ASSURING PUBLIC ALERT SYSTEMS WORK TO WARN AMERICAN CITIZENS OF NATURAL AND TERRORIST DISASTERS

(110–132)

HEARING

BEFORE THE

SUBCOMMITTEE ON
ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS, AND EMERGENCY MANAGEMENT

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

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U.S. House of Representatives
Committee on Transportation and Infrastructure

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June 3, 2008

SUMMARY OF SUBJECT MATTER

TO: Members of the Subcommittee on Economic Development, Public Buildings, and Emergency Management

FROM: Committee on Transportation and Infrastructure Oversight and Investigations Staff

SUBJECT: Hearing on "Assuring Public Alert Systems Work to Warn American Citizens of Natural and Terrorist Disasters"

PURPOSE OF THE HEARING

On Wednesday June 4, 2008, at 10:00 a.m., in room 2167 of the Rayburn House Office Building, the Subcommittee on Economic Development, Public Buildings, and Emergency Management will hold a hearing on the efforts within the Federal Government, in particular the Federal Emergency Management Agency ("FEMA"), to modernize, expand, and integrate existing emergency alert warning systems mainly through the Integrated Public Alert and Warning Systems ("IPAWS"); and on H.R. 6038, the "Integrated Public Alerts and Warning Systems Modernization Act of 2008."

BACKGROUND

Emergency Alert System

Presently, the United States issues emergency warnings through the Emergency Alert System ("EAS"). EAS is the successor system to the Emergency Broadcast System, and relies primarily on broadcast media and the National Oceanic and Atmospheric Administration's (NOAA) Weather Radio All Hazards Network.[1] NOAA sends alerts through NOAA Weather Radio (NWR), which has been expanded to include warnings for all hazards.

Although the name of the system has changed since its inception, the nation's current system of emergency alerts and warnings was developed in the early 1950s to send public alerts and

[1] National Oceanic and Atmospheric Administration's Weather Radio All Hazards Network work in cooperation with FEMA on several aspects of EAS.

emergency messages through broadcast radio and television stations as part of America's response to the threat of nuclear attack. As the system evolved, it was opened to state and local participation.

Responsibility for civil defense measures, including the current operation of EAS at the national level, has rested with the Administrator of FEMA, and its predecessor agencies, since the 1950s.[2] The Federal Communications Commission ("FCC") has been designated by FEMA to manage broadcaster involvement in EAS. The FCC currently provides technical standards and support for EAS, including rules for its operation and enforcement within the broadcasting community. Non-Federal EAS operational plans are generally developed at the state and local level. The FCC requires States that have developed an EAS plan to file the plans with the FCC. Not all States have FCC-compliant EAS plans that have been reviewed by the FCC. FEMA advisors often help to integrate EAS usage into regional or state emergency response plans. The decentralized process of EAS coordination and implementation contributes to uneven planning; for example, procedures for initiating a message and activating EAS differ from state to state.[3]

Currently, broadcast radio and television stations, cable television systems, and satellite operators are required to participate in national-level EAS alerts, yet participation in state and local EAS alerts is voluntary. The FCC requires that broadcast and cable stations install FCC-certified EAS equipment as a condition of licensing. Even though broadcasters, not the state or local authorities, have the final authority whether or not to transmit a non-Federal emergency message, there has been a long history of cooperation.

To date, there has never been a national-level alert. The District of Columbia, Puerto Rico, the U.S. Virgin Islands and 42 of 50 states have activated EAS at a state level. Approximately 90 percent of all messages and 100 percent of all Federal messages disseminated by the EAS are generated by NOAA weather alerts.[4] FEMA directly delivers the national-level alerts to the Primary Entry Point ("PEP") stations. Broadcast of these national-level alerts are relayed by the PEP stations throughout the nation to radio and television stations that rebroadcast the message to other broadcast stations and cable systems until all EAS participants have been alerted.[5] The transferring of alerts from one EAS participant to the next is often referred to as the "daisy chain" distribution Originally, there were 34 PEP stations nationwide. FEMA has begun to add additional stations and has plans to expand the number of PEP stations to 63, which will enable every state and territory to be covered.

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[2]P.L. 103-337, National Defense Authorization Act for Fiscal Year 1995, Title XXXIV- Civil defense, Sec. 603 (42 U.S.C. 5196), amending the Federal Civil Defense Act of 1950 (64 Stat 12450). Also, integrated in the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5152 and seq.).

[3]CRS Report for Congress, The Emergency Alert System (EAS) and All-Hazard Warnings, page 2, May 5, 2008, Linda K. Moore.

[4]FEMA Briefing by Lance Carver, Director Integrated Public Alert and Warning System Program Management Office, "Integrated Public Alert and Warning System Overview", April 18, 2008.

[5]Originally, there were 34 PEP stations across the country. FEMA reports that in order to provide more coverage they plan to increase the number to 63.

On June 26, 2006, President Bush issued Executive Order 13407, stating that the U.S. policy is "to have an effective, reliable, integrated, flexible and comprehensive system to alert and warn the American people..." The President issued a list of functional requirements for the system, including:

- evaluating and assessing existing resources at all levels of government;
- adopting common alerting protocols, standards terminology and other procedures to enable interoperability;
- delivering alerts on criteria such as location and risk;
- accommodating disabilities and language needs;
- supporting necessary communication facilities;
- conducting training, testing, and exercises;
- ensuring public education about emergency warnings;
- coordinating and cooperating with private sector and government at all levels;
- administering the existing Emergency Alert System as a component of a broader system; and
- ensuring that the President can alert and warn the American people.[6]

FEMA: The Integrated Public Alert and Warning System ("IPAWS")

Currently, there are several Federal initiatives to improve, expand, and integrate these existing warning systems. The Integrated Public Alert and Warnings System ("IPAWS"), which is a public-private partnership in which FEMA has a leadership role, is the primary initiative regarding testing and developing state-of-the-art technology to transmit alerts and warnings.

In response to Executive Order 13407, FEMA created the IPAWS Program which is administered by the IPAWS Program Management Office to oversee the evolution of the public alert and warning system.

According to FEMA, IPAWS aims to be the nation's next generation public communications and warning capability. FEMA is working with public and private sectors to integrate warning systems to allow the President and authorized officials to effectively address and warn the public and state and local emergency operations centers via phone, cell phone, pagers, computers, and other personal communications devices.

The current emergency alert system is based on generally outdated technology that relied on radio and TV to transmit audio-only alerts. Today, the public uses many different technologies to receive information and is less reliant on TV and radio.

The aim of IPAWS is to improve public safety through the rapid dissemination of emergency messages to as many people as possible over as many communications devices as possible, including in multiple languages and in American Sign Language and Braille. IPAWS seeks to expand the traditional alert and warning system to include more modern technologies and, at the same time, upgrade the alert and warning infrastructure so that no matter what the crisis is, there would be near instantaneous transmission and receipt of alerts by the public through digital technologies that can reach various communications devices, such as mobile phones, land lines,

[6]Executive Order 13407, "Public Alerts and Warning System", signed by President George W. Bush, June 26, 2006.

pagers, fax machines, personal digital assistants, desktop computers, and digital highway signs. IPAWS is currently running pilot programs in various locations and the aim is to eventually make the programs nationwide.

Presently, FEMA and other Federal agencies are working with tribal governments, state and local emergency managers and broadcasters to test elements of the IPAWS program. The goal is to expand these 14 pilot programs that are being conducted in various locations across the country to nationwide application once testing is complete. According to FEMA, the pilot programs include:

- **Geo-targeted Alerting System ("GTAS"):** The GTAS pilot is a joint FEMA and NOAA public alert and warning project. GTAS is testing new technologies to give emergency managers the ability to predict hazard zones in near-real-time, to collaborate on which areas to alert and what the message should be, and then to deliver these alerts and warnings to residents in a specific geographic area based on risks and recommended protective measures.

- **Web Alert Relay Network ("WARN"):** The WARN pilot project provides emergency operations staffs with web-based collaboration tools and alerts and warnings capabilities. In addition, the WARN pilot is working to develop a two-way messaging framework based on international standards that supports emergency messages generated and sent out by authorized emergency officials at the Federal, state, region, county, parish or tribal level. The WARN pilot also provides opt-in capabilities for the public in pilot locations to receive alert and warning messages on their computers, cell phones, pagers, and other devices.

- **Digital Emergency Alert System ("DEAS"):** DEAS is a program designed to upgrade the existing EAS with digital technologies and international warning standards, such as the Common Alerting Protocol ("CAP"). Upgrades associated with the DEAS program include the provisioning of all public television stations across the country to enable them to disseminate DEAS messages through their digital broadcasts. Additionally, there are on-going DEAS state and territory pilots whereby an Emergency Operations Center can originate alerts and warnings using CAP and then disseminate them using the public television station digital broadcasts.

- **Emergency Telephone Notification ("ETN"):** ETN allows emergency managers to log in and provide warning messages. ETN also provides automated calling of all residents in a selected geographic area. (This is formerly known as reverse 911.)

- **Enhanced ETN:** This pilot provides additional servers to ETN to minimize the chance of outage and adds capability for translation from English to multiple languages.

- **Deaf and Hard of Hearing Notification System ("DHNS"):** DHNS provides emergency information to the hearing impaired community and uses American Sign Language videos to inform those with hearing disabilities. DHNS sends the information over the Internet and via other communication devices.[8]

[8]Program summarized from the FEMA website, IPAWS Program.

Modernizing and integrating the public alert and warning system is an extremely large and complicated task. The different and often separate roles and responsibilities that the Federal Government, State and local governments, and other non-governmental and private sector stakeholders play in disseminating alerts has often led to problems with coordination, and uneven effectiveness of EAS utilization from state to state.[9] It is evident that during the early implementation of IPAWS, FEMA envisioned developing an integrated public alert and warning system that would provide effective warnings at all times, in all places, under all conditions and over all broadcast media devices available to the public. FEMA implemented pilot projects to test the digital capabilities of public radio and television, provide more geographically targeted alerting capabilities, just to name a few, and to upgrade and expand the relay distribution system.

Now that many of the pilot programs are concluding, some stakeholders worry that FEMA may not have a clear plan and several challenges remain. According to information provided to Committee staff, FEMA is realigning some of the IPAWS program. Many stakeholders want to see a clear end-state articulated, including how IPAWS is intended to function, a plan with intermediate goals, and a timeline that will show how FEMA intends to reach the end-state. Without a clearly articulated plan and timeline, States and localities may forge ahead and purchase upgraded EAS systems on their own that may not be compatible with other systems and equipment in other parts of the country, making it more difficult to implement a nationwide integrated system. In fact, New York already operates a satellite- and radio-based network, and Washington, California, and some other States have moved ahead in a similar direction. Although there has been progress in modernizing and integrating the EAS system, some critical challenges remain including reaching agreement on standard technology for disseminating alerts, gaining collaboration among EAS stakeholders to ensure all elements of the system can work together, and providing adequate training for EAS participants.[10]

In March 2007, the Government Accountability Office ("GAO") initiated a study of the functioning of EAS from the perspective of emergency preparedness in government operations. GAO made several recommendations to FEMA and the FCC for additional planning and greater involvement with stakeholders. GAO found that there were problems regarding the dependability and effectiveness in the relay system that had not been identified, in part because there is no requirement for a system test at a national level and that many EAS participants lacked the proper training and technical skills to issue effective EAS alerts. Additionally, the report identified problems such as gaps in disaster planning and insufficient redundancy to ensure uninterrupted broadcasting nationwide. The study did note that FEMA, in coordination with the FCC, continues to work on implementing the executive order regarding improvements to the system. In response, FEMA agreed with the intent of GAO's recommendations. However, more than one year since GAO's recommendations, several of the concerns raised by GAO still have not been fully resolved.

FCC: Commercial Mobile Alert System (CMAS)

The Warning, Alert and Response Network Act ("WARN Act") as signed into law as Title VI of P.L. 109-347, the "Security and Accountability for Every Port Act of 2006" ("SAFE Port

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[9]CRS Report for Congress, The Emergency Alert System (EAS) and All-Hazard Warnings, page 1, May 5, 2008, Linda K. Moore.

[10]Emergency Preparedness: Current Emergency Alert Systems Has Limitations, and Development of New Integrated System Will Be Challenging, March 30, 2007, GAO-07-411, Mark Goldstein.

Act") required the FCC to establish a Commercial Mobile Service Alert Advisory Committee ("CMSAAC"). Committee members included state, local and tribal governments, members of the private sector, and representatives of people with disabilities. CMSAAC was charged with providing the FCC with recommendations on technical requirements, standards, regulation and other matters needed to support the transmittal of emergency alerts by commercial mobile service providers to their subscribers on a voluntary basis.[11]

In April 2008, the FCC adopted most of the recommendations made by the CMSAAC, including recommendations for wireless carriers to transmit certain types of alerts including presidential, imminent threat, and AMBER alerts as well as emergency alerts originated by state, local and other non-Federal entities. The FCC also adopted the recommendations that the coverage is to be nationwide and that Federal agency manage the alerts by acting as an aggregator in accepting, verifying, and routing messages.[12] Stakeholders seemed pleased with the collaborative process between government and the private sector that is necessary to the implementation of the public alert and warning system.

The final determination on a choice of a federal aggregator was deferred because FEMA raised concerns that the agency may not have authority to manage alerts as an aggregator. FEMA asked in a letter to the FCC not identify a federal aggregator until all legal issues have been resolved.[14] FEMA has expansive legislative authority over public alerts and warnings, as set forth in Sections 202 (*Disaster Warnings*) and 611(d) (*Communications and Warnings*) of the Robert T. Stafford Disaster and Emergency Assistance Act. These sections provide broad authority for FEMA to issue warnings to state and local officials and to provide technical assistance to these entities for effective warnings; to utilize or make available to federal, State and local agencies the emergency communications system or any other Federal communications system to provide warnings to governmental authorities and civilians endangered by disasters; and to enter into agreement with commercial communications providers for use of facilities for providing warnings to governmental or civilians endangered by disasters. In addition, the Administrator of FEMA may make appropriate provisions for necessary emergency preparedness communication and for dissemination of warnings to the civilian population of a hazard. Committee staff believes this provides FEMA with very broad authorities to do what it takes in the best interest of the public to disseminate alerts and warnings, including serving as a federal aggregator.

Some believe that FEMA's reluctance and delay in accepting responsibility as the federal aggregator is an example of FEMA's lack of a clear plan, timeline, and end-state for the modernization and integration of the nation's EAS system.

However, on May 30, 2008, FEMA announced that it will assume the federal aggregator role for the nationwide Commercial Mobile Alert System. Once the system is in place, FEMA will verify the Federal, state, and local emergency alerts that are sent by "authorized senders" and will transmit alerts to commercial mobile service providers, who will, in turn, transmit them to their cellular subscribers. In addition, FEMA announced that it is working with the Department of Homeland Security's (DHS) Directorate for Science and Technology and NOAA to adopt CAP as set forth in

[11]P.L. 109-347, Sections 603 (a-c) and 602 (a-c)
[12]FCC, First Report and Order, April 9, 2008, PS Docket No. 07-287 (FCC 08-99)
[14]Letter to the FCC, February 19, 2008, form General Martha T. Rainville, Assistant Administrator, Office of National Continuity Programs, FEMA, Docket No. 07-287.

the FCC's July 12, 2007 Second Report and Order, Review of the Emergency Alert System. FEMA plans to adopt CAP within the next 30 to 60 days.[15]

However, there remains the issue of a lack of clear leadership and accountability on a comprehensive plan that would tie all of the elements of an integrated public alert and warning system together. GAO recommended in its 2007 report that FEMA establish forums for the diverse stakeholders involved with emergency communication to discuss emerging issues related to the implementation of an integrated EAS system. These forums should include relevant Federal agencies, state and local governments, private industry and the affected consumer community.

The Integrated Public Alert and Warning System Modernization Act of 2008

On May 13, 2008, Subcommittee Ranking Member Sam Graves introduced H.R. 6038, the "Integrated Public Alerts and Warning Systems Modernization Act of 2008". The bill amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act to direct the President to modernize the integrated public alerts and warning system. The bill authorizes FEMA to do much of what it was already doing administratively through the current authorities in the Stafford Act, as directed by Executive Order 13407, and as authorized through the Post-Katrina Emergency Reform Act. The bill also specifically gives the Administrator of FEMA responsibility for the alerts and warning system and proscribes the Secretary of Homeland Security from transferring that responsibility outside of FEMA without an Act of Congress. The bill requires FEMA to:

- lead the modernization of the EAS system;
- have certain capabilities and meet certain requirements to modernize the system including in summary; establishing or adopting common alert warning protocols, standards and operating procedures; providing the capability to distribute alerts on the basis of geographic locations and risks; providing alerts for individuals with disabilities and limited English proficiency and ensuring that there is training, testing and exercises for the public alerts and warning systems;
- implement pilot programs to demonstrate feasibility;
- develop a system that incorporates multiple communication technologies;
- improve coverage to remote areas;
- promote local and regional and private partnerships;
- provide redundant alert mechanisms; and
- submit a detailed implementation plan that includes a timeline, a spending plan, and recommendations for any additional authority that may be necessary.

The bill also authorizes $37 million for 2009 and such sums as may be necessary for subsequent years.

PRIOR LEGISLATIVE AND OVERSIGHT ACTIVITY

The Subcommittee has not previously held a hearing specifically on the Emergency Alert System or the Integrated Public Alerts and Warning System.

[15]Press Release, FEMA Announces That It Will Assume Aggregator/Gateway Role For Nationwide Cell Phone Alert System, May 30, 2008.

WITNESSES
(Listed in Alphabetical Order)

Mr. Larry Gispert
President, International Association of Emergency Managers; and
Director, Department of Emergency Management, Hillsborough County

Mr. Christopher Guttman-McCabe
Vice President, Regulatory Affairs
CTIA – The Wireless Association®

Mr. James T. Judkins, Jr.
Suffolk, Virginia Citizen; and
Emergency Management Coordinator, Suffolk Department of Fire and Rescue,
Division of Emergency Management

Chief Derek K. Poarch
Chief
Public Safety & Homeland Security Bureau
Federal Communications Commission

Major General Martha T. Rainville
Assistant Administrator
National Continuity Program Directorate
Federal Emergency Management Agency

Mr. Michael Womack
Director, Mississippi State Emergency Management Agency
National Emergency Managers Association

ASSURING PUBLIC ALERT SYSTEMS WORK TO WARN AMERICAN CITIZENS OF NATURAL AND TERRORIST DISASTERS

Wednesday, June 4, 2008

HOUSE OF REPRESENTATIVES,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
SUBCOMMITTEE ON ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS AND EMERGENCY MANAGEMENT,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:08 a.m., in Room 2167, Rayburn House Office Building, Hon. Eleanor Holmes Norton [Chair of the Subcommittee] presiding.

Ms. NORTON. Good morning.

This is an important hearing. Almost every American is familiar with this scenario: You are watching television, and suddenly the television program is interrupted; a beeping sound comes. You see the multicolored stripes across the screen, and then you hear, ″This is a test of the Emergency Alert System,″ the EAS. You breathe a sigh of relief because it is only a test.

But during any given year, thousands of citizens across our country hear an emergency broadcast on their radios or on television advising them that they have a few minutes to seek appropriate shelter because, for example, a tornado is coming or to evacuate the area because a hurricane is arriving in a few hours.

The Federal Emergency Management Agency, or FEMA, is responsible for administering the national EAS with assistance from the Federal Communications Commission for ensuring compliance with regulations. Broadcast radio and television stations and satellite radio operators are required to participate in a national-level EAS alert. And State and local governments may use the EAS on an as-available basis. Broadcast station participation is voluntary, but of course most do.

Given the high number of natural disasters in our country each and every year, probably 90 percent of all messages and 100 percent of all Federal messages are disseminated by the EAS, as generated by the National Oceanic Atmospheric Administration's Weather Radio All Hazards—NWR, as we call it—and the National Weather Service.

Two years ago, President Bush issued Executive Order 13407, directing the Department of Homeland Security to modernize and integrate the Nation's public warning systems. FEMA then created the Integrated Public Alert and Warning Systems, which we call IPAWS, and is working with the public and private sectors to inte-

grate warning systems so that authorized officials can effectively warn the public through an upgraded version of the EAS system.

EAS messages will continue to be transmitted but, in addition, must today include the modern technology conveniences that almost every American owns, including pagers, cell phones, computers and other personal communication devices. This is a big task.

FEMA began working on a plan to update the EAS system in part by conducting pilot programs nationwide. With IPAWS pilot projects coming to an end, however, many stakeholders are expressing frustration that the IPAWS program does not have a clear plan and timeline for finishing the various tasks that still need to be completed. Several States and localities have begun modernizing their own systems in the absence of Federal guidance and consensus.

Stakeholders include State and local governments and various private-sector groups. The Government Accountability Office has suggested that FEMA hold some stakeholder forums on the challenges of integrating the system and various other issues. At the meetings, the stakeholders perhaps could produce some clearly defined deliverables, such as, for example, the Common Alerting Protocol, or CAP, a standardized format for use in all types of message alerts.

The public also is entitled to a clear timetable as to when a final decision or action will be completed. Many stakeholders point to the Commercial Mobile Service Alert Advisory Committee, a process set out in the Warning Alert and Response Network Act—we call it the WARN Act—which has been signed into law as the Security and Accountability for Every Port Act of 2006.

CMSAAC members, we will call them, include Federal, State, local and tribal governments, members of the private sector, and people with disabilities. They are charged with providing recommendations on technical requirements, standards, regulations and other matters needed to support the transmittal of emergency alerts by commercial mobile providers to their subscribers on a voluntary basis. They meet deadlines, make decisions and produce reports. The advisory committee has already produced results.

We are pleased that, after some reluctance and delay, FEMA announced on May 30, 2008, that once the system is in place, that agency will serve as the Federal aggregator and gateway for the nationwide Commercial Mobile Alert System. I appreciate the meetings between FEMA's staff and the Committee staff regarding their expansive legislative authority for public alerts and warnings in the Stafford Act.

We must remember that we are modernizing and integrating the public alerts and warning systems that can make the difference between living and dying for the Nation's citizens. When a parent hears an alert on the radio and has a few minutes to get her children into a cellar before a tornado strikes, we are reminded that this alert and warning system must be robust, more readily available, and truly modern. This Subcommittee is committed to assisting FEMA in making the public alert and warning system much better and, indeed, the best. No less will do.

I am pleased to welcome all of the witnesses today and look forward to their testimony.

And I would ask the Ranking Member if he has an opening statement.

Mr. GRAVES. Thank you, Madam Chair, for holding this hearing on the state of our public alert and warning systems.

I also want to thank all of our witnesses for being here today and for their efforts to improve our alert and warning capabilities. I know that they have the best interest of the American people at heart, and I very much appreciate your service.

Quite frankly, I think this is one of the most important hearings we have held in Congress, Madam Chair. Far too many people are dying in disasters that could have been avoided with an effective warning system. In the first 5 months of this year alone, over 100 people were killed by tornadoes in the South, in the Midwest, and in my home State of Missouri. This is simply unacceptable.

We live in a country with 250 million wireless subscribers, yet we rely on a Cold War-era alert system to warn people of life-and-death situations. Unless you live in a State that has decided to create its own modern alert system, you probably need to be sitting in front of a TV or listening to the radio to receive an emergency alert. Given our mobile lifestyle, this is not good enough. We need to modernize our aging systems so government officials can get the right message to the right people at the right time to save lives.

There is no excuse for the lack of effective warning to the public. Technology already exists to integrate cable, satellite, digital and wireless capabilities into a system that allows local officials to geographically target life-saving warnings in less than a minute. However, there is no plan to use or integrate them.

What we are missing is clear Federal leadership—not mandates, but leadership to drive a consensus among the stakeholders about the standards and protocols we will use to build this system. If FEMA fails to lead us to the next generation of alert systems, then I believe we will end up with a patchwork of State and local systems that can't communicate with each other.

We are on the verge of repeating the same mistakes we made with radios, where neighboring jurisdictions and police and fire can't talk to one another. To avoid such a mess, I introduced the Integrated Public Alert and Warning System Modernization Act last month with Chairwoman Norton. Our bill will clarify leadership and accountability and require a roadmap for developing a modern alert system that reaches people quickly and effectively.

So far there has been some effort to examine and improve portions of the current system. In June of 2006, the President issued an executive order directing the Department of Homeland Security to take the necessary steps to upgrade our alert system. As a result, the Federal Emergency Management Agency established the Integrated Public Alert and Warning System, also known as IPAWS.

In October 2006, Congress enacted the Warning Alert and Response Network, or WARN, Act that directed the Federal Communications Commission, or the FCC, to establish an advisory committee, and FCC ordered to develop the commercial mobile services component of IPAWS. However, to date, FEMA has not provided

clear leadership to develop the system architecture or a plan to tie the elements of an integrated system together.

In fact, the recent controversy over FEMA's reassessment of its authorities and role as the Federal coordinator or aggregator of alerts has caused numerous stakeholders to question FEMA's commitment to the IPAWS effort. FEMA's decision last week to assume the Federal aggregator role is significant, and I am glad FEMA is back onboard. However, little progress will be made until FEMA adopts the Common Alert Protocol standards and a clear consensus plan to integrate all of the moving parts of IPAWS.

