Integrated Public Alert and Warning System (IPAWS)

Strategic Outreach Plan

FEMA

2013/2014

This document replaces the
IPAWS Outreach Plan for Communications and Partner Engagement dated January 2012

MESSAGE FROM THE DIRECTOR

I am pleased to present the *Integrated Public Alert and Warning System (IPAWS) 2013-2014 Strategic Outreach Plan*. This is the IPAWS Program Management Office's (PMO) road map to increase the awareness and understanding of IPAWS, promote adoption and usage of IPAWS, strengthen existing partner relations, and develop new partnerships and interests.

Our mission requires the energy, effort and expertise of numerous individuals and organizations that have vested interests in public alert and warning. It is imperative that our public and private sector partners are informed, fully engaged, and committed to advancing alert and warning capabilities across the nation. Implementing IPAWS is a collaborative effort requiring the right resources – people, skills, and technologies – to ensure the end result is an integrated and interoperable system allowing our nation's leaders to alert and warn the American people of impending danger.

Success in this endeavor depends on a strong network of relationships between the IPAWS PMO and all of our partners. Each partner plays a critical role in achieving the mission, goals, and objectives that are laid out in this plan. The IPAWS PMO is dedicated to fostering, maintaining, and creating enduring relationships to ensure that together we can achieve our shared mission and best serve the nation.

The American people are the foundation of all of our partnerships and the primary reason we work to create an effective, reliable, integrated, flexible, and comprehensive public alert and warning system. In times of crisis, the American people continually demonstrate resilience. Therefore, it is essential that the American people have timely information to allow them to take the necessary actions to ensure their safety and minimize damage to property.

Antwane V. Johnson, Director
Integrated Public Alert and Warning System (IPAWS)
Program Management Office
DHS FEMA National Continuity Programs

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

The "Integrated Public Alert and Warning System (IPAWS) 2013-2014 Strategic Outreach Plan" details the strategic outreach goals and objectives for the IPAWS Program Management Office (PMO). The IPAWS PMO engages in efforts and activities that are designed to assist all IPAWS partners with the adoption, use, and incorporation of IPAWS into their governance structures, strategies, policies, business models, and standard operating procedures. The IPAWS PMO, in partnership with alerting authorities, public and private sector partners, Federal, non-profit and advocacy organizations, will use every opportunity and available venue to strengthen the nation's alert and warning capabilities. This will ensure all segments of the American population understand the functions of IPAWS and how to respond to alerts and warnings from public safety officials. Now that IPAWS is operational, the IPAWS PMO's 2013-2014 strategic outreach goals include:

- Increase the awareness and understanding of IPAWS by all partners and the American people
- Increase the adoption and use of IPAWS by all partners
- Strengthen existing partner relationships and develop new partnerships and interests

The strategic goals of IPAWS cannot be realized without support and engagement from all partners involved in public alerts and warnings. Consequently, strategic communications, outreach activities, and partner engagements must be targeted and effective for IPAWS to continue to mature into the capability envisioned by E.O. 13407. The IPAWS PMO remains committed to and actively engaged with partners, as we strive to achieve the IPAWS goals and objectives, ensuring that timely alerts and warnings are delivered to the American people to allow them to take the necessary actions to ensure their safety and minimize damage to property.

2.0 INTRODUCTION

The Integrated Public Alert and Warning System (IPAWS) modernizes and enhances alert and warning delivery to the American people. To fulfill Presidential Executive Order 13407, IPAWS incorporates existing and future technologies in order to provide public safety officials at all levels of government a broad range of emergency message options and communication pathways to the American people.

During an emergency, public safety officials at all levels of government need to provide the public with life-saving information quickly. IPAWS facilitates early and reliable delivery of alert and warning information over multiple media channels. IPAWS provides authorized alerting authorities at all levels of government with the capability to integrate their alert and warning systems with the national alert and warning infrastructure. Consequently, IPAWS increases the capability and options available to local officials by which life-saving information can be distributed during a crisis. Additionally, IPAWS can be used by the President to send an emergency message to all of the American people quickly and simultaneously through multiple communication pathways.

The IPAWS Program Management Office (PMO) is partnering with recognized government and industry leaders, technical experts, and practitioners to ensure IPAWS incorporates the latest technology and is accessible to public safety officials at all levels of government. Partners in this mission include: Federal executive governance and legislative oversight; public safety officials at

all levels of government; private sector industry; and non-profit and advocacy organizations. Moving forward, the IPAWS PMO is accelerating efforts to reach the American people to ensure they understand how IPAWS functions, and how to respond to alerts and warnings from public safety officials.

3.0 US POLICY ON PUBLIC ALERTS AND WARNINGS

"It is the policy of the United States to have an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people in situations of war, terrorist attack, natural disaster, or other hazards to public safety and well-being (public alert and warning system), taking appropriate account of the functions, capabilities, and needs of the private sector and of all levels of government in our Federal system, and to ensure that under all conditions the President can communicate with the American people."[1]

Executive Order (EO) 13407 "Public Alert and Warning System", signed by President Bush on June 26, 2006, is the principle authority for the IPAWS PMO. Under EO 13407, the IPAWS PMO has clear directives to:

- Consult, coordinate, and cooperate with the private sector, including communications media organizations, and Federal, State, territorial, tribal and local governmental authorities, including emergency response providers;
- Ensure the conduct of public education efforts so that State, territorial, tribal, and local governments, the private sector, and the American people understand the functions of the public alert and warning system and how to access, use, and respond to information from the public alert and warning system;
- Ensure the conduct of training, tests, and exercises for the public alert and warning system.[2]

Other documents providing guidance for the IPAWS PMO include:

- The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Section 611(d) and (e), 42 USC. 5196(d) and (e), November 23, 1988;
- Presidential Memorandum, "Emergency Alert System Statement of Requirements", September 15, 1995;
- Homeland Security Presidential Directive 7 (HSPD-7), "Critical Infrastructure Identification, Prioritization, and Protection", December 17, 2003
- The Federal Response to Hurricane Katrina: Lessons Learned, February 23, 2006
- Warning, Alert, and Response Network (WARN) Act, October 13, 2006
- National Security Presidential Directive- 51(NSPD-51)/Homeland Security Presidential Directive-20 (HSPD-20), "National Continuity Policy", May 9, 2007
- National Incident Management System, December 2008
- Government Accounting Office (GAO) Report, Emergency Preparedness: Improved Planning and Coordination Necessary for Development of Integrated Public Alert and Warning System, GAO-09-1044-T, September 2009
- Presidential Policy Directive/PPD-21 "Critical Infrastructure Security and Resilience", February 12, 2013[3]

[1] Executive Order 13047 "Public Alert and Warning System", June 26, 2006
[2] Presidential Executive Order 13407, Sec 2(a)(vi-viii); June 26, 2006

- Executive Order "Improving Critical Infrastructure Cybersecurity", February 12, 2013
- Government Accounting Office (GAO) Report, Emergency Alerting: Capabilities Have Improved, but Additional Guidance and Testing Are Needed, GAO-13-375, March 2013
- National Preparedness Report, March 30, 2013
- National Response Framework, Second Edition, May 2013

The IPAWS PMO will continue to establish and execute communication and partner engagement strategies to effectively accomplish the strategic goals identified in the Strategic Outreach Plan. The IPAWS PMO will meet Executive Order 13407 directives, implement recommendations from GAO reports, adhere to legislative directives, and incorporate IPAWS into the Communications Sector and the Critical Infrastructure and Key Resources (CIKR) community.

3.1 GOVERNMENT ACCOUNTABILITY OFFICE (GAO) REPORTS

In the 2009 General Accounting Office (GAO) report, "Improved Planning and Coordination Necessary for Modernization and Integration of Public Alert and Warning System"[4], the GAO recommended "increased coordination and consultation with partners."[5] The IPAWS PMO enthusiastically accepted the challenge as evidenced by its "Strategic Plan for the Integrated Public Alert and Warning System (IPAWS) Program – June 2010" and the "Integrated Public Alert and Warning System (IPAWS) 2013-2014 Strategic Outreach Plan" [hereafter referred to as the Strategic Outreach Plan]. The Strategic Outreach Plan replaces the "IPAWS Outreach Plan for Communications and Partner Engagement – January 2012".

In March of 2013, the GAO released a second report on IPAWS, "Emergency Alerting: Capabilities Have Improved, but Additional Guidance and Testing Are Needed." The recommendations contained therein will be addressed by the IPAWS PMO and outreach initiatives. The GAO's recommendations for executive action include:

"To ensure that IPAWS is fully functional and capable of distributing alerts through multiple pathways as intended, we recommend that the Secretary of Homeland Security direct the Administrator of FEMA to take the following four actions:

- In conjunction with FCC, establish guidance (e.g., procedures, best practices) that will assist participating State and local alerting authorities to fully implement and test IPAWS components and ensure integration and interoperability.
- In conjunction with FCC and NOAA, conduct coordinated outreach to educate the American public on IPAWS capabilities, especially CMAS.
- Develop a plan to disseminate a national-level alert via IPAWS to increase redundancy and communicate presidential alerts through multiple pathways.
- In conjunction with FCC, develop and implement a strategy for regularly testing the national-level EAS, including examining the need for a national test code, developing milestones and time frames, improving data collection efforts, and reporting on after-action plants.

[3] Presidential Policy Directive/PPD-21, Implementation of the Directive (6); PPD-21 "revokes Homeland Security Presidential Directive/HSPD-7, Critical Infrastructure Identification, Prioritization, and Protection, issued December 17, 2003. Plans developed pursuant to HSPD-7 shall remain in effect until specifically revoked or superseded".
[4] GAO, Emergency Preparedness: Improved Planning and Coordination Necessary for Development of Integrated Public Alert and Warning System, GAO-09-1044-T.
[5] Ibid.

To ensure that CMAS is effectively used and that the EAS relay distribution network is capable of reliably communicating national-level alerts, we recommend that the Chairman of FCC, in conjunction with FEMA, take the following two actions:

- Review and update rules governing CMAS, including those related to geo-targeting, character limitations, and testing procedures.
- Provide states with additional guidance (e.g., templates of EAS plan) to facilitate completion of updated state EAS plans that include IPAWS-compatible equipment."[6]

4.0 STRATEGIC OUTREACH GOALS

Now that IPAWS is operational, the IPAWS PMO has established three primary goals for 2013-2014. The 2013-2014 strategic outreach goals do not negate, but rather complement, the 2011-2012 strategic outreach goals[7] to (1) provide partners with consistent messages at the right times, and (2) engage and manage partners' expectations and activities effectively. The 2013-2014 strategic outreach goals reflect the operational nature of IPAWS and the importance of incorporating this new capability into the nation's alert and warning infrastructure. These goals and objectives are designed to guide a focused prioritization of efforts and activities that are intended to support all partners as they incorporate IPAWS into governance structures, strategies, policies, business models, standard operating procedures, and in educating the American people about IPAWS' capabilities, and what they need to do when they receive an emergency alert or warning.

