

STATEMENT

OF

ANTWANE JOHNSON

DIRECTOR OF THE INTEGRATED PUBLIC ALERT AND WARNING SYSTEM
NATIONAL CONTINUITY PROGRAMS

FEDERAL EMERGENCY MANAGEMENT AGENCY

U.S. DEPARTMENT OF HOMELAND SECURITY

BEFORE

THE

SUBCOMMITTEE ON EMERGENCY PREPAREDNESS, RESPONSE AND RECOVERY

COMMITTEE ON HOMELAND SECURITY

U.S. HOUSE OF REPRESENTATIVES

WASHINGTON, D.C.

“20 Years After 9/11: Examining Emergency Communications Part 2”

Submitted

By

Federal Emergency Management Agency

500 C Street SW

Washington, D.C. 20472

November 2, 2021

Introduction

Good morning Chairwoman Demings, Ranking Member Cammack, and Members of the Subcommittee. My name is Antwane Johnson, and I am the Director of the Integrated Public Alert and Warning System (IPAWS) Program within National Continuity Programs (NCP), Office of Resilience at the Federal Emergency Management Agency (FEMA). I appreciate the opportunity to speak to you today about this program, and how more than 1,600 agencies across the country are using it to save lives.

What is IPAWS?

An effective, timely, and far-reaching public alert and warning system is critical to communicating threats to public safety and providing people with guidance during times of crisis.

Executive Order 13407 and The IPAWS Modernization Act of 2015 define FEMA's responsibility to provide a public alert and warning system. Section 706 of the Communications Act of 1934 requires Presidential access to commercial communications during "a state of public peril or disaster or other national emergency." The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Section 202 directs FEMA to provide technical assistance to state and local governments to ensure that timely and effective disaster warning is provided. The National Defense Authorization Acts of 2020 and 2021 included additional IPAWS requirements significantly increasing the role of the FEMA Administrator for dissemination of national alerts, previously only authorized to be sent by the President. In accordance with these statutes, IPAWS was created to enhance and extend a national infrastructure and capability to Federal State, local, tribal, and territorial (FSLTT) officials for public alert and warning.

IPAWS is a national system for local alerting. There are two main system components:

(1) The IPAWS Program Office maintains the National Public Warning System to support warnings and emergency communications from the President or FEMA Administrator in the event of a catastrophic or national emergency. The President and/or FEMA Administrator can warn the American people by a broadcast from private sector radio stations that partner with FEMA. These stations, called FEMA Primary Entry Point (PEP) radio stations, receive all-hazards resiliency improvements at radio transmitter sites and provide reach to approximately 90 percent of the U.S. population. Activation of the National Public Warning System (PEPs) triggers the activation of all other radio and television providers that participate in the Emergency Alert System (EAS) in accordance with Federal Communications Commission regulations.

(2) The IPAWS Program also operates and maintains the IPAWS Open Platform for Emergency Networks, or "IPAWS-OPEN", that provides FSLTT governments the capability to send emergency alerts, warnings, and information to people in the geographic area of their jurisdiction via Wireless Emergency Alerts (WEA) to mobile devices, EAS messages on radio and television, NOAA Weather Radio broadcasts, and a growing number of voluntary information providers connected by the internet. More

than 1,600 agencies are able to use the IPAWS-OPEN capabilities to provide emergency information in response to threats to public safety such as those issued this year by multiple states and local alerting authorities for hurricanes Henri and Ida, as well as the coronavirus (COVID-19) public health emergency, and the mass demonstrations and civil disturbances in major cities last year. Changes to the Federal Communications Commission's (FCC) regulations, as directed by The National Defense Authorization Act for 2021 Section 9201, Reliable Emergency Alert Distribution Improvement (READI Act), recently authorized the FEMA Administrator to use WEA for national emergencies. The broadened use of WEA ensures warnings related to situations of, nation-state attacks, natural disasters, acts of terrorism, and other man-made disasters can be sent from a federal authority to warn people and provide protective action guidance.