There are also serious questions about the reliability of the existing relay system used to disseminate alerts. In 2007, FEMA conducted a nationwide Emergency Alert System test. Three of the primary entry-point stations designed to transmit the alert to other broadcast stations failed to receive and retransmit the alert.

There are also unresolved questions about how State and local officials can and should use the future IPAWS system. We must keep in mind that 98 percent of all alerts are local and that IPAWS must meet their needs for fast and targeted alerts. Given the slow and confusing pace of IPAWS, some States and localities are moving forward with their own systems to meet the needs of their citizens. While I can't blame the States for moving ahead without FEMA, it increases the risk that local alert systems will not be compatible.

In the end, we want to ensure that all Americans have the capability to receive alerts and warnings regarding disasters through as many modes of communication as possible. And that is the intent behind the bill that we have introduced.

Again, I want to thank Chairwoman Norton and our witnesses today. Your testimony is going to help us identify the critical steps for achieving the IPAWS vision as quickly as possible.

Thanks, Madam Chairman.

Ms. NORTON. Thank you, Mr. Graves.

Mr. Carney, do you have an opening statement?

Mr. CARNEY. Yes, I do.

Good morning. I wanted to thank you for holding this hearing today, Madam Chair.

As you are aware, I have committed myself during the 110th Congress to ensuring a proper state of readiness at FEMA, particularly in light of past tragedies that this Nation has suffered and because there are situations that we will undoubtedly face again in the future.

The American people deserve the best and most efficient public alert system so that they will have the time, the direction and the resources to protect themselves and their families. Throughout our history, the American people have proven that they are capable of an amazing capacity to survive, endure and succeed any challenge, especially when they are given a fighting chance.

Madam Chair, I am interested to hear the testimony of our witnesses today, particularly with respect to the IPAWS system and how it affects the present Emergency Alert System, EAS.

Pennsylvania developed its own EAS plan and filed it with the FCC on April 1, 2004. And I am interested to learn from our witnesses here their thoughts on whether IPAWS will be concluded

soon and the implications that it might have for States like Pennsylvania, States that have existing EAS plans.

I believe that we dodged a bullet during the hurricane and severe storm season during 2006 and 2007, but this season's storms already in the plains have been much more severe, much more aggressive, and have led to an enormous also loss of life already. It is my desire that FEMA not find itself again overwhelmed, as it had been the last time the Nation faced devastating natural disasters.

I look forward to the testimony of the witnesses. And I thank you for your time, Madam Chair.

Ms. NORTON. Thank you, Mr. Carney.

We have been joined by the Ranking Member of the Full Committee. I am pleased to have Mr. Mica.

Mr. MICA. Well, thank you. And I want to also thank you for holding this timely and important meeting on ensuring the public that our alert systems work to warn American citizens of natural and terrorist disasters.

In the third panel I guess today, we have Larry Gispert, who is the emergency manager from Hillsborough County. That is not in my district but the State of Florida. I welcome him and look forward to his testimony before this Subcommittee today.

I also want to congratulate our Ranking Member and Chair for their bill, H.R. 6038, which does require the Federal Government to upgrade the Nation's alert and warning system.

Now, I don't know what it is going to take. I come from a district that has been hit by hurricanes, floods, fires, tornadoes. I think we have had everything but the locust. And heaven forbid we should have another Katrina or natural or terrorist disaster and not be able to warn the public adequately.

We have the technology to achieve adequate warning for the public. Somehow we either lack the legislative will or the administrative ability to get the job done. And I am hoping that this hearing can move us toward the goal of replacing an Emergency Alert System that relies on 1950s broadcast technology and only works if you have a radio turned on. That is a pretty pitiful statement, that we don't have better system in place.

The tornadoes that we had in central Florida back in 2007 killed several dozen folks. It struck at 3 o'clock in the morning, and we did not have an adequate warning system. And we have seen also the inadequacies of some systems, particularly in the rural areas or areas where there are longer distances, and some of the traditional types of warning systems just do not work.

But, as I said, we do have the technology. People have cell phones. We have the ability to turn on and off electronic equipment and to provide timely warning for people to avoid loss of life and be prepared to deal with a disaster.

So I look forward to the testimony today. I look forward to working with Ms. Norton and Mr. Graves to come up with a solution. And whatever they can craft that will do the job I want them to know that I will be supportive of.

So thank you, and I yield back.

Ms. NORTON. Thank you, Mr. Mica.

I want to welcome our first witness now, Captain James Judkins, Jr., of Norfolk, Virginia, the emergency management coordinator of the Suffolk Department of Fire and Rescue, which is a part of the division of emergency management.

Mr. Judkins, I want to particularly thank you for driving what I understand was 4 hours here in that traffic. I really appreciate it, because while we have very informed representatives from the Emergency Management Association, I always like these hearings to have a person who is on the ground right now, who has had experiences with what we are talking about. So we particularly value your testimony, and we will receive it now.

TESTIMONY OF JAMES T. JUDKINS, JR., EMERGENCY MANAGEMENT COORDINATOR, SUFFOLK DEPARTMENT OF FIRE AND RESCUE, DIVISION OF EMERGENCY MANAGEMENT

Mr. JUDKINS. Thank you, Madam Chair and distinguished Members of the Committee. I appreciate the opportunity to share with you some stories that happened on the 28th of April when an F-3 tornado impacted the City of Suffolk, Virginia. And that is the worst natural disaster that has affected our city in the 400 years that our city has been around.

We were very blessed in the fact that there were over 500 structures, both residential and commercial, that were impacted, 49 of those were totally wiped out, but in the aftermath, no one lost their lives. Only six people required hospitalization, leaving the rest of them just to be treated by the paramedics in the field and the hospital emergency rooms and the local urgent care centers.

I have several stories I would like to share with you that our responders and our news media gleaned from those people involved.

In the first case, it goes like this: On the afternoon of the storm, a resident of the Hillpoint Farm subdivision was on his way home in his pickup truck when he heard on the radio what he described as several EAS activation alerts specific for the City of Suffolk. He immediately cell-phoned his wife and advised her to watch the skies and take cover in the hallway if she happens to spot a funnel cloud. A little while later, he received a frantic call from his wife who was huddled in the downstairs hallway as the twister roared outside and severely damaged their house.

In the second case, ″I had the radio on,″ states this one lady, ″and I heard them talking about a tornado approaching. I thought, 'We don't have to worry about that.'″ The man of the house was upstairs working on his computer. The wife was downstairs, looking out the window. And a moment later, there was nothing but debris in the air. Suddenly, the glass in the house began to break. And within seconds, the husband and wife found each other and ducked into a closet as they watched their house come apart all around them. Pictures blew off the walls, mattresses tumbled down the hall, and lamps were sucked out the windows.

In case number three, upon hearing the weather alert on television, this family took cover in a small half-bath on the second floor. The walls and windows of the rooms next to and below the bathroom were blasted away by the twister's force.

Case number four: A grandmother reports she is still shaken from what is described as a horrifying experience. This senior cit-

izen, who breathes with the aid of portable oxygen, was sitting in her home's south-facing sunroom with her sister and moved to heed a televised weather warning. They had only gotten a few steps into the interior hallway before the twister struck their home.

Case number five: First responders reported this story, that of a grandmother and her granddaughter who literally rode out the storm in a bathtub. In that account, upon hearing the warning, the grandmother and child took cover in their bathroom, grasping each other, clutching each other as they nestled themselves in the tub. The tornado leveled their home and tossed the tub, with its precious contents, in a nearby lake.

Case six: This case is personal to me because it involves my mother and my aunt. My aunt was terminally ill, and my mother was caring for her. They were watching television when the weather alert sounded. Specific information for the community in which they live, the subdivision in which they live, were broadcast. Mom managed to get my aunt and herself into the interior hallway just as the rear of the home was torn away.

And finally, case seven: Spring athletics are under way in the City of Suffolk at this time. The teams were on their respective practice fields when the school officials received the tornado warning via the All Hazards Weather Radio. The athletes were directed to the school's interior hallways for refuge.

In each of these seven cases, there are two common factors. The first and most remarkable and most important to me is the fact that no one was seriously injured or died. And secondly, those lifesaving measures that each one of those people took were prompted by an Emergency Alert System message.

In my 28-plus years' experience, I find that here is no perfect alert system. Sirens will fail either mechanically or nowadays it fails because people with their portable listening devices can't hear them because their music is so loud. Weather radios for an unexplained reason get turned off because they are ignored by the weekly test that they have, and they turn them off. More and more people find themselves listening to satellite radio and watching satellite TV. They are not getting the local messages there. Subscriber-based weather warning systems work well transmitting messages to the cell phones, but they require that you preregister.

My grandmother once said that you can lead a mule to water but you can't force him to drink. The same thing applies, I feel, to warning systems. Each of us has a responsibility to our families for their safety and well-being. And that responsibility includes knowing your community's warning systems and having a method to receive those emergency messages.

I thank you for your time.

Ms. NORTON. Well, thank you very much, Mr. Judkins. Those are exactly the kinds of case examples we are interested to hear.

Now, in your examples, all heard the EAS over the radio or the television, isn't that right?

Mr. JUDKINS. That is correct.

Ms. NORTON. So the EAS works well when the radio and the television are on, as most commercial radio? It works well if you have it on.

But you indicated that if you didn't happen to have your radio on but you had a cell phone, you have to preregister. And of course that is because not everybody wants their cell phone number known.

In your community, is there a system, as we have in some communities? I think here in the District of Columbia, telephones inside the home can ring in advance with a warning.

Mr. JUDKINS. The only system that we have in the city is what we call reverse 911, and you have to pretty well program the numbers in an area that you want to respond. It is an older reverse 911 system. So it is limited by outgoing phone lines. The newer 911 systems are Internet-based; therefore, you get more and more messages out quicker. But they still have to define an area that you have. So it takes time to set up an outgoing message like that.

In my office, I have the ability to use what we call cable voice override, which I can—from any phone I can send out an emergency message, and that will override whatever channel our residents are listening to, regardless of what channel it is on that cable system.

Ms. NORTON. So those have been programmed in.

Mr. JUDKINS. The way that works, I have a phone number that I dial in, and after I go through a series of hoops, and then it just totally overrides everybody, whatever they are watching. But, again, they have to have their TV on; they have to have their TV on. And they have to be a subscriber to the local cable channel. So that is the limitations of that system.

So, as you see, there are limitations to both that system and the system of reverse 911. The subscriber——

Ms. NORTON. Well, the reverse 911, does the local jurisdiction already have the phone numbers so it doesn't have to go to get it preregistered?

Mr. JUDKINS. Well, on that, they have a—they subscribe to a number bank from our local phone provider, which is Verizon. Now, the downfall of that, if you have an unlisted phone number, then your number is not in that bank that you get from the phone company.

And then you have to geographically set up the area in which you want to call. And it takes time. There are other systems out there that work a lot faster, but still you have to set up the geographic area. Even with the Internet-based system, it will blast the calls out really fast, but it still takes time to set up that area in which you want to call.

Ms. NORTON. When we get into the differences between systems, you know, I am almost driven back to saying, will somebody just have a whistle that blows loudly in the community? Back in the day, somehow that whistle was understood.

I mean, I am hearing what you are saying. I wonder if improvements in the EAS are the way to do this. Do you think that the EAS could accommodate different modes of communication, some that people subscribe to, some that they don't, some that require the jurisdiction to have programmed in the numbers, all the rest? Do you think we can design an EAS system that is truly universal?

Mr. JUDKINS. I think with the technology that we have, we definitely—it is capable. And with the number of cell phones out there,

that is definitely a good way to push it out. Home telephones, if you are like me, you let the answering machine catch that so you won't be bothered by telemarketers.

But, again, I would just like to revert back, there is positively no 100 percent way to get the message out. We have to do a good job to get the message out to as many people as we can and to educate our people that it is our responsibility to try to be on the lookout for those messages, especially if we know severe weather is threatening our area.

Ms. NORTON. Thank you.

I am going to go next to Mr. Graves.

Mr. GRAVES. Thank you, Madam Chair.

And thanks for being here, Captain. I appreciate it.

I was the head of our volunteer fire department for 12 years in my little town of Tarkio. And my district is a district that has 26 counties in it. Three of them are suburban, and the rest of it is extraordinarily rural. And we would go through the motion, every time we would have a warning go out, we would all show up down at the fire department, and we would get the trucks out, and the police cars would participate, and we would drive up and down the streets, blowing the sirens, hoping that people got the message. That is still in place today.

And then we would also, kind of, initiate an ad hoc call-in tree. You would call your family, and then you would call your parents, and then you would call your brother and sister, and then they would call their friends. And, you know, you would hope it would spread just as quickly as possible.

So I know the frailties of the system, particularly at night when most people are asleep. And it is startling, the difference in, you know, casualties at night as opposed to, say, during the day when people might be paying attention.

But it seems to me like—and I know the technology is there. Because, to me, in a district like me, we do a lot of tele-town-hall meeting. And we launch them from—whether it is in my home district or whether I am out here in D.C., we will launch 35,000, 36,000 calls in one evening instantly to folks throughout the district. And if they pick up, they come onboard. But regardless, they listen to our prerecorded message. And I come on the line, and we take questions and do the whole thing. But we do instantly launch 30,000, 36,000 calls. I live in a county that only has 7,000 people in it. It would seem to me like—I know the technology is there. We just have to get it in place.

But my question to you is, what are the three challenges that you see right now in developing a system that works nationwide?

And, obviously, Chairman Norton and myself, we represent completely different districts. She has a very urban district, and I have a very rural district. And that is the reason why I think it is a perfect match, introducing this bill together, because between the two of us, we have to be able to cover everybody out there and take care of them.

But what do you see as the three major challenges for districts such as the Chairman's and mine, which is very rural?

Mr. JUDKINS. I think, first of all, the first challenge would be identifying the medium, how do you want to get it out there.

The second challenge, of course, is getting buy-in on that, getting buy-in of course from the legislatures, getting buy-in from the broadcasters, getting buy-in from the folks that run the communications systems, whatever they be.

And the third thing, probably maybe depending on how we wind up pushing this out, the third thing would be getting buy-in from the citizens. Again, they have to be willing to hear the message. If it is voluntarily, probably some may do it, some may not. But if it is something that is going to be pushed, then that is something that probably will work.

And then there is a challenge of the type of messages. If you put every weather alert message that is generated by NOAA Weather Radio, then some people will get really irritated, get woke up at 3 o'clock in the morning when the local fog advisory or the local freeze advisory comes out. So there has to be some way to gauge the type of message that you want to go out.

So I see those as the challenges.

Mr. GRAVES. Bear in mind—and I think the phone system is the best simply because, a lot of cases, at least in the rural areas, if you lose a line because of the tornado or the storm is still ahead of you, you know, you end up losing a line, the lights go out and electricity goes out, but the phone is still working. And, quite frankly, very few people in my district in the rural parts have cable anyway. So even being able to integrate a cable system is going to make it tough too.

But I would agree, though, that it would have to be a system—obviously, in an urban setting, that is much more—you know, that works much better to tie in the multiple mediums.

But I appreciate you being here. I think this is a huge, huge task that we are undertaking. But we want to remember all of the—there are a lot of aspects out there, a lot of aspects in getting that message out. But I think people would be very interested in it. And the buy-in, I think, at least from the public, is going to be there. That is, the buy-in from some of the medias is going to be a little bit tougher.

Thanks, Madam Chair.

Ms. NORTON. Thank you, Mr. Graves.

Mr. Carney?

Mr. CARNEY. Thank you, Madam Chair.

I just have a couple of questions. I actually represent a district much like Mr. Graves. It is an extremely rural part of northeastern central Pennsylvania. In fact, I am either blessed or damned to not even have cell service at my house. Most times I appreciate that, frankly, but occasionally it seems like it might be an awfully useful tool in inclement weather.

From your perspective, what is the most effective way to get messages out, from your experience and from what you have heard from your colleagues around the country?

Mr. JUDKINS. Well, right now, my locality is pretty much like yours, we are rural/urban. There is a large portion of our city that is still farm community. Usually, when we have an event like we experienced in April, the first thing the media guys want to shove a microphone in your face is, why don't you have sirens? Well, how

many sirens do you think it would take to cover 430 square miles? And then there are all the frailties of the siren system.

So, as it stands right now, with the technology that we currently have in place, I feel that it would be a toss-up between—NOAA All has its radio, basically because, if you happen to get one of the newer models that has the local code probed in, you don't get irritated by hearing your neighbor's weather and get awakened by messages you don't want. And that is one of the issues that I push out to the people that I do outreach for.

And, of course, the next best system probably that is out there right now is some of your systems that localities can purchase. They are very expensive, but they can blast a lot of messages out to a lot of people very quickly. They are Internet-based, and you can place the numbers in via a purchased telephone list to the local subscribers, and you can get a lot of messages out quick. But, again, that system is very expensive, and localities like mine just do not have the emergency management budget to take anything like that.

Mr. CARNEY. That is true.

I was also intrigued by your comment of folks listening to satellite radio now, the subscription rates are through the ceiling, and that hurts their ability to hear broadcasts of warnings.

Is there a way—and, frankly, I don't know the answer to this. Is there a way that you can interrupt the satellite broadcast to issue a message, issue a warning?

Mr. JUDKINS. Well, I am not an electronics guru, but with the technology folks we have out in the world today, I am sure there would be a way. The real challenge would be to be able to get the message to the area in which you would want it to go.

In some localities, DirecTV also has the reception for local channels. Some technology along that line might work for that. But you would have to have something within the system that would be able to pull in that local message so people would be hearing all the message from for all of the country or all of that particular coverage area for that satellite system.

Mr. CARNEY. Thank you.

No further questions at this time, Madam Chair.

Ms. NORTON. Does the gentleman from New York have questions?

Mr. ARCURI. No, ma'am.

Ms. NORTON. Okay, thank you.

Just a couple more questions. Do all the broadcasters in your area participate voluntarily?

Mr. JUDKINS. No. All of them don't; the majority do. I can safely say that the major TV stations all participate, and that is where we get the most of our coverage. The majority of the radio stations do, but not all of them, again, because it is a voluntary system for local messages.

But as a matter of fact, the tornado that we had the other day, that is how I got the message. I was out of the office, and I heard the EAS on my vehicle radio, and that prompted me to get back to the office. And, of course, while I was en route, I got the call from my dispatcher that she had gotten a teletype message down

from the Virginia Emergency Operations Center that we were under a warning. So that is the way the message flows in our city.

Ms. NORTON. Well, the ones that don't, is there a cost to them if they do subscribe to EAS in any way?

Mr. JUDKINS. You are talking about the broadcasters?

Ms. NORTON. Yes. The ones, for example, that don't subscribe.

Mr. JUDKINS. I don't have an answer to that question.

Ms. NORTON. We will ask the next witness. I thought it is a fairly easy system that everybody would want to be on. I would hate to have a radio station with people listening, where they didn't hear it on my radio station but my neighbor did, and my neighbor went for cover and I didn't. So I am interested in that. But we will find out about that.

Well, again, you will have to forgive me, Captain Judkins, I am driven back to sirens. Are sirens used at all any longer?

Mr. JUDKINS. In the Hampton Roads area, the siren is the alert method of choice for the nuclear power plants.

Ms. NORTON. For what?

Mr. JUDKINS. For the Surry nuclear power plant, and they are for North Anna and the other nuclear power plants that service the Commonwealth. They are also backed up by radio and TV EAS alerts, but they do have sirens out.

They test them on a regular basis, but I can't remember when every single siren have worked on every test. It is usually one or two that don't work at times. There are always mechanical issues.

Keep in mind, also, there is a number of the rural jurisdiction across the Commonwealth that still use sirens to alert volunteer firefighters. Then it becomes the question as to, what does the siren going off mean? Is it a fire? Is it an alert at a nuclear power plant?

Ms. NORTON. Well, you wouldn't use it for a fire. We are talking about as part of the EAS system.

Mr. JUDKINS. Right. But keep in mind, there is still a number of jurisdictions in the Commonwealth that still use that system to alert local volunteer firefighters.

Ms. NORTON. Yeah, one would have to—the only reason I am driven to it is the technical—well, first, you are talking about the sirens. You know, imagine getting to everybody's cell phone.

Mr. JUDKINS. Right.

Ms. NORTON. Some cell phones work, in some places they don't. They drop calls. I would hate to depend on that to alert me. And I recognize that sirens go off, not all of them work. Just try asking your neighbors how often their cell phones work. I just would be—particularly given—well, the Ranking Member says that is all they have in his district. And in rural areas, most people don't even have cable. They may not use cell phones as often as they do in big cities. I just don't know why we would abandon that technology instead of having everybody to at least understand it.

For example, in a tornado, I am here talking about things where there is a flash. You know, with a hurricane, usually you have some warning. But I must say, they have had tornado warnings even here recently. And the whole point there—and, of course, the radio is very good, and a lot of false positives, and that is fine. But you talked about it somewhere, you had better get yourself to-

gether in 3 seconds. I don't understand—just getting yourself to cover, much less picking up the phone, hearing what it is all about. It seems to me that, particularly for certain kinds of events, events that might be almost immediate, like tornadoes, I don't know why I wouldn't want to hear a siren rather than, you know, not be near a cell phone or even one of these reverse 911 calls.

I just don't know why we do not want to rely on them at all, particularly since it looks like this isn't going to be universal anytime soon. And even if it is, it depends upon you having the technology, the telephone, the radio. It has to be on. The cell phone has to be where you can pick it up. I can understand that for a hurricane. Most hurricanes don't come upon us without some warning. Even Katrina had a warning. But I am worried about events for which there is little warning.

I must say, some of those were in your own case studies. But all those people happened to have the radio or the television on, didn't they?

Mr. JUDKINS. Yes, ma'am. They just luckily had their communication device. Some of the military bases are experimenting and actually purchased and installed a loudspeaker-type system. It is unbelievably clear, and that can put out messages to large areas with an unbelievably clear signal.

I saw a demonstration at one of my conferences I was attending a while back. And that is a solution that possibly could be used in smaller communities where you have a lot of people clumped together. You are actually hearing a message, you know what to do, you know how long you have to do it.

But, again, it is the thing of people being able to hear. If they have their iPods on and the music cranking, they wouldn't hear that. They wouldn't hear the sirens.

Ms. NORTON. I can think of some sirens they might hear. I think that could be adjusted so that they would hear them over something in their ear, because a lot of people do carry things.

You know, because you are on the ground, because you had case studies and because you have a far-flung area, I am particularly interested in how to quickly reach people. Now, I recognize that we are not—even if we were talking about a terrorist alert—we are not talking about somebody that is coming with a bomb. That is usually not the way even wars or enemies fight any longer.

But FEMA is more about natural disasters than about anything else, because that is what we have every year. So I am a little concerned about getting so fancy, so high-tech that essentially we get to over-depend upon people listening for the alert. We forget that there are people who love silence, don't have anything on. There are people in hospitals where there may not be radios and where silence is valued. There are people in libraries. So, you know, I am always skeptical but particularly skeptical about making this universally appear and be universally effective without understanding how diverse all of us are.

Are there any more questions of any members of the panel?

If not, I want to thank Captain Judkins. Your testimony has been very, very useful to the Committee, and particularly thank you for the long trip.

I want to call then—the next witness is Major General Martha T. Rainville, retired, who is the assistant administrator at FEMA, National Community Program Directorate; and Chief Derek K. Poarch, chief of the Public Safety and Homeland Security Bureau of the FCC.

However, I do want to note and express my condolences to Mr. Poarch, who is not here because of a death in the family. So his deputy, Lisa Fowlkes, will be filling in.

Thank you both.

Ms. Rainville, let's begin with you.

TESTIMONY OF MAJOR GENERAL MARTHA T. RAINVILLE, ASSISTANT ADMINISTRATOR, NATIONAL CONTINUITY PROGRAM DIRECTORATE, FEDERAL EMERGENCY MANAGEMENT AGENCY; LISA FOWLKES, DEPUTY CHIEF, PUBLIC SAFETY AND HOMELAND SECURITY BUREAU, FEDERAL COMMUNICATIONS COMMISSION

General RAINVILLE. Good morning, Madam Chairman, Ranking Member Graves, Members of the Subcommittee. I am Martha Rainville, the assistant administrator for FEMA's National Continuity Program Directorate. And I want to thank you for this opportunity to share with you this morning the progress that FEMA is making with the Integrated Public Alert and Warning System.

The Emergency Alert System has served us well, but it is based on technology that is about 15 years old. Through IPAWS, FEMA and our partners are transforming the alert system from an audio-only signal that is sent over radios and televisions, as we have discussed earlier, to one that can support audio, video, text and data alert messages sent to residential telephones, Web sites, pagers, e-mail accounts and to cell phones. The mission of the IPAWS program is simply to send one message over more channels to more people at all times and places.

My written testimony, which has been submitted for the record, lays out in detail, first, the importance of interagency cooperation and public-private partnership in improving the Nation's alert warning system, lessons learned through our 2007 pilot programs in the Gulf States, and also the next steps that FEMA will take in developing IPAWS.