The 2013-2014 IPAWS PMO strategic outreach goals and objectives include:

Outreach Goal 1: Increase the awareness and understanding of IPAWS by all partners and the American people

Objective 1.1: Ensure the American people understand the functions of IPAWS and how to respond to alerts and warnings from public safety officials
Objective 1.2: Build understanding and communicate the value of IPAWS to all partners
Objective 1.3: Facilitate the development of strong, collaborative private/public partnerships within the alerting community

Outreach Goal 2: Increase the adoption and use of IPAWS by all partners

[6] GAO, Emergency Alerting: Capabilities Have Improved, but Additional Guidance and Testing Are Needed, GAO-13-375.

[7] Outreach Goal 1: Provide partners with consistent messages at the right times
Objective 1.1: Create targeted messages for partners detailing IPAWS' purpose, scope, capabilities, benefits, limitations, and desired actions.
Objective 1.2: Disseminate timely information, materials, and updates to partners.
Objective 1.3: Provide feedback mechanisms to address partner concerns.
Outreach Goal 2: Engage and manage partners' expectations and activities effectively
Objective 2.1: Document and ensure understanding of partners' roles and responsibilities.
Objective 2.2: Secure partner involvement and commitment.
Objective 2.3: Coordinate activities between Federal, State, territorial, tribal, local public safety officials, and industry and other private sector partners.
Objective 2.4: Provide resources, education, training, guidance, support, and tools to partners to enable them to collaborate with and participate in IPAWS.

Objective 2.1 Empower all partners to adopt and use IPAWS
Objective 2.2 Develop and promote resources designed to encourage, assist, and enable partners to incorporate IPAWS into governance structures, strategies and policies, business models, and standard operating procedures
Objective 2.3: Ensure the American people are directly covered by an IPAWS State, territorial, tribal, or local public alerting authority

Outreach Goal 3: Strengthen existing partner relationships and develop new partnerships and interests
Objective 3.1: Identify and pursue new avenues for IPAWS implementation
Objective 3.2: Standardize and expand the discipline of public alerts and warnings through cooperation with Federal partners, State and local alerting authorities, the private sector, advocacy and non-profit organizations, and the American people
Objective 3.3: Incorporate IPAWS into the nation's critical infrastructure protection policies and programs

4.1 INCREASE THE AWARENESS AND UNDERSTANDING OF IPAWS BY ALL PARTNERS AND THE AMERICAN PEOPLE

To ensure the American people understand the functions of IPAWS and how to respond to alerts and warnings from public safety officials, the IPAWS PMO works with partners through numerous communication mediums, to engage and educate the American people. Efforts include releasing newly created Public Service Announcements (PSAs) on radio and TV, a 15-minute online course "IPAWS and the American People", and incorporating IPAWS and Wireless Emergency Alerts (WEA) information on Ready.gov. The IPAWS PMO continuously collaborates with Federal partners, State and local alerting authorities, non-profit and advocacy organizations, the public and private sector, and the media, to accelerate efforts to reach the American people.

The IPAWS PMO facilitates the development of strong, collaborative private/public partnerships by executing tactical engagements involving multiple partner groups; engagements include, but are not limited to: webinars, roundtables, panel sessions, and interactive technical demonstrations. These engagements build consensus, highlight the interdependencies between partners, and emphasize that IPAWS is beneficial across the entire spectrum of the alerting community and to the American people. It is in the best interest of both the private and public sector to achieve the IPAWS goals and objectives, ensuring that timely alerts and warnings are delivered to citizens to allow them to take the necessary actions to ensure their safety and minimize damage to property.

4.2 INCREASE THE ADOPTION AND USE OF IPAWS BY ALL PARTNERS

The IPAWS PMO continually strives to promote broad adoption and use of IPAWS by all partners and is working to ensure the American people are directly covered by an IPAWS public alerting authority. The IPAWS PMO works closely with partners and provides them with the information and authorization they need to adopt and use IPAWS and serves as a resource on all aspects of public alerts and warnings.

The IPAWS PMO selects and participates in the most impactful state emergency management agency, private sector, and non-profit and advocacy conferences and events. The IPAWS PMO leverages these opportunities to clearly and frequently communicate with partners, invite

partners to participate in IPAWS related activities, strengthen relationships with public and private sector partners, and collaborate with partners to find solutions to challenges in public alert and warning.

Additionally, the IPAWS PMO conducts frequent demonstrations of IPAWS' proof of concept end-to-end operations, including alert origination, alert aggregation using the IPAWS Open Platform for Emergency Networks (IPAWS-OPEN), and alert dissemination technologies for partners. During these demonstrations, IPAWS collaborates with numerous public and private sector partners to increase the impact and scope of the demonstrations.

4.3 STRENGTHEN EXISTING PARTNER RELATIONSHIPS AND DEVELOP NEW PARTNERSHIPS AND INTERESTS

Identifying and pursuing new avenues for IPAWS implementation involves the IPAWS PMO working with: the nuclear, chemical, and radiological community; organizations representing children, older Americans, and people with limited English proficiency; the Centers for Disease Control and Prevention (CDC); the Department of Defense (DOD), universities, et al. Promoting IPAWS capabilities and expanding the IPAWS PMO's outreach efforts to existing and new partners will tremendously benefit the American people.

Standardizing and expanding the discipline of public alerts and warnings through cooperation with Federal partners, State and local alerting authorities, the private sector, advocacy and non-profit organizations, and the American people, involves promoting best practices, updating emergency communication plans, and developing consistent alerting codes and symbology for alerts and warnings, among other important activities.

Incorporating IPAWS into the nation's critical infrastructure protection plans, policies, and programs necessitates that the IPAWS PMO work with Federal partners to advance the goals of the: National Infrastructure Protection Plan (NIPP)[8], specifically within the Communications and Emergency Services sectors; the National Response Framework (NRF)[9]; the National Incident Management System (NIMS)[10] training program; and the National Protection and Programs Directorate/Office of Infrastructure Protection's (NPPD/OIP) Infrastructure Information Collection Division (IICD).[11]

[8] The National Infrastructure Protection Plan (NIPP) "provides a unifying framework that integrates a range of efforts designed to enhance the safety of our nation's critical infrastructure. The overarching goal of the NIPP is to build a safer, more secure, and more resilient America by preventing, deterring, neutralizing, or mitigating the effects of a terrorist attack or natural disaster, and to strengthen national preparedness, response, and recovery in the event of an emergency." http://www.dhs.gov/national-infrastructure-protection-plan

[9] The National Response Framework "presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies - from the smallest incident to the largest catastrophe. The *Framework* establishes a comprehensive, national, all-hazards approach to domestic incident response." http://www.fema.gov/national-preparedness/national-response-framework

[10] The National Incident Management System (NIMS) "identifies concepts and principles that answer how to manage emergencies from preparedness to recovery regardless of their cause, size, location or complexity. NIMS provides a consistent, nationwide approach and vocabulary for multiple agencies or jurisdictions to work together to build, sustain and deliver the core capabilities needed to achieve a secure and resilient nation." http://www.fema.gov/national-preparedness/national-incident-management-system

[11] IICD, in collaboration with Homeland Infrastructure Threat and Risk Analysis Center (HITRAC), manages the National Critical Infrastructure Prioritization Program's (NCIPP) Data Call process. The NCIPP Data Call is the primary method used by the Department to collect, identify, and prioritize critical infrastructure information from states, the 18 critical infrastructure sectors, and other homeland security partners across the nation. The NCIIP Data

5.0 BENEFITS OF IPAWS

One popular incentive for alerting authorities to use IPAWS is the ability to use a unique technology, Wireless Emergency Alerts (WEA),[12] which are only accessible through IPAWS. WEAs provide public safety officials with the capability to communicate directly with the American people by broadcasting warnings to cell phones and other mobile devices whenever and wherever disaster strikes. WEAs serve as "bell-ringers" and are a very effective way for alerting authorities to communicate brief messages identifying the type of warning, the affected areas, and to provide instructions, which often include directing people to other sources of information, such as radio or TV, to learn more.

The Emergency Alert System (EAS) (participants include broadcast radio and television stations, cable television, satellite radio and television services, and wireline video service providers), NOAA's National Weather Service, and HazCollect, also play a critical role in the nation's integrated public alert and warning system. Digital signs, siren systems, emergency telephone networks, internet search engines, social sharing websites, computer gaming systems, and instant messaging, are also examples of technologies that are or could use IPAWS to deliver lifesaving emergency alerts to the public.

IPAWS uses an internationally recognized eXtensible Markup Language (XML) message exchange data standard known as the Common Alerting Protocol (CAP). Technologies that use CAP and have access to the internet can be programmed to receive and distribute IPAWS alerts. Although most messages are text only, CAP messages can also include links to live video and audio output. Through CAP, existing and future alerting technology developers are able to seamlessly incorporate IPAWS into existing alert and warning systems.

Across the nation, IPAWS is being successfully used by alerting authorities to communicate with the American people, in order to: (1) reduce risk to public safety; (2) protect property; and (3) return abducted children to their families. Examples of IPAWS-in-Action can be found in Appendix A and at www.fema.gov/IPAWS.

6.0 PUBLIC ALERT AND WARNING ESSENTIALS

For thousands of years, the ability to warn people of imminent danger has been a priority for civilizations throughout the world. Now, as in history, an effective warning requires various cooperative steps. Alert and warning originators need to have a basic process and supporting infrastructure that:

- Receives and shares information and can respond to the emergency as it evolves
- Includes the necessary decision making process and the authority to alert and warn
- Provides a method or device to convey the alert and message
- Provides for exercising, testing, and training

Call uses an enhanced Infrastructure Data Collection Application, which provides the ability to input data throughout the year. http://www.dhs.gov/about-infrastructure-information-collection-division

[12] Additional information on WEAs can be found at www.fema.gov/ipaws, Ready.gov, and www.ctia.org

The IPAWS PMO has created an "IPAWS Toolkit for Alerting Authorities" [hereafter referred to as the Toolkit]. The Toolkit is designed to help all alerting authorities adopt and use IPAWS and educate the American people about public alerts and warnings and appropriate responses when an alert is issued. The IPAWS PMO continually enhances the Toolkit, which contains information, guidance, and resources on topics including, but not limited to:

- IPAWS capabilities
- Alerting best practices
- Governance structure
- Technology requirements
- Operation and usage of IPAWS
- Testing and exercises
- Training
- Qualifying to be an authorized IPAWS alerting authority
- Educating the American people about alerts and warnings
- Building and strengthening relationships with private sector and other alerting partners

7.0 IPAWS PARTNERS

The IPAWS PMO's partners are divided into five major functional groups: (1) the American people; (2) Federal executive governance and legislative oversight; (3) Federal, State, territorial, tribal, and local alerting authorities; (4) private sector industry; and (5) non-profit and advocacy organizations.

The IPAWS PMO conducts outreach to all partner groups in order to: (1) detail what the partner needs to know about IPAWS and how it affects and benefits them; (2) openly and collegially discuss program benefits, limitations, and solutions for emerging technologies; (3) create opportunities to solicit authentic feedback; and (4) provide partners with opportunities, training, guidance, and tools to enable them to collaborate with and participate in IPAWS, for the purpose of accomplishing our shared goal of creating "an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people."[13]

The IPAWS PMO collaborates with recognized government, industry leaders, and technical experts to ensure that IPAWS incorporates the latest technology, and is practical for public safety officials at all levels of government. Additionally, the IPAWS PMO identifies venues and opportunities to reach key audiences from all partner groups, continually gauges results, and when needed, develops methods for improving communications.

