anyone want to comment on the next generation of 9-1-1?

I have actually finished with my questions. I went way over my time. I want to give you an opportunity to say anything you would like on this subject matter. Anyone on the panel?

Mr. KNIPHFER. They said earlier we are doing a lot of things with video conferencing and getting pictures back from the field where we can actually transmit pictures back using these cell phone devices, wireless devices back, so we are moving toward

holding video teleconferencing back with wireless devices with our people, responders in the field. It is going to be greatly enhanced, that we can actually communicate your command-and-control with video teleconferencing back from the operations center to the field commanders in the field.

Things we are doing with the tablets now, with GIS and everything else, we are actually doing damage assessment a lot quicker. We can go out and take pictures of houses and do damage assessment real quick real-time now. We just did, thanks to the Federal Government in Operation Clean Sweep, cleaned property and debris removed quickly. In the State of Alabama after Katrina that was such a problem. We just now cleaned up a lot of the State of Alabama that way. We are trying to get an extension through for FEMA for 60 more days to go right of entry on property.

The wireless technology we are using now can go along with the integrated process of a warning system, and integrating all these systems together is going to allow us to pass data and information, to get the information up to FEMA headquarters and to the President and quicker declare emergencies and disasters. We provide that information quicker and easier so we can actually show that response time, that disaster information that the President needs to see to declare disasters quicker.

Mr. BILIRAKIS. Very good.

Ms. Goucher.

Ms. GOUCHER. Thank you, Mr. Chairman.

I want to echo Mr. Guttman-McCabe's comments about FEMA. They have come a tremendously long way in the last couple of years toward fulfilling Presidential Order 14307—my memory escapes me.

I have been at this a long time, and there was a period of time about 5 or 6 years ago where FEMA and the FCC weren't even talking to each other about these issues. At least now they are getting in the same room and working together to move this forward.

We are tremendously excited about IPAWS and the new CAP-enhanced EAS. That is going to give us so many more capabilities for enhanced messaging. A picture of the abducted child can be embedded in a CAP EAS alert. Now, that saves two or three steps on the part of law enforcement. You can just send out one message with all the information you need, the evacuation map, the route where the chemical cloud is blowing. So we are greatly looking forward to the rollout of this system, because it is going to enhance our own news dissemination capabilities.

I think it is interesting, however, that we have seen the good and the bad in alerting here with a jurisdiction that truly knows how to use the system and use it wisely versus one where we have feral foxes—what was it—“rapid foxes.”

That takes us right back to the issue of training. We need to get down to the granular level with not just the State folks, but police, fire, EMTs, all the emergency responders.

If my counterpart from Texas were here today, Ann Arnold from the Texas Association of Broadcasters, she would tell you an absolutely heartbreaking story about some wildfires in West Texas a few years ago. The local fire marshal sent his people up and down the roads with bullhorns to tell the people the fire was coming,

evacuate, the fire is coming, evacuate, because they couldn't think of any other way to get the word out. There were two elderly ladies who lived down a half-mile dirt road that didn't hear the bullhorns and died in the fire.

They were soap opera fans. They were watching TV at the time. So Ann Arnold called the fire marshal the next day and said, why didn't you fire off an EAS alert? They would have seen it on TV. His response was, what is EAS?

That to us is unacceptable. You know, this system has been around in one form or another for 60 years. It should be in the DNA of emergency responders to think of using this system—not overusing it but using at times like that.

I wind up going around the State providing training because, to date, there has been nothing else. The only training emergency senders, alert senders receive is the technical manual that comes with their encoder-decoder. There has been nothing else.

So, to reiterate some of my oral testimony, we are very excited that FEMA is actually undertaking the development of this training program, but all it will wind up doing is certifying that you can send a message through the Federal aggregator. If you are not inclined to send an EAS message in the first place, that is not going to matter to you. So we need some kind of a carrot and stick to bring these folks to the table, to make them recognize this tool is at their disposal. We will put our airwaves and transmitter at your disposal. Please use them. This is what the system is for. Just use it wisely.

Mr. BILIRAKIS. Thank you very much.

Mr. Guttman-McCabe, anything further?

Mr. GUTTMAN-McCABE. I guess, in conclusion, Mr. Chairman, I would just say I was in front of this committee several years ago before the legislation was enacted; and the future that I envisioned is happening. To me, that is a testament to Government reaching out to industry, private industry, and working in a collaborative fashion.

We had 17 different organizations representing the wireless industry on the committee that developed the standards. There was a full commitment. If you look at that and you look at wireless AMBER Alerts, which picked up on the great work by the broadcasters and Wireless Priority Service, these are all voluntary efforts that the industry can really get behind and feel good about.

The same is true to a large extent about next-generation 9-1-1. The industry realizes that 9-1-1 needs to continue to evolve. It has evolved multiple times since I have been at CTIA over the last 10 years. But it is a process. It takes a while to standardize and then move it into the technology and then deploy it.

So we agree with some of the statements that some of the subcommittee members made about the need to be able to text to 9-1-1 and things like that. Yet it is not as simple as saying tomorrow you can text. My most recent alert, which was a text-based alert, and CMAS or PLAN or wireless emergency alerts, they will come as a text, but they are not text-based. They are not an SMS or a text. They are a broadcast service.

But my most recent text alert from my local county was “fternoon.” It took me a little while to figure out what “fternoon”

was. It took my 11-year-old 2 seconds. She said, Dad, it is “afternoon” minus the “A.” Well, that was the only thing I received from them. I didn’t receive the text before that ended with “afternoon” or anything afterwards.

To me, that was an illustration of why you can’t just send 9-1-1 text, because the system is not designed for this type of an exchange. When you dial 9-1-1, you want a response immediately. When you send a text, as many of the younger folks up behind you may know, it may go through instantaneously, and it may take 2 or 3 minutes. In the case of “fternoon”, the first half of the text never got to me.

So to me it is engage industry, work through the process, and you are going to get an industry that I am proud of that most of our CEOs can say they do everything in their power to be good corporate citizens. This is an example that I think should be repeated as we move forward.

Mr. BILIRAKIS. Thank you very much.

I thank the witnesses, of course, for their valuable testimony. The Members of the subcommittee may have additional questions for you or questions for you. We ask you to respond to these in writing. The hearing record will be open for 10 days.

Without objection, the subcommittee stands adjourned. Thanks so much for your patience. I appreciate it.

[Whereupon, at 1:15 p.m., the subcommittee was adjourned.]