The success of IPAWS depends heavily on the interagency cooperation and the public-private partnerships. FEMA works closely with our partners at the National Oceanic and Atmospheric Administration, the National Weather Service, and the Federal Communications Commission to ensure the coordination of effort when it comes to upgrading, improving and securing integrated public alerts and warning. We also coordinate extensively with others, such as the Primary Entry Point Advisory Committee and the Association of Public Television Stations on systems upgrades.

Congress allocated funds in the fiscal year 2005 Katrina supplemental that enabled us to deploy a suite of new alert warning capabilities in Mississippi, Louisiana and Alabama during the hurricane season 2007. So, for the first time, these State emergency management officials had the ability to send alerts via American Sign Language video to residents who are deaf or hard of hearing

and to send prerecorded messages in Spanish to residents who do not speak English.

These successful pilots ended in December 2007 on schedule. And since then, through the State homeland security program grants, FEMA continues to support State and local governments seeking to improve their alert capabilities. And in fiscal years 2006 and 2007, 27 States received more than $1 billion through this program, which includes an eligible category to support alert systems.

This year, FEMA is taking steps to improve alert and warning infrastructure and to increase the dependability of the national system.

First, we are strengthening the Federal Government's ability to send emergency warnings directly to the American people by increasing the primary entry-point stations from 36 to 63. This will enable Federal warnings to reach 85 percent of the American public directly, up from 70 percent currently.

Second, we are increasing the survivability and resilience of the national alert and warning system through digital EAS. Digital EAS adds the direct transmission of voice, video or text alert to stations across the country over the PBS satellite network. It will also allow the distribution of alerts in multiple languages. And later this summer, FEMA will roll out digital EAS into the eight States and one territory that participated in a previous pilot. These States are Alabama, Alaska, Florida, Louisiana, Mississippi, New Jersey, Texas, South Carolina and Puerto Rico. We will also expand digital EAS beyond these original nine locations to five more locations this year.

Third, we are increasing the capacity of the national alert system by incorporating NOAA's infrastructure into the IPAWS architecture. Through NOAA's national network, IPAWS gains another redundant path to State and local entities, broadcasters and the public.

And, finally, as announced on May 27th by Administrator Paulison, FEMA will assume the Federal aggregator gateway role for cellular mobile alerts. And we will work with DHS Science and Technology to develop, test and integrate the technical solution and with FCC to make the alert aggregator operational.

Our goal is to ensure that the President can send an alert to the public during an all-hazards event and to support capabilities chosen by State and local officials. And, together with our partners, we will ensure that IPAWS is reliable, resilient and secure.

So thank you, Madam Chairwoman and Ranking Member Graves and others, for this opportunity to tell you what FEMA is doing with IPAWS.

Ms. NORTON. Thank you, Ms. Rainville.

Ms. Fowlkes?

Ms. FOWLKES. Good morning, Madam Chairwoman Norton, Ranking Member Graves, and Members of the House Subcommittee on Economic Development, Public Buildings and Emergency Management. Thank you for the opportunity to appear before you today on behalf of the Federal Communications Commission to discuss our efforts to develop a robust and reliable emergency alert system and to establish a Commercial Mobile Alert System, other-

wise known as the CMAS, as required by the Warning Alert and Response Network Act.

The Commission's efforts are consistent with the goal of H.R. 6038, legislation introduced by Ranking Member Graves and cosponsored by Chair Norton, which is to improve the ability to alert the residents of the United States of all potential hazards under all conditions. I will briefly summarize the Commission's efforts in these areas to date.

For over 50 years, the U.S. has had a mechanism in place to deliver alerts to the American public, particularly for the President to communicate with the public in the event of a national emergency. That system, the EAS, requires EAS participants, including radio television and cable systems, to deliver emergency alerts to the public.

The FCC continues to enhance the manner in which this alert and warning system takes advantage of new technologies. For example, in 2005, the Commission expanded scope of EAS to include digital broadcast radio and television, digital cable, and satellite radio and television. Last year, the Commission expanded the EAS to include Internet protocol-based video programming services offered by wire-line telephone companies.

The Commission has taken steps to ensure more robust and reliable next-generation EAS. Last year, the Commission required EAS participants to have the capability to receive common alerting protocol formatted EAS alerts no later than 180 days after FEMA publishes the CAP technical standards and requirements.

The Commission also required commercially based EAS participants to transmit State and local EAS alerts that are originated by Governors or their designees no later than 180 days after FEMA publishes its adoption of the CAP standard, provided that the State has submitted and received Commission approval for a State EAS plan that describes how such alerts will be transmitted.

The Commission has also taken steps to establish a Commercial Mobile Alert System pursuant to the WARN Act. Under the statute, the Commission was required to undertake a series of actions within tight statutory deadlines. I am pleased to report that the Commission has met all of its WARN Act deadlines to date.

First, the Commission was required to establish and convene an advisory committee to recommend technical requirements by which commercial mobile service, or CMS, providers could voluntarily transmit emergency alerts. The Commission established an advisory committee, the Commercial Mobile Service Alert Advisory Committee, consisting of a balanced array of experts. As required by the WARN Act, the committee held its first meeting on December 12, 2006.

Next, the WARN Act required that the advisory committee develop and submit its recommendations to the Commission by October 12, 2007. The CMSAAC submitted its report to the Commission in a timely manner, recommending an end-to-end alerting system under which a federally administered alert aggregator would aggregate and authenticate alerts received from Federal, State, tribal and local governments. The alerts would then be sent to an alert gateway which would process the alert into a 90-character format that could be sent to CMS providers. The alert would then be sent

to gateways and infrastructure administered by CMS providers and then ultimately transmitted to subscribers' handsets.

By April 9, 2008, the Commission was required to adopt technical requirements based on the advisory committee's recommendations. I am pleased to report that the Commission released its first report in order adopting those requirements by the statutorily required date. The Commission's order generally adopted the advisory committee's recommendations, including its end-to-end CMAS architecture proposal. The FCC also agreed that the Federal Government entity should perform the alert aggregator and alert gateway functions, and we are pleased that FEMA has announced that it will perform these functions.

The Commission's order also adopted technical requirements for CMAS elements controlled by CMS providers. In addition, the order adopted rules requiring participating CMS providers to transmit three classes of emergency alerts—presidential; imminent threats, such as a tornado or hurricane warnings; and AMBER Alerts—to target alerts at areas no larger than the county level and include an audio attention signal and vibration cadence on CMAS-capable handsets.

Over the next several months, the Commission will continue to take steps to improve the EAS and to establish the CMAS. The Commission is currently working on an order that would address the best ways to ensure that non-English-speaking Americans and those with disabilities are able to receive EAS alerts. In addition, during the summer, the Commission will adopt rules that, among other things, address the process by which CMS providers must elect whether they will transmit alerts over the CMAS.

The Commission will continue to coordinate with all stakeholders on alert and warning issues. The Commission looks forward to continuing to work with FEMA on EAS and CMAS issues and stands ready to support FEMA in implementation of H.R. 6038 should it be enacted.

Thank you for the opportunity to appear before you today. This concludes my testimony, and I would be pleased to answer any questions.

Chief Poarch has also included additional information on EAS and CMAS in his written testimony.

Ms. NORTON. Thank you, Ms. Fowlkes.

Could I ask you both that if there were a need for a National Emergency Alert today, can you assure us if the public would receive it in time? I ask each of you.

General RAINVILLE. Yes, ma'am. We feel confident at FEMA that the Nation would receive the alert.

Ms. NORTON. How?

General RAINVILLE. We test the PEP station—through the FEMA Operations Center to the PEP Station is the origination of the alert. We test the PEP stations monthly.

So we feel confident that that can get through to 70 percent currently, until we add the other PEP stations this year; and then 85 percent directly through the PEPs. But then the PEPs cascade the message down through a chain to local stations so that the States are responsible for that piece of it.

But we feel confident through the messages going out through NOAA and others, that reach 98 percent of the public, that we can also get an EAS message out. Clearly, there is a need to modernize and upgrade the system to add redundancy, to add resiliency to it, to add layers of alerts and methods of alerts to the current system; because, as you said earlier, not everyone is watching television or listening to the radio.

Ms. NORTON. Ms. Fowlkes?

Ms. FOWLKES. From the FCC's perspective, we continue to do everything that we certainly can to ensure that communications service providers, upon receiving the alert, are able to transmit it out so that the public gets it in a timely fashion. We do this through required monthly and weekly testing of the Emergency Alert System which requires participation by EAS participants.

We have also taken steps to prepare EAS participants for next-generation emergency alerts, the Emergency Alert System. In the context of CMAS, we have been working with the industry, working with FEMA and others to ensure that that mobile alerting system will be able to receive and transmit alerts in a timely fashion.

Under the committee's recommendations, there were a number of elements to ensure redundancy and resiliency in that system. There were a number of other actions taken by the Commission to ensure timely alerts with that respect. So, again, the Commission certainly is doing everything that it can to ensure that EAS participants or CMAS participants will be able to send out the alerts in a very timely fashion.

Ms. NORTON. Well, I ask you, Major General Rainville, there has been considerable impatience—I should say the natives are restless—the sense that leadership is needed if we are to upgrade this system.

Are you saying in your testimony that there needs to be a forum, or at least that you recognize that a forum would be useful because of how diverse the stakeholder groups are?

Now the GAO recommended such forums simply to inform the agency the way we are being informed this morning.

Are any such forums going on? Are they planned? When? Through what vehicle?

General RAINVILLE. Thank you for that question, because one of the most important lessons from the pilots on the Gulf last year was that that one solution won't work for everybody and that States have different needs and different best ways of alerting their populations.

We need to listen to the States, to the emergency managers, which, like the Captain we have here this morning, so that we get it right in whatever our solution is.

We are informally meeting with State emergency managers through the FEMA regions, we are working with IAEM and other groups to get their feedback on, but we will be setting up a formal group, an advisory group, if you will, that will work to make sure to inform the IPAWS program.

We haven't determined the membership yet. We are actually working with IAEM to help us with that, with APTS and PBS as well. So, informally we have. I want to get it formally established so that we have a standing advisory group.

Ms. NORTON. What is the cause of the delay here? You have people now taking their own initiative? The Ranking Member talked about the almost danger, the risk, that we will have a patchwork. If you have too much of a patchwork, you don't have what we were after Katrina and after 9/11. What is the problem with even getting a forum going, forums going around the country?

General RAINVILLE. I think that is a very good question, Madam Chairwoman. One of the questions was what type of forum can we legally establish to work our way through that?

Ms. NORTON. Let's talk about such forums, because that is the only problem— you have got somebody sitting right behind you from Norfolk, wait a minute, Suffolk, who can tell you what kinds of forums.

I really want—let's go to Ms. Fowlkes, because the FCC has required EAS participants to have the ability to receive the CAP EAS alert no later than 180 days after FEMA publishes its standards.

Let me ask you whether or not you recommend the CMSAAC, the Mobile Alert Advisory Committee, as a model for handling this issue in the future?

Ms. FOWLKES. Well, what I can tell you is from the FCC's perspective, the CMSAAC worked well in this case. We were very fortunate to have people from different perspectives—and I have to give the wireless industry credit, because we had all the major carriers on the committee—and they all worked well together, and everyone was very serious in trying to get to some technical—some viable technical recommendations that everyone could live with within the statutorily mandated time period.

That, of course, helped the Commission, when the Commission had to start complying with statutory deadlines in its rulemaking.

I stress ″in this case″ because an advisory committee is made up of people, and people have their own agendas and personalities. So if you don't have the right people on the advisory committee, you don't necessarily get the same results.

Ms. NORTON. That is essential, Ms. Fowlkes, if you don't have the right people—if you don't have the right people sitting up here. We all have to—people took a chance on all of us. We don't know if we are the right people.

It seems to me there would be less of a chance given all the Emergency Management Apparatus we have in the country. Including putting together who the right people. I am concerned, and I am really reflecting the concern out there in the country, that if the threshold of who are the right people is stopping us, when we have had an emergency management network, for example, in terms of FEMA, for a very long time, very sophisticated on the ground—only people who can tell us anything about what we need to do—I just don't understand that that kind of matter about who should be on it, you know, if you have got the wrong people on it, okay, put some other people on it too, in your case, and for that matter in FEMA's case.

For example, Congress has—there are grants to help offset the cost of upgrades.

Are local governments applying for these grants, these EAS grants? If so, what kind of guidance can you give them, given the virtual starting point where you find yourself?

General RAINVILLE. I can speak to the area of alerts and warnings. As I said in my testimony, from 2006 and 2007,In those 2 years, 27 States applied for grants. That totalled about $1 billion that could be used for alerts and warnings.

My counterparts in the Grants Directorate at FEMA could give you more detailed information. But we have been working with them, particularly since the Gulf pilots, when we saw the success of those capabilities being fielded, to be sure that language was written into the grants that would allow the States flexibility in using grant money for alerts and warnings.

This is very important. Again, it is important that the States and locals determine what capabilities are most important to them, what their priorities are. Because what might be a useful siren system in one place won't work in another, or ETN or opt-in, whatever it might be.

If you would like to have more specific grant information, I would like to get back with you on that information and divert——

Ms. NORTON. I am going to live this subject for a moment. Ms. Rainville, I am going to ask you to submit to this Committee— first of all, let me say I admire that you all do pilots first because that also informs us.

I am very concerned about the startup nature of this. I am going to ask that you submit to the Subcommittee within 30 days a plan for forums. You don't have to have all the forums going—and I would hope that would trigger the forums. Within FEMA, there are the experts who can tell you how to do this.

Now, if you want to do a pilot forum first, so that you are sure of what kind of people—but it seems to me you should submit to us a plan for forums. You ought to be able to start at least one forum within the next 30 days. I think that would increase the confidence of the public that this matter is moving on.

I am going to move to the Ranking Member now.

Mr. GRAVES. Thank you, Madam Chairman.

My question is for General Rainville.

Last month the FCC held an emergency alert summit, and most of the panelists said that the greatest obstacle to progress was the lack of leadership in FEMA. As an example, they cited FEMA's failure to adopt a common alert protocol, which, as I understand it, it is critical for manufacturers to build the equipment for the programmers to write the software, for broadcasters to purchase the right equipment, for State and local officials to be sure that they upgrade their system to be sure that it is compatible with everyone else's system.

My main question to you is, when is FEMA going to adopt that standard? When are you going to come up with the standards so that everybody can start working in the same direction?

General RAINVILLE. FEMA intends to announce its intention to adopt the CAP 1.1 in about 30 to 60 days. The time before that, and actually publishing the standards, is going to take an effort to define how we are going to meet the standard and how the rest of the community is. We are very concerned, because publishing the standard specifically starts the 180-day clock on compliance, with other Federal agencies, compliance by industry, as well.

We know that many will need time to be able to comply once the standard is published. We want to use this time from announcing our intention to go to a specific standard, to let them begin work toward a reasonable standard, but not be locked into the 180-day clock that will result in many being uncompliant, regardless of the work they put into this.

We have a particular issue with index encoder-decoders at the PEP stations that are no longer being manufactured. We would have to begin manufacturing those to have the broadcasters in compliance. So we want to work, again, through forums. But there are specific groups in working with industry, working with the emergency managers and working with the Federal partners, to make sure that what we come up with is something that we can all comply with and we can all produce and we will be successful. That is one of the reasons, the main reason, that we have been delayed.

Mr. GRAVES. Well, you have to develop a consensus among all of the stakeholders and all of the folks out there. You have to do that. I need some assurance that you are going to do that.

General RAINVILLE. Yes, sir, it is the consensus first, but the other issue is to be able to physically comply with the equipment. It is the equipment manufacturing that has fallen by the wayside, and that will take time to regenerate to allow them to physically be compliant with this.

Mr. GRAVES. It seems to me like we can't move forward until we have that protocol, until everybody is working or at least working towards that goal, that they have some sort of consensus to be working toward. So everything is kind of on hold until we get to that point.

What do you say, 30 to 60 days you are going to have the protocol?

General RAINVILLE. Yes, sir, 30 to 60 days. What we were going to try to do is announce our intention to go a CAP 1.1. Many manufacturers are already using that as a standard. It is one that they will then know is going to be the standard to some degree.

It won't hold up progress, but it will allow them time to be able to comply and allow industry time, as well as NOAA and FEMA, with our networks. We can also and will and are working with the SEC as well, because the rule that gives 180 days is another area of this we can look at to see if there is some relief there, so that we can announce and publish the standards and still allow the community time to comply.

Mr. GRAVES. So when will there be a Federal standard, approximately?

General RAINVILLE. That would be something I would like to get back to you on. I can make a guess, but I don't think it would be fair to give you a timeline. We need to push this.

Mr. GRAVES. Go ahead and guess.

General RAINVILLE. We need to be able to have a list of products and companies that produce the products for State and local emergency managers to choose and have confidence in. We have to make sure that manufacturers know the standard so that our system can be interoperable with what they are producing.

So we are very anxious to get this going, but we are also trying to be very realistic to make sure that we can come out with something that is actually doable with them.

Mr. GRAVES. You are the leadership. Go ahead and give me an estimate. Give me a guess.

General.

General RAINVILLE. I would estimate, because of the manufacturing time that has been estimated to us for the end decks, using them as a start point, that it would be—after an announcement, it would be maybe 18 months before they would be able to get those in production.

Again, we can get back to you with some of the other requirements that we know some of the other timelines on. We don't control that, but we have already been talking to companies that we know might be interested in producing them and trying to go get ahead of this sum so that we can keep pushing this.

And that once we do come out with a standard, that we have some confidence that they are actually going ahead, and will be able to help us meet it.

Mr. GRAVES. Thanks.

Ms. NORTON. Mr. Arcuri.

Mr. ARCURI. Thank you, Madam Chairwoman.

You know, I think it is important that we not have a patchwork throughout the country, but I represent a district in New York. And one of the concerns that we have in New York is the fact that we have spent a great deal of money in our State in order to develop a system ourself, the New York Alert.

Are there any assurances that we can get from FEMA, or what steps will FEMA take to try to integrate? We certainly don't want to detract from initiatives within the State, especially in States that have spent a great deal of money.

Are there any steps to be taken to ensure that we can integrate what's being done locally and on a State level and whatever FEMA adopts?

General RAINVILLE. Absolutely. That is one of the goals of IPAWS is to have an integrated, interoperable system. New York has done a lot. Washington State has done a lot. The National Capital Region has a robust capability. What we are doing is working with them to be sure that the standards we come out with, that the systems we come out with for the national system will allow those capabilities to interoperate, that the States will be able to piggyback off on the national infrastructure, much like they do now with the current EAS.

Not only do we learn a lot from the States and what they are doing, but we want to make sure that this integrated public alert warning system is just that, and will allow the States who have that capability to continue using that capability. That is why it is so important that we work with them, that we understand what they are doing and what their needs are, and where they are headed as well.

Mr. ARCURI. What steps does FEMA take in order to let the State, particular States know the direction they are heading in to sort of lead, but in other words, give States some indication that,

look, FEMA is heading in this direction, so you may want to taper what you are doing in the same direction that FEMA is heading?

General RAINVILLE. What we have been doing since IPAWS program management office was set up a year ago—particularly in the last 6 months—becoming active, going to conferences, going to the hurricane conference, going to the IAEM conferences. Wherever we are invited we go, and we talk about IPAWS and have an outreach program so that State and locals know what we are doing.

We also have been working through the 10 FEMA regions. Region 1 has just appointed an IPAWS coordinator, and we are hoping to use that with the other regions as well. We did the pilots in the Gulf. We did other Digital EAS pilots in the nine States and territories. We are also using that as vehicles to learn who to reach out to in the States: emergency managers, obviously; governors, obviously.

Homeland Security advisors in some cases are connected or not, but we can always do a better job, and we are just really, I feel, beginning down that path where we have done pilots. We are ready to roll out the first increment of IPAWS.

As this is rolled out, we need to have an aggressive outreach and education to the States. In all of this we found that there are five States that have decided not to use EAS for their State system. We need to understand why that is, too, and work with them.

Mr. ARCURI. I don't want to put you on the spot ask you which States, but you find some States are agents more amenable to working with FEMA and other States are a little more cooperative in terms of adapting the same type of strategy?

General RAINVILLE. What we found-- and I can give you the five States later, and I can probably name them, because I was very concerned, frankly, that some had decided not to use the system—but what we have learned is that the States as a whole tend to trust FEMA because we have longstanding relationships in other areas for emergency support, but they are very leery of having a Federal solution imposed on them because they, depending on their geographic location, they have different problems that they are going to face natural hazards.

It is very important to them that we look at a solution, at an integrated solution that can support their choices. We are learning the best way to communicate with them, but it is an area that we really look forward to developing further our initial communications with them, our meetings with them, particularly along the Gulf Coast last year, were very, very informative and helpful.

Mr. ARCURI. Thank you. Mr. Carney had to step out, but he asked me if it got to this point before he returned, if I would ask one question. He represents a district in northern Pennsylvania. His concern is this: With respect to IPAWS, how are you working to improve coverage to remote areas?

He points out that in his district, which is rural, communication is not a foregone conclusion. He notes that he gets cell-phone service, but only if he stands in certain parts of his home. Many people in his rural communities don't benefit from the same level of telecommunications as other people do in suburbs and cities.

What can they expect in that regard?

General RAINVILLE. Well, I can sympathize, because I come from northwestern Vermont where we just have no cell phone service at all.

Our approach is, one, to layer capability, to maintain a vigorous alert system over radio and television that we currently have. To layer on that, we believe that probably the most effective next capability is the ETN, the Enhanced Telephone Notification, known as Reverse 911—which is a trademark term now—because more people have land lines, it is not an opt-in. We can push up to 60,000 calls in 10 minutes if the State telephone infrastructure can accommodate that.

That is the next, we think, most effective capability short-term, while we continue to develop the opt-in for Web alerts, e-mail alerts, pager alerts, cell-phone alerts as well. Those are all layers that will help reach more people. But for the rural folks, we really need to make sure that we have, coming into digital EAS, that we have an ETN capability, that the States understand and have some funding streams for that as well, because that will really reach out to the rural.

In those jurisdictions that choose to have siren, that the sirens can be tied into the alert system as well. Again, that is a local choice. It works for some and it doesn't for others. So the layered approach, we feel, is really the way to reach the people regardless of where they live.

Mr. ARCURI. Thank you very much.

Thank you, Madam Chairman.

Ms. NORTON. Thank you, Mr. Arcuri.

Mr. Dent.

Mr. DENT. Thank you, Madam Chairman. General Rainville, my main question is: When does FEMA expect to have a fully integrated system that is going to be up and running?

General RAINVILLE. I am only smiling because we see this as the layered approach, and we see IPAWS as a continued development for alerts to upgrade the technology of alerts.

However, we are rolling out the first increment of IPAWS' capability this fiscal year, this summer. We are fielding the digital EAS in the nine States and territory where we piloted it over the last 2 years, and we are adding five more locations to that this year.

We also added NAWAS to two States, to Florida and Pennsylvania last year at their request. We are pushing on our work with geotargeting with NOAA to be able to do a better job with the cell phone alerts, which need geotargeting capability and with opt-in and encouraging States with ETN.

While we continue to encourage to develop technology that we need to do a better job, we also are very firm about rolling out some capability now. The States need this now, not only the standards and protocols, but they need to understand the real capability that they have available to them.

Mr. DENT. General, my next question deals with that. Researchers, I know, found that local officials need these public alert warning systems that meet some basic requirements.

Specifically, they require delivery of warnings to the public in less than 2 minutes. This is especially true in common situations

like tornados in which the windows of time to alert people to take cover is very, very short.

Will IPAWS meet this requirement?

General RAINVILLE. I believe it will, for certain delivery methods now, and our work and development is to make sure that whatever we do, whether it is work as a Federal aggregator or whether it is developing better technology to deliver methods of different alerts, it is to make sure that we don't interfere, first of all, with the State message or delay the State message, and that we find ways to reach people the quickest way possible.

The person with the cell phone is not going to get an ETN message at home, but they will get it on their cell phone. So that is very much on our minds.

I think we will see realistically that the very quick breaking alerts for tornados, where they have less than 2 minutes, it might be difficult to get a message through, just for the time that it takes that emergency manager to send the message out.

But NOAA does a fabulous job of getting the alerts down to 98 percent of the public. We are using NOAA's infrastructure, and NOAA is using our EAS as well, so that we can help each other with the timing.

So I would say that if that is our goal, realistically, there are challenges with that, particularly with the no-notice events.

Mr. DENT. Do you think broadcasters should be required to carry State and local alerts?

General RAINVILLE. I believe that the public deserves to get the alerts as soon as possible, over every means possible.

Mr. DENT. I think that is a ″yes.″

General RAINVILLE. I am trying to stay out of trouble, but I know that our business is alerts and warnings, and our passion is making sure that people get life-saving information. I think that that should be available to everybody. However, I respect the judgment and the rights of the Governors in the States.

I know that all of our partners feel the same we do about getting alerts out, and they are doing everything within their power to alert their residents.