[13] Presidential Executive Order 13047, Sec 1

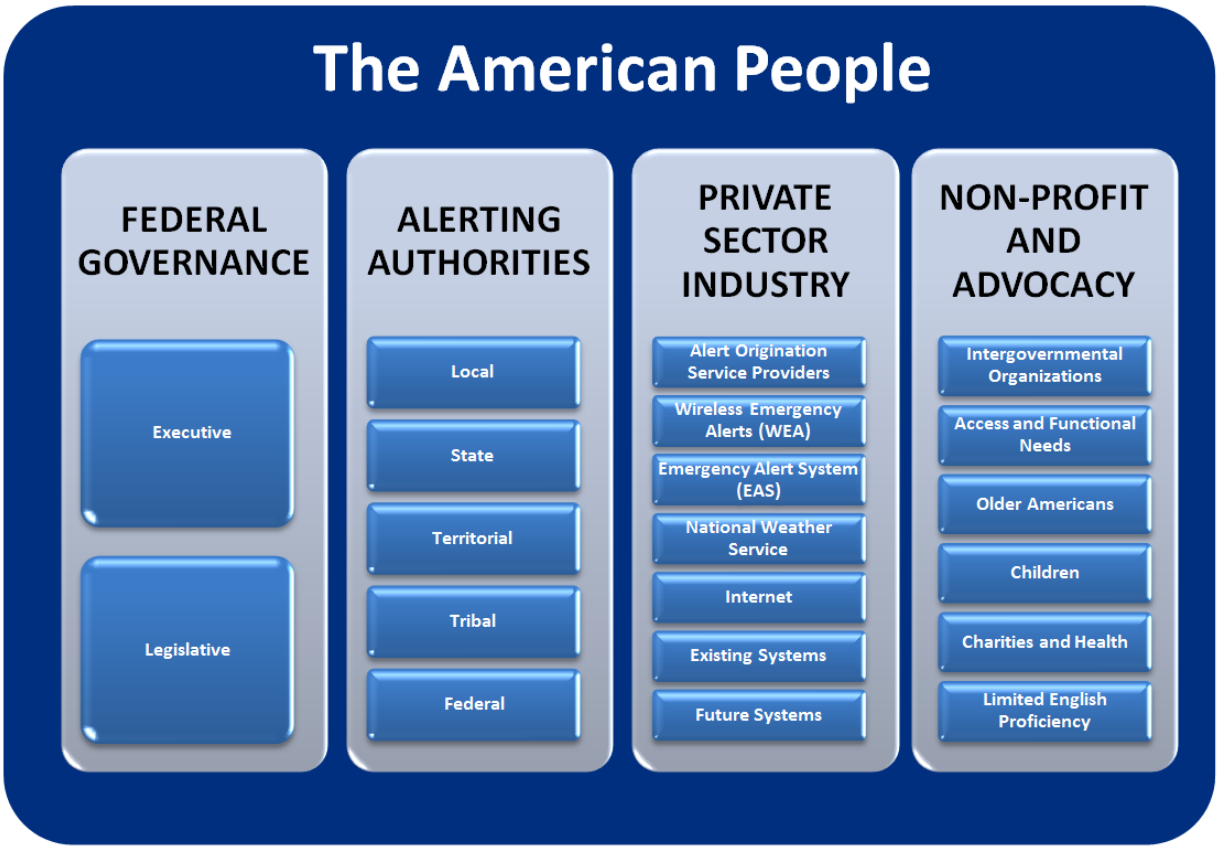

Figure 1 – IPAWS Partner Groups

Figure 1 illustrates how the IPAWS 2013-2014 Strategic Outreach Plan organizes the IPAWS PMO's partners into groups based on: (1) commonality of roles and responsibilities in public alerts and warnings; and (2) the types of activities the IPAWS PMO uses to uniquely engage each partner group.

7.1 THE AMERICAN PEOPLE

Ultimately, it is the American people who will benefit most from IPAWS. The American people are the foundation of all partner groups, and the primary reason the IPAWS PMO works to create an effective, reliable, integrated, flexible, and comprehensive public alert and warning system.

It is incumbent upon the IPAWS PMO to reach out to the American people, in order to ensure all segments of the American population understand the functions of IPAWS, and how to appropriately respond to alerts and warnings from public safety officials. The IPAWS PMO, in partnership with State and local alerting authorities, public and private sector partners, Federal partners, and non-profit and advocacy organizations, will use every opportunity and available venue, to provide educational and actionable information to the American people.

The IPAWS PMO, in partnership with Ready.gov, has created public education products that are designed to ensure the American people understand the functions of the public alert and warning system and how to access, use, and respond to information from public safety officials.

Public safety announcements (PSA) for TV and radio, in English and Spanish, were released in June 2013 and were created as a means to draw the public's attention to Wireless Emergency Alerts (WEA) and how they are an important lifesaving tool. The PSAs are intended to educate the public on what WEA is, how to recognize when a message is received, to heed the warning and take the prescribed protective action in the message, and directs viewers to learn more about lifesaving alerts on the new webpage at www.Ready.gov/alerts.

The IPAWS PMO encourages public safety officials to take full advantage of these products and work with local broadcasters to make the WEA PSAs a part of local public education campaigns by individualizing the PSA tagline. FEMA works with all public safety officials who are interested in incorporating these and other products into local efforts to educate the public about emergency alerts.

The IPAWS PMO and Ready.gov also developed a webpage with up-to-date information to the public on how to prepare for emergencies. Ready.gov/alerts provides information on Wireless Emergency Alerts (WEA), the Emergency Alert System (EAS), and NOAA's All Hazards Radio. This webpage hosts all of the WEA PSAs for viewing as well as other helpful information for the public. Ready.gov/alerts also engages the American people by providing a mechanism for them to submit their personal stories of receiving alerts from their public safety officials; these stories are highlighted on the Ready.gov/alerts webpage and in FEMA presentations to stakeholder groups.

Additionally, the IPAWS PMO developed a 15 minute web-based training course, "IPAWS and the American People," which will be hosted by the Emergency Management Institute (EMI) and released in the second half of 2013. The course is designed to educate the American people about the variety of alert and warning tools and technologies public safety officials can use to send them life-saving alerts. The course also has a section focused on how the public should respond when they receive an alert.

7.2 FEDERAL EXECUTIVE GOVERNANCE AND LEGISLATIVE OVERSIGHT PARTNERS

The IPAWS PMO works with Federal partners to ensure that the vision of "Timely alert and warning to the American people, in the preservation of life and property" is understood and shared by all partners, and that all Federal groups are working toward fully interoperable and integrated capabilities in support of that vision. Because legislative support is vital to continuing the IPAWS mission, the IPAWS PMO ensures that White House and Congressional staff are kept well-informed on the latest IPAWS developments, and provides timely answers to their queries.

7.3 FEDERAL, STATE, TERRITORIAL, TRIBAL, AND LOCAL ALERTING AUTHORITIES

The IPAWS PMO ensures that the most current information is communicated effectively to IPAWS public alerting authority users, and those authorized to access IPAWS for information sharing only. Because IPAWS is the nation's alerting system and all disasters are local, the IPAWS PMO works to provide non-federal alerting authorities with the resiliency that IPAWS offers.

Recognizing that well-trained users will make the best use of IPAWS, the IPAWS PMO supports online training, drafts detailed best practices, provides strong governance examples from States that have been successful in adopting and using IPAWS, and promotes a greater understanding of the tools, technologies, and strategies available to alerting authorities. The IPAWS PMO creates on-line courses for alerting authorities to supplement informational materials, including the Toolkit, message templates, and other tools. These documents cover best practices in crafting public alerting messages and how to exchange information through the IPAWS Open Platform for Emergency Networks (IPAWS-OPEN).[14] The IPAWS PMO assists State, territory, tribal, and local public safety officials throughout the process of incorporating IPAWS into their emergency communication plans.

The IPAWS PMO recognizes the sovereignty of tribal nations and the special challenges they face with emergency management and public alerting. The IPAWS PMO works with FEMA Regional Tribal liaisons and regional tribal emergency managers to educate tribal governments on how IPAWS can help them communicate with, and alert tribal members in times of crisis.

The IPAWS PMO also engages Federal alerting partners including the National Weather Service and the Department of Justice (DOJ), keeps them well-informed on IPAWS developments, and works with them as they disseminate imminent threat alerts and AMBER Alerts.

The IPAWS PMO has also released the new "Fiscal Year 2013 Supplemental Guidance on Public Alert and Warning". The purpose of the FY 2013 Supplemental Guidance on Public Alert and Warning is to provide guidance to public safety officials on: public alert and warning activities that can be funded through federal grants; technical standards that facilitate interoperability; and recommendations for planning, coordinating, and implementing alert and warning projects. The goal of this document is to assist alerting authorities with fully implementing and testing IPAWS components and ensuring integration and interoperability, promote consistency in policies across federal grant programs, and to ensure compatibility among federally-funded projects. This document will continue to evolve as new technologies emerge, and will additional insight on the use of these new technologies.

7.4 PRIVATE SECTOR PARTNERS

Effective public-private partnerships are necessary to ensure IPAWS is interoperable with existing and emerging technologies. As the IPAWS PMO continues to articulate the benefits of full participation in the implementation of IPAWS to public and private sector partners, IPAWS' effect on the American people will increasingly result in reduced risk to public safety. For example, the IPAWS PMO works with the FCC, individual EAS Participants and local, state, and regional emergency communication committees, and FEMA's Regional Emergency Communication Coordination Working Groups (RECCWG) to extend and improve EAS as an alert dissemination mechanism and to encourage development and refinement of local, state, and regional emergency communications plans.

The IPAWS PMO, in partnership with FEMA's Private Sector and Business Operations offices, conducts outreach to strengthen cooperation and encourage compliance with Common Alerting Protocols (CAP) standards by private sector software and hardware developers and manufacturers, the broadcast community, commercial mobile service providers, and internet providers. It is important that these partners understand the value of being CAP-compliant, both from a business and a public relations standpoint. IPAWS PMO outreach efforts include

[14] Strategic Outreach Plan, Section 6.0, March 2013

providing communication tools for vendors to ensure that they understand the FEMA CAP compliance process for IPAWS integration, how easy it is, and how it does not risk their patent or proprietary rights.

7.5 NON-PROFIT AND ADVOCACY PARTNERS

Working with and through intra-governmental organizations, non-profit foundations, universities, etc. (e.g. the National Governors Association), allows the IPAWS PMO to exercise wise financial stewardship of program funds, while still maximizing the impact of outreach initiatives and exponentially reach all partners involved in public alerts and warnings, including the American people.

Executive Order 13407 requires that IPAWS "include in the public alert and warning system the capability to alert and warn all Americans, including those with disabilities and those without an understanding of the English language."[15] In order to ensure that these groups are best served by IPAWS, the IPAWS PMO continues to liaise with non-profit and advocacy organizations, including the National Center for Accessible Media, the National Disabilities Rights Network, and other national and regional groups. The IPAWS PMO, in cooperation with FEMA's Office of Disability and Integration Coordination, hosts semi-annual roundtables for industry experts, Federal partners, universities, and advocacy organizations to discuss alerting the whole community and removing barriers to alerting accessibility. These activities allow the IPAWS PMO to identify alerting requirements and communications strategies that can be incorporated into alerting and warning systems, to improve alerting for Americans with disabilities and others with access and functional needs.