IPAWS Adoption

Since the inception of IPAWS in 2011, more than four million life-saving alert messages have been processed using IPAWS-OPEN. It is important to note that in June 2019, there were 1,200 local alerting authorities across the nation who were authorized to utilize IPAWS services to alert and warn approximately 70 percent of the public within the United States. Realizing that all emergencies start locally, in that same year (2019) FEMA initiated the IPAWS "Close the Gap" campaign to increase the number of local alerting authorities. As a result of this initiative and stakeholder outreach, as of October 2021 three federal agencies, all 50 states, two territories, eight Tribal governments and thousands of local alerting authorities utilize IPAWS services. Today more than 80 percent of the U.S. population is covered by a local alerting authority who has been authorized and trained to utilize IPAWS, and 100 percent of the population is covered by a state level alerting authority.

In 2020, twice the number of agencies used IPAWS to send alerts as in 2019, resulting in a 182 percent increase in the number of alerts to the public by local alerting authorities in response to COVID-19, civil unrest, wild-fires, AMBER alerts, and several other public safety threats. In 2020, 43 percent of WEAs and 24 percent of EAS alerts sent via IPAWS were initiated with both Spanish and English message content, meaning that devices set with Spanish as the primary language choice would display the alert in Spanish. IPAWS works to expand its reach in accessible communications capabilities and services. IPAWS uses the Common Alerting Protocol, or CAP, which allows alerts sent through the system to transport rich multi-media attachments and links. By sending CAP compliant messages through IPAWS, private industry partners are able to develop content or compatible devices that can facilitate receipt of emergency alerts by individuals with disabilities. The IPAWS Program Management Office (PMO) is diligently working towards integrating additional, accessible technologies and encouraging industry innovation to meet the needs of all people.

IPAWS Alerts, Warnings and Notifications

IPAWS Use for AMBER Alerts

In 2003, President George W. Bush signed the Prosecutorial Remedies and Other Tools to end the Exploitation of Children Today (PROTECT) Act of 2003 (Public Law 108-21). This Act

established the national coordination of state and local America's Missing: Broadcast Emergency Response (AMBER) programs. The National Center for Missing & Exploited Children (NCMEC) is responsible for AMBER plans, which allows broadcasters and transportation authorities to immediately distribute information about recent child abductions to the public and enables the entire community to assist in the search for and safe recovery of children.

The AMBER Alert program is a voluntary partnership among law enforcement agencies, broadcasters, transportation agencies, and the wireless industry to activate an urgent WEA. For example, on October 6, 2021 a one-year-old boy was in the back seat of a car that was stolen from a grocery store parking lot in East Nashville, TN, while his parents were inside the store. The car was later abandoned with the child still in the back seat. A statewide AMBER alert was issued via WEA, and a citizen recognized the vehicle from the information contained in the WEA message and notified law enforcement. The child was recovered safely.

As of October 2021, 94 children across the country have been safely returned to their families as a direct result of WEA information and community engagement.

Our IPAWS team works closely with the U.S. Department of Justice Tribal Access Program for National Crime Information officers and Tribal Law Enforcement agency members as well as the United States Attorney's Office for Missing and Murdered Indigenous Persons to assist Tribal governments with developing alert and warning plans. Currently, the Cocopah Tribe, Navajo Nation, Eastern Band of Cherokee Indians, and the Confederated Tribes of the Chehalis Reservation have access to IPAWS and can send geo-targeted Amber Alerts.

IPAWS Use for Other Emergencies

Public Safety Officials have expanded their use of IPAWS to include both public safety notifications and imminent threat alerts and warnings. This allows public safety officials to increase their reach to the public. Some examples include public safety notifications regarding 911 outages; boil water notices with respect to contamination; stay at home orders and COVID vaccination sites; missing and endangered persons, particularly for young adults that do not meet AMBER alert criteria; and missing and endangered elderly (commonly known as Silver Alert) and individuals with disabilities (commonly referred to as a Golden Alert).

Law enforcement agencies use IPAWS to issue Blue Alerts. These alerts provide rapid dissemination of information to law enforcement agencies, media outlets and the public to aid in apprehension of violent criminals who have killed or seriously injured an officer in the line of duty. These alerts may also be issued when a suspect is considered a credible threat to law enforcement, or an officer is missing in the line of duty. As an example, the Texas Division of Emergency Management issued a Blue Alert via WEA after an officer was killed in the line of duty and authorities in Tampa, Florida issued a Blue Alert via WEA after a 26-year-old police officer was shot in the head in Daytona Beach. As a result, both suspects were quickly apprehended by law enforcement.