Mr. DENT. Thank you.

I yield back, Madam Chairman.

Ms. NORTON. Thank you. Picking up really on your question, really for Ms. Fowlkes, you do have requirements for equipment and testing as a condition of licensing. You don't require, however, the broadcasters to certify their compliance.

Given that we are trying to upgrade the system, shouldn't there be a more rigorous assessment of these broadcasters and their status?

Ms. FOWLKES. Well, I think that the Commission already has a rigorous enforcement program with respect to EAS as well as its——

Ms. NORTON. You don't require them to certify their compliance?

Ms. FOWLKES. We do inspections, and where we find——

Ms. NORTON. But you inspect about 10 percent of licensed broadcasters per year. I understand that you can't go around and inspect everybody.

But as we try to modernize the system, living in the post-9/11 period, are there any changes? I mean, these are old ways of doing business.

Are there any changes you would make given the fact that we don't expect you to go around and look at every broadcaster to find some way, for example, to certify their compliance?

Ms. FOWLKES. At this point, I am not—I do not know whether or not that is an issue that is currently before the Commission, so that is something—that specific issue is something I would have to get back to you on.

Ms. NORTON. I wish you would get back to us within 30 days on that. We are talking about upgrading the systems. That means the FCC, as well as FEMA, should be looking at what it used to do to see if it is the same as what it should continuing to be doing.

Apparently there is a Federal requirement—help me on this—that if it is a Federal alert, then you have got to broadcast it. But, of course, not all of these broadcasters, we learned from Captain Judkins, are part of the EAS system. So it is hard for me to understand how there could be a Federal alert system where everybody would have to participate.

Then there would be, apparently, a different way of regulating. I understand most or many broadcasters, for example, belong. How does the universal requirement stack up with whatever the States require people to do so that some don't even have to do it?

General RAINVILLE. What I can tell you is that the requirement that FEMA has is to maintain an emergency alert system that can be used to transmit Presidential message, that Federal alert message, in time of a national crisis.

Ms. NORTON. Do you have any idea how many broadcasters have not voluntarily decided to comply?

General RAINVILLE. It is concerning. I mean, there are certain categories. Obviously, as you well know, that are required that it is mandatory——

Ms. NORTON. As required of who, it is required—say that again?

General RAINVILLE. I can get you the list, but it is required of broadcasters and FCC can tell you who is not required.

But the major broadcasters, including the cable and satellite are required. It is mandatory for them to carry the Federal alert, that Presidential message.

Ms. NORTON. We are the Federal Government.

General RAINVILLE. Yes, ma'am.

Ms. NORTON. We can talk about Federal alerts. But we are really talking about alerts, almost all of which emanate from the State.

General RAINVILLE. Absolutely.

Ms. NORTON. Ms. Fowlkes, let me ask you, what is if difference between those that are required by us and those States and others who apparently participate voluntarily?

Ms. FOWLKES. Basically, in all broadcasts, all media companies basically, broadcast radio, television cable, so on and so forth are required to carry the presidential——

Ms. NORTON. So who does that leave out, please?

Ms. FOWLKES. If they are just doing the Presidential alert, that is all they would be doing, the alert from FEMA.

Ms. NORTON. Everybody doesn't take that, right? Because—does that mean every single broadcast media must, in fact, do the presidential alert?

Ms. FOWLKES. Yes, unless they have come in and demonstrated a good-faith reason for not doing it and gotten a waiver from us, yes. All broadcasters have to comply with the Presidential EAS.

Ms. NORTON. All of them are prepared to do so, even those who are not participating in the EAS system at State level; is that what you are telling me?

Ms. FOWLKES. I am sorry, I didn't hear the first part.

Ms. NORTON. Some do not participate. Can we at least stipulate that there are some broadcasters who do not participate in EAS?

Ms. FOWLKES. In the Presidential EAS?

Ms. NORTON. No, I just said that you rarely get a Presidential EAS.

Ms. FOWLKES. Right.

Ms. NORTON. This is FEMA we are talking about. Most of the alerts they have concern with and that the Congress has concern with, God help us, would be State-generated. Therefore, I am interested in knowing who doesn't participate and on what basis, since we know that large numbers do, on a voluntary basis. Are there large numbers who do not participate, and what kind of station would be most likely not to participate?

Ms. FOWLKES. I am unaware, off the top of my head, to what extent. I know there are some broadcasters that may choose not to participate in transmitting State and local EAS alerts. I would have to get back to you on the reasons for that and what kind of station would likely not do——

Ms. NORTON. The reason I am interested, Ms. Fowlkes, is the only reason we are having this hearing is the proliferation of technology that puts a special burden on FEMA in the first place. Now, among those are all kinds of radio stations and TV, which is why FCC also now has to deal with all kinds of numerous, numerous kinds of outlets that just weren't even on a map 10 years ago.

So once you get to State regulation, since we are talking about very rare, very rare Presidential—I mean, even FEMA has only Presidential for Louisiana.

I can't imagine—and I hope there is no scenario where the President is going to be telling you whatever is.

But what we are dealing with every day—tornados, hurricanes, floods, don't drive through the water and the lights on—the committee is interested in, given the proliferation of outlets, in knowing who is at liberty not to participate and in knowing whether or not there is any big thing to participate in.

Is there some expense involved? Is there some cost to the broadcaster involved?

Could you enlighten us on that?

Ms. FOWLKES. Those specific questions I would have to get back to you on. Again——

Ms. NORTON. You don't know if there is——

Ms. FOWLKES. Off the top of my head——

Ms. NORTON. Any cost? It comes through the State.

Ms. FOWLKES. I don't know how much it is. Those are issues I would have to get back to you. Those specific questions I would ask to get back to you on.

Ms. NORTON. I am very concerned to know that. Would you get back to us also on the number of outlets that do not participate?

You have no idea who is listening to these things. Some people are listening only to those things. We have such a niche society. It is very dangerous to have such a niche society.

That is what we have. People look at only those TV stations that they think are for them. You know, they listen only to the music that they think is their thing. They don't even hear, never go to mainstream or maybe to what the average person goes to. They don't even go to the network news which used to universalize us all—we used to listen.

That is gone, those ratings are down. The new generation doesn't listen to news at all, they only listen to iPods. I mean, the FCC is in the best position to understand this, that when you are talking so many outlets, so much technology you have—at least this Member is saying, where is the siren?

Because I do not have confidence, particularly since the EAS doesn't have to be procured by everybody, that everybody is going to receive it through our fancy network with technology.

I am very concerned, General Rainville, about what you have done. First of all, let me say this, before I ask you about this contractor, you apparently did sign a contract with a contractor pursuant to an interagency agreement with DOE.

But first I have got to ask you this. You have testified here that there have been no forums. The only people who can tell us anything, as we upgrade the system, which we have stipulated, is largely for what happens in the States and localities, are located there.

But my first question is how could you let a contract at all without hearing through forums or some other mechanism what the States and localities need?

I mean, I was a little shaken to hear you say we do great outreach and people want to hear IPAWS. First of all, what is there to hear about? But, far beyond that, why would we risk investing in technology before listening to the people who long to help us upgrade, to know what to put money in, since there is not an infinite pot, and what not to. I don't understand on what basis you let a contract at all.

How did you know what you were contracting for?

General RAINVILLE. One of our mandates is to assure that that Federal message can be delivered. So in our desire to update, upgrade technology into that Federal structure, we know that there is a lot of work that needs to be done. And it is that capable and modernized and Federal infrastructure that the States——

Ms. NORTON. By this, you mean what? Are you talking about some wires?

General RAINVILLE. I am talking about a systems architecture that would allow the transmission of modern emergency alerts and warnings. We need that from the Federal perspective for that presidential——

Ms. NORTON. Modern alerts and warnings refer to what?

General RAINVILLE. I am sorry?

Ms. NORTON. Modern alerts and warnings refers to what?

General RAINVILLE. It refers to a redundant, a resilient path for messages, any kinds of message. The current EAS message as we know it, also for ways for using technology that we can use that message through a digital means with digital EAS and through other methods, other devices to reach more people.

As you said, the people are not at the radios now, they are off at work on their computer and their e-mail. We need to be able to reach them through as many ways as possible.

Ms. NORTON. We really need to know what kinds of ways wouldn't be worth money and what kinds of ways would.

General RAINVILLE. Right.

Ms. NORTON. You know, we just as a matter of general knowledge, know that cell phones are not very reliable in lots and lots and lots of places, including where we sit right now.

In any case, even though there have been no forums, even though we are essentially at startup, even though you do let a contract to Sandia National Laboratories, as the IPAWS integrator—integrator of what, I can't imagine—anyway, somebody must have known, because they were supposed to deliver. They were supposed to deliver all these things you just talked about, IPAWS technology, work on standards development, work to ensure that all IPAWS systems receive certification and accreditation and support for the pilot.

We understand that they got approximately $18 million and that you received almost no deliverables.

Was this contract competitively bid?

General RAINVILLE. This was an interagency agreement that we already had with DOE, that we used to go to Sandia, who is, as you know one of the national labs.

Ms. NORTON. My question was very direct.

General RAINVILLE. I am sorry?

Ms. NORTON. My question was very direct. Was this contract bid by competition?

General RAINVILLE. Not to my knowledge. That was before I came to FEMA, but not to my knowledge, because it was already a standing IAA that we had with DOE and Sandia.

Ms. NORTON. Now, they took the money and ran, and you don't have much to show for it; is that true?

General RAINVILLE. Right now, the piece of their work that has not been delivered is under review at FEMA.

Ms. NORTON. Is what?

General RAINVILLE. Is under review at FEMA. We continue——

Ms. NORTON. Did they deliver anything, General Rainville?

General RAINVILLE. They delivered the work for the Gulf pilots of the—they subcontracted out with other vendors for the opt-in, the ETN, the American Sign Language alert for the deaf and hard-of-hearing.

Ms. NORTON. They subcontracted?

General RAINVILLE. They did. But they integrated and they ran the pilots for us. That is one thing they delivered. But they did not deliver, as was provided in the statement of work, the documents, the after-action reports, we don't have a draft. The standards and

protocols have not been delivered, and they have not given us any of that documentation.

So that is now——

Ms. NORTON. Have you received any of your funds back from Sandia?

General RAINVILLE. We have indicated to them that we expect $3 million to come back to us that they have not already used.

Ms. NORTON. They are going to keep the $18 million fully?

General RAINVILLE. Well, they are saying that they have used that money to do whatever they have done to this point.

Ms. NORTON. Do you believe they can do the job, IPAWS' job? They got the pilot from which you were supposed to learn to do it for the country. Can they do the job? If not, what are you going to do about getting somebody who can?

General RAINVILLE. What we are doing now is we are reviewing this at FEMA for what we need to do as far as Sandia regarding—but we are also now working with DHS Science and Technology to help us further develop some of these systems—and that we have since stood up a Program Management Office for IPAWS, as you know at FEMA, who is doing some of the architecture work themselves.

So we have looked at other means of accomplishing this work, because we have got to push on with IPAWS. This, frankly, has really delayed us.

So we are—I will leave it to FEMA to learn from these——

Ms. NORTON. Yes, because we learn from these pilots. I certainly believe you could do some of this work simultaneously. I am back to, though—really grave misgivings about the stories of Federal and, for that matter, local spending on whole computer systems as one example, that just, you know, I am sorry, this thing doesn't work for us.

After the government has spent all this money, it seems to me we may be going down this road again. Some of this may not be preventable, because the way technology moves quickly, the way we have to try to figure out all the tasks that we really want the technology to do, and this one is truly complex.

So the Subcommittee would have huge misgivings about your putting more money out there without these forums. We don't even think you know what you are talking about, frankly. We only know what people can tell us about how the EAS has worked. We only know because you are going to have limited funds. We only have, what, in our bill, $25 million, $37 for FY 2008. You are not going to have a lot of money. So you are not going to be able to do a Cadillac in the first place.

Without systemic input from the field, I don't know how in the world a contractor could proceed. There may be some parts of this that are so clearly outdated that any system would need some of that. But I am even leery about that, given the—"horrible" is the only word for it—ask the IRS, who spent billions of dollars on computers that don't do anything now.

So when somebody tells me what I am doing is giving the contractors and people to do some technology that has to do with very complicated upgrading of other—of their technology to deal with every—which kind, technology that people out there are using,

your task is so complex that I begin to wonder whether it can be done at all, without at least warning people, hey, you are not going to be able to get this on the cell phone.

Guess what? It is so expensive and so few of you—I am just giving you an example. It might be nice that you all carry this, but the EAS system can't come into everybody's iPod. Sorry.

But if we tell you this up front, at least you know. But, of course, if you put out a contract and said, hey, what we are going to do is get you wherever you are without, in fact, doing what I regard as the most complicated groundwork to figure this out. How do you figure it out? I can't tell you, but I will tell you one thing. You don't know something, you better ask somebody.

The experts are located where they have hurricanes, where they have tornados, where they have had flash floods. I am very concerned. This Subcommittee is very concerned that the New York example may be the only way to go. New York had 9/11 so they are doing what they have to do, not waiting for you or anybody else.

There are people who have had natural disasters, who see the Federal Government as moving so slow, see you with a failed contract here, have seen no forum systematically in their area and figure out, oh, shucks we might just as well do this. It is very, very concerning, I must say to you.

If a contract is left to somebody else, submit that contract before it is finalized to this Committee, so at least we recognize the administrative agency that does it, so that we can at least understand what you are contracting for. As I have said, you have got to set up these forums immediately.

I don't have other questions. We have given you a lot of homework. I am much more concerned to get you back to FEMA to start you on that homework.

Thank you both for really important testimony about a subject of vast importance, not only to our Committee and Subcommittee, but to the people of the United States of America.

If there are no other questions—are there other questions? Then we will call the next witnesses. Panel III. Some of General Rainville's staff might want to talk with some of the staff of Panel III about who to go to set up forums.

Panel III is Christopher Guttman-McCabe, Vice President of Regulatory Affairs, CTIA, The Wireless Association; Larry Gispert, President of the International Association of Emergency Managers and Director of the Department of Emergency Management, Hillsborough County, Florida; and Michael Womack, Region IV Vice President and member of the Board of Directors, National Emergency Managers Association, and Director of the Mississippi State Emergency Management Agency.

I am pleased to hear from all of you.

TESTIMONY OF CHRISTOPHER GUTTMAN-McCABE, VICE PRESIDENT, REGULATORY AFFAIRS, CTIA, THE WIRELESS ASSOCIATION; LARRY GISPERT, PRESIDENT, INTERNATIONAL ASSOCIATION OF EMERGENCY MANAGERS; AND DIRECTOR, DEPARTMENT OF EMERGENCY MANAGEMENT, HILLSBOROUGH COUNTY, FLORIDA; AND MICHAEL WOMACK, REGION IV VICE PRESIDENT AND MEMBER OF THE BOARD OF DIRECTORS, NATIONAL EMERGENCY MANAGERS ASSOCIATION; AND DIRECTOR, MISSISSIPPI STATE EMERGENCY MANAGEMENT AGENCY

Ms. NORTON. I would like to begin with the emergency management. Mr. Gispert, let's hear from you first.

Mr. GISPERT. Good morning/good afternoon.

Chairwoman Norton, Ranking Member Graves and distinguished Members of the Subcommittee, thank you for allowing me the opportunity to provide testimony on alert and warning from a local perspective.

I am Larry Gispert, and I serve Hillsborough County on the West Coast of Florida as Director of Emergency Management, a position I have held for 15 of my 28 years in the career field.

I am currently serving as the President of the International Association of Emergency Managers, and I have also served as the President of Florida Emergency Preparedness Association.

IAEM has over 4,000 members in the United States and in other countries. Most of our members are U.S. city and county emergency managers who perform the crucial function of coordinating and integrating the emergency management efforts at the local level. Our members represent both urban and rural areas throughout the country.

Former House Speaker Tip O'Neill is credited with observing that ″all politics are local.″ I would like to modify those remarks by saying that like politics, all disasters are local.

One of most basic responsibilities of local governments and their elected officials is to provide a mechanism to alert and warn citizens of pending danger.

On the west coast of Florida we have over 90 severe weather days a year, with events like winds in excess of 60 miles per hour, driving rain, pounding hail and occasionally tornados. These events normally occur unannounced and frequently at night.

Since 1998, Florida has had three major tornado outbreaks which have killed a total of 62 people and destroyed or damaged over 1,000 homes. Florida utilizes the emergency alert system which captures the audio on all television, radio and cable systems that permit us to issue an emergency message.

We also depend heavily on the NOAA weather radio system to issue warnings to those individuals who have purchased such radios. Many counties have access to a computerized telephone notification system that dials multiple telephone numbers and delivers a prerecorded message. It has been our experience that these systems are good for warning a specific neighborhood of an emergency, but they become problematic in communitywide notifications because a phone switching network quickly overloads. We believe we only reach about 50 percent of our citizens by utilizing all of the existing systems.

Another problem facing local governments is the ability to warn special populations. For example, visually impaired, hearing impaired, those with impaired mental skills, and, as well as the non-English speaking population. None of the current warning systems makes this type of warning easy, and, in most cases, it is impossible to reach these types of citizens.

There have been proposals of utilizing SMS text messaging over cell phones as a means of warning. This method shares some of the drawbacks of the other systems. SMS message is extensive and can be delayed like the automated phone dialers, due to similar switching network problems. Also, most text message systems require the individual citizen to opt-in to receive the alerts.

This brings us to the proposed Integrated Public Alert and Warning System, IPAWS. This system purports to be an integrated activation of multiple alerting and warning systems, each utilizing the common alerting protocol, CAP. If this is true, then our ability to warn a larger percentage of our vulnerable population will be realized and more lives will be saved.

However, systems and technology are not the complete answer, coupled with an enhanced expansion and a greater support of our existing public education programs on what to do when the warning is received. As well as giving hundreds of public presentations a year, we work closely with the local media to produce video shows and written pamphlets that also convey the message of individual citizen action.

The most technologically sophisticated warning system possible will fail if the person receiving the warning does not know what action to take to save their lives. This lifesaving information has to be presented and repeated over and over and over until it is absorbed and then also repeated at the time of the warning.

IAEM supports the concept of an improved alert and warning system if it is designed to support State and local governments in executing their primary responsibility for warning the public. We do not want to see a system which adds more time to the process of issuing warnings. We do want the system to reach a large percentage of the affected population. It must be easy to use, reasonably priced to maintain and operate. The system must also enable us to reach those special populations.

Finally, we need to continue and increase our longstanding education systems for citizens, so they have the knowledge to do the right thing at the right time when danger is imminent.

Thank you.

Ms. NORTON. Mr. Womack.

Mr. WOMACK. Thank you, Madam Chairwoman Norton and Ranking Member Graves and other Members of the Committee for having me here.

I am speaking on behalf of the National Emergency Management Association, NEMA, that is made up of State directors of emergency management. I am also going to speak on the State of Mississippi's experience with the IPAWS' pilot program.

There are several key areas that I will discuss. The first is that I believe and NEMA believes that the current organizational structure for public alert and warning for the most part works well, but more coordination on the Federal level is necessary.

Second, that Mississippi's experience with the Integrated Public Alert and Warning System, IPAWS, was, again for the most part, good; but then more Federal support is needed to complete the pilot.

Third, that legislation to implement the Executive Order and to provide statutory authority for the current practice could be helpful in moving the Nation's efforts forward, provided there is more coordination with the State and local government stakeholders as the system is developed.

I am quite lucky at this point because I am going to be able to deviate from a lot of my written remarks because they have been covered by Captain Judkins and Director Gispert. I would say they are right on target, with almost everything they have said about the variety of systems that are out there, the fact that no one system works very well.

I really want to emphasize this education and public preparedness part of it.

Mr. WOMACK. It is absolutely critical. We have a lot of success in Mississippi working with the National Weather Service, local emergency management directors and other responders in teaching the public what a watch is and what a warning is. And one of the discussions that you had earlier today was about the amount of time you have for a tornado warning. The watch is often hours in advance, and some of the warnings can be 10 or 15 minutes in advance. So it is a big part of this public education.

As with other States, my State uses a variety of technologies. We use sirens. We use outdoor alert and warning systems, reverse 911, blast e-mails and some text messages, as well as some new technologies.

The current organizational structure for alert and warning systems in the Federal Government works reasonably well, and there is no reason for radical change. The National Weather Service's NOAA radio is an excellent tool, and it's used very effectively in my State and other States. The Federal Emergency Management Agency, in our opinion, in NEMA's opinion, is the right place for IPAWS; and we support its efforts for trying to pull this together.

As we talked—as this Committee has talked earlier, this is an extremely complex set of issues. The term ″patchwork″ was used a little bit earlier. Without taking responsibility and authority away from State and local government, you are going to have some patchwork.

As far as the need for the Presidential message, we fully support that. But understand that 99.9 percent of the messaging will come from State and local government, primarily from local.

In talking about the IPAWS and its work on the Mississippi gulf coast, we used my State as the vendor that provided most of our technological services. The Deaf Link portion of the pilot worked very well. The reverse 911 system had a lot of challenges but ultimately was successful. And there is nothing like having a voice that people understand and hear frequently that they trust. Governor Barbour recorded messages that we were able to send out under IPAWS having to do with hurricane preparedness and hurricane warnings, and it was very effective.

Even though it was effective, we are only looking at approximately 42 percent of the calls were live answers, 32 percent of the calls were voice answering machines, and 26 percent were unsuccessful, and they were only landline calls. A massive volume of calls, 221,000 calls, were made in one of our tests.

Having the other programs under IPAWS were a mixed success. The biggest challenges we had was, just as we were working through all of the problems in the new systems, then the program was effectively terminated. So it needs to be funded, and it needs to be on a more lengthy basis.

Last month, Ranking Member Graves introduced House Bill 6038 to direct the President to modernize the integrated public alert and warning system. We feel that this is a good step. We feel it will further strengthen the role of FEMA and the need for developing a nationwide system.

In conclusion, we appreciate Congress's increased attention and focus on disaster and alert warning systems; and thank you on behalf of NEMA.

Ms. NORTON. Thank you, Mr. Womack.

Mr. Guttman-McCabe.

Mr. GUTTMAN-MCCABE. Thank you and good afternoon, Chairwoman Norton and Ranking Member Graves.

I am Christopher Guttman-McCabe, Vice President for Regulatory Affairs at CTIA - The Wireless Association. CTIA is the international organization representing all sectors of the wireless industry: carriers, manufacturers, content and data providers. I am privileged to appear before you today to present CTIA's views on the important topic of emergency alerts. My comments today focus on the wireless industry's efforts to develop an alerting service through the WARN Act and how these efforts work with the goals set out in H.R. 6038.

This is an exciting time. The wireless industry as well as Federal, State and local governments recognize the importance of timely emergency alerts delivered to as wide a group as possible. CTIA and the industry understand the role wireless can play in consumer safety. The industry already delivers over 100,000 e-911 calls each day.

The industry was proud to support the Warning Alert and Response Network Act. The key element of that Act was a true partnership with the Congress, the FCC, government agencies and industry.

The wireless industry has in its recent past some examples of what can happen when government and industry partner voluntarily in the creation of a new service. Wireless Priority Service is a program through the Department of Homeland Security that utilizes wireless networks to deliver priority access to key government officials during times of crisis. The Federal Government worked with industry to develop the requirements for the service but did not mandate a technical solution. The service was deployed and developed quickly with key input from the technology experts resulting in no challenges, no appeals and no delays.

CTIA and the industry also launched a voluntary wireless AMBER Alert service in partnership with the Department of Justice and National Center for Missing and Exploited Children. Po-

tentially life-saving messages are delivered to wireless subscribers who opt in to the offering. And in the emergency alerting context, CTIA and the industry have coordinated efforts with DHS, FEMA and the FCC through various pilot programs.

Going forward, CTIA and the industry believe that alerts should ultimately be transmitted on multiple retransmission media. While wireless can and should be a component of any alerting service, Madam Chair, as you have stated, a complete public alert and warning system should explore the full range of redirected communications, media and devices, without limiting itself to the wireline and wireless phone networks, radio, television, cable or satellite.

Congress got it right when it established the framework for creating and deploying wireless emergency alerts. The WARN Act, enacted on October 13, 2006, properly balances wireless carriers' capabilities with the requirements of an effective alerting service. Congress's plan is working as scripted.

The FCC established an advisory committee comprised of more than 40 individuals representing Federal, State, local and tribal governments, communications providers, vendors, third-party service bureaus, broadcasters, consumers groups, disability groups and technical experts, among others. I served as one of the wireless industry's representatives to that committee. Over 11 months, we generated over 600 documents, held hundreds of meetings, spent thousands of man hours to develop a thorough, workable proposal.

On April 9 of this year, the FCC issued its First Report and Order largely adopting the recommendations of the committee. Among other things, the Order set forth the alerting service architecture proposed and concluded that a Federal Government entity should aggregate, authenticate and transmit alerts to the carriers.

Just last week, FEMA announced its intention to fulfill this important role. So while the FCC and the WARN Act committee have established the commercial alert service architecture and are working on technical standards and procedures, FEMA will develop standards and protocols to fulfill its role as the aggregator and issue technical specifications governing the alert gateway. We look forward to working with them cooperatively on that process.