The IPAWS PMO has written and distributes a white paper "Alerting the Whole Community: Removing Barriers to Alerting Accessibility," and continues to work with and train alerting authorities to communicate the benefits of IPAWS to the entire population within their jurisdiction, including Americans with disabilities and others with access and functional needs.

For non-English speaking populations, the IPAWS PMO provides guidance to private sector partners producing multi-lingual alerting dissemination technologies and tools. Also, the IPAWS PMO produces informational materials in multiple languages, including Braille.

8.0 TACTICAL IMPLEMENTATION AND TOOLS

The IPAWS PMO strategically focuses resources to support efforts to achieve the 2013-2014 strategic outreach goals by directly engaging partners through: digital communications; websites; social media; media relations; collateral material development; videos and public service announcements; working groups and roundtables; webinars; IPAWS champions; events, demonstrations, and workshops; training; exercises; and standards testing.

8.1 DIGITAL COMMUNICATIONS

Today, digital communication is essential to any successful outreach initiative. Digital communications are prevalent and oftentimes the most effective way to both share and obtain information. The IPAWS PMO continues to invest resources to strengthen and increase digital communications for the purpose of effectively engaging a wide variety of partners.

[15] EO 13407, Section 2.a.iv

The IPAWS PMO establishes a regular schedule of cost-effective communication with these strategic partners. Websites, email subscriptions, newsletters, webinars, and other means of communication are evaluated and enhanced as necessary to enable effective communication on the latest IPAWS developments. The IPAWS PMO frequently uses webinars to engage stakeholders whenever possible, and while this technology doesn't allow for personal interaction with partners, webinars are still effective and reflect wise financial stewardship of program funds. Because IPAWS is now operational and more alerting authorities are using IPAWS, digital communication methods will be essential to reaching as many partners as possible.

8.2 WEBSITE

The IPAWS PMO makes a concerted effort to present relevant information using an intuitive website organization. The IPAWS PMO continually works to improve the quality, organization, relevance, and interactive nature of the information posted on the IPAWS website.

The IPAWS PMO regularly refreshes website content, with technical and communication staff working closely together to provide IPAWS partners with the best information possible. By posting documents and information on the IPAWS website, the PMO maximizes distribution at the least cost.

Items on the IPAWS website include: information on a variety of IPAWS compliant alert dissemination systems, such as the Emergency Alert System (EAS) and Wireless Emergency Alerts (WEA); standards and protocol guidelines; accomplishments; schedules and milestones; details about IPAWS' participation in conferences, demonstrations, and workshops; an informative video that provides a comprehensive overview of IPAWS; PMO contact information; PSAs; resources for public alerting authorities, and a large archive of working group webinars. The IPAWS website is also the best place to find testing, grants, a collection of best practices and case-studies, training resources, and detailed program information.

8.3 SOCIAL MEDIA

The 24/7 news cycle and the increased use of social media have made it easy for the American people to get information quickly. The IPAWS PMO continues to work with the FEMA Web and Digital Engagement teams toward the PMO's goal of engaging partners through an integrated set of robust social media tools. If permitted to utilize social media, the IPAWS PMO will use Facebook, Twitter, LinkedIn, YouTube, etc., and take advantage of other social media and online organizational forums used by emergency management personnel, to post IPAWS updates and get feedback on IPAWS.

8.4 MEDIA RELATIONS

IPAWS PMO staff work to craft targeted messages for partners participating in specific trade media opportunities, editorial articles, expert interviews, etc., with the goal of communicating important information to partners through trade, industry, and other media publications.

IPAWS is operational, and as additional tools and technologies become available or milestones are reached, the IPAWS PMO will provide input or draft language for press releases that will be distributed by FEMA External Affairs and other partners.

8.5 COLLATERAL MATERIAL DEVELOPMENT

Collateral materials benefit the IPAWS PMO's partners the most when the information is current, targeted, and easily accessible. The IPAWS PMO's core messages are consistent, but

each partner group has different information needs, and a one-message-fits-all approach fails to recognize the unique roles and responsibilities of each partner. The IPAWS PMO creates targeted messages, which evolve as components of IPAWS mature and new information becomes available.

Rather than handing out large quantities of printed collateral materials, the IPAWS PMO makes a concerted effort to direct partners to the IPAWS website where IPAWS-related information is located. The IPAWS website is a more comprehensive and dynamic resource for partners than static documents.

IPAWS PMO leadership and IPAWS subject matter experts actively distribute IPAWS business cards to partners. The IPAWS business card contains the IPAWS website URL, IPAWS email address at ipaws@dhs.gov, and a quick response (QR) code. Using the QR code, individuals with smart phones and a QR app can quickly and conveniently access the IPAWS website. As part of FEMA's overall preparedness initiative, IPAWS "Get Alerts, Stay Alive" bags, which can serve as "go-bags" for emergencies, are distributed at conferences and demonstrations.

8.6 VIDEOS AND PUBLIC SERVICE ANNOUNCEMENTS

The IPAWS PMO Outreach Team conceptualized and created an IPAWS introductory video which is available on the home page of the IPAWS website and on IPAWS partner's websites. Instead of IPAWS PMO leadership or IPAWS subject matter experts using 20 minutes to explain the basic principles and functions of IPAWS, the five minute video is played at presentations, panel sessions, and technical demonstrations. The video gives the presenter more time to address topics relevant to specific partner groups and allows partners to ask pertinent questions; which results in partners gaining a deeper understanding of how they contribute to and influence IPAWS.

The IPAWS PMO, in partnership with Ready.gov and the Ad Council, created Wireless Emergency Alert (WEA) Public Service Announcements (PSAs) for radio and TV. The PMO is collaborating with key partners, including the National Association of Broadcasters (NAB) and the National Alliance of State Broadcasters Associations (NASBA), to encourage broadcasters to air the WEA PSAs using broadcaster-donated time for public service announcements. Additionally, the PSAs are being placed by the Ad Council in strategic local markets through relatively inexpensive local media buys; the PSAs will also be distributed to IPAWS partners to support their outreach efforts.

8.7 WORKING GROUPS AND ROUNDTABLES

The IPAWS PMO recognizes that partners have unique capabilities and perspectives; as a result, the PMO conducts several series of targeted working groups and roundtables for numerous partner groups which aid in disseminating information, soliciting feedback, strengthening relationships, continuing collaboration, and addressing any concerns expressed by partners. These forums leverage the necessary technical and operational expertise from Federal, State, territorial, tribal and local governments, the private sector industry, and non-profit and advocacy groups.

Working groups and roundtables allow the PMO and partners to openly and collegially discuss program benefits and limitations, build consensus, and find solutions for emerging technologies. The IPAWS PMO also uses working groups and roundtables to clearly and frequently communicate with and invite partners to participate in IPAWS related activities.

IPAWS currently sponsors or participates in the following working groups and roundtables:

- Emergency Alert System (EAS) Roundtable
- Emergency Interoperability Consortium (EIC)
- Homeland Infrastructure Foundation Level Data Working Group (HIFLD)
- IPAWS and the Office of Disability Coordination (ODIC) Roundtable for Federal Partners and Industry Experts
- Joint Special Interest Group (SIG) for Alert Disseminators
- Joint Special Interest Group (SIG) for Emergency Management Practitioners
- Regional Emergency Communication Coordination Working Group (RECCWG)
- The White House Principal Communications Working Group

Additionally, the IPAWS PMO coordinates with the National Communications Sector-Specific Agency and participates in Communications Government Coordinating Council activities and working groups to collaborate in updating the Sector Annual Report and the National Sector Risk Assessment. The IPAWS PMO will continue to build working groups and roundtables for partner groups, such as: Limited English Proficiency (LEP), older adults, and alerting authorities.

8.8 WEBINARS

Virtual participation in meetings and conferences creates very valuable opportunities to reach IPAWS PMO partners as they gather to discuss critical decisions that relate to the adoption or usage of IPAWS. Webinars make it possible for IPAWS PMO leadership and IPAWS subject matter experts to supplement in-person presentations to targeted groups in remote areas of the country without the costs or logistical considerations of travel.

On the first or third Wednesday of each month, IPAWS subject matter experts conduct a virtual presentation to IPAWS practitioners and developers. The one-hour dialogue provides an opportunity for IPAWS subject matter experts to deliver information on and explain IPAWS capabilities, invite IPAWS users to provide case examples of IPAWS in action, provide accurate and timely information, and respond to questions and concerns. Through the monthly webinars, IPAWS partners are able to identify IPAWS subject matter experts and, as needed, follow up with them directly after the webinar.

8.9 IPAWS CHAMPIONS

The IPAWS PMO has identified and is engaging influential partners, particularly public safety officials, to serve as IPAWS "champions" and assist the IPAWS PMO in achieving the 2013-2014 strategic outreach goals. The most effective champions are volunteers who work with and assist the IPAWS PMO by: (1) regularly participating in forums; (2) issuing invitations to IPAWS PMO leadership and IPAWS subject matter experts to present at key conferences and meetings; (3) asking questions, including tough ones; and most importantly, (4) willingly using their own networks to spread the word about IPAWS. The IPAWS Champion Program is proving to be an invaluable resource in exponentially expanding outreach efforts to all partners, including the American people.

8.10 EVENTS, DEMONSTRATIONS, AND WORKSHOPS

Under Presidential Executive Order 13407, the Integrated Public Alert and Warning System (IPAWS) PMO has a clear directive to "ensure the conduct of public education efforts so that State, territorial, tribal, and local governments, the private sector, and the American people

understand the functions of the public alert and warning system and how to access, use, and respond to information from the public alert and warning system."[16]

The IPAWS PMO selects the most impactful, advantageous conferences and events, and leverages these opportunities to clearly and frequently communicate with partners, invite partners to participate in IPAWS related activities, strengthen relationships with public and private sector partners, and collaborate with partners to find solutions to challenges in public alert and warning.

The IPAWS PMO conducts frequent demonstrations of IPAWS' proof of concept end-to-end operations, including alert origination, alert aggregation using the IPAWS Open Platform for Emergency Networks (IPAWS-OPEN), and alert dissemination technologies for partners. During these demonstrations, IPAWS collaborates with numerous public and private sector partners to increase the impact and scope of the demonstrations.

The IPAWS PMO protects limited resources by managing events efficiently and maximizes impact through a series of interactive workshops held by IPAWS subject matter experts in the IPAWS PMO booth space. These workshops engage conference attendees on a variety of pertinent topics – all of which are geared toward achieving the IPAWS PMO's top three strategic outreach goals for 2013-2014: (1) increase the awareness and understanding of IPAWS by all partners; (2) increase the adoption and use of IPAWS by all partners; and (3) strengthen existing partner relationships and develop new partnerships and interests.

8.11 TRAINING

Under Presidential Executive Order 13407, the Integrated Public Alert and Warning System (IPAWS) PMO has a clear directive to "ensure the conduct of training, tests, and exercises for the public alert and warning system".[17] Effective and institutionalized training is vital to maximizing the potential of the successful execution and adoption of IPAWS by alerting authorities, the private sector, non-profit and advocacy organizations, Federal governance partners, and the American people.