IPAWS Use During COVID-19, Wildfires and Recent Disasters

COVID-19 sparked creative uses of IPAWS by state and local alerting authorities who leveraged IPAWS-OPEN capabilities to alert the public to rapid increases in COVID-19 infections, mandates, and vaccine information. IPAWS-OPEN usage from March 2020 through August 2021 included a total of 656 COVID-19 related alerts sent between WEA and EAS. The Manatee County Public Safety Department used IPAWS for the first time to inform the public about local COVID-19 restrictions and the Navajo Nation was the first tribal nation to send a COVID-19 alert through IPAWS. As an example, governors in Maryland, Virginia and Michigan used IPAWS to issue mandates and amplify guidance issued by the White House COVID-19 task force and the CDC, directing people to stay at home.

IPAWS was used before, during and after the most severe weather on the West Coast. As of October 2021, there have been 49 WEAs sent for wildfires in 2021, and the unprecedented heat wave and severe drought on the West Coast has also prompted the need for alerts. Counties in California, Oregon, Nevada, Idaho, Texas, and Utah sent fire warnings and follow up evacuations where warranted. In August 2021, the City of Portland, Oregon, and Multnomah County sent WEAs in both English and Spanish informing people of severe heat and the need to stay cool and check on other people. These have increased recognition of the need to ensure protective actions are taken before an event turns life-threatening.

Prior to Hurricane Ida at the end of August 2021, state, local, tribal, and territorial alerting authorities issued a series of timely WEA and EAS alerts advising the public to take protective measures. The New Orleans Office of Homeland Security & Emergency Preparedness as well as local Alerting Authorities sent more than 200 alerts that aided the safe evacuation, shelter, and support of residents. The Louisiana Governor's Office issued IPAWS alerts on behalf of counties that were unable to issue an alert. After the storm passed and hundreds of thousands of people were without power, IPAWS remained a lifeline to New Orleans residents, helping them find shelter and resources to aid during the recovery process.

The 77 National Primary Warning System (NPWS) PEP stations continue to serve as a critical communications lifeline for news and updates before, during and after powerful storms such as Hurricane Ida, which left the New Orleans area with no power or television and spotty cell service. New Orleans radio station WWL is known among locals as the “hurricane station” through its use of the PEP station there, equipped with FEMA-owned back up equipment and generators. Nineteen station employees provided around-the-clock coverage to provide updates and support for the New Orleans community.

As of October 2021, State and local authorities, and the National Weather Service (NWS) have sent nearly 800 WEAs during the 2021 hurricane season. For the two most significant storms impacting the U.S. in the 2021 season, Henri and Ida, state and local authorities and the NWS sent nearly 400 emergency messages through IPAWS.

IPAWS in Recent National Defense Authorization Acts (NDAAs)

Public Law 116-92 (NDAA FY2020) was signed into law in December 2019 and included Section 1756, Integrated Public Alert and Warning System. This provision included 33 new and additional requirements for the IPAWS program that support users and the development of tools

to warn and educate the public about emergency alerting and protective action guidance to take when they receive an alert. FEMA is reviewing the NDAA requirements and prioritizing resources as appropriate.

The National Defense Authorization Act for 2021 Section 9201, Reliable Emergency Alert Distribution Improvement (READI Act) directed the FCC to adopt regulations to ensure that mobile devices cannot opt out of receiving WEA alerts from the FEMA Administrator, encourage chief executives of states to form State Emergency Communications Committees (SECCs), establish a state EAS plan checklist for SECCs, amend requirements for SECCs, ensure SECCs meet, review, and update their EAS plans annually, enable the FEMA Administrator, State, local, Tribal, and territorial governments to report false EAS and WEA alerts, and provide for repeating EAS alerts for emergency warnings issued by the President, the FEMA Administrator, and any other entity determined appropriate by the Commission, in consultation with the FEMA Administrator. FEMA commends the FCC for quickly acting to change the WEA alert category “Presidential” to “National” and authorizing the FEMA Administrator’s use of the National Emergency Message category to send a WEA nationwide should we experience an imminent threat of national consequence.