The FCC also required that participating providers must transmit three classes of alerts: Presidential, imminent threat and amber alerts; must target those alerts geographically; and must include an audio attention signal and vibration cadence for subscribers with disabilities and elderly.

The efforts under way with the FCC and industry to develop and deploy the commercial mobile alert system, with the strong likelihood of FEMA's involvement as the alert aggregator, complement the goals established in H.R. 6038. For example, the WARN Act will help, quote, government reach the broadest portion of the affected population as possible, end quote, as well as ensure broad dissemination of Presidential level alerts, two of the key goals of H.R. 6038.

While the industry is pursuing accomplishing many of these goals with the FCC and, ultimately, FEMA under the framework of the WARN Act, CTIA cautions against Congress and agencies taking any action that could disrupt significant efforts and progress to date.

In conclusion, a government-industry partnership, as seen in the development of Wireless Priority Service and wireless AMBER Alerts, and as being realized right now under the WARN Act process, will facilitate development and deployment of a comprehensive, modern wireless alert system. CTIA and the industry look forward to continuing to work with government in this effort.

Thank you again for this opportunity to highlight our work to enhance the Nation's public alert and warning capabilities, and I look forward to answering any of your questions. Thank you.

Ms. NORTON. Well, what impressed me about the testimony of all three of you, you emphasize that you have got to have a system that is simple enough for people to understand and that works. I am very leery of all this complexity out there in trying to meet all of the forms of media and deal with everything and say now we have this system and everybody really thinks they really do have one.

I note in the FCC testimony, the advisory committee I think to which you allude, Mr. Guttman-McCabe——

Mr. GUTTMAN-MCCABE. Yes.

Ms. NORTON. —and I see on there, it seems to me, just looking down the list, virtually all the actors, that this is an FCC group that one might expect to be on. And it includes EMS and State officials, public safety officials and the rest. Are you, Mr. Gispert and Mr. Womack, familiar with this, the advisory committee for the mobile alert—the so-called Mobile Alert Advisory Committee?

Mr. GISPERT. Madam Chairwoman, yes, some of our members have participated as representatives of that committee.

Ms. NORTON. I am just going to—because I still see—and I appreciate her staying—that Ms. Rainville is here. It does seem that your task may be simplified, rather than duplicating. Maybe there are some differences that would need to occur. But it looks like if we did this in every State you would have all the stakeholders ready-made, with an understanding of why it is needed and with the field experience and the communications experience needed to put it together. So this might simplify the notion of getting it.

But I am very, very concerned about the input of the field and of people who broadcast in the field, particularly in light of—I guess it was Mr. Gispert's testimony. Maybe Mr. Womack that had the statistics. Are we dependent on the States? We are not talking about anything that happens from Washington.

Mr. GISPERT. Ma'am, can I correct the record, please?

Ms. NORTON. Yes.

Mr. GISPERT. Ninety percent of the alerts and warnings are issued by local governments. The State doesn't issue many, many alerts and warnings. It is mostly at the local level, county and city level.

Ms. NORTON. But they do it.

Mr. WOMACK. Yes, ma'am. The statistics that I gave out had to do just with the reverse 911 system.

Ms. NORTON. I see.

Mr. WOMACK. It demonstrates that the reverse 911 system can be effective for maybe between 40 and 60 percent of the population. And that is it. And that is why you have to have about four or five or six different systems.

And I totally agree with you that low tech needs to be part of the solution. There are places where warning sirens are very effective, in college settings, in places where there are large concentrations of populations. But I just don't think that we can go in and mandate anywhere that says this is the system that needs to work for you.

I would like to compliment FEMA's—their vendors that worked with us trying to fix the systems that they tried to field with us. Now, I don't know that I would have preferred to have more input on the front end of it, but they did try to come in and fix the systems as best they could until they ran out of time or budget or whichever it was. So there was a lot of effort in trying to get the systems up and operational.

Ms. NORTON. Mr. Guttman-McCabe, you see, I bring some skepticism about trying—even trying to put all the diverse media and to therefore say to the public, hey, look, all of y'all are in it now. Because when somebody's cell phone doesn't work when there is some disaster, they will say, well, you said. We know that, for example, the Virginia Tech shooting taught us that closed communities like campuses, which are almost by definition high tech, can use text messaging fairly well.

But as I look down the road and consider that—how expensive this will be even to do it simply, I am not sure why I would want to include text messaging for the Nation, the capacity to say to the States, regardless of where it is, people should be able to use text messaging and should be able to use cell phones. I can't imagine a cell phone that would work 100 percent of the time. If it does, then they will tell me it can cause cancer or whatever it is.

The point is, technology doesn't pretend to be perfect; and the one thing that the Federal Government is going to have to do and the States are going to have to do is to try to say what must be included and what does not have to be included.

Mr. GUTTMAN-MCCABE. Well, Madam Chair, if I may, I think Congress did a very good job in the WARN Act of giving sufficient detail with not being too prescriptive. So I think the rationale in the Act was that 255, 265 million Americans have cell phones. So this is a good outlet. A lot of people take——

Ms. NORTON. That tells me nothing.

Mr. GUTTMAN-MCCABE. So I am saying——

Ms. NORTON. That tells me absolutely—there is going to be twice that, you know, in just a few years. That tells me nothing. What I do know is those things don't always work. And to spend a whole lot of money where half of them may be down—look, it could be off, Mr. Guttman. Well, I keep mine off. I don't want to be bothered.

Mr. GUTTMAN-MCCABE. Yes, ma'am. What I was going to say is that wireless needs to be a piece or a component of the program.

Ms. NORTON. Why? Why do cell phones need to be a key component of the program? I am telling you, if there is a finite amount of money, why do cell phones, which may or may not work, have to be a key component of the program? Mr. Gispert.

Mr. GISPERT. Madam Chairwoman, as a local practitioner for 28 years—and I have 1.2 million people who depend on me to get alerts and warnings—I carry what is called an alert and warning toolkit. It has multiple systems in it.

My community is very diverse. We go all the way from the newly born all the way to the nearly dead. And I have to communicate across that entire diverse community. And I have to use every tool in my toolkit.

Cell phones could be a tool. Sirens can be a tool. Telephone alerting systems can be a tool. The problem that I have is, I don't have a single button, one button to activate all the systems. So I have to sequentially pick the tool out of the toolkit, alert that segment of the population, pick another tool, trip it off and alert another segment. If I could push one button and alert a maximum number of citizens, it would greatly help me.

Please, while I have the microphone—the absolute biggest problem is our public does not want to be warned. They go through life—their life is so complex. They have answering machines on their telephones. Their cell phones are either on or off. For every system that you have the option to activate, only 30 percent of the people choose to opt in. The other 72 percent of the people choose not to get the warning.

Ms. NORTON. Mr. Womack had some actual figures that made all this talk about——

Mr. WOMACK. Well, it needs to be part of the solution. If we get 30 or 40 percent with the sirens, because we don't have enough money to cover 100 percent of the Nation with sirens, and we get 20 or 30 percent with landlines, and we get another 20 or 30 percent with text messaging——

And one good thing about text messaging is, it takes very little bandwidth compared to voice. So you can push out millions of messages compared to the amount of time it takes for voice. Those two—those, you know, 50,000 70,000 calls, two to three hours to push them out. It has nothing to do with the vendor. It has to do with the bandwidth of the cell towers. It has to do with how many calls you can get through switches locally. So there is an advantage to it. I would think text messaging would be a cheap—relatively cheap alternative compared to voice because it takes up so little bandwidth. This is the expert on it.

Mr. GUTTMAN-MCCABE. And that is correct.

Ms. NORTON. Can you be alerted to text messaging in the same way you are alerted to the phone ringing?

Mr. GUTTMAN-MCCABE. You can. And the idea behind the WARN Act and the technical specifications is it is similar to text messaging, but it doesn't have an impact on the network. So you send out one message. It almost acts like a broadcast, sort of concentric circles; and everyone in the area, whether they are roaming into the area or they are generally there, gets the message. The message is simple and straightforward. It is 90 characters. It is easy to read. And I understand your concern, Madam Chair, but I would just say, wireless makes sense to have it be a component of it.

On our side of the equation, our CEOs have committed to doing the upgrades and making the upgrades available. On the committee, we had representatives from the five largest carriers, their senior technical person, their chief technical officer who sat on the committee and put in the time to be part of this to be a component. And I think Congress looked at wireless and said, let's—you know, IPAWS is a broad-reaching effort. Let's focus on one area that is

growing. Everyone seems to be having a cell phone. Let's focus on that. Let's focus on that.

So you had earlier mentioned concerns regarding whether there was a clear path or guidelines. Congress gave the wireless industry and the FCC a clear path and guidelines, and we are hitting it. So the reason why wireless should be involved, I would argue, is because Congress directed to us to, and we have honored that——

Ms. NORTON. We are not saying wireless should not be involved. The question is, if we have a universal system, it seems to me we have got to warn people in advance which systems we are using there. If we put out this notion that we have wireless, we have reverse 911, we don't have any such thing. We have whatever the local community can do. The capability to do it is quite apart from what a universal system is.

Look, EAS—and, you know, obviously, I like something as simple as that. Unfortunately, or perhaps fortunately, the world is not simple anymore. And we do want to communicate to people. And if people—I can't even get people often to pick up their vibrations. And the layering, the layering might well do it. But if we don't have guidance about what kind of layering, that we don't tell people, don't depend on text messaging, you who are infatuated with that, and this community, the major ways we have to notify you are—here I get back to Mr. Gispert and public education.

Mr. WOMACK. Can I address the EAS question? It works I think very well in Mississippi, and I think it works very well in other States as well. And it is because we have the National Weather Service working with local emergency management directors who work with their responder community.

Now I give you an example just this past year. The Weather Service—the morning, before the storm system came in in the afternoon—did a conference call with all local directors in the impacted area saying you are at a high risk for tornadoes. High risk. You need to make sure that everyone is notified of this.

So the local emergency management director in the county called up all of the responders and called up all of the schools and called up other people that needed to know this information and said, be ready. This could happen between 2:00 and 4:00. So when the warnings actually came through, they had already thought through what are we going to do? A school was hit, and not one child was injured. But that is why it is not just about warning systems. EAS works well.

The other point I would like to make about it is is because of its work with public area radio and commercial radio, not all of them, but if people want to get the warnings, they can. That is really what it comes down to.

Mr. GUTTMAN-MCCABE. And one thing, if you don't mind, Madam Chair, that I would add is Mr. Gispert and others have talked about education on the consumer side of the equation. I think as we expand this service into other mediums like wireless, there needs also to be some education on the alert originator side of the equation.

I was one of those 30 percent that actually subscribed to Arlington Alerts in Arlington, Virginia. And we have looked at—I have sort of cataloged my last 100 alerts from Arlington County. And if

you will indulge me just for a minute, I am just going to give you the re: line in the e-mail that came to my wireless phone, the last 10 or so: military aircraft flyover, traffic alert, rolling thunder, ceremonial cannon firing, military aircraft flyover, rabid fox in the area, water main break, Comcast cable outage, flash flood warning. So it isn't until you get to about the 11th alert that actually there is one that is a flash flood warning. If you looked at the statistic in this packet, you will see about 50 in there. I would say two would qualify by these gentlemen as actual emergency alerts.

Ms. NORTON. When people know that that is what comes forward, lots of people are not going to turn on their phone at all.

Mr. GUTTMAN-MCCABE. We call it the car alarm syndrome. We fear the car alarm syndrome. That alarms now just go off so often that people don't bat an eye.

Ms. NORTON. The great thing about EAS is when people see that across their television, they look. Because, first of all, you have educated the public because it is simple. They know that it could be the real thing, and they are grateful it is not. So I am—you know, technology's great advantage is that it allows us to do a lot of things with it. And I must say I am looking for something that, once you hear it, once you see it, you know that it means you have got to pay attention to it.

And, yes, public education is part of this. I am not sure where people would get this public education. I know how they got the EAS. They just got it through it coming on, telling you this is a test, and that is how people got to know it. They didn't have to make any particular effort.

Mr. WOMACK. But if you fund emergency management at the local level and you fund National Weather Service at the local level, then they can be out there doing your education. Because we are not going to be able to do it at the State or national level. We are just simply not going to be able to do it.

The education has got to come from the local level. They can teach people what a watch means versus what a warning means. And they can teach people——

Ms. NORTON. Who can teach them?

Mr. WOMACK. The local emergency management director, the local National Weather Service representative. If those are funded—you know, there is this tendency to say we can consolidate National Weather Service offices or we don't need to fund every county level emergency management director. That is not the case in emergency preparedness. You need those people on the ground who are out there educating the public.

Ms. NORTON. You see, my presumption is entirely on the ground. That is why I was at the forums. I don't think they should be doing another thing with IPAWS.

Yes, Mr. Gispert.

Mr. GISPERT. Madam Chairwoman, my emergency management office once again is responsible for 1.2 million people. We do over 200 public presentations a year. We do it to civic associations, business groups, homeowners associations. And as a part of those presentations, we tell them about alert and warning, we tell them what to do when the EAS trips off or when the NOAA weather trips off, and we continue to tell them, we continue to tell them, we continue

to tell them. They need to be reemphasized. Because when it actually happens, people suddenly they get a little addled and they forget what they are supposed to do.

The biggest problem with sirens is you can use sirens for one and only one thing. You can train the person. Hear the siren, do this. If you tell the people, if you hear the siren, you need to do one of five things, you are in trouble.

So, once again, whatever diverse—IPAWS, EAS, whatever system the Federal Government approves of, the absolute primary objective should be educate our public. Educate our public. Here is what you do when you hear the warning. And then it will be successful. Otherwise, you will spend millions of dollars on systems to trip and people say, what do I do? We have to educate the public, and that is done at the local level.

Ms. NORTON. Well, I couldn't agree more, Mr. Gispert; and I must say that the notion of the kind of outreach and repetitive work you are doing is the best way to do it. But you know what? I don't think people go to—I don't think people are very meeting-oriented these days. The reason the EAS works is—guess what? I am looking at something I want to see, and you interrupt something that I wanted to see and, therefore, I got educated.

I just think we have got to be very sophisticated about how diversified we become and how busy everybody is. And as we contemplate this network, sure, allow everyone to do everything. Because they are going to pay for it. The Federal Government is certainly not going to do it. I love your low tech way of doing it, keep repeating it over and over again.

Mr. WOMACK. Madam Chairwoman——

Ms. NORTON. But I must say that I think to the extent that the media can be involved we are going to be ahead of the game because that is what has gotten us the EAS effectiveness in the first place.

Mr. WOMACK. That was exactly the comment I was going to have. When directors of emergency management or mayors or sheriffs or certainly the governor, when they go on TV and radio and they talk about preparedness and they talk about the meaning of these systems, that might encourage some people to go a step further and go to their local emergency management director or some of these meetings.

It is more than just using the media, put out the messages with electronic methods. It is also using the media effectively as elected and appointed leaders. That is one thing I think Governor Barbour I think did very effectively both during Katrina and in the hurricane seasons we have had since, getting out that message of individual preparedness.

Ms. NORTON. While I appreciate that comment and I agree with it, what I am leery of is developing a very simple way to educate the public and to educate the majority of the public. You know, who knows how to do that best? Marketing people. We ought to put some of them on this committee. Simple, direct, because that is how they get their messages across all too effectively.

So I am asking then that the WARN Act forum that—do you think that would be an important way already existing on the

ground, just for the record, to implement the national—the alert and warning system?

Mr. GUTTMAN-MCCABE. I would argue——

Ms. NORTON. Using the forum and that process or one similar to that?

Mr. GUTTMAN-MCCABE. I would say similar if not very similar. It is a very good model because it goes across—broadcasters were involved as long as—as well as wireless and local and, you know, a good cross representation.

Ms. NORTON. So we don't have to kind of rethink and start from ground zero.

Mr. GUTTMAN-MCCABE. I don't think it has to mirror exactly that exact——

Ms. NORTON. Do you have ideas for changes you would make in it?

Mr. GUTTMAN-MCCABE. Well, you know, this was weighted a little bit towards the wireless perspective because the Act is specific to wireless.

Ms. NORTON. Yeah. Because of FCC, yeah.

Mr. GUTTMAN-MCCABE. So I would say—you know——

Ms. NORTON. It is a start right there. Because those people are already familiar, they have already been working through the FCC mechanism. I am sorry?

Mr. WOMACK. I would just say that don't get started in a program and then, either for funding or time, just suddenly say, okay, we are going to stop it and then we are going to do go another direction.

Ms. NORTON. Yeah. This happened to you, apparently.

Mr. WOMACK. It did. Governor Barbour very much believes in the——

Ms. NORTON. What stopped?

Mr. WOMACK. In December, I believe it was the funding ran out on the pilot or whatever. But in December we were told that it would not be funded again. That, if we wanted to, we could try to contract for the services ourselves. All work on fixing the, quote, unquote, bugs—and they could have been bugs in our agency, that we just weren't using it properly—all of that stopped, effectively; and we were basically told if we wanted to use our own State money or use other homeland security grant funding to pay for these services, we could do so.

There are only two problems with that: We are required under State law to go out for competitive bid processes. So it may be different vendors that we would have to work with if we had to contract for services through the State.

The second thing is this: If you are not a high metropolitan area State population wise, you know, like New York or D.C. or someplace, your homeland security grant funding has been reduced tremendously based on threat. Now I say that we are not looking at the threat of hurricanes and earthquakes when we are doing our funding, but that is another issue.

Ms. NORTON. Very important issue. You all need to say it over and over again. After 9/11, the emphasis on a terrorist attack has been very detrimental to emergency management in the United States as if what you really need to prepare for is al Qaeda. Of

course we need to do that. We have a whole agency to do that, and we funded people as if that is what the funding was for in the early days after 9/11. And here we—this Subcommittee and this Full Committee have long tried to make everyone understand that even with the Homeland Security Committee, on which I serve by the way, we are talking about all hazards, and 99 percent of those are the hazards that you know most about.

Mr. WOMACK. I think there has got to be a balanced approach. NEMA's position is there has got to be a balanced approach. We have to have funding for terrorism prevention and response, but we have got to make sure that we keep funding for natural hazards.

Ms. NORTON. What services were you funded for that you don't believe you should—you could keep going?

Mr. WOMACK. We are trying to find State dollars right now to procure the reverse 911 system again, plus some of the other things like the hearing impaired and some of the other services. We need the services provided by IPAWS. It is just now we either are going to have to take homeland security grants that were——

Ms. NORTON. IPAWS, you need the services?

Mr. WOMACK. We need the services provided by IPAWS.

Ms. NORTON. Why?

Mr. WOMACK. Because, as I said, if we get 40 to 60 percent of the population with reverse 911, if we get another 20 or 30 percent with the digital EAS or whatever other messages, all of these services get a segment of the population.

Ms. NORTON. Mr. Womack, Mr. Gispert and Mr. Guttman-McCabe, you are going to find the problem Mr. Womack is talking about throughout the country. Guess what? We are not going to give you money. You have got to understand and this is why I keep—you are going to work within—and that is why these committees are so important—within a crucible of limited funding. Choices are going to have to be made.

I know you can reach people if you had X, Y. You are not going to get it from us. If your taxpayers have it, that is where it is going to come from. Ultimately, we think most jurisdictions are going to say, how much layering can we afford?

The Federal Government has grants. Where is—and, look, we also have a deficit that is so large that we have what we call PAYGO, when you can't go and put anything on the floor unless it is already paid for, which is going to continue to be the constraint because of the war, because of the tax cuts, because the money isn't there. And the deficit is sky high.

So all this talk about layering and we can meet this, this number, that number and the other number, we need a committee to sit down and make sure everybody knows that the all-purpose layering will be possible if your taxpayers are willing to pay for it. And then you take the rap. Because that is what you are going to have to tell them.

Or what I bet most people are going to do is to say we are in the EAS system. It does give us all this stuff. But in this jurisdiction, Mr. Graves said, sirens and nothing—nothing we can say about layering is going to make rural areas do what is the optimum thing to do. So we need very tough choice-making district-by-district, area-by-area thinking unless you live in—you know, on the

east side of Manhattan where, you know, there are a lot of rich people who want to know in every conceivable way if there is an alert.

I am trying—I am trying to make you understand the atmosphere or the climate in which we work now and I think I can say without fear of contradiction where we would be working for many years to come.

Oil prices and food prices only forecast that, if anything, we are threatened with some bottoming out of the standard of living of the United States continuing to just progress automatically. That being the case, somebody is going to have to sit down with FEMA from the local level and help guide FEMA; and then somebody is going to have to be real clear with their own people. I upgraded systems that consist of the EAS and not much more. Keep your radio on.

I am very afraid that if we keep acting like we are going to fund an all-media system that we will have the opposite effect on people. They will think, well, they will get to me one way or the other.

Your testimony has been very important, particularly—but what it has said to me is that these forums are more necessary than ever. Because if people have to make choices, then I don't know how they are going to make them if they are not all sitting around tables in their own locals with somebody telling me the honest-to-goodness truth. Mr. Gispert is going to say, look, in my area I can get to—y'all better be there, because we are going to make up for lots of other things simply by going wherever you are.

And in New York they are going to say, after 9/11, every penny we have—I mean, 9/11 has re-created the homeland security apparatus of the United States of America.

I always learn from these hearings, and they educate me profoundly. You certainly have done so. This has been remarkably useful testimony.

I want to thank all three of you for coming and for bearing with us while we question the others and for taking our questions, which had been put forward to help educate us. Thank you very much.

The hearing is adjourned.

[Whereupon, at 12:44 p.m., the Subcommittee was adjourned.]

Subcommittee on Economic Development, Public Buildings and Emergency Management

Hearing on "Assuring Public Alert Systems Work to Warn American Citizens of Natural and Terrorist Disasters"
Wednesday, May 4, 2008

Statement – Congressman Jason Altmire (PA-04)

Thank you, Chairman Norton for calling today's hearing to examine our nation's emergency alert warning systems.

Over 50 years ago, our nation implemented an emergency alert system (EAS) designed to protect our citizens from disasters. This system - which currently broadcasts alerts over the radio and television – has provided timely warnings to millions of citizens and no doubt saved the lives of countless Americans.

Since the events of September 11 and Hurricane Katrina, there has been a major push within the federal government to improve and expand the alert system. In June of 2006, President Bush signed Executive Order 13407, which called on the modernization of the EAS. The Federal Emergency Management Agency (FEMA) responded by creating the Integrated Public Alert and Warning System (IPAWS). This system is charged with examining the current EAS, identifying methods of expanding the EAS, and implementing the necessary changes. Unfortunately, with the conclusion of the IPAWS rapidly approaching, there remains no clear understanding of how the next generation EAS will function or what modern technologies will be utilized.

Madam Chair, it is imperative that we upgrade the EAS as expeditiously as possible and I look forward to working with you and the rest of this subcommittee to achieve this goal. Thank you again for holding today's hearing. I yield back the balance of my time.

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Chair Eleanor Holmes Norton
Subcommittee on Economic Development, Public Buildings and Emergency Management

~~A Hearing on "Assuring Public Alert Systems Work to Warn American Citizens of~~ Natural and Terrorist Disasters"

Almost every American is familiar with this scenario – You are watching television and suddenly the television program is interrupted, a beeping sound comes, you see the multi-colored stripes across the screen and then you hear "This is a test of the Emergency Alert System (EAS) . . ." You breathe a sigh of relief because it is only a test, but during any given year, thousands of citizens across the nation hear an emergency broadcast on their radios or on television advising them that they have a few minutes to seek appropriate shelter because a tornado is approaching or to evacuate the area because a hurricane is arriving in a few hours.

The Federal Emergency Management Agency (FEMA) is responsible for administering the national EAS with assistance from the Federal Communications Commission (FCC) for ensuring compliance of regulations. Broadcast radio and television stations and satellite radio operators are required to participate in national-level EAS alerts and state, and local governments may use the EAS on an as-available basis. Broadcast station participation is voluntary.

Given the high number of natural disasters in this country each and every year probably 90% of all messages and 100% of all Federal messages are disseminated by the EAS as generated by the National Oceanic Atmospheric Administration's (NOAA) Weather Radio All-Hazards (NWR) and the National Weather Service (NWS).

Two years ago, President Bush issued Executive Order 13407, directing the Department of Homeland Security to modernize and integrate the nation's public warning systems. FEMA then created the Integrated Public Alert and Warning System (IPAWS) and is working with the public and private sectors to integrate warning systems so that authorized officials can effectively warn the public through an upgraded version of the EAS system. EAS messages will continue to be transmitted but in addition today, must also include the modern technology conveniences that almost every American owns today, including pagers, cell phones, computers and other personal communication devices. FEMA began working on a plan to update the EAS system in part by conducting pilot programs nationwide.

With IPAWS pilot projects coming to an end, however, many stakeholders are expressing frustration that the IPAWS program does not have a clear plan and timeline for finishing the various tasks that still need to be completed. Several states and localities

have begun modernizing their own systems in the absence of federal guidance and consensus.