The IPAWS PMO, in partnership with FEMA's Emergency Management Institute, developed an on-line training course, IS-247a "Integrated Public Alert and Warning System". The course was launched in December 2011, and as of June 15, 2013, 7,050 people had completed and passed the course. IS-247a is one of four requirements for becoming an alerting authority authorized to use IPAWS. The IPAWS PMO is also working with the National Incident Management System (NIMS) program to include IS-247a as recommended training for NIMS compliance.

IS-247a consists of three overarching lessons: (1) introduction to IPAWS; (2) appropriate, effective, and accessible alert and warning messages; and (3) common alerting protocol message composition. The course objectives are to: (1) define IPAWS and describe IPAWS operations; (2) identify the benefits of using IPAWS for generating warnings and the basis for determining who is authorized to send IPAWS alert and warning messages; (3) apply criteria for sending appropriate alert messages, including accessible messages; (4) understand the myths associated with public response to warning messages; (5) define CAP and identify some of the commonly used CAP elements and their associated values, and how a WEA message is mapped from CAP;

[16] EO 13407, Sec 2.a.vi
[17] EO 13407, Sec 2.a.vi

and (6) identify the components of effective alert and warning messages and describe factors that influence public response to warning messages.

In the summer of 2013, the IPAWS PMO will launch a second on-line course, "IPAWS and the American People". This course is designed to educate the American people about the variety of IPAWS alert and warning tools and technologies available to them and their public safety officials. The course contains a section dedicated to educating the American people on how to respond to information from the public alert and warning system. This training will be distributed to numerous IPAWS PMO partners to maximize its reach and incorporate knowledge of IPAWS and wise response to alerts and warnings into the American people's collective psyche.

Additionally, the IPAWS PMO is currently designing a third on-line training course; this course will provide advanced training to alerting authorities. To identify the most critical areas for additional training, the IPAWS PMO hosted focus groups comprised of public safety officials. Early focus groups identified three themes for the course: (1) IPAWS testing by alerting authorities; (2) coordinating the different geo-targeting capabilities of alerting systems; and (3) governance. The IPAWS PMO anticipates the advanced training course for alerting authorities will be launched in the second half of 2013.

8.12 EXERCISES

The IPAWS PMO recognizes the immense value of exercises in promoting and maintaining IPAWS in a ready state. Exercises assess and validate the speed, effectiveness, and efficiency of capabilities, and test the adequacy of policies, plans, procedures, and protocols in a risk-free environment. Aside from actual events, scenario-based exercises provide the best means of evaluating capabilities.

The IPAWS PMO is required to conduct discussion-based and operations-based exercises of public alert and warning communication systems. IPAWS works closely with private sector partners and alerting authorities to identify gaps, best practices, and lessons learned, and to implement mitigation strategies.

All IPAWS system exercises and tests, including: the National Level Exercises (NLE); Eagle Horizon; regional tabletop exercises; and nationwide Emergency Alert System (EAS) tests, are supported by the PMO. The PMO collects data and partner feedback, compiles information from exercises and tests to assess what worked well and what did not, and identifies the type of training needed to improve alert system operations across the United States. At the end of the exercise or test, after-action reports and improvement plans are generated that detail the outcomes of the test and identify mitigation strategies to minimize or eliminate gaps or weaknesses. Moving forward, the IPAWS PMO will update the Five-Year Training and Exercise Schedule to ensure all exercise and test requirements are met.

8.13 STANDARDS TESTING

IPAWS PMO actively engages private sector partners to promote the testing of alert and warning technologies against nationally and internationally established standards and protocols, such as the Common Alerting Protocol (CAP), to ensure interoperability with the IPAWS Open Platform for Emergency Networks (IPAWS-OPEN). The IPAWS PMO provides partners with testing information, instructions, forms, and testing facilities, including the IPAWS Demonstration and

Test (D&T) Center at the Joint Interoperability Test Command (JITC), which can test EAS-CAP equipment in a live environment. Companies that want to access the IPAWS-OPEN test environment need to execute a Memorandum of Agreement (MOA) with FEMA; the MOA application can be found on the IPAWS website.

9.0 SUMMARY

Throughout American history, dedicated public safety officials have provided live-saving, essential services to the American people. The American people are the foundation of all partner groups and the primary reason the IPAWS PMO works to create an effective, reliable, integrated, flexible, and comprehensive public alert and warning system, which the Federal government provides at no cost.

New alert and warning technologies will only be effective if supported by private sector developers, and if clearly understood and trusted by alerting authorities and the American people. As IPAWS is adopted by alerting authorities, private sector developers and manufacturers, and the American people, then more alerting tools will be integrated, providing greater resiliency and increasing the chance that a community will receive the information they need when they need it most.

Ultimately, the American people will benefit most from the implementation of IPAWS, as alerting authorities use it to alert and warn the American people before, during, and after a disaster, allowing the American people to take the necessary actions to ensure their safety and minimize damage to property.

WEAS IN ACTION

On July 1, 2013, five counselors and 29 children in East Windsor, Connecticut, were in the Sports World complex soccer dome having fun at summer camp. Shortly after 1:30 PM, the manager received a Wireless Emergency Alert (WEA) from the National Weather Service stating that a tornado warning had been issued for the area until 2:00 PM. The manager immediately evacuated everyone into an adjoining building, and within about two minutes of the alert, an EF-1 category tornado hit the dome and sent it flying into the air. Due to the manager's quick and correct response to the received WEA alert, no one at the summer camp was injured.

This is another instance of the life-saving alerts that are being sent out through IPAWS WEA. The IPAWS PMO is working hard with NOAA and all of our alerting partners to continue to ensure that the American people have timely information to allow them to take the necessary actions to ensure their safety and minimize damage to property. There are 34 people in East Windsor, Connecticut, who are living proof.[18]

Here are a few stories that also demonstrate how State and local public safety officials have used WEAs to communicate with their communities in times of disaster for the purpose of saving lives and protecting property. Additional stories can be found at www.fema.gov/ipaws.

SUPERSTORM SANDY

"This Emergency Alert just popped up on my phone. Ten seconds later, the TV went out. Here we go…"[19]

"COOL TECH: Loud alarm and screen alert about [Super Storm Sandy] making landfall in NYC."[20]

"As Hurricane Sandy headed for the city two weeks ago, sirens began ringing on some New Yorkers' cell phones. The alarms were accompanied by messages telling them to stay inside; not to drive; or for those in Zone A, to evacuate...the storm was the first time the system was used in New York."[21]

"The emergency alerts showed up where and when they mattered."[22]

"While I am pretty calm in the face of severe weather…keeping the weather channel on tends to make my four year old paranoid. So instead of watching the weather, we hung out in the play room…from the other side of the house, I heard an unusual ringing. It sounded like an emergency alert ring, but I was sure the TV was off… I headed off to investigate. The TV was off. Could that sound have come from my phone? It sure did. My Samsung Galaxy S III sent me a text alert letting me know there was severe weather in my area. But this was no ordinary text message, the notification came with a special forced tone alert that overrode my volume setting. How smart is that?! When I turned on my phone I found a message from the National

[18] http://www.nbcconnecticut.com/news/local/Tornado-Warning-in-Effect-for-Fairfield-County-213843351.html, July 3, 2013
[19] Heidi N. Moore, October 30, 2012
[20] Sree Sreenivasan, October 28, 2012
[21] New York Times, November 9, 2012
[22] O'Reilly Radar, October 30, 2012

Weather Service alerting me to a tornado warning in the area. I turned on the TV, and sure enough a tornado warning had just been issued. Now that's the way technology should work!"[23]

BOSTON BOMBING AND MAN HUNT

"Boston officials did use cellphone text messages, known as Wireless Emergency Alerts, in the aftermath of the marathon bombings…the Massachusetts Emergency Management Agency has the ability and authority to issue imminent threat WEA messages.

The Massachusetts Emergency Management Agency (MEMA) issued a shelter-in-place order stating, "Shelter in place still in effect, it does not prevent employees from returning home – MEMA.

Boston residents then spread the word by tweeting; the WEA messages are intended to sound a siren on their devices to alert people to pay attention and get more information elsewhere."[24]

TORNADOS

"When we were driving thru Georgia, almost to Adairsville, I received an EXTREME ALERT message on my cell phone, warning of a tornado in my area. Is this something that is on all cell phones? I was amazed and happy for the warning. We continued driving, but were certainly watching the skies. We were actually on Interstate 75 as the tornado crossed right in front of us. All of the vehicles came to a stop as we watched. We had to weave thru the debris in order to find our way to the next exit. Thankfully we were stopped and not caught up in the tornado…billboard signs and huge trees were destroyed! It was quite a site!"[25]

"We [National Weather Service] put out the early warning, people got notice and knew what to do when a tornado approaches. The damage was bad, but we're happy that no one got hurt, so that's a success story we feel pretty good about. The more ways we can get the information out, the better the chance people have to be warned."[26]

"Your warning of a tornado imminent in my area of New York, sent 7/26/12 via text message to my cell, was invaluable! From the bottom of my heart- THANK YOU National Weather Service!"[27]

AMBER ALERTS

"Police credit one Minneapolis teen's quick thinking -- and quick dialing -- with helping them safely locate an abducted child and the suspect in his disappearance on Wednesday…but Buenrostro doesn't think of herself as a hero. Instead, she credits the AMBER Alert that came across her father's cell phone just an hour before police reunited the boy with his mother. She and her father made the 911 call that led to the arrest of suspected kidnapper Isabel Diaz-Castillo. "I was so shocked," she recalled. "I was like, 'Oh my God. This is the car.' So, I ran back inside the house and told my dad." Police reunited 8-month-old Carlos Orozco with his mother in a matter of hours thanks to Buenrostro's report.

"The Bureau of Criminal Investigation credits the first Wireless Emergency Alert with leading to a quick and safe recovery, adding that the cell phone alerts issued on Wednesday were the first of the kind in the United States to lead to a successful recovery of a missing child.

---

[23] http://www.thesuburbanmom.com/2012/08/31/technology-that-keeps-us-safe-wireless-emergency-alerts
[24] http://www.radioworld.com/article/report-boston-did-use-wireless-alerts/219096 April 24, 2013
[25] New Yorker, traveling through Adairsville, Georgia, January 30, 2013
[26] Local New York NWS Spokesman, Star Gazette, August 1, 2012
[27] Citizen Post of Facebook, FCC Blog, August 30, 2012

"Teenagers are on their phones a lot, but in this case, it helped law enforcement reunite a little boy with his mother," said Minnesota Public Safety Commissioner Mona Dohman. "Wireless Emergency Alerts are another important way to ensure the public receives vital information right away, wherever they are."[28]

"The minute the AMBER Alert was issued on Wednesday, cell phones across the state started buzzing, marking the first time [in Minnesota] an emergency alert of this type went wireless. At about 3 p.m., cell phone users across Minnesota received information about the abduction of 8-month-old Carlos Orosco in Minneapolis. "All of a sudden, my phone just screeched at me," recalled Julio Ojeda-Zapata, technology reporter for the Pioneer Press…it was very effective because I looked at the phone and saw the AMBER Alert, and what's interesting -- just five seconds before, I also saw the AMBER Alert on a highway sign,' Ojeda-Zapata said. 'They're doing it right. You can't ignore AMBER Alerts these days.' The coordination didn't end there. When the mobile alerts went out, more than 110 billboards across the state also displayed the AMBER Alert information too.