The IPAWS Technical Support Services Facility

In response to the National Advisory Council’s Recommendation and NDAA 2020 direction to improve the IPAWS lab, the IPAWS PMO significantly increased the capabilities of the lab and stood up the IPAWS Technical Support Services Facility in October 2020.

The new 24/7 Technical Support Services consist of a contract staff of 18 subject matter experts, providing around-the-clock support services to all FSLTT emergency management agencies in their use of IPAWS. The facility provides alerting authorities with test and evaluation, operational assessments, IPAWS demonstrations, and expert technical support. The facility also provides an interactive and closed IPAWS testing environment and allows users the opportunity to practice and train to increase familiarity and confidence using IPAWS.

The facility has supported 268 calls from Federal, state, tribal and territorial agencies between January-October 2021 as well as calls from the public who have questions about alerts in their area.

IPAWS-OPEN and NPWS Modernization

FEMA continues sustaining and enhancing IPAWS systems and infrastructure, including IPAWS-OPEN modernization and migration to a cloud infrastructure environment, as well as modernization of NPWS legacy PEP stations.

In April 2021, FEMA transitioned IPAWS-OPEN from Department of Homeland Security data centers into Amazon Web Services GovCloud environment to increase system availability and reliability of greater than 99.9 percent. This improvement in services provides reasonable assurances that IPAWS-OPEN services experiences no more than 56 minutes of system downtime, (inclusive of maintenance) for the year and the successful processing of approximately 42,000 messages per month.

FEMA has completed modernization of 13 of the original group of PEP stations since 2019, increasing the percentage of the U.S. population covered by a FEMA connected radio station with High Altitude Electromagnetic Pulse (EMP) protection to 51 percent. On October 15, 2021, WBZ radio station in Boston, MA became the 13th station modernized station to receive the full complement of resilient transmitter, generation, and fuel system capabilities and EMP protections. In May 2021, IPAWS PEP equipment underwent EMP testing at the Department of Defense's test range at the Patuxent Naval Air Station. The IPAWS PEP equipment underwent 36 full power pulses, double the 16 planned pulses without failure or degradation of system capabilities. This addresses the mandate that our critical infrastructure systems be mission ready and capable of operating before, during and after an EMP event.

Stakeholder Engagement

As of October 2021 FEMA, has conducted 23 IPAWS webinars this year with average attendance of 151 live participants and 12,611 downloads of webinar content and issued 35 social media posts with more than 41,000 views and nearly 1,300 connections.

The program also revamped its online independent study courses offered through the FEMA Emergency Management Institute. As of mid-year, 717 people completed the required IS-247 “IPAWS for Alert Originators” course online and 227 people completed the IS-250 online course “IPAWS for Alerting Authorities.” This training provides skills to draft authenticated, effective, and accessible warning messages, and best practices in effective use of the Common Alerting Protocol. It is mandatory for establishing new Alerting Authorities.

The program also distributes a “Monthly Tip” to all Alerting Authorities and Vendors. These Tips, sent via email to more than 6,000 stakeholders, provide guidance and insight related to using IPAWS.

We hosted the first ever virtual IPAWS Users Conference on September 15th. This 6-hour event targeted current IPAWS Alerting Authorities and Vendors and over 500 people registered.

IPAWS Program Goals and Challenges

The IPAWS program office has been engaging vendors of IPAWS-compatible software to encourage better integration of IPAWS screens for consistency and creation of effective public alert and warning messages.

We will continue to promote adoption and use of IPAWS by emergency management and public safety officials. Through the IPAWS Stakeholder Engagement and Customer Support teams, the program office works with state, local, tribal, and territorial officials to promote use of the system. We also provide information and support on various federal grant programs that may provide funding for alerting authorities to purchase alerting software that interfaces with IPAWS.

IPAWS will also continue to make local and State emergency managers aware of the IPAWS Technical Support Services Facility.

In accordance with new WEA rules established by the FCC in 2021, FEMA is working with wireless carriers and alerting software vendors to enhance WEA capabilities to support the enhanced role of the FEMA Administrator and the Commission's future actions to address enhancements to the Emergency Alert System.

Conclusion

Every day I am grateful for the opportunity to work with a program dedicated to helping alert and provide guidance to people during times of crisis. Thank you for your interest in the program and we look forward to collaborating with this Subcommittee on ways to improve. I am happy to take any questions you have at this time.