Stakeholders, include State and local governments, and various private sector groups. The Government Accountability Office (GAO) has suggested that FEMA hold some stakeholder forums on the challenges of integrating the system and various other issues. At the meetings the stakeholders could produce some clearly defined deliverables, such as, for example, Common Alerting Protocol (CAP), a standardized format for use in all types of message alerts. The public also is entitled to a clear timetable as to when a final decision or action must be completed.

Many stakeholders point to the Commercial Mobile Service Alert Advisory Committee (CMSAAC), a process set out in the "Warning, Alert and Response Network Act (WARN Act) signed into law as Title VI of P.L. 109-3478, the Security and Accountability For Every Port Act of 2006. CMSAAC members include federal, state, local and tribal governments, members of the private sector and people with disabilities. They are charged with providing recommendations on technical requirements, standards, regulations and other matters needed to support the transmittal of emergency alerts by commercial mobile providers to their subscribers on a voluntary basis. They meet deadlines, make decisions and produce reports. The Advisory Committee has produced results.

We are pleased that after some reluctance and delay, FEMA announced on May 30, 2008 that once the system is in place, that agency will now serve as the federal aggregator and gateway for the nationwide Commercial Mobile Alert System. I appreciate the meetings between FEMA's staff and the Committee staff regarding their expansive legislative authority for public alerts and warnings in the Stafford Act.

We must remember that we are modernizing and integrating the public alerts and warning system that can make the difference between living and dying for the nation's citizens. When a parent hears an alert on the radio and has a few minutes to get her children into cellar before a tornado strikes, we are reminded that this alert and warning system must be more robust, more readily available, and truly modern. This Subcommittee is committed to assisting FEMA in making the public alert and warning system much better and indeed the very best, no less will do.

I would like to welcome the witnesses and I look forward to hearing from them.

STATEMENT OF
THE HONORABLE JAMES L. OBERSTAR
SUBCOMMITTEE ON ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS, AND EMERGENCY MANAGEMENT
HEARING ON "ASSURING PUBLIC ALERT SYSTEMS WORK TO WARN AMERICAN CITIZENS OF NATURAL AND TERRORIST DISASTERS"
JUNE 4, 2008

I am pleased that the Subcommittee is holding this important hearing on upgrading the nation's system of public alerts and warnings, and I commend Chair Norton for her leadership in probing this important issue.

June 1st marked the beginning of the 2008 hurricane season. The first named storm of the season, Tropical Storm Arthur, moved slowly across the Yucatan last Friday. Luckily, our hurricane-prone states were spared, but we know more storms will come. In 2008, we have already had 29 disasters declared by the President and four emergencies, including severe storms, tornados, and wild fires.

To help keep millions of Americans out of harm's way in the event of a natural or man-made disaster, our nation relies on an emergency communications system that has been in existence since the 1950's, although it has received some upgrades over time. The current national Emergency Alert System ("EAS") is complex, and involves several Federal entities.

The Federal Emergency Management Agency ("FEMA") is responsible for administering EAS. FEMA has designated the Federal Communications Commission ("FCC") to manage the broadcast media, including radio, cable television stations and satellite radio operators, who are required to participate in national-level EAS alerts. The National Oceanic and Atmospheric Administration's ("NOAA") National Weather Service administers the All-Hazards National Weather Radio ("NWR") alert and warnings program. Currently, 90 percent of all messages and 100 percent of all Federal messages disseminated by the EAS are generated by NOAA weather alerts.

State and local governments may use EAS on an as-available basis, but participation is voluntary. The process of EAS coordination at the state or regional level is highly decentralized and has led to a system in which, for example, procedures for initiating a broadcast message and activating the system differ from state to state. Fortunately, there has never been a national level disaster alert issued by the President.

In recent years, the Federal Government has elevated the importance of providing the nation with a modern, reliable, integrated, and comprehensive public alert and warning system that can reach the American people, across the nation, at any time. Unfortunately, we do not fully have that capability today. Executive Order 13407, issued by President Bush in June 2006, specifically called for the modernization of the EAS system.

In response, FEMA created the Integrated Public Alert and Warning System ("IPAWS") to develop and implement the next generation alerts and warnings communication system. In today's world, Americans no longer rely on just the television or radio to receive news and information. In order for IPAWS to be successful, the existing EAS framework must be upgraded and the network must be expanded to include more modern technologies including cell phone, pagers, the internet, and other wireless devices.

Modernizing and integrating the public alerts and warning system is an extremely large and complicated task. At the commencement of the IPAWS program, FEMA outlined a vision of an integrated alert and warning system that would be effective, available at all times and under any conditions, and available through various media devices. FEMA initiated several pilot projects aimed at furthering those goals, including upgrading the digital capabilities of public radio and television, providing more geographically-targeted alerting capabilities, and upgrading and expanding the relay distribution system. The 14 pilot programs have concluded and many stakeholders fear that FEMA does not have a clear plan of how IPAWS intends to function in the future. Several questions remain unanswered, including the lack of a clear articulation of the intermediate goals of IPAWS, the timeline for full-scale implementation of the system, and perhaps, most importantly, what an upgraded, integrated system will look like and how FEMA intends to achieve it.

Cleary, the Federal Government can not operate in a vacuum. State, local, and tribal governments and the private sector have specific roles and responsibilities in disseminating alerts and they must work together. We can not afford to allow a haphazard and uneven version of EAS implemented across the country. Because FEMA has not yet come forward with a well-articulated plan for IPAWS, some states and localities have felt the need to upgrade their alert systems on their own. A national, integrated system is needed because a patchwork of equipment and systems operating around the country may or may not be interoperable. We have been there before and remember the problems and tragic consequences that equipment, which proved to not be interoperable, caused during 9/11.

We recognize the progress that has been made in modernizing and integrating the EAS system, but underscore that some major challenges remain, including reaching an agreement on standard technology for disseminating alerts, working with EAS stakeholders to gain collaboration so all systems can work effectively together, and providing training for EAS participants.

I look forward to hearing from Major General Rainville today on the status of the IPAWS Program, and expect that FEMA will present the Subcommittee with a clear plan for how the agency plans to modernize and implement the nation's next generation

public communication and warning system. Congress and this Committee stand ready to assist FEMA in those efforts.

Finally, I would like to recognize Ranking Member Graves and Chair Norton for introducing H.R. 6038, the "Integrated Public Alerts and Warning Systems Modernization Act of 2008," a bill which directs the President to modernize the integrated public alerts system and includes a requirement to produce a detailed implementation plan that includes a timeline and spending plan.

I welcome the witnesses and I look forward to hearing their testimony.

Testimony of Larry Gispert, President

International Association of Emergency Managers

Before the

Subcommittee on Economic Development, Public Buildings and Emergency Management

Committee on Transportation and Infrastructure

U.S. House of Representatives

On

Assuring Public Alert Systems Work to Warn American Citizens

Of Natural and Terrorist Disasters

June 4, 2008

Chairwoman Norton, Ranking Member Graves, and distinguished members of the Subcommittee, thank you for allowing me the opportunity to provide testimony on alert and warning from a local perspective.

I am Larry Gispert, and I serve Hillsborough County on the West Coast of Florida as Director of Emergency Management – a position I have held for 15 of my 28 years in the field. I have the privilege of serving nearly 1.2 million folks who call Hillsborough County and the City of Tampa home. I am currently serving as the President of the International Association of Emergency Managers and have also served as President of the Florida Emergency Preparedness Association.

IAEM has over 4,000 members including emergency management professionals at the state and local government levels, tribal nations, the military, colleges and universities, private business and the nonprofit sector in the United States and in other countries. Most of our members are U.S. city and county emergency managers who perform the crucial function of

International Association of Emergency Managers, 201 Park Washington Court, Falls Church, VA 22046
Phone 703 538 1795

coordinating and integrating the efforts at the local level to prepare for, mitigate the effects of, respond to, and recover from all types of disasters including terrorist attacks. Our membership includes emergency managers from large urban areas as well as rural areas.

~~I want to express my sincerest gratitude to this subcommittee for the strong support you~~ have provided to the emergency management community over the past few years, particularly for the Emergency Management Performance Grant Program – the major source for building "all hazards" state and local emergency management capacity – and reforming the Federal Emergency Management Agency.

Warnings are local

Former House Speaker Tip O'Neil is credited with observing that, "all politics is local." I would like to modify those remarks by saying that like politics, all disasters are local. One of the most basic responsibilities of local governments and their elected officials is to provide for the public safety – and one of the most basic ways of doing this is by providing a mechanism to alert and warn citizens of pending danger. Depending on the time of day and day of the week this can prove to be very difficult.

In Florida, we face the threat of hurricanes every year. Although the path may change by taking an unexpected curve, speeding up or slowing down, at least they don't sneak up on us. In addition to hurricanes, we also have over 90 severe weather days a year – with events like winds in excess of 60 mph; driving rain and pounding hail; and even the occasional tornado. These events normally occur unannounced and frequently at night.

The February 2, 2007 (Groundhog Day) F3 tornado struck in the early hours of the morning while most in Lake and Volusia Counties were still sleeping. Tragically, the storm killed 20, destroyed 434 homes and inflicted major damage on another 456 homes.

The December 25, 2006 (Christmas Day) F2 tornado which struck Volusia, Lake, Columbia and Pasco Counties did not result in any deaths. However, over 336 homes were damaged or destroyed by the tornado.

On February 22, 1998 seven separate tornados formed and affected Osceola, Orange, Seminole and Volusia Counties, resulting in the deaths of 42. This deadly storm struck in the early morning hours while everyone slept.

These three incidents underline the vulnerability of our community. They reflect a situation in which the danger can happen with little or no prior notice. In these situations of quickly moving danger, local governments (who have the primary responsibility for alert and warning) currently have few options to exercise. Therefore, a quick and reliable method of alerting and warning citizens of danger would greatly increase their chances for survival.

Systems to warn the public of these severe weather conditions are absolutely necessary in order to ensure their safety. Most of Florida's counties do not use sirens for such warnings because they are only intended to warn those who are outdoors. Florida homes are heavily insulated to insure proper air conditioning which also attenuates the sound of sirens. As a consequence, we must depend on other means to warn the citizens. We utilize the Emergency Alert System (EAS) which captures the audio on all television, radio and cable systems that permits us to issue a voice message. We also depend heavily on the NOAA / National Weather ~~Service All Hazards Radio System to issue warnings to those individuals who have purchased~~ such radios. Local governments have purchased and installed these radios for all public schools and public buildings. We have an active and long-standing public education program that promotes the ownership of such radios.

Current warning systems neither easy nor uniform

Depending on the amount of time available, we will send public safety vehicles into select neighborhoods to warn the public by using their public address systems. Many counties have access to a computerized telephone notification system that dials multiple telephone numbers and delivers a pre recorded message. These systems can also deliver messages to digital pagers. It has been our experience that these systems are good for warning a specific neighborhood of an emergency, but they become problematic in community-wide notifications because the phone switching network gets quickly overloaded. We believe as local governments effectively combining and utilizing all these methods of warning, we reach only about 50 per cent of the population. Once again time of day and day of the week will increase or decrease that percentage.

Another problem facing local governments is the ability to warn special populations, e.g. visually impaired, hearing impaired, impaired mental cognitive skills as well as the non-English speaking population. None of the current warning systems makes this type of warning easy and in most cases it is impossible to reach these types of citizens.

There have been proposals of utilizing SMS text messaging over cell phones as a means of warning. This method shares some of the drawbacks of the other systems – SMS messaging is expensive; and can be delayed (like the automated phone dialers) due to similar switching network overloads. Also most text messaging systems require the individual citizen to opt in for the alerts. Once again, local governments can only reach a small percentage of the necessary public for their warnings.

Technology can improve warnings, but it is not the entire answer

This brings us to the proposed Integrated Public Alert & Warning System (IPAWS). This system purports to be an integrated activation of multiple alerting and warning systems each utilizing the common alerting protocol (CAP). If this is true, then our ability to warn a larger percentage of our vulnerable population will be realized and more lives will be saved. In this day and age we have to do better. Technology is such that we could reach out and touch a larger percentage of our population with the information that could save their lives.

However, systems and technology do not comprise the complete answer to the solution. Coupled with them has to be expansion and greater support of our existing public education programs on what to do when the warning is received. Not only do emergency managers perform multiple test, drills, exercises, and planning meetings throughout the year but for example we in Hillsborough County do over 200 public presentations a year. We speak to civic associations, business groups and homeowner groups in an attempt to convey what the average citizen needs to do when the warning is given. We work closely with the local media to produce video shows and written pamphlets that also convey the message of individual citizen action. Our annual Hurricane Guide is very popular and we distribute over 400,000 copies each year prior to the season.

The most technologically sophisticated warning system possible will fail if the person receiving the warning does not know what action to take to save their lives from the disaster. This life saving information has to be presented and repeated over and over until it is absorbed – and then also repeated at the time of the warning. The messages contained within these programs need to be coordinated through the local emergency manager for maximum effectiveness within the community.

Conclusion

IAEM supports the concept of an improved alert and warning system – if it is designed to support state and local governments in executing their primary responsibility for warning to the public. We do not want to see a system which adds more time to the process of issuing warnings.

IAEM has not had a specific position as to whether there should be a federal level message aggregator or not. However, our position has been that if there is one, it should be FEMA. FEMA is the only federal partner with an "all hazards" mission, and, further, we believe FEMA possesses the clear legislative authority to perform this function under Sections 202 and 611 of the Stafford Act. Therefore we were pleased to see the announcement last Friday that this issue has been resolved.

Other elements necessary to make a system of this nature successful will include the ability to reach a large percentage of the affected population; with a system that is easy to use; and, that is reasonably priced to maintain and operate. Finally, we need to continue and increase our long-standing education programs for citizens so they have the knowledge to do the right thing at the right time when danger is imminent. Once again, thank you for this opportunity to speak on behalf of IAEM.

IAEM Contact Information:
International Association of Emergency Managers, 201 Park Washington Court, Falls Church, VA 22046
President: Larry Gispert (GispertL@HillsboroughCounty.org)
Government Affairs Chair: Bob Bohlmann (rcbohlmann@co.york.me.us)
Policy Advisor: Martha Braddock (MSBraddock@aol.com)

TESTIMONY OF
CHRISTOPHER GUTTMAN-MCCABE
VICE PRESIDENT, REGULATORY AFFAIRS
CTIA – The Wireless Association®

BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
SUBCOMMITTEE ON ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS
AND EMERGENCY MANAGEMENT

JUNE 4, 2008

Good morning Chairwoman Norton, Ranking Member Graves, and distinguished members of the Subcommittee. I am Christopher Guttman-McCabe, Vice President for Regulatory Affairs at CTIA, The Wireless Association®. CTIA is the international organization that represents all sectors of the wireless communications industry: wireless carriers, manufacturers, and data companies. I am privileged to appear before you today to present CTIA's views on the important topic of implementing a modern, effective public alerting and warning system on behalf of our carrier members and more than 255 million wireless consumers. My comments today focus on the wireless industry's efforts to develop and deploy a commercial mobile alert service to notify citizens of emergencies, whether natural or man-made, and what role Government has played and can play in the future to advance that effort.

The Importance of Government – Wireless Industry Partnership in Advancing Public Alerting Capabilities

This is an exciting time. The wireless industry and federal, state and local governments all recognize the importance of the timely dissemination of emergency warnings and alerts to as wide a group as possible. CTIA and the industry understand the role wireless can play in this process. At the same time, Government has wisely recognized in recent years that engaging in regulatory flexibility efforts through partnership with industry – rather than imposing inflexible mandates – results in faster implementation of solutions.

The wireless industry has in its recent past several examples of what can happen when government and industry partner voluntarily in the creation of a new service – Wireless Priority Service and AMBER Alerts. Wireless Priority Service is a White House-directed National Security/Emergency Preparedness program, through the National Communications System ("NCS"), that utilizes commercial wireless networks to deliver priority access to key government officials during times of crisis and high call volume. Government, through both the NCS and the Federal Communications Commission ("FCC" or "Commission"), worked with industry to develop the requirements for the service but, did not mandate a solution. Instead, government provided funding to manufacturers and vendors for development of the capability, resulting in the rapid deployment of the service in two phases. Importantly, the service was developed and deployed with key input from the technology experts, resulting in no challenges, no appeals, and no delays.

CTIA and the industry also launched a voluntary Wireless AMBER Alert Service in partnership with the Department of Justice and the National Center for Missing and Exploited Children that helps to protect our Nation's children. By making potentially life-saving AMBER

Alert text messages available to wireless subscribers who "opt in" to the offering, this program will significantly increase the reach of the AMBER Alert notification program. The carriers currently participating collectively provide service to more than 90% of U.S. wireless customers. The service has been designed to be scalable so that additional carriers can continue to join the effort going forward.

In the emergency alerting context, CTIA and the industry have dedicated substantial time, effort and money toward developing and implementing an effective alert capability for wireless users. CTIA and the industry have coordinated their efforts with the Department of Homeland Security and the Federal Emergency Management Agency ("FEMA"), as well as with the FCC. In particular, the industry participated in the *National Capital Region Digital Emergency Alert System Pilot*, designed to demonstrate the distribution of Emergency Alert Service ("EAS") messages.

The wireless industry and dozens of other interested stakeholders presently are working to develop commercial mobile service alert systems under the Warning, Alert and Response Network Act ("WARN Act").[1] My remarks today will describe the wireless industry's efforts to date to implement the WARN Act and explain how these efforts comport with the goals set out in the "Integrated Public Alert and Warning System Modernization Act of 2008," H.R. 6038.

The WARN Act

Congress got it right when setting out to establish a framework for creating and deploying wireless emergency alerts. The WARN Act, enacted on October 13, 2006 as part of the Security

[1] Warning, Alert, and Response Network (WARN) Act, Title VI of the Security and Accountability For Every Port Act ("SAFE Port Act"), Pub. L. 109-347, 120 Stat. 1884 at § 602(a) (2006); *In re The Commercial Mobile Alert System*, First Report and Order, PS Docket No. 07-287, FCC 08-99 (rel. Apr. 9, 2008) ("Report and Order").

and Accountability For Every Port ("SAFE Port") Act, established a process for developing and implementing a Commercial Mobile Alert System ("CMAS"), in which wireless carriers may elect to transmit emergency alerts to their subscribers. Most relevant to today's discussion, the WARN Act provided for the (1) creation of a joint government-industry partnership to develop the requirements of a voluntary wireless emergency alert service, with the goal of establishing standards; (2) appointment of a body responsible for weighing specific alerting and warning requirements against industry capabilities; (3) designation of a federal entity tasked with administering the alert service and creation of rules governing who may generate messages coupled with a process to authenticate and secure alert messages; and (4) funding for research, development, and deployment of a nationwide alert service.

The WARN Act properly balances wireless carriers' existing capabilities with the requirements of an effective Emergency Alert service, at the same time recognizing that wireless technology is evolving. This continuing evolution will enable carriers to provide improved and enhanced alerting capabilities over time – reflecting the idea underlying H.R. 6038 that developing a national emergency alerting system should not be a one-time event.

In the WARN Act, Congress developed a unique procedure to address the problem of emergency alerting by securing the participation of interested parties in the development and deployment of a Commercial Mobile Alert Service. Congress's plan is working as scripted. Within one year of enactment, the FCC established an advisory committee, the Commercial Mobile Service Alert Advisory Committee ("CMSAAC" or "Advisory Committee"), comprised of more than 40 individuals representing federal, state, local, and tribal government (including FEMA and the NCS); communications service providers; vendors, developers, and manufacturers; third party service bureaus; broadcasters; representatives of certain groups of consumers; and

individuals with technical expertise, among others. I served as a representative of the Advisory Committee on behalf of the wireless industry. Though it worked expeditiously to comply with the statutory schedule, the Advisory Committee spent the requisite time to understand every individual viewpoint and considered how each could be addressed in the final recommendations for the alert service. Over 11 months, five main committees and their subcommittees generated over 600 numbered documents, held hundreds of meetings to discuss in detail each carefully considered point, and spent thousands of man-hours to develop the Advisory Committee's recommendation. To ensure that every voice was heard, in addition to the countless working group meetings, the Advisory Committee held six public meetings to discuss its progress and allowed for public comment on its work. A thorough, workable plan for the deployment of the commercial mobile alerts system was developed.

The FCC also has diligently performed its duties under the WARN Act. Shortly after the Advisory Committee submitted its final recommendations, the Commission sought public comment and, on April 9, 2008, issued its First Report and Order largely adopting the recommendations in their entirety. The Order set forth the alerting service architecture proposed by the Advisory Committee and concluded that a Federal Government entity should aggregate, authenticate, and transmit alerts to the participating wireless providers. Just last week FEMA announced its intention to fulfill this important role. The FCC also required that participating providers must transmit three classes of alerts – Presidential, Imminent Threat, and AMBER alerts and must include an audio attention signal and vibration cadence for subscribers with disabilities and the elderly. Within the alert service architecture, wireless providers are responsible for administering a number of elements, including the Service Provider Gateway, infrastructure and

mobile devices. Participating carriers also must provide alert messages to those subscribers roaming on their networks.

Additionally, the Commission adopted several technical requirements based on the Advisory Committee's recommendations, ~~including requiring geo-targeting at the county level~~ and limiting multi-language alerting to the transmission of alerts in English only at this time. It is important to note that the decisions regarding geo-targeting and English-language alerts reflect the technological constraints wireless carriers presently face. The Advisory Committee, however, specifically contemplates future implementation of more granular geo-targeting and further investigation into adding other languages, such as Spanish, to wireless alerts as technology evolves. With regard to geo-targeting, the Advisory Committee recommended that certain urban areas with populations exceeding 1,000,000 inhabitants or with other specialized alerting needs be identified for priority consideration for implementing more precise geo-targeting. It also recognized the desire to move forward with this process in a number of areas with particularly urgent alerting needs as soon as possible and recommended that funding under Section 604 of the WARN Act be provided to FEMA for this purpose.

The FCC continues to work expeditiously to issue rules in the coming months that will address the distribution of alerts by non-commercial educational and public broadcast stations and procedures for wireless carriers to elect to transmit emergency alerts to subscribers.

The Commercial Mobile Alert System Complements the Integrated Public Alert and Warning System Modernization Act of 2008

The efforts underway to develop and deploy the Commercial Mobile Alert System, with the strong likelihood of FEMA's involvement as the Alert Aggregator and Gateway operator,

complement the goals established in H.R. 6038, the Integrated Public Alert and Warning System Modernization Act of 2008. The WARN Act provides a sensible process that will help facilitate the development and evolution of a wireless alerting service and the role that it can play in the modernization of the IPAWS as envisioned in H.R. 6038. Moreover, I believe that its creation and implementation under a commercial – government partnership process will enhance the effectiveness of a comprehensive emergency alerting system.

H.R. 6038 directs FEMA to modernize the Integrated Public Alert and Warning System ("IPAWS") to ensure that Presidential emergency alerts can be sent and received by Government and its citizens. As part of this broad goal, the Bill authorizes FEMA to set technical standards, processes, protocols and procedures. H.R. 6038 also enables FEMA to direct how to adapt the distribution and content of messages based on geographic location, risks, or user preferences; ensure these alerts can effectively warn those with disabilities and limited proficiency in English; and make sure adequate training and testing occurs. The Bill contemplates an IPAWS that draws on multiple and diverse communications technologies, maintains the ability to incorporate or migrate to future technologies, reach the broadest portion of the affected population as possible, and offer redundant alerting mechanisms where practicable.

I could not agree more with the goals of H.R. 6038. And I will say that the wireless industry, under the framework of the WARN Act, is pursuing and accomplishing many of these goals with the FCC and FEMA in creating the commercial mobile alert service. While the FCC and the WARN Act Advisory Committee have established the commercial mobile alert service architecture and many of the technical standards and procedures, FEMA – if selected by the FCC as the federal Alert Aggregator – will develop standards and protocols to fulfill its role as Alert Aggregator and issue technical specifications governing the Alert Gateway. Moreover, the

Advisory Committee has engaged on, and will continue to advance, issues regarding the distribution and content of messages based on geographic location. In addition, the FCC adopted the Advisory Committee's recommendation requiring participating carriers to include an audio ~~attention signal and vibration cadence on alert-capable handsets to ensure that those with~~ disabilities could receive these alerts. Although the technical impediments to wireless alerts in multiple languages are significant, the Advisory Committee will continue to study ways to provide alerts beyond English only. Moreover, the FCC is currently working on further rules to implement the WARN Act, including rules governing testing of alert transmission and reception, for participating providers. I respectfully submit that many of the goals and requirements set forth in H.R. 6038 either already have been addressed or presently are being addressed in the wireless context. Thus, the WARN Act process is effectuating the Bill's worthy goal of ensuring broader dissemination of Presidential-level alerts and warnings. But CTIA cautions against Congress or agencies taking any action that could disrupt the wireless industry's significant efforts and progress to date.