Just under an hour after the AMBER Alert was issued, Minneapolis police had a suspect in custody and were reuniting the boy with his mother…The more people that have that information, the more likely we're going to have someone call with information," said Janell Rasmussen, a Minnesota AMBER Alert Coordinator…"I can't think of a better way to get the word about these kinds of things. This is very, very effective."[29]

POTENTIAL FOR WEAS TO DIMISH NEGATIVE IMPACT IN FUTURE DISASTERS

The following stories provide media quotes associated with prior events that occurred when WEAs were not yet available. These stories are included in the Strategic Outreach Plan to provide alerting authorities with examples of the tremendously vital role WEAs could play as the American people inevitably, and unfortunately, experience future events similar to the ones listed below. The IPAWS PMO's goal is to enable alerting authorities to use WEAs to significantly diminish the negative impact of future events.

SNOWMAGEDDON

"For D.C. area commuters stuck in snow, 'it just felt hopeless'. A disastrous commute that began early that day…lasted well past midnight. Thousands of commuters were stranded for hours, and hundreds of cars were abandoned on the road; information to commuters before and during the commute was sparse."

As a result, the Washington Metro Council of Governments called for:

- An evaluation of the information systems that gather travel information
- A plan to identify better ways to relay that information to the public
- A public education campaign to stress personal preparedness and the importance of heeding emergency directives[30]

---

[28] Minneapolis, MN (KMSP) Minneapolis teen awarded for reporting AMBER Alert suspect - KMSP-TV http://www.myfoxtwincities.com/story/21303100/minneapolis-teen-awarded-for-leading-police-to-amber-alert-suspect#ixzz2MEHMXjnK, February 21, 2013

[29] ST. PAUL, MN. (KMSP) EMERGENCY ALERTS: Cell phones abuzz with wireless info - KMSP-TV http://www.myfoxtwincities.com/story/21292496/emergency-alerts-cell-phones-abuzz-with-wireless-alerts#ixzz2MEH7Etwd, February 20, 2013

[30] The Washington Post: 01/28/11

HURRICANE RITA

"3.7 million people evacuated from the Houston area and Texas coast and created a 100 mile traffic jam that put evacuees in danger as Hurricane Rita approached. This was due in part to:

- Fear stemming from the memory of Katrina, and
- Vague and non-targeted evacuation instructions

Probably the biggest failure of the whole process was communication – people not having their expectations met…if people know they're going to be in a 20-hour drive, they can prepare for a 20-hour drive. If they think it's going to be four or five, they… prepare for it with gasoline and water or food.

At the pinnacle of the evacuation and traffic jam, even after logistical solutions were identified, public safety officials had difficulty communicating information to the public."[31]

WILDFIRES

"Three people in Colorado are dead after an emergency 911 system malfunctioned and failed to alert them to evacuate their homes ahead of a raging wildfire. The three victims…did not receive the automated notification in time to save their lives. Colorado authorities said they are investigating problems with an emergency notification system because some residents who had signed up to get wildfire warnings never got one. About 12 percent of people failed to get a warning about a wildfire in the mountains southwest of Denver."[32]

EARTHQUAKES

"Cell service along the East Coast was spotty following a Virginia-based earthquake that was felt as far away as New England. There were no reports of downed cell towers or wires, but mobile providers said that millions of people tried to make cell phone calls at the same time, resulting in overwhelmed cellular relay stations. Cell service disruptions occur during periods of heavy call volumes because of a bottle-necking factor. Like a highway that gets congested during rush hour, cellular infrastructure is not designed to handle the amount of calling traffic that occurs during emergency situations."[33]

[31] "Miles of Traffic as Texans Heed Order to Leave", The New York Times, 09/23/06
[32] "Colorado Wildfire Deaths Blamed on 911 Malfunction", ABC News: 04/04/2012
[33] http://money.cnn.com: 08/23/11 "East Coast quake causes major cell service disruptions"

APPENDIX B: PARTNER ORGANIZATIONS

The IPAWS PMO has categorized partners into five major functional groups: (1) the American people; (2) Federal governance; (3) Federal, State, territorial, tribal, and local alerting authorities, or "alerting authorities"; (4) private sector industry; and (5) non-profit and advocacy organizations. There are many organizations and interest groups within each of these partner groups, many of which IPAWS actively engages. The list below is a broad, but not exhaustive, list of current or future partner organizations the IPAWS PMO has and will continue to engage.

THE AMERICAN PEOPLE

- The American people
- Media

FEDERAL GOVERNANCE PARTNERS

Federal Governance Partners are Federal authorities who are responsible for national policies and regulations affecting public alerts and warnings. Government partner organizations are important to the success of the IPAWS program. They represent a large and unique segment of the emergency management community and the American people.

Federal Executive Government Partners

- The White House, Executive Office of the President
  - White House Communications Agency (WHCA)
  - White House Military Office (WHMO)
- Department of Defense (DOD)
  - DOD Joint Interoperability Test Command (JITC)
  - DOD Space and Naval Warfare Systems Command (SPAWAR)
- Department of Health and Human Services (HHS)
  - HHS Emergency Management Office
- Department of Homeland Security (DHS)
  - DHS Cyber Security and Telecommunications
  - DHS Executive Leaderships
  - DHS Office of Civil Liberties, Civil Rights, and Children's Working Group
  - DHS Operations
  - DHS Policy
  - DHS Science and Technology
- Department of Justice (DOJ)
  - Department of Justice, Office of Justice Programs (AMBER Alerts)
  - Federal Bureau of Investigations, National Capitol Region Office
- Federal Communications Commission (FCC)
  - FCC Public Safety and Homeland Security Bureau (PSHSB)
- Federal Emergency Management Agency (FEMA)
  - FEMA Acquisition Program Office (APO)
  - FEMA Emergency Management Institute
  - FEMA Executive Leadership
  - FEMA National Continuity Programs Directorate
  - FEMA National Preparedness Directorate

- FEMA Office of External Affairs
- FEMA Office of Disability Integration and Coordination (ODIC)
- FEMA Regional Communications Coordinators Working Group (RECCWG)

➢ National Oceanic and Atmospheric Administration (NOAA)
- National Weather Service (NWS)
- NOAA Regional External Affairs

➢ National Security Council (NSC)
➢ Nuclear Regulatory Commission
➢ Chemical Stockpile Emergency Preparedness Program (CSEPP)
➢ Critical Infrastructure Partnership Advisory Council (CIPAC)
➢ Radiological Emergency Preparedness Program (REPP)
➢ State, Local, Tribal, and Territorial Government Coordinating Council (SLTTGCC)
➢ US Park Police

Legislative Government Partners

The IPAWS PMO engages with Congressional Committees that have legislative oversight of IPAWS. Quarterly reports are provided to these committees and IPAWS PMO leadership regularly delivers updates on IPAWS implementation to members on these committees. The IPAWS PMO also conducted an interactive end-to-end IPAWS concept of operations demonstration for members of Congress and their staff at the US Capitol Visitors Center.

➢ United States Congress:
- United States Senate Committee on Appropriations
- United States Senate Committee on Homeland Security and Governmental Affairs
- United States House of Representatives Committee on Appropriations
- United States House of Representatives Committee on Homeland Security
    - United States House of Representatives Subcommittee on Emergency Communications, Preparedness, and Response
- United States House of Representatives Committee on Transportation and Infrastructure
    - United States House of Representatives Subcommittee on Economic Development, Public Buildings, and Emergency Management

FEDERAL, STATE, TERRITORIAL, TRIBAL, AND LOCAL ALERTING AUTHORITY PARTNERS

In addition to the President, alerting authorities include Federal, State, territorial, tribal, and local public safety officials who are designated within their level of government as an authority responsible for communicating emergency alerts and warnings to the American people. Organizations representing public safety officials include:

➢ Association of Public Safety Communications Officials (APCO)
➢ Community Emergency Preparedness Information Network (CEPIN)
➢ International Association of Chiefs of Police (IACP)
➢ International Association of Emergency Managers (IAEM)
➢ International Association of Fire Chiefs
➢ IPAWS Originator Practitioners' Working Group (OPWG)
➢ National Center for Missing and Exploited Children (NCMEC)
➢ National Emergency Managers Association (NEMA)
➢ National Emergency Number Association (NENA)
➢ Regional Emergency Communications Coordination Working Group (RECCWG)

- State Homeland Security and Emergency Management Offices
- U.S. First Responders Association
- Various Urban Area Security Initiatives (UASIs)
- The Weather Channel

PRIVATE SECTOR INDUSTRY PARTNERS

Private Sector Industry partners are comprised of representatives from private sector companies with recognized equities in the alert and warning field. Because the majority of the infrastructure needed to accomplish the IPAWS mission is owned and operated by the private sector, the private sector is a key partner in the development and implementation of IPAWS.

Alert Origination Service Providers

- Emergency Interoperability Consortium

Dissemination Groups

- Alliance for Access to Technology
- Alliance for Telecommunications Industry Solutions (ATIS)
- American Cable Association
- Association of Public Television Stations
- Cellular Telecommunications and Internet Association—The Wireless Association (CTIA)
- Commercial Mobile Service Providers (CMSP) (e.g. Sprint, Verizon, AT&T, T-Mobile, etc.)
- EAS-CAP Industry Group
- IPAWS Disseminator Practitioners' Working Group (DPWG)
- Latino Public Radio Consortium
- National Alliance of State Broadcasters Associations (NASBA)
- National Association of Broadcasters (NAB)
- National Cable and Telecommunications Association
- National Federation of Community Broadcasters (NFCB)
- National Public Radio (NPR)
- Primary Entry Point Advisory Committee (PEPAC)
- Public Broadcasting Service (PBS)
- Satellite Broadcast & Communications Association (SBCA)
- Society of Broadcast Engineers (SBE)
- Society of Cable Telecommunications Engineers (SCTE)
- State Chapter Broadcaster/Cable/Satellite Associations
- State Emergency Communications Committees (SECC)
- Telecommunications Industry Association (TIA)
- Telecommunications Sector Government Coordinating Council (GCC)

NON-PROFIT AND ADVOCACY PARTNERS

Executive Order 13407 specifically requires IPAWS to, "include in the public alert and warning system the capability to alert and warn all Americans, including those with disabilities and those without an understanding of the English language." Thus, the IPAWS PMO continuously seeks to engage a number of intra-governmental, non-profit, and advocacy organizations and their members to ensure they are kept informed of IPAWS progress, as well as solicit support for the adoption and use of IPAWS.

Intra-Governmental Organizations

- The Council of State Governments (CSG)
- The International City/County Management Association (ICMA)
- National Academy of Public Administration (NAPA)
- National Association of Counties (NACo)
- National Conference of State Legislatures (NCSL)
- National Congress of American Indians (NCAI)
- National Governor's Association (NGA)
- National League of Cities (NLC)
- Nuclear Energy Institute (NEI)

People with Disabilities and Others with Access and Functional Needs

- American Association of People with Disabilities/Coalition of Organizations for Accessible Technology (AAPD/COAT)
- The Coalition of Organizations for Accessible Technology (AAPD/COAT)
- Consortium for Citizens with Disabilities and the National Disability Rights Network
- Hearing, Speech & Deafness Center
- Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities
- Massachusetts Statewide Independent Living Council
- National Adult Protective Services Association
- National Association of Councils on Developmental Disabilities
- National Association of the Deaf
- National Center for Accessible Media (NCAM)
- National Council on Disability (NCD)
- National Council on Independent Living (NCIL)
- National Disability Rights Network
- National Federation of the Blind
- National Institute on Disability and Rehabilitation Research (NIDRR)
- National Organization on Disability/Emergency Preparedness Initiative
- United States Access Board
- WGBH National Center for Accessible Media
- World Institute on Disability

Universities

- Carnegie Mellon University's Robotics Institute Quality of Life Technology Center
- Gallaudet University's Technology Access Program
- Georgia Institute of Technology, Information Technology Technical Assistance & Training Center (ITTATC)
- North Carolina State University's Center for Universal Design
- The Rochester Institute of Technology, National Technical Institute for the Deaf (NTID), Center on Access Technology
- Temple University College of Education Institute on Disabilities
- The University at Buffalo's Center for Inclusive Design & Environmental Access (IDEA)
- The University of Washington, The National Center on Accessible Information Technology in Education (AccessIT program)
- The University of Wisconsin-Madison, The Trace Center

Older Americans

- American Association of Homes and Services for the Aging (AAHSA)
- National Association of Area Agencies on Aging (n4a)
- National Association of States United for Aging and Disability (NASUAD)
- National Council on Aging

Children

- National Center for Missing & Exploited Children (NCMEC)

Charities, Foundations, and Health

- American Health Care Association
- National Association of State Mental Health Program Directors (NASMHPD)
- Safe America Foundation
- US Red Cross

Standards Based Organizations

- IEEE Advancing Technology for Humanity
- Organization for the Advancement of Structured Information Standards (OASIS)

Limited English Proficiency

- LEP Advocacy Interpreter Standards Committee
- National Limited English Proficient (LEP) Advocacy Task Force

APPENDIX C: KEY MESSAGES IPAWS PARTNERS NEED TO KNOW

The American People

- When disasters strike, whether they are natural, accidental, or man-made, it has always been vital that alerts and warnings be reported accurately and in a timely fashion to those who may be in danger.
- It is the policy of the United States to have an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people.
- Integrated Public Alert and Warning System, or IPAWS, is the solution for effective public alerts and warnings.
- IPAWS allows alerting authorities to write their own message using open standards. The message is then authenticated by the IPAWS Open Platform for Emergency Networks, or IPAWS-OPEN, to be delivered simultaneously through multiple communications devices reaching as many people as possible to save lives and protect property.
- IPAWS must ensure the President can reach the American people, but the IPAWS Program Management Office (PMO) recognizes that most alerts and warnings are issued by the National Weather Service (NWS) or at a State and local level.
- IPAWS alerts and warnings are location-specific and therefore more relevant to those receiving the alert.
- Through the use of open standards such as the Common Alerting Protocol (CAP), IPAWS allows for growth and integration with future consumer technologies.
- In addition to the President, alerting authorities include State, territorial, tribal, and local public safety officials who are designated within their level of government as an authority responsible for communicating emergency alerts and warnings to the American people.
- After completing a Memoranda of Agreement (MOA) and FEMA-sponsored training, alerting authorities will be authenticated for access to IPAWS. They will then be able to use Common Alerting Protocol (CAP) compliant emergency and incident management tools to create location-specific alerts that are scaled to cover areas as big as their entire jurisdiction or a much smaller geo-targeted area within their jurisdiction. Once created, the alert can then be sent to IPAWS Open Platform for Emergency Networks (IPAWS-OPEN) for relay to the Emergency Alert System (EAS), National Oceanic and Atmospheric Administration (NOAA) Weather Radio and other National Weather Service (NWS) systems, Wireless Emergency Alerts (WEA), and other private sector systems. The specific geographic area to which these alerts can then be delivered depends on the capabilities of the dissemination channel used.
- Once the alert is received from the alerting authorities, IPAWS Open Platform for Emergency Networks (IPAWS-OPEN) authenticates the source and validates that the alert input conforms to the Common Alerting Protocol (CAP) standard and IPAWS profile. CAP provides a standard of interoperability for everyone across all levels of government, as well as the private sector.
- While older systems relied on audio and text-only systems, the IPAWS Open Platform for Emergency Management (IPAWS-OPEN) makes picture and video feeds possible, and allows for the seamless incorporation of emerging technologies.
- Emergency alerts will be delivered to the American people across multiple pathways.
- Alerts will be delivered by the Emergency Alert System (EAS), using AM, FM, and

satellite radio as well as broadcast, cable, and satellite TV.

- Wireless Emergency Alerts (WEA) broadcast alerts to cell phones and other commercial mobile network devices based on their location, even if cellular networks are overloaded and can no longer support calls, text, or emails.
- The location specific Wireless Emergency Alerts (WEA) will be received by individuals in the targeted area whether they live there or are just passing through, as long as their mobile device is on and is IPAWS compatible.
- State, territorial, tribal, and local alerting systems such as emergency telephone networks, giant voice sirens, and digital road signs may also receive alerts from IPAWS Open Platform for Emergency Management (IPAWS-OPEN) and future alerting technologies and systems can be easily integrated into IPAWS through adherence to the Common Alerting Protocol (CAP) standard.
- When disaster strikes, IPAWS allows emergency managers and alerting authorities at all levels to send one message to more people over more devices, to save lives and protect property.
- No matter where you are -- at home, at school, at work, or even on vacation, you can get life-saving alerts.
- To enhance public safety, a free Wireless Emergency Alerts (WEA) service is rolling out. WEAs are text-like alert messages received by your mobile device during an emergency in your area. The purpose of a WEA is to provide an increasingly mobile American public with a free and fast way to receive critically important information.
- Alerts received at the right time can help keep you safe during an emergency. With Wireless Emergency Alerts (WEA), warnings can be sent to your mobile device when you may be in harm's way, without need to download an app or subscribe to a service.
- Wireless Emergency Alerts (WEA) are emergency messages sent by authorized government alerting authorities through your mobile carrier.
- Wireless Emergency Alerts (WEA) will be issued by alerting authorities in these scenarios:
    - Extreme weather, and other threatening emergencies in your area
    - AMBER Alerts
    - Presidential Alerts during a national emergency
- Wireless Emergency Alerts (WEA) will look like a text message and will show the type and time of the alert, any action you should take, and the agency issuing the alert. The message will be no more than 90 characters.
- You will know the difference between a Wireless Emergency Alert (WEA) and a regular text message because WEAs include a special tone and vibration, both repeated twice.
- The National Weather Service (NWS) sends Wireless Emergency Alerts (WEA) for:
    - Tsunami Warnings
    - Tornado and Flash Flood Warnings
    - Hurricane, Typhoon, Dust Storm and Extreme Wind Warnings
    - Blizzard, Ice Storm, and Lake Effect Snow Warnings
- When you receive a Wireless Emergency Alert (WEA), follow any action advised by the message. Seek more details from local media or authorities.
- If you are visiting an area where you don't live, or are outside the area where your phone is registered, and if you have a Wireless Emergency Alert (WEA) capable phone and your wireless carrier (more than 100 carriers, including all of the largest carriers) participates in the program, you will receive the WEA.
- If you travel into a threat area after a Wireless Emergency Alert (WEA) is first sent, your WEA-capable device will receive the message when you enter the area.

- Wireless Emergency Alerts (WEA) use began in 2012, but many mobile devices, especially older ones, are not WEA-capable. When you purchase a new mobile device, it probably will be able to receive WEAs.
- Wireless Emergency Alerts (WEA) complement subscription-based alerts. Local public safety agencies may have asked you to subscribe to a system to receive telephone calls, text messages, or emails. Those messages often include specific details about a critical event. WEAs are very short messages designed to get your attention in a critical situation. They may not give all the details you receive from other notification services.
- You will not be charged for receiving Wireless Emergency Alerts (WEA); this service is offered for free by wireless carriers. WEAs will not count towards texting limits on your wireless plan.
- Wireless Emergency Alerts (WEA) do not track people or their devices. Just like emergency weather alerts you see on local TV, WEAs are broadcast from area cell towers to mobile devices in the area. Every WEA-capable phone within range receives the message, just like every TV shows the emergency weather alert, if it is turned on; however, the TV stations, like WEAs, don't know exactly who is tuned in.
- Wireless Emergency Alerts (WEA) will not interrupt your phone conversations; the WEA will be delayed until you finish your call.
- You may get very few Wireless Emergency Alerts (WEA), or you may receive frequent messages when conditions change during an emergency. The number of messages depends on the number of imminent threats to life or property in your area.
- If, during an emergency, you can't make or receive calls or text messages due to network congestion, you will still be able to receive a Wireless Emergency Alerts (WEA) because WEAs are not affected by network congestion.
- Wireless Emergency Alerts (WEA) are only one of the ways you receive emergency alerts. Other sources include NOAA Weather Radio, news broadcasts, the Emergency Alert System (EAS) through radio and TV, outdoor sirens, and other alerting methods offered by State and local public safety agencies.

Federal Governance Partners

- The IPAWS Program Management Office (PMO) works to promote and adhere to policies, regulations, and guidelines which will facilitate the development, implementation, and adoption of an effective, reliable, integrated, flexible, and comprehensive alert and warning system.
- The IPAWS Program Management Office (PMO) continues to judiciously dedicate resources to support and sustain two major IPAWS components, the Emergency Alert System (EAS) Modernization, the Primary Entry Point Expansion Program (PEP Program), and the IPAWS Open Platform for Emergency Networks (IPAWS-OPEN).

Federal, State, Territorial, Tribal, and Local Alerting Authorities

- IPAWS is designed to address the reality that individual communication preferences change rapidly.
- IPAWS supports Presidential messaging capability, imminent threat alerts and warnings, and AMBER alerts.
- Alerting authorities can use alert origination service provider tools to send alerts to IPAWS Open Platform for Emergency Networks (IPAWS-OPEN) which are then simultaneously distributed across multiple communication pathways.

- Wireless Emergency Alerts (WEA) provide alerting authorities with the ability to send alerts to mobile devices in targeted geographic areas, reaching people when disaster strikes, no matter where they are located, as long as their mobile device is on and is Wireless Emergency Alert (WEA) compatible.
- The IPAWS Program Management Office (PMO) continues to work with private sector industry partners to make their alert technologies work with IPAWS Open Platform for Emergency Networks (IPAWS-OPEN) (e.g. telephone, text and email notification, devices and services for people with disabilities, Internet, digital signage, and emerging communications tools that will become commonplace for public use).
- Alerting authorities need to be authenticated to use IPAWS. The application process for IPAWS alerting authorities is coordinated through the IPAWS Program Management Office (PMO).
- Alerting authorities are required to complete IS-247.a, which is an on-line training course hosted by the Emergency Management Institute (EMI), before accessing IPAWS Open Platform for Emergency Networks (IPAWS-OPEN).
- The Federal government provides alerting authorities to access IPAWS and Wireless Emergency Alert (WEA) capabilities at no cost.
- Wireless Emergency Alerts (WEA) will mitigate the oftentimes difficult and costly challenge of convincing the American people to sign up to receive alerts through mobile devices.
- The only way to send Wireless Emergency Alerts is through IPAWS Open Platform for Emergency Networks (IPAWS-OPEN).
- The IPAWS Program Management office (PMO) implements a proactive partner communications outreach plan to support State, territorial, tribal, and local adoption and use of IPAWS.
- Alerting authorities will be authenticated for access to IPAWS after completing four steps (see IPAWS website for details). Alerting authorities are then able to use Common Alerting Protocol (CAP) compliant emergency and incident management tools to create location-specific alerts that are scaled to cover areas as big as their entire jurisdiction or a much smaller, targeted area within their jurisdiction. Once created, the alert can then be sent to IPAWS Open Platform for Emergency Networks (IPAWS-OPEN) for relay to the Emergency Alert System (EAS), Wireless Emergency Alerts (WEA), NOAA Weather Radio, other National Weather Service (NWS) systems (e.g. HazCollect), and other alerting systems.
- The ability to geo-target alerts depends on the capabilities of the individual dissemination device/system.
- Once the alert message has been authenticated by IPAWS Open Platform for Emergency Networks (IPAWS-OPEN), the message is simultaneously delivered to all IPAWS-compliant public alerting systems.