CTIA and the wireless industry support the evolution of a framework for a comprehensive alert service that ultimately can be transmitted on multiple retransmission media, including wireless. CTIA and the industry believe that, while wireless can be a component of any alerting service, such a service should not focus solely on wireless. Rather, a complete public alert and warning system should explore the full range of communications media and devices, without limiting itself to wireline and wireless telephones, radio, television, cable or satellite.

Conclusion

A government-industry partnership, as seen in the development of Wireless Priority Service and wireless AMBER alerts, and as being realized right now under the WARN Act process, will facilitate development and deployment of a comprehensive, modern emergency alert and warning system. In the wireless context, I am optimistic that the government-industry partnership model will lead to an evolving mobile alerting system that taps the wireless industry's creativity and ingenuity.

CTIA and the wireless industry look forward to continuing their work with Government in the creation and deployment of a commercial mobile alert system. Thank you again for this opportunity to highlight our efforts to enhance the nation's public warning and alerting capabilities.

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE SUBCOMMITTEE ON ECONOMIC DEVELOPMENT,PUBLIC BUILDINGS AND EMERGENCY MANAGEMENT HEARING "ASSURING PUBLIC ALERT SYSTEMS WORK TO WARN AMERICAN CITIZENS OF NATURAL AND TERRORIST DISASTERS."

Testimony on behalf of tornado survivors from the City of Suffolk, Virginia
June 4, 2008
10 am

Submitted by Captain James T Judkins, Jr.
Coordinator
City of Suffolk Department of Fire and Rescue
Division of Emergency Management
400 Market Street
Suffolk, Va.
757-514-7586

On the afternoon of, April 28, 2008, a tornado struck the City of Suffolk, Virginia. Later classified as a strong EF-3 on the Enhanced Fujita Scale, the twister moved through the City on a Southwest to Northeast path. Radar data received from the National Weather Service, Wakefield, Virginia indicated Vortex Tornado Signatures occurring within the City from 3:46:49pm at a location southwest of the Village of Holland to 4:21:11pm at a location near the Village of Driver. Forecasters estimated the funnel cloud as being approximately a quarter mile wide at the point of touchdown.

In its aftermath, assessment teams identified five hundred residential or commercial structures affected, forty-nine of those listed as destroyed. Damage estimates approached thirty million dollars. Area hospital emergency departments, urgent care centers and on-scene emergency care personnel treated almost two hundred patients. Miraculously, no one died. Only six required hospitalization.

Hundreds of stories surface in the aftermath of this storm illustrating the courage and determination of emergency responders and average citizens. I would like to share a few of those stories with this committee about those average citizens. Some were reported by the local media. Some were shared with emergency responders.

Case #1

On afternoon of April 28, 2008, a resident of the Hillpoint Farms subdivision was on his way home in his pick-up when he heard on the radio what he later described as several EAS activation tones specific for the City of Suffolk. He cell phoned his wife and advised her to watch the skies and take cover in the hallway if she spots a funnel cloud. Later, he received a frantic call from his wife huddled in the downstairs hallway as the twister roared outside severely damaging their beautiful home. His wife escaped serious injury.

Case # 2

"I had the radio on, and I heard them talking about a tornado approaching," reported one resident. "I thought, 'We don't have to worry about that." The man of the house was upstairs working on the computer. His wife, who was down stairs, looked out the window a moment later. "There was nothing but debris blowing in the wind," she said. Suddenly, glass in the house began to break. Within seconds, both husband and wife found each other and ducked into a closet as they watched their house come apart around them. Pictures blew off the walls, mattresses tumbled down the hall and lamps were sucked out the window.

Case #3

Upon hearing the weather alert on the television, this family took cover in a small half bath on the second floor. Walls and windows of rooms next to and below that bathroom were blasted away by the twister's strong winds, but amazingly, the family was unharmed.

Case #4

A grandmother reports she is still shaken from what she described as a horrifying tornado experience. This senior citizen, who breathes with the aid of portable oxygen, was sitting in her home's south-facing sunroom with her sister and moved to heed a televised weather warning. They had only gotten a few steps into the interior hallway before the twister struck.

Case 5#

First Responders reported a story of a grandmother and her grand daughter who "rode" out the storm in a bathtub. In that account, upon hearing the warning, the grandmother and child took cover in their bathroom, grasping each as they nestled themselves in the tub. The tornado leveled their home and tossed the tub with its precious contents into a near-by lake. Both survived with only cuts and scrapes.

Case #6

This case is personal to me as it involves my mother who was caring for my terminally ill aunt. They were watching television when the weather alert sounded. Specific information about the Sadler Heights neighborhood was broadcast. Mom managed to get my aunt and herself to the interior hallway just as the rear of the home was torn away.

Case #7

Spring athletics were underway at Suffolk's three high schools. Teams were on their respective practice fields when school officials received the tornado warning via NOAA All Hazards Weather Radio. Athletes were directed to the school's interior hallways for refuge without incident.

In each of these seven cases, there are two common factors. The first and most remarkable was the fact that no one was seriously injured. Secondly, life-saving measures were prompted by Emergency Alert System messages.

In my 28 plus years experience, I find there is no one perfect alert system. Sirens fail, either mechanically or may not be heard due to the use of headphones on personal listening devices. Weather radios are turned of for unexplained reasons. More and more people are watching or listening to satellite radio and television where local warnings are not available. Subscriber based weather warning services require pre-registering.

My Grandmother once said, "your can lead a mule to water but you can't force him to drink". The same thing applies to warning systems. Each of us has a responsibility to our families for their safety and well-being. That responsibility includes knowing your community's warning system and having a method to receive emergency messages.

Three simple phrases say it all. Get a kit, have a plan and stay informed.

Respectively Submitted,

Captain James T. Judkins, Jr.
Emergency Management Coordinator
Suffolk, Virginia

Written Statement
Of

Derek K. Poarch
Chief, Public Safety and Homeland Security Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554
Telephone: (202) 418-1300

Before the
Subcommittee on Economic Development, Public Buildings, and Emergency Management
Committee on Transportation and Infrastructure
U.S. House of Representatives

June 4, 2008

Good Morning Chair Norton, Ranking Member Graves and Members of the House Subcommittee on Economic Development, Public Buildings, and Emergency Management. Thank you for the opportunity to appear before you on behalf of the Federal Communications Commission to discuss the FCC's efforts to develop a robust and reliable Emergency Alert System (EAS) and to establish a Commercial Mobile Alert System as required by the Warning Alert and Response Network (WARN) Act.

~~Introduction~~

One of the FCC's primary statutory obligations is to promote the safety of life and property through the use of wire and radio communication. An essential element of that obligation is to ensure that all Americans have the capability to receive timely and accurate alerts, warnings, and critical information regarding disasters and other emergencies, irrespective of what communications technologies they use. As we have learned from recent disasters, such a capability is essential to enable Americans to take appropriate action to protect their families and themselves from loss of life or serious injury.

The Commission, under the leadership of Chairman Kevin J. Martin, has taken a number of steps to enhance the reliability and robustness of the Nation's EAS. In addition, the Commission continues to implement the WARN Act which establishes a framework by which commercial mobile service (CMS) providers may elect to voluntarily transmit emergency alerts to their subscribers. I will briefly summarize the Commission's efforts in these areas.

Emergency Alert System

For over 50 years, the United States has had a mechanism in place to deliver alerts to the American public, particularly for the President to communicate with the public in the event of a national emergency. That system – the EAS –requires EAS Participants including radio, television and cable systems, to deliver emergency alerts to the population. Under the leadership of Chairman Martin, the FCC continues to enhance the manner in which this alert and warning system takes advantage of new technologies. For example, in November 2005, the Commission expanded the scope of EAS to include digital broadcast radio and television, digital cable television and satellite radio and television. Last year, the Commission further expanded the EAS to include Internet Protocol-based video programming services offered by wireline telephone companies.

The Commission also has taken steps to ensure a more robust and reliable Next Generation EAS. Last year, the Commission required EAS Participants to have the capability to receive Common Alerting Protocol (CAP)-formatted EAS alerts no later than 180 days after the Federal Emergency Management Agency (FEMA) publishes the CAP technical standards and requirements. The Commission also: (1) required EAS Participants to adopt Next Generation EAS delivery systems no later than 180 days after FEMA releases standards for those systems; (2) preserved the current EAS network, but enhanced its effectiveness and redundancy by enabling EAS delivery upgrades; and (3) required EAS Participants to transmit state and local EAS alerts that are originated by governors or their designees no later than 180 days after FEMA publishes its adoption of the CAP standard, provided that the state has submitted and received Commission approval for a state EAS plan that describes how such alerts will be transmitted.

Commercial Mobile Alert System

The Commission has also taken steps to implement the WARN Act, which established a process for the creation of a Commercial Mobile Alert System whereby commercial mobile service providers could voluntarily transmit emergency alerts to their subscribers. Under this statute, the Commission was required to undertake a series of actions to accomplish that goal. I am pleased to report that the Commission has met all of its WARN Act deadlines to date, and has taken significant steps to facilitate the development of an effective Commercial Mobile Alert System.

First, the Commission was required to establish and convene an advisory committee to recommend technical standards and other requirements by which commercial mobile service providers could voluntarily transmit emergency alerts. The Commission established an advisory committee, the Commercial Mobile Service Alert Advisory Committee (CMSAAC), consisting of a balanced array of experts. This included: representatives of public safety organizations such as the Association of Public Safety Communications Officials, International, the International Association of Fire Chiefs and the National Association of State EMS Officials; local governments including Contra Costa County, California and the City of New York; a Federally-recognized Indian tribe; five major wireless carriers and an organization representing rural carriers, equipment manufacturers, and vendors; the National Association of Broadcasters as well as the Texas, Michigan, and Florida state broadcasters associations; the Association of Public Television Stations; organizations representing people with disabilities and the elderly; and Federal government agencies, including FEMA and the National Oceanic and Atmospheric Administration (NOAA) and other experts. As required by the WARN Act, the Committee held its first meeting on December 12, 2006.

Next, the WARN Act required that the advisory committee develop and submit its recommendations to the Commission by October 12, 2007. The CMSAAC submitted its report to the Commission in a timely manner, recommending an end-to-end alerting system. Under the recommended system, alerts from Federal, state, tribal, and local governments would be received by an Alert Aggregator that would aggregate, authenticate, and validate the alerts. The alerts would then be sent to an Alert Gateway which would process the alert into a 90-character format that could be sent to CMS Providers. The alert would then be sent to CMS Providers' gateway and infrastructure for processing, and then ultimately transmitted to subscribers' handsets. Many of the wireless carriers indicated during the Committee's deliberation and in comments in the rulemaking that a Federally-administered alert aggregator/gateway was essential to their voluntary participation in the CMAS.

On December 14, 2007, the Commission issued a Notice of Proposed Rulemaking seeking comment on implementation of the WARN Act, including the recommendations of the advisory committee. The Commission received over 60 comments on the issues raised in the Notice.

Based on the advisory committee's recommendations, the Commission was required to adopt technical standards, protocols, procedures, and technical requirements by April 9, 2008. I am pleased to report that the Commission released its CMAS Report and Order, adopting those requirements by the statutorily required date.

The Commission's Order generally adopted the advisory committee's recommendations. It adopted the end-to-end architecture for the CMAS proposed by the advisory committee. It also concluded that a Federal government entity should perform the alert aggregator and alert gateway

functions, as recommended by the advisory committee. We are pleased that the Federal Emergency Management Agency has announced that it will perform these two functions.

The Commission's Order also adopted technical requirements for elements of the CMAS controlled by the CMS provider (*i.e.*, the CMS Provider Gateway, CMS provider infrastructure and handsets). In addition, the order adopted technologically neutral rules requiring participating CMS providers to: (1) transmit three classes of emergency alerts – Presidential, Imminent Threat, and AMBER alerts; (2) target alerts at areas no larger than the county-level, as recommended by the advisory committee; and (3) include an audio attention signal and vibration cadence on CMAS-capable handsets in order to ensure that people with disabilities have access to these alerts. Due to implementation issues, including network congestion concerns raised by wireless carriers during both the Committee's deliberations and the rulemaking proceeding, the Commission declined at the time to require participating CMS providers to transmit alerts in languages in addition to English. With respect to the availability of CMAS alerts while roaming, subscribers will receive alert messages if the carrier operating the network has a roaming agreement with the subscriber's CMS provider and is participating in the CMAS, and the subscriber's mobile device is configured for and technically capable of receiving alert messages. Finally, the Commission determined that CMAS alerts may not preempt an ongoing phone call or data session.

Next Steps

Over the next several months, the Commission will continue to take steps to improve the EAS and to establish the CMAS. In an effort to ensure that all Americans are able to receive emergency alerts and information, the Commission is currently working on an Order that will address the best ways to ensure that Americans who do not speak English and those with disabilities are able to receive EAS alerts and emergency information in general. This action would be in addition to the rules the Commission has previously adopted requiring broadcast television licensees and cable television service providers to make local emergency information accessible to persons who are deaf or hard of hearing, and to persons who are blind or have visual disabilities. The pending order also takes steps to improve the Commission's ability to assess EAS operations and system readiness.

The Commission also expects to meet its remaining statutory deadlines under the WARN Act. By early July 2008, the Commission will adopt rules requiring non-commercial educational (NCE) and public broadcast stations to install equipment and technologies to enable the distribution of geo-targeted alerts by CMS providers that have elected to transmit emergency alerts. In addition, by early August 2008, the Commission will adopt rules regarding, among other things, the procedures whereby CMS providers must elect whether they will transmit alerts over the CMAS.

Coordination with Federal Colleagues

The Commission has – and will – continue to coordinate with other stakeholders on alert and warning issues. The Commission has worked and coordinated with FEMA and NOAA on alerting issues as they relate to both the EAS and the CMAS, as well as issues of concern to state and local governments. In addition, both agencies played a role in the advisory committee's development of the technical requirements that the Commission ultimately adopted pursuant to the WARN Act. The Commission has also worked with FEMA on issues related to DHS's implementation of Executive Order 13407, which gives DHS primary responsibility for development of an integrated public alert and warning system. The Commission looks forward to continued work with FEMA on the

development of the CMAS and stands ready to support FEMA in implementation of H.R. 6038, legislation introduced by Ranking Member Graves and cosponsored by Chair Norton, should it be enacted.

The FCC will also continue to reach out to state, local, and industry stakeholders. To this end, last month, the FCC's Public Safety & Homeland Security Bureau hosted a summit on the current and future state of EAS. This summit brought Federal, state and local governments as well as industry stakeholders together to discuss ways to improve the EAS.

The Commission has also sought to educate industry stakeholders about the FCC's EAS and CMAS rules. For example, earlier this year, the Commission updated its EAS handbooks for broadcast radio and television stations and cable television service providers and created new EAS handbooks for satellite radio and television service providers. The Commission also developed Spanish-language versions of these handbooks. In addition, last month FCC staff participated in a web-based industry training seminar designed to educate small wireless carriers about the FCC's CMAS rules. The purpose of the training was not only to educate, but to encourage small wireless carriers, who often serve the most rural parts of our Nation, to participate in the CMAS.

The Commission will continue with all of these efforts in order to ensure that Americans have effective, reliable emergency alert and warning systems.

Conclusion

Thank you for the opportunity to appear before you today. This concludes my testimony and I would be pleased to answer any questions you may have.

Federal Communications Commission
Washington, D.C. 20554

The Honorable Eleanor Holmes Norton
Chair, Subcommittee on Economic Development, Public Buildings and Emergency Management
Committee on Transportation and Infrastructure
U.S. House of Representatives
585 Ford House Office Building
Washington, DC 20515

Dear Chair Norton:

Please find enclosed my responses to the questions from the June 4, 2008 Subcommittee on Economic Development, Public Buildings and Emergency Management Hearing on "Assuring Public Alert Systems Work to Warn American Citizens of Natural and Terrorist Disasters."

Please contact me if I can be of any further assistance.

Sincerely,

Lisa M. Fowlkes
Deputy Chief
Public Safety & Homeland Security Bureau

Enclosure

SUBCOMMITTEE ON ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS
AND EMERGENCY MANAGEMENT
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES

HEARING

ON

ASSURING PUBLIC ALERT SYSTEMS WORK TO WARN AMERICAN CITIZENS OF NATURAL AND TERRORIST DISASTERS

Questions for the Record

For

Federal Communications Commission
Public Safety & Homeland Security Bureau
Deputy Chief Lisa M. Fowlkes

June 4, 2008

Please return to the Committee on Transportation and Infrastructure by June 20, 2008

Questions for the Record for Federal Communications Commission
Public Safety & Homeland Security Bureau
Deputy Chief Lisa M. Fowlkes
Submitted by The Honorable Eleanor Holmes Norton
Chair, Subcommittee on Economic Development, Public Buildings and Emergency Management

1. **Regarding the broadcasters that do not participate in the EAS: What type of broadcasters and stations do not participate and what is the number as a percentage of all broadcasters and stations? Why do they choose not to participate?**

The Commission's rules prescribe technical standards, procedures, and testing protocols for receipt and transmission of a Presidential message. 47 C.F.R. Part 11. The rules mandate that generally all radio and television broadcasters, cable, Digital Audio Radio, Direct Broadcast satellite systems and wireline video providers carry this national-level message unless they have received an authorization from the Commission to be a non-participating source. *See* 47 C.F.R. §§11.11, 11.18(f), 11.19. EAS participants that are designated as non-participating must go off the air or cease programming during the transmission of a Presidential alert message and must comply with other EAS requirements (*e.g.*, EAS equipment and testing). 47 C.F.R. § 11.18(f). Less than 1% of broadcast stations have sought and received such an authorization. The types of stations that have received these authorizations include AM, FM and television stations (both full power and low power) and serve both large and small markets.

EAS activation by state or local governments to initiate warnings and the broadcast and transmission of non-Presidential alerts currently is voluntary, and plans for use of the EAS for state and local level messages are developed by volunteers from industry and state and local emergency organizations. The Commission does not collect or have information with regard to the level of participation at state and local levels or to the reasons why a station would elect not to participate. Last year, the Commission amended its rules to require broadcast stations and other terrestrial EAS participants to receive and transmit state-level and geographically targeted Common Alerting Protocol (CAP)- formatted EAS messages originated by the state governors or his/her designee within 180 days after the Federal Emergency Management Agency publishes its adoption of the CAP, provided that the Commission has approved the applicable state plan providing for delivery of such alerts. Review of the Emergency Alert System, EB Docket No. 04-296, *Second Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 13275 (2007) (*EAS Second Report and Order and Further Notice*").

2. **Is there a cost to broadcasters to participate in EAS? If so, what is the cost?**

To participate in EAS a broadcaster must install, maintain, and test an EAS encoder/decoder that enables it to receive and transmit EAS messages. The EAS encoder/decoder typically costs approximately $3,500 – $4,500. We are not aware of any additional costs that would be incurred as a result of participation in state and/or local EAS.

DEPARTMENT OF HOMELAND SECURITY

FEDERAL EMERGENCY MANAGEMENT AGENCY

STATEMENT OF

Martha T. Rainville
Assistant Administrator

ON

"Assuring Public Alert Systems Work to Warn and Alert Citizens of Natural and Terrorist Disasters"

BEFORE THE
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS, AND EMERGENCY MANAGEMENT
U.S. HOUSE OF REPRESENTATIVES

JUNE 4, 2008

INTRODUCTION

Good morning Madam Chairwoman, Ranking Member Graves and Members of the Subcommittee. I am retired Major General Martha Rainville, Assistant Administrator of the Federal Emergency Management Agency's (FEMA) National Continuity Program (NCP) Directorate. Thank you for the opportunity to appear before you today to discuss the progress that FEMA has made over the past two years and to describe what we expect to accomplish in the years ahead. FEMA is the Executive Agent for the national Emergency Alert System (EAS).

It is my privilege to lead the dedicated professionals with whom I work at FEMA. At NCP, our mission is to serve the public by protecting our Nation's constitutional form of government in direct support of National Security Presidential Directive 51/ Homeland Security Presidential Directive 20 (NSPD-51/ HSPD 20) and FEMA's recently released Strategic Plan. FEMA serves as the Nation's center of excellence for government continuity planning, guidance, and operations support, in direct support of FEMA's Strategic Goal #1: Lead an integrated approach that strengthens the Nation's ability to address disasters, emergencies, and terrorist events. FEMA also is responsible for assuring that the President can address the Nation under the most extreme circumstances and is in alignment with FEMA Strategic Goal #3: Provide reliable information at the right time for all users.

Under the leadership of Administrator Paulison, FEMA has weathered difficult times and today is better able to fulfill our mission of reducing the loss of life and of property and to protect the Nation from all hazards, including natural disasters, acts of terrorism, and man-made disasters. The agency has transformed into a "New FEMA," one that leads and supports the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation.

The emergency management landscape today is not what it was in 2001, or even in 2005 and it will not be the same two years from now. Together with our partners, we are helping to shape the future of emergency management. In this uncertain world, one thing is clear: No one person, agency, or group has all the answers. To that end, we are transforming our concept of "emergency management" into a disciplined approach that entails collaboration with stakeholders, thoughtful planning, and decisive execution.

FEMA's direction and authority with regard to alerts and warnings are spelled out in various federal Statutes, regulations and directives including: Section §706 of the Communications Act of 1934, as amended (47 U.S.C. §606); Warning, Alert, and Response Network Act, Title VI of the Security and Accountability for Every Port Act of 2006, Pub. L. No. 109-347, 120 Stat. 1884 (2006); Section 202 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (42 U.S.C. §5132); 47 C.F.R. Part 11; Executive Order 12472, *Assignment of National Security and Emergency Preparedness Telecommunications Functions*, April 3, 1983 (amended by Executive Order 13286 of February 28, 2003; and Executive Order 13407, *Public Alert and Warning System*, June 26, 2006.

Our focus is to raise the level of awareness about continuity planning and increase interagency cooperation in the alert and warning community to create a more resilient government at all levels. We have laid the foundation for becoming an organization that is valued across all jurisdictions as an engaged, agile, responsive, and trusted leader and partner.

Improving the Nation's Alert and Warning Systems

In the alert and warning community, we work closely with our federal partners at the National Oceanic and Atmospheric Administration (NOAA) and the Federal Communications Commission (FCC) to ensure that the federal government speaks with one voice when it comes to upgrading, improving, securing, and regulating the EAS with support from the FCC which is responsible for ensuring that broadcasters comply with applicable federal regulations. In 1994, the EAS replaced the Emergency Broadcast System (EBS) which has been in operation since 1963. Under FCC regulations, broadcast radio and television, cable television stations, direct broadcast satellite services, and satellite radio operators are required to carry national (Presidential) EAS alerts and to support state and local EAS alerts and tests.

We cannot always accurately predict the next disaster. But we can plan for it, and we can alert the American people – we can tell them to seek shelter before a tornado hits, we can tell them to evacuate before the rivers swell up leaving behind a trail of devastation. The Integrated Public Alert and Warning System is the Nation's next generation alert system. IPAWS is a system of systems through which FEMA is upgrading the existing EAS, creating a redundant path through Digital EAS, and supporting the distribution of alert and warning messages to residential telephones, to websites, to pagers, to e-mail accounts, and to cell phones. We cannot do everything at once so later this year we are rolling out the first increment to support digital alerts. Later on, we will roll out additional increments to support risk-based alerts, non-English language alerts and alerts for special needs communities. Throughout the increments FEMA will improve the resilience and the security of IPAWS.

We collaborate extensively with our nonprofit partners, particularly the Primary Entry Point Advisory Committee (PEPAC), the Association of Public Television Stations (APTS), and the Public Broadcasting System (PBS). Our partnership with PEPAC and its member Primary Entry Point (PEP) stations provides the foundation for FEMA's ability to send a Presidential alert to the public and provides the existing system over which most state, local, tribal, and territorial alerts are sent today. FEMA's partnership with APTS and PBS brings the PBS satellite network into IPAWS through Digital EAS. This initiative provides a redundant and resilient path over which to distribute national, state, local, tribal, and territorial alerts. It is only through our public-private partnerships that we are able to sustain, upgrade, add, and maintain the PEP stations and integrate the PBS satellite network into the IPAWS.

We recognize that there is no single solution set that will meet everyone's alert and warning requirements and that is why FEMA and our partners are looking for the most appropriate interoperable solutions for IPAWS. At the same time, we are aware of the concerns of our state partners who have invested in their own alert and warning systems. With that in mind, IPAWS is intended to be fully interoperable with those systems by establishing common protocols for alerts and warnings. It is only through a coordinated federal response to Executive Order 13407 that we can remain focused on the primary reason for establishing IPAWS – to provide life saving information to the American people during an emergency.

Since FEMA established the IPAWS program management office, Congress has provided us with an appropriation of $25 million for Fiscal Year (FY) 2008. We are focusing our fiscal resources on upgrades to the EAS through improvements to and the expansion of the PEP stations; developing plume modeling that support geo-targeted messages; using satellite networks as a redundant path for alerts (Digital EAS); deploying a mobile EAS asset (IPAWS truck); creating standards and protocols, and engineering support.

President Bush in June 2006 issued Executive Order 13407, "Public Alert and Warning System," which established the national policy for alerts and warnings and directed a series of actions meant to improve and modernize the ability of government at all levels to communicate rapidly with the American people. The EAS currently allows the President to transmit an alert to the American people within 10 minutes through the Primary Entry Point (PEP) stations, which then travels from station to station in order to send the message over all broadcast radio and television stations, cable television stations, and satellite radio stations. While a President has never activated the national EAS, carrying a Presidential message is mandatory and takes priority over any other EAS message. To ensure that the infrastructure remains viable for a national message, FEMA tests the connections to the PEP stations on a weekly basis. If a Presidential message is ever sent, FEMA would authenticate the sender and the message.

The EAS also provides a means for NOAA, state, local, tribal, and territorial government officials to send warnings about local emergencies such as AMBER alerts, hazardous material incidents, and weather warnings. These warnings are the most common emergency messages. State, local, tribal, and territorial government officials determine the content of their alerts. The operating procedures that govern the transmission of a state, local, tribal and territorial alert are developed by the government officials and the local broadcast radio and television stations. State, local, tribal, and territorial officials include in their state plans measures to validate their users and procedures to proscribe the frequency of alerts. The procedures then become part of the state EAS plans which are filed at the FCC. There is no federal or other entity that reviews, validates, or authenticates a state, local, tribal, or territorial alerts sent over the EAS. FEMA does not receive data from NOAA, state, local, tribal, or territorial officials about their use of the EAS or the content of their alert messages.

The EAS has served us well, but the reality is that it is based on technology that is 15 years old. Through IPAWS, FEMA and our partners are transforming the alert system

from an audio only signal sent on radios and televisions to one that can support audio, video, text, and data messages sent to residential telephones, to websites, to pagers, to e-mail accounts, and to cell phones. The mission of the IPAWS program management office is: "Send one message over more channels to more people at all times and places."

We started by re-engaging the federal alert and warning partnership between FEMA, the FCC, NOAA, and DHS' Science and Technology Directorate (S&T). Successful execution of Executive Order 13407 requires a coordinated federal response as no single entity has the authorities, statutes, or appropriations to accomplish IPAWS alone. By more closely working with NOAA, FEMA is developing an integrated national architecture that will provide a redundant and resilient path for alerts sent by the President, federal, state, local, tribal, and territorial officials.

FEMA is working with the FCC to conduct assessments of the PEP stations, and with the NOAA to assess their state and local architecture. It will take us approximately one year to complete. This collaborative and coordinated approach will allow us to verify the dependability and effectiveness of the cascading relay system. This interoperability among federal alert and warning systems and the states will expand the message delivery capabilities for the President, federal, state, local, tribal, and territorial officials.

We recognize the importance of establishing a forum for the diverse alert and warning stakeholder groups. FEMA is working with DHS to identify the appropriate departmental advisory committee that we should use to establish a stakeholder subcommittee and comply with the Federal Advisory Committee Act. Until that process is complete, we are connecting with our stakeholders through national forums such as the International Association of Chiefs of Police Conference, the International Association of Emergency Managers Conference (IAEM), the National Hurricane Conference, the Big City Emergency Managers' Learning and Exchange Forum, and the National Association of Broadcasters Show. We also participated in the FCC Emergency Alert Summit in May 2008 and will present an IPAWS overview during the IAEM mid-year meeting later this month.

Once we finish our coordination for the first IPAWS increment (Digital EAS), we plan to conduct town hall meetings this summer in FEMA Regions IV and VI and with Regional representatives and state emergency management personnel from the selected states.

Lessons Learned from the Pilot Projects

Since 2005, FEMA has deployed several pilot alert and warning technologies to 14 coastal states. The proof of concept pilot projects allowed FEMA and the participating states to explore the viability of new alert capabilities including the ability to send targeted alerts within a specific jurisdiction; the use of digital technology to send alerts over public television stations; and the ability to send alerts as text messages to cell phones, e-mail accounts, and pagers.

Congress allocated funds in the FY 2005 Supplemental Appropriations in Response to Hurricane Katrina. FEMA used $2.5 million of the supplemental appropriations to provide for the first time a suite of alert and warning capabilities to Alabama, Louisiana, and Mississippi.

I am pleased to report that the pilot projects successfully demonstrated the integration of new technologies into state emergency operations centers. With the pilots, Alabama, Louisiana and Mississippi emergency managers had the ability to send alerts over the Internet as American Sign Language (ASL) video to residents who were deaf or hard of hearing and to send pre-recorded messages in Spanish for residents who did not speak English. These successful pilots ended in December 2007. In fiscal years 2006 and 2007, 27 states, including Alabama, Louisiana and Mississippi, applied for and received grant funds from the State Homeland Security Program (SHSP) funds to improve their alert capabilities.

The pilots also served as a proof of concept and demonstrated that state and local emergency management personnel could successfully integrate modern technologies into their operations centers. The pilots also took a large step toward addressing the GAO concern that the EAS must adequately support residents who are not literate in English or who are deaf or hard of hearing.

Thanks in large part to the participation of state and local emergency managers, we learned that augmenting the reach of the EAS with alerts sent to residential telephones, cell phones, e-mail accounts, and other devices was popular with both officials and residents. Over a four-month pilot project period, 8,000 people across three states signed up to receive alerts to their cell phones, pagers, and e-mail accounts while another 600 signed up to receive ASL video translations of alerts. Officials in the three states chose to send audio alerts to residential phones totaling approximately 200,000 calls. The 2007 pilot projects demonstrated the state, local, tribal, and territorial emergency operations centers could successfully integrate new alert and warning capabilities into their operations. Now emergency managers and state, local, tribal, and territorial officials can identify and prioritize the capabilities that are best suited to protect their residents and apply for funds through the SHSP grant program to help offset the costs.

One lesson reaffirmed through these various pilot projects is that the alert and warning tools preferred by one state may not be as useful for another state. State local, tribal, and territorial officials are well-suited to determine which alert and warning technologies will provide the appropriate protection for their residents. This complements FEMA's role to ensure that IPAWS provides an interoperable platform to accommodate the options that state officials can choose based on likely disasters in their regions and the needs of their population. FEMA is partnering with the DHS Science and Technology Directorate to establish alert and warning standards and protocols to support the ability of state, local, tribal, and territorial emergency managers to send alerts to their residents during emergencies. The standards and protocols will allow for states to select the capabilities that they need without any major reinvestments if they need to change their capabilities in the future.

We also learned that not every technology works for every scenario. While sending alerts to cell phones may be an ideal solution for a city or county, a localized or regional alert would need to be geo-targeted and sent only to a disaster-affected area to avoid overwhelming the telecommunications infrastructure. FEMA supports the recommendations in the FCC's First Report and Order, PS Docket No. 07-287 to create a framework for delivering emergency messages through a nationwide mobile phone alert system. As announced on May 30, 2008 by Administrator Paulison, FEMA will assume the aggregator / gateway role for nationwide cellular mobile alerts. We will work with DHS S&T to finalize the technical solution and with FCC to make the Alert Aggregator operational. As we move forward, FEMA will ensure the Alert Aggregator does not impede or delay emergency messages sent from state and local emergency managers.

We also successfully demonstrated the delivery of alerts to residents with special needs and learned that there are many different solutions for providing information to people who are deaf or hard of hearing. There are state, local, tribal, and territorial officials who prefer to use ASL translations of alerts while others like Dane County, Wisconsin are sending alerts to a Telecommunications Device for the Deaf (TTY) to reach their residents during an emergency. The special-needs NOAA Weather Radio is widely available (there are various options ranging in price from $60 to $150 that can alert residents who are deaf and hard of hearing about hazardous conditions). The radios use visual and vibrating alarms to signify that an alert is coming and transmit warnings to a liquid crystal display readout screen.

We find more and more states are using innovative approaches to alerts by adapting existing technologies to provide their residents with life-saving information. One example is Oklahoma's Weather Alert Remote Notification program which sends alerts to residents who are deaf and hard of hearing over their pagers and other wireless devices. The program, started as a pilot in 2001 and funded in part by a FEMA grant, was fully implemented in 2003. Through the grants programs, FEMA continues to support states that request assistance for alert and warning improvements. In fiscal years 2006 and 2007, FEMA approved $1.05 billion through the SHSP grant program which includes an eligible category for grant funding expenditures to support alert systems.

We at FEMA know that improving the national infrastructure is critical and we must ensure that the alert and warning system will serve this and future generations. FEMA is setting the framework for federal, state, local, tribal and territorial officials to get critical and life-saving information to residents. To ensure the viability and survivability of the national backbone, we are devoting resources to improving the PEP stations and, through Digital EAS, to creating redundant pathways for emergency messages. In conjunction with our partners at DHS S&T, we are developing standards and protocols that will better inform state, local, tribal and territorial emergency managers as they make choices about their alert and warning solutions. In this way, FEMA is ensuring that there is a redundant and resilient capability for a national message.

Next steps for IPAWS

Over the next few years, FEMA is taking a number of steps to improve the alert and warning infrastructure and increase the dependability of the national system.

First, we are strengthening the federal government's ability to send emergency warnings directly to the American people by increasing PEP stations from 36 to 63. This will enable these warnings to be delivered to 85 percent of the American people, up from 70 percent. We began the installation of 3 new PEP stations in FY 2007 and they were completed and operational in FY 2008. Our immediate steps this year are to award contracts to build an additional 24 PEP stations that will provide up to 60 days of fuel and supplies, and provide an all hazards shelter. These improvements will expand the number of locations of entry point receiver stations and will ensure their ability to support alerts for sustained periods without resupply. This is a lesson learned from Hurricane Katrina and the outstanding performance of WWL AM Radio Station 870, the PEP station in New Orleans.

Second, we are increasing the survivability and resiliency of the national alert and warning system by utilizing the satellite technologies of the Public Broadcast System infrastructure. By integrating the PBS satellite network into IPAWS through the Digital EAS project, FEMA is improving the survivability of the alert and warning infrastructure. Digital EAS will eventually provide video, voice, and text messaging capabilities for a Presidential alert, and will allow the President, for the first time, the ability to distribute a message in multiple languages.

This year we will roll out the first increment of IPAWS – Digital EAS – to the eight states and one territory that previously participated in the Digital EAS pilot project: Alabama, Alaska, Florida, Louisiana, Mississippi, New Jersey, Texas, South Carolina, and Puerto Rico. We also will expand Digital EAS beyond the original nine locations to five more states – those under consideration are Arkansas, Georgia, Kentucky, North Carolina, New Mexico, Oklahoma, and Tennessee. We are currently in the discussion stages with the FEMA Regions and state emergency management personnel to finalize our plans. Depending on the results of the 2008 installations, we plan in 2009 to roll out Digital EAS to 16 additional states that are prone to weather hazards such as hurricanes, tsunamis, and earthquakes. The state Digital EAS will give state, local, tribal, and territorial emergency managers the same functionality as a Presidential message including the redundant path of the PBS satellite network for message distribution. FEMA will continue to roll out Digital EAS until there is coverage in all states and territories.

Third, we are increasing the capacity of the national alert system by incorporating NOAA's infrastructure – which is currently in use by many of the state and local emergency operations centers – into the IPAWS architecture. This year FEMA will provide NOAA with a mobile platform (IPAWS truck) that NOAA can use to temporarily re-establish alert and warning capabilities within an area affected by a disaster and to provide redundancy between the Weather Forecast Office and its transmitters if necessary.

We are also working with NOAA and the National Weather Service (NWS) to develop secure interfaces to deliver a Presidential alert to the public over the NWS infrastructure. By partnering with NOAA and making our systems interoperable, we will build a solid framework for state and local officials to use and ensure that the national EAS is reliable, redundant, and secure.

~~Fourth, FEMA is coordinating and collaborating with the FCC to extend the reach of the~~ public alert system through new technology supported by new regulations and rule making. FEMA is committed to supporting and to building on the FCC's report and order to include cell telephone in the distribution of emergency information. The framework by the FCC established is a critical step in executing Executive Order 13407 to develop a system that will allow federal, state, local, tribal, and territorial officials to communicate with the American people under all conditions.

Our goal is to ensure that the President will be able to send an alert to the public during an all-hazards event, and to support alert and warning capabilities chosen by state and local emergency managers to send alerts to their residents. Through the pilot project phase and now as we prepare to deploy the first permanent increments of IPAWS, FEMA is demonstrating how seriously we have taken our responsibility to deliver life-saving information to the public.

Summary

In summary, FEMA remains committed to providing the infrastructure, the guidance, and the support to ensure that the national alert system is more robust, more resilient, and more reliable so that when the next catastrophic disaster strikes, the President and emergency managers at all levels can provide quick and accurate information to all Americans.

Madam Chairwoman, Ranking Member Graves and Members of the Committee, thank you again for the opportunity to speak, for your support of FEMA, and your interest in IPAWS. I appreciate the opportunity to appear before you today. Thank you.

U.S. Department of Homeland Security
Washington, DC 20472

JUL 16 2008

Chairwoman Eleanor Holmes Norton
Subcommittee on Economic Development, Public Buildings,
and Emergency Management
Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, D.C. 20515

Dear Madam Chairwoman:

Thank you for the opportunity to provide more information about FEMA's progress in the development of the Integrated Public Alert and Warning System (IPAWS). Specifically, you have requested the IPAWS Program Management Office (PMO) provide additional information regarding:

- States that do not participate in national EAS and FEMA's outreach to them; and
- Status of a standing advisory group and timeline, initiatives, and issues for the first meeting.

I have included responses to these queries as well as a chart of proposed IPAWS stakeholder engagement activities through Fiscal Year 2009.

If you have any further questions, comments, or concerns, please do not hesitate to contact FEMA's Office of Legislative Affairs at 202-646-4500.

Sincerely,

Major General (Ret.) Martha Rainville
Assistant Administrator

1. Which states do not participate in the Emergency Alert System (EAS), and why? Is FEMA doing anything to encourage them to participate in the system?

The PMO is unaware of any states that do not participate in the EAS. A preliminary review of publicly available information conducted by the PMO earlier this year indicated that five states (Georgia, Tennessee, Delaware, Kansas, and Wyoming) had not activated the EAS during a local emergency. Upon further review conducted after the subcommittee hearing of June 4, 2008, the PMO determined that each state, in fact, participates in the EAS and utilizes the system in addressing emergencies.

2. Who do you intend to invite to participate in this advisory group? What is your target date for commencing the first meeting? What are the initiatives and issues that are on your agenda for the group to consider?

The PMO will work with the FEMA National Advisory Council (NAC) and 10 FEMA Regional Advisory Councils (RAC). Council members of each are drawn from a geographic (including urban and rural) and a substantive cross section of officials, emergency managers, and emergency response providers from State, local, and tribal governments, the private sector, and nongovernmental organizations. The NAC was formed in 2007 and meets quarterly. The PMO plans to give its first presentation at the November 2008 meeting in Los Angeles, California. Each RAC meets monthly and the PMO plans to present to multiple RAC meetings each month beginning in August 2008.

The PMO will seek advice on alert and warning issues and initiatives including:

- Implementation of Digital EAS;
- Development of the Common Alerting Protocol;
- Development of regulatory framework; and
- Challenges facing State & local emergency management personnel.

The PMO will continue to assess need and explore options for establishing a separate IPAWS advisory group. The PMO will continue to participate in existing private stakeholder group forums, such as the National Emergency Management Association, International Association of Emergency Managers, and National Association of Broadcasters conferences.

FEMA is committed to ongoing and sustained interactions with our stakeholders and we have identified conferences and meetings that the IPAWS PMO personnel will leverage to reach alert and warning stakeholders through the third quarter of fiscal year 2009.

Event Date	Activity	Desired Outcomes
July 8-10, 2008	National Continuity Programs (NCP) Annual COOP Strategic Planning Conference, Charleston, SC	Increased engagement of COOP partners
July 16-18, 2008	Public Television Programmers Association Meeting, WGBH, Boston, MA	Increased engagement of public broadcasting stakeholders
August 6-7, 2008	FEMA Region VII Regional Assistance Committee Conference	Inform regional partners on IPAWS and how it applies to their regions
August 10-15, 2008	International Association of Firefighters Annual Convention, Las Vegas, NV	Increased engagement of first responder stakeholders
September 8-11, 2008	National Emergency Management Association Annual Convention, Portland, OR	Increased engagement of state & local emergency management stakeholders
September 15-17, 2008	Annual NPSTC Conference, Seattle, WA	Increased engagement of telecommunications partners
September 2008	Alert and Warning Stakeholder Forum	Provide information to and obtain information from public, nonprofit, and private stakeholders
October 29-31, 2008	2008 Technologies for Critical Incident Preparedness Conference, Chicago, IL	Increased engagement of emergency responder community
November 15-20, 2008	International Association of Emergency Managers Annual Conference, Kansas City, KS	Increased engagement of state & local emergency management stakeholders
January 13-16, 2009	National Educational Telecommunications Association Annual Conference, Tampa, FL	Increased engagement of public broadcasting stakeholders
April 1-3, 2009	CTIA Wireless Spring Trade Show, Las Vegas, NV	Increased engagement of wireless stakeholders
April 6-10, 2009	National Hurricane Conference, Austin, TX	Increased engagement of state & local emergency management stakeholders
April 17-23, 2009	National Association of Broadcasters, Annual Show, Las Vegas, NV	Increased engagement of commercial broadcasting stakeholders

MIKE WOMACK
MEMBER OF THE NATIONAL EMERGENCY MANAGEMENT ASSOCIATION
AND MISSISSIPPI EMERGENCY MANAGEMENT AGENCY DIRECTOR

TESTIMONY
BEFORE THE

HOUSE TRANSPORTATION AND INFRASTRUCTURE SUBCOMMITTEE ON ECONOMIC DEVELOPMENT, ~~PUBLIC BUILDINGS, AND EMERGENCY MANAGEMENT~~

ON

ASSURING PUBLIC ALERT SYSTEMS WORK TO WARN AMERICAN CITIZENS OF NATURAL OR TERRORIST DISASTERS

THE UNITED STATES HOUSE OF REPRESENTATIVES

JUNE 4, 2008

INTRODUCTION

Thank you Chairwoman Norton, Ranking Member Graves, and distinguished members of the Committee for allowing me the opportunity to provide you with a statement for the record on our nation's preparedness. I am Mike Womack, the Director of the Mississippi Emergency Management Agency. In my statement, I am representing the National Emergency Management Association (NEMA), whose members are the state directors of emergency management in the states, territories, and the District of Columbia. My tenure with MEMA began in 2002 and I served as Director of Response and Recovery and Deputy Director, leading up to my appointment as the Director in December 2006. I bring more than 29 years of experience in active and reserve military service, retiring in June 2001 as a Lieutenant Colonel from the Mississippi Army National Guard with an extensive operations management background. I have served in numerous positions including Administrative Officer, Operations Officer, Intelligence Officer, Civil Affairs Officer and Chief of Staff of a 5,000-soldier armor brigade.

There are several key areas that I wish to discuss with you today related to improving our alert and warning systems:

1. The current organization structure for public alert and warning works well, but more federal utilization of the system is necessary;
2. Mississippi's experience with the Integrated Public Alert and Warning System (IPAWS) Gulf Coast Pilot Program was good, but more federal support is needed to complete the pilot;
3. Key components of the Executive Order on Alert and Warning need to be finalized; and
4. Legislation to implement the Executive Order and to provide statutory authority for the current practice could be helpful to moving the national effort forward provided there is coordination with state and local government stakeholders as the system is developed.

Alert and warning systems are a valuable tool for state emergency managers to prepare and respond to disasters. Alert systems serve to make sure citizens are aware of disasters and can take steps to get out of harm's way. Alert and warning is not just a rural issue or an urban issue. The capability is needed by every single jurisdiction, no matter what their threats and risks are for disasters. State and local governments are the primary authorities for alert and warnings, rather than the federal government. Alert systems are a component of the state's emergency operations plan in disaster preparedness and response operations to deliver timely and accurate messages out to citizens for everything from a hazardous materials incident, sheltering in place, evacuation orders, and distribution locations for key commodities such as ice and water after a disaster. While local governments serve as the primary authority, in some cases states find it necessary to expand capabilities to ensure system-wide coverage. Many states have developed state-wide emergency alert and warning systems to ensure coordinated information and messages to citizens, the private sector, and local government partners in times of disaster. NEMA's Preparedness Committee has been active in coordinating with the Federal Emergency Management Agency (FEMA) and the National Weather Service (NWS) on warning issues for many years. Alert and warning dates back long before the advent of the Emergency Alert System (EAS) and the precursor Emergency Broadcast System (EBS), the system was a central government function to protect national security interests. Our nation

now has local systems employing a wide variety of technologies and equipment: various sirens, outdoor alert and warning systems, reverse 911, blast e-mails, and some text messaging systems. These various components result in a patchwork system often based on a community's ability to afford the technology to warn citizens. There is no one system that covers all of the public. Federal, state, and local cooperation are essential to serve as the backstop for when local systems and subsequent state systems are unable to meet challenges in getting the message out.

The current organizational structure for alert and warning in the federal government works and there is no reason for radical change. The National Weather Service's NOAA Weather Radio is a known resource tool for both emergency management and citizens in preparing for disasters. The NOAA Weather Radio system works very well and has brand name appeal. The Federal Emergency Management Agency is the right place for IPAWS, as the nation's all hazards emergency management coordination point. While the National Alert and Warning System (NAWAS) exists, the tool is seldom, if ever, used. During the 9/11 terrorist attacks, NAWAS would have been an excellent conduit to coordinate information to state emergency operations centers. Stronger federal collaboration is necessary though for the National Weather Service, FEMA, and the Federal Communications Commission on alert and warning issues. Our national tools are supplements to local networks that utilize a wide variety of technologies and methodologies. Common alerting protocols are necessary to integrate all of the federal, state, and local systems, but any standards must be coordinated with all partners. States are also interested in seeing continued efforts with new technologies and supports continued or increased financial investments for technology development. The main problem is that we have federal alert and warning systems, but we do not utilize them for whatever reason – it may be lack of coordination, lack of understanding of the system, or lack of time to act. However, the lack of use of the system in emergencies can be fixed and addressed, and must be accomplished with a partnership of all levels of government.

Mississippi has been participating in the Gulf Coast Pilot Program for IPAWS and we found the system to be an important component in the tool box for state and local emergency managers to get the warnings out. Overall, our experience in Mississippi has been good, but there were certainly challenges with the pilot. We used MyStateUSA as the technological support for Mississippi's mass notification. The Deaf Link portion of the pilot worked very well. We also used the reverse 911 system in coordination with the Governor, by using his voice to record critical emergency messages. Our citizens found this as an authoritative source, but reverse 911 will not reach the entire population. Citizens will not answer calls if they are not home or if they do not recognize the numbers, also many citizens rely solely on mobile telecommunications now instead of traditional land-line phones. Of the four times we used the system (on 8/18/2007, 8/28/2007, 9/19/2007, and 9/20/2007), Mississippi had an average of: 42 percent of the calls answered live; 32 percent answered utilizing an answering machine; and 26 percent were unsuccessful. Mississippi found the system very valuable; however redundancy is necessary in the system. Reverse 911 works for long notice events, but it still takes hours to get the calls out since there are only so many circuits in the system. For the third part of the pilot, digital EAS never worked well and just when bugs in the system were identified funding was pulled by FEMA. The short notice of the program's cancelation created a very expensive program that was totally unfunded for state and local use. IPAWS must be adequately funded over a two year period to be fully implemented, tested, an updated to reflect the tests. IPAWS should exist as only part of the system, as no entity should have a sole communications system for warning and alert. Nationally, we need to better define what IPAWS is meant to accomplish and establish that local short warning and immediate systems are the first line of defense for warning.

In June 2006, the President issued Executive Order 13407 on Public Alert and Warning that designates the Department of Homeland Security (DHS) as the lead for alert and warning and the federal coordination point. Along with requirements for the development of a standard alert and protocol system, DHS is also charged with adapting alerts based on geographic

locations and risks. DHS is also responsible for coordinating public education, including state, territorial, tribal, and local governments, and ensuring that these stakeholders understand how to utilize and access systems. Key initiatives related to the Executive Order have yet to be implemented, including the development of a comprehensive national alerting capability and administration of a national text messaging network for alert and warning.

Last month, Ranking Member Graves introduced H.R. 6038 to direct the President to modernize the integrated public alert and warning system. The Integrated Public Alert and Warning System Act provides the statutory, legal framework for essentially implementing Executive Order 13407 and specifically designates FEMA as the lead agency responsible for accomplishing the tasks related to modernization of the public alert and warning system. The legislation calls for more detailed reports on pilot programs, which will be helpful to Congress and stakeholders in tracking the progress on the system's improvements and the move to a more fully developed national system. We would ask that consideration be given to requiring FEMA to coordinate more with state and local governments as the implementation plan is developed for the system and improvements are made. NEMA also appreciates that the legislation holds harmless the Department of Commerce, including NOAA Weather Radio, as we believe this system works well.

CONCLUSION

We appreciate Congress' increased attention and focus on disaster alert and warning systems. Federal efforts for alert and warning must be coordinated in order to provide state governments with a valuable tool for preparing citizens during times of disaster. Thank you for the opportunity to testify on behalf of NEMA.

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