Private Sector Industry Partners

- To ensure interoperability with IPAWS Open Platform for Emergency Networks (IPAWS-OPEN), current and emerging alert and warning technologies need to meet certain standards and accommodate protocols (e.g. the Common Alerting Protocol (CAP).
- Guidelines for developing or retrofitting alerting technologies to be interoperable with IPAWS can be obtained on the IPAWS website, www.fema.gov/ipaws.
- Investments made by IPAWS private sector industry partners will help protect lives and

property.

- As the American people understand more about the nation's public alert and warning system, the IPAWS Program Management Office (PMO) anticipates that demand will grow for commercial notification technologies and services to be IPAWS-compliant.
- There is no fee for private sector partners to integrate with IPAWS Open Platform for Emergency Networks (IPAWS-OPEN).
- Alert origination and dissemination technologies need to undergo testing to demonstrate conformity to IPAWS standards and protocols; the IPAWS Program Management Office (PMO) may be able to assist with testing.

Non-Profit and Advocacy Partners

- Executive Order requires IPAWS to "include in the public alert and warning system the capability to alert and warn all Americans, including those with disabilities and those without an understanding of the English language."[34]
- FEMA recognizes that organizations supporting people with disabilities and others with access and functional needs are a critical part of the nation's emergency management team.
- Common Alerting Protocol (CAP) compliant accessible technologies can be incorporated into IPAWS.
- The IPAWS Program Management Office (PMO) works closely with: Americans with disabilities and others with access and functional needs advocates; intra-governmental organizations; organizations representing older Americans and children; charities, foundations, and health organizations; standards based organizations; and advocates for people with limited English proficiency.

[34] Executive Order 13407 Section 2(a)(iv)

APPENDIX D: OUTREACH CALENDAR OF EVENTS (2013 – 2014)

The IPAWS PMO leverages conferences, webinars, roundtables, technical demonstrations, working groups, and other events to communicate with partners, invite partners to participate in IPAWS related activities, strengthen relationships with public and private sector partners, and collaborate with partners to find solutions to challenges in public alert and warning. Public safety officials at all levels of government, private sector partners, and non-profit and advocacy organizations bring unique capabilities and perspectives to the table; it is through these engagements that the IPAWS PMO is able to leverage the best-of-the-best, share lessons learned, and establish consensus for what needs to be done to accomplish our shared mission of reducing risk to public safety and protecting property.

Since January 2010, the IPAWS PMO has participated in over 300 events and activities which have engaged Americans across all IPAWS partner groups. Moving forward, the IPAWS PMO will continue to engage partners through conferences, webinars, roundtables, technical demonstrations, working groups, and other events. The activities listed below are current and projected events.

CURRENT AND PROJECTED EVENTS

Month/Year	Event/Activity	Partner Group
December-14	IPAWS Developer Webinar	Private Sector Industry
November-14	International Association of Emergency Managers (IAEM) 2014 Annual Conference	Alerting Authorities
	IPAWS Practitioner Webinar	Alerting Authorities
October-14	IPAWS/ODIC Roundtable for Federal Partners and Industry Experts: Americans with Access and Functional Needs	Non-Profit/Advocacy
	Pennsylvania Emergency Management Agency Annual Conference	Alerting Authorities
	IPAWS Developer Webinar	Private Sector Industry
September-14	National Emergency Managers Association (NEMA) Policy and Leadership Forum and Annual Conference	Alerting Authorities
	Radio Show 2014	Private Sector Industry
	IPAWS Practitioner Webinar	Alerting Authorities
August-14	Washington Emergency Management Agency Annual Conference	Alerting Authorities
	Arizona Emergency Management Agency Annual Conference	Alerting Authorities
	IPAWS Developer Webinar	Private Sector Industry
July-14	IPAWS Practitioner Webinar	Alerting Authorities
June-14	IPAWS Developer Webinar	Private Sector Industry
	Ohio Emergency Management Agency Annual Conference	Alerting Authorities
May-14	Governor's Hurricane Conference	Alerting Authorities
	CTIA International Association for the Wireless Telecommunications Industry	Private Sector Industry
	IPAWS Practitioner Webinar	Alerting Authorities
April-14	National Association of Broadcasters (NAB) Show	Private Sector Industry

	IPAWS Developer Webinar	Private Sector Industry
March-14	National Emergency Managers Association (NEMA) Mid-Year Policy and Leadership Forum and Annual Conference	Alerting Authorities
	IPAWS/ODIC Roundtable for Federal Partners and Industry Experts: Americans with Access and Functional Needs	Non-Profit/Advocacy
	Texas Emergency Management Agency Annual Conference	Alerting Authorities
	South Carolina Emergency Management Agency Annual Conference	Alerting Authorities
	Annual International Technology and Persons with Disabilities Conference (CSUN)	Non-Profit/Advocacy
	IPAWS Practitioner Webinar	Alerting Authorities
February-14	IPAWS Developer Webinar	Private Sector Industry
January-14	Consumer Electronic Show (CES)	Private Sector Industry
	IPAWS Practitioner Webinar	Alerting Authorities
December-13	IPAWS Developer Webinar	Private Sector Industry
November-13	IPAWS Practitioner Webinar	Alerting Authorities
October-13	Tenth Annual Iowa Homeland Security Conference	Alerting Authorities
	IPAWS Developer Webinar	Private Sector Industry
	Great American Shakeout	Alerting Authorities American People
	California Emergency Services Association (CESA) 2013 Conference	Alerting Authorities
	International Association of Emergency Managers (IAEM) 2013 Annual Conference	Alerting Authorities
September-13	National Emergency Managers Association (NEMA) Policy and Leadership Forum and Annual Conference	Alerting Authorities
	Illinois Emergency Management Agency Annual Conference	Alerting Authorities
	Alert Origination Service Provider webinar series (5 of 5)	Alerting Authorities Private Sector Industry
	National Association of Counties (NACo) Webinar	Alerting Authorities
	Radio Show 2013	Private Sector Industry
August-13	Alert Origination Service Provider webinar series (2,3, and 4 of 5)	Alerting Authorities Private Sector Industry
	Oklahoma Emergency Management Conference	Alerting Authorities
	79th Annual APCO Conference and Expo	Alerting Authorities Private Sector Industry
	Alabama Association of Broadcasters Annual Conference	Alerting Authorities
July-13	Alert Origination Service Provider webinar series (1 of 5)	Alerting Authorities Private Sector Industry
	West Virginia and National Boy Scouts Jamboree Wireless Emergency Alert (WEA) test	Private Sector Industry Non-Profit and Advocacy
	Interagency Contingency Working Group (ICWG)	Federal Partners

June-13	2013 Louisiana Emergency Preparedness Association (LEPA)/ LA Governor's Office of Homeland Security and Emergency Preparedness (GOHESEP) & Gulf States Hurricane Conference	Alerting Authorities
	2013 CSEPP (Chemical Stockpile Emergency Preparedness Program) Annual Meeting	Federal Governance Private Sector Industry
	East Coast CATEX Power Restoration Functional Exercise Initial Planning Conference	Alerting Authorities
	Wireless Public Alerting Dissemination (WPAD) Workshop	Alerting Authorities
	United States Nuclear Infrastructure Council: Special Summit	Alerting Authorities Private Sector Industry
	Interagency Continuity Working Group (ICWG)	Federal Governance
	Emergency Preparedness Forum	Alerting Authorities
	Be Safe America Congressional Briefing	Federal Governance
May-13	IPAWS Practitioner Webinar	Alerting Authorities
	10th Annual The Security Summit	Non-Profit/Advocacy
	Great Lakes Homeland Security Conference	Alerting Authorities
	Governor's Hurricane Conference	Alerting Authorities
	Utah Governor's 2013 Public Safety Summit	Alerting Authorities
	Puerto Rico Emergency Management Conference	Alerting Authorities
	Nixle User Conference, California	Alerting Authorities
	CTIA International Association for the Wireless Telecommunications Industry	Private Sector Industry
April-13	National Association of Broadcasters (NAB) Show	Private Sector Industry
	IPAWS Developer Webinar	Private Sector Industry
	National Level Exercise – Eagle Horizon	Federal Governance
	Nixle User Conference, New Jersey	Alerting Authorities
March-13	Forum on the Emergency Alert System, Washington, DC	Private Sector Industry Federal Governance
	IPAWS Practitioner Webinar	Alerting Authorities
	NCR Joint Federal Committee Meeting	Alerting Authorities
	25th Annual Regulatory Information Conference (RIC) Nuclear Regulatory Commission	Federal Governance
	National Emergency Managers Association (NEMA) Mid-Year Policy and Leadership Forum and Annual Conference	Alerting Authorities
	IPAWS ODIC Roundtable for Federal Partners and Industry Experts Topic: Universities and Technology Development for Americans with Access and Functional Needs	Non-Profit/Advocacy
February-13	Computer Science and Telecommunications Board (CTSB) Workshop on Geo-targeted Disaster Alert and Warnings - National Academies	Private Sector Industry

	National Organization of Black Law Enforcement Executives (NOBLE) 2013 William R. Bracey Winter CEO Symposium	Non-Profit/Advocacy
	28th Annual International Technology and Persons with Disabilities Conference (CSUN)	Non-Profit/Advocacy
	MWCOG Emergency Managers Committee Meeting	Alerting Authorities
	Focus group for advanced training for alerting authorities	Alerting Authorities
	State of Illinois – IPAWS Integration into their Alert and Notifications Systems (ANS) Plan	Alerting Authorities
	Emergency Notification Vision Creation Session (Florida)	Alerting Authorities
	NCR Operations Center Coordination Group	Alerting Authorities
	IPAWS Developer Webinar	Private Sector Industry
January-13	International Disaster Conference and Expo (IDCE)	Alerting Authorities
	Consumer Electronic Show (CES)	Private Sector Industry
	FEMA Region III Discussion on Assistive Technology and Access for People with Functional Needs	Federal Governance
	IPAWS Practitioner Webinar	Alerting Authorities
	Region 8 Regional Emergency Communications Coordination Working Group	Alerting Authorities


IPAWS
Integrated Public Alert and Warning System
www.fema.gov/emergency/ipaws

For more information on IPAWS
please contact the
IPAWS Program Management Office

E-Mail
ipaws@dhs.gov

Web Site
http://www.fema.gov/ipaws