Presentation Overview / A focus on users

- IPAWS 101: What is it? / Dissemination streams / Sign-up process
- Wireless Emergency Alert (WEA) Features and 2019 Upgrades
- County IPAWS EAS testing opportunities
- Advanced FEMA course on Effective IPAWS Alerting
- DHS Report on Alerting Tactics: Best Practices & Message Format
- Report on WEM's new IPAWS Working Group
- Kenosha County EMD Lt. Staples on Lessons Learned using WEA

IPAWS Alerts via EAS, WEA, NWS, Websites

IPAWS Architecture: "a *National System* for *Local Alerting*"
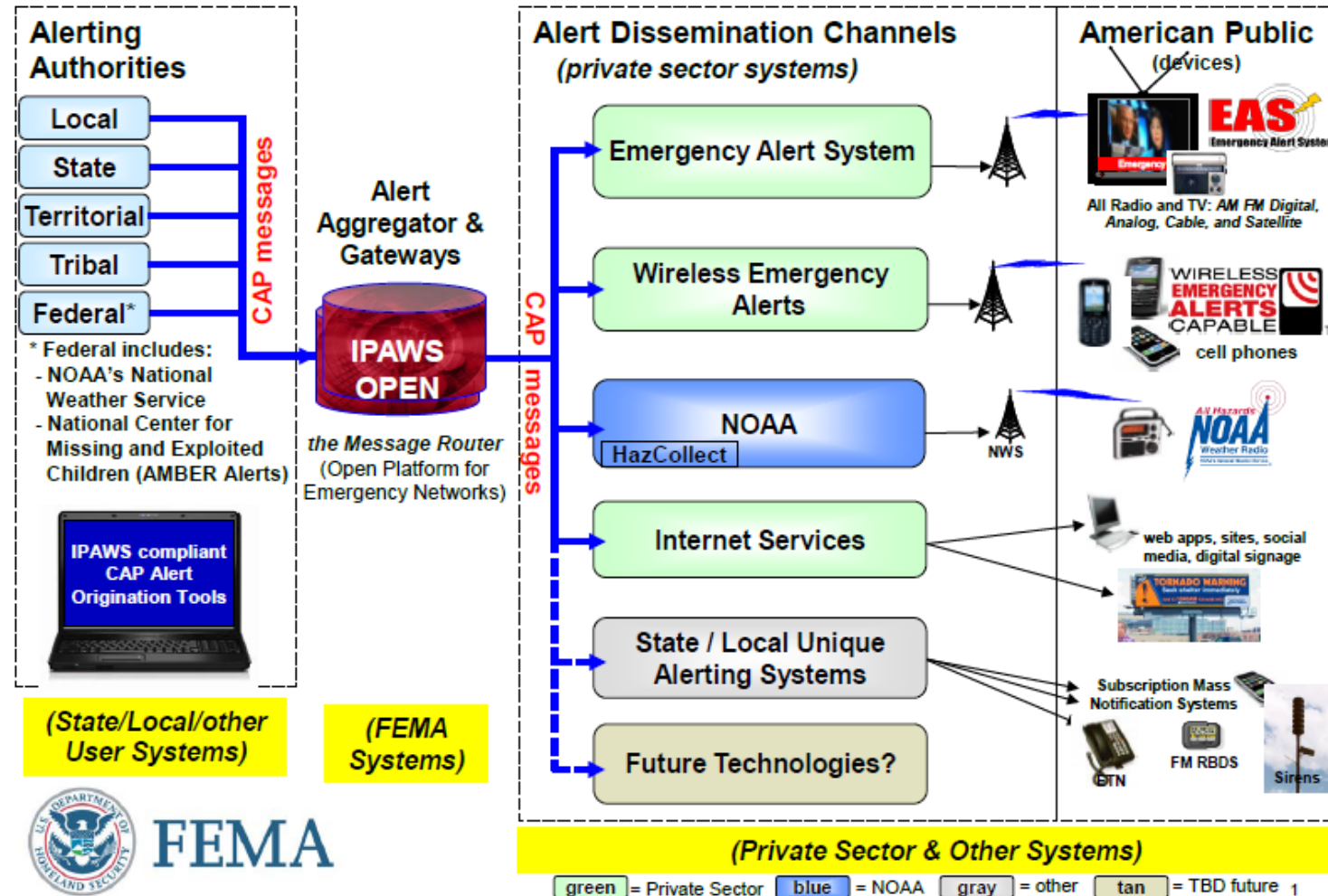
Wireless Emergency Alert (WEA) Features

- Same system as the Amber Alerts we receive on our cellphones.
- There is no sign-up needed. Most WEA-enabled wireless devices will receive your WEA message within the alerted area.
- WEA alerts reach locals, as well as visitors, right in their pocket!
- WEA uses a special channel that is separate from voice and text channels, so WEA alerts will normally get through, unaffected by any congestion on the networks.
- However, WEA will never provide 100% delivery of your message, as demonstrated on the next slide results of the 2018 WEA Test.

Results of WEA National Test on 10/3/18

- WEA is a Cell Broadcast with no return data from cellphones, so no hard data results.
- My AT&T and Verizon phones got the test 5 seconds after FEMA pushed Send button.
- Manitowoc County EM survey of 1,200 citizens showed 90% success rate.
- Anecdotal reports on EAS email lists: About 75% received message, 25% didn't/unsure.
- DHS nationwide survey of 25,000[+] employees showed 66% success rate.
- Some reported receiving repeated alerts.

What causes missed and repeating WEA alerts?

- <u>Missed alerts</u> could be issues with the carrier's network, or individual handset reception, call-in-progress, or user opt-out.

- <u>Repeating alerts</u> are most likely caused by handset software issues. Carriers resend the alert on a cycle so handsets newly entering the alerted area receive the alert, but handsets should ignore repeat alerts.

- Note: Alert originators must issue an IPAWS "Cancel" message to stop this cycle if the incident ends prior to the issued end time.

Wireless Emergency Alert (WEA) Upgrades

<u>Upgrades to WEA Currently in Effect:</u>

- Carriers must transmit messages to area that best approximates the specified area.

- Carriers must disclose alert delivery targeting information to the originating Emergency Management Agency, but the agency must offer FOIA-level confidentiality.

- Carriers must support embedded telephone numbers and URLs.
    - Be sure your systems can handle the traffic. WI DOJ sent Amber Alert with URL; got 30,000 hits that took down website for 50 min.

Wireless Emergency Alert (WEA) Upgrades

Upgrades to WEA Coming on May 1, 2019

- Carriers must re-transmit messages that are <u>issued</u> in Spanish.
- Carriers must support 360-character messages if their network is capable, otherwise 90-character messages can still be used.
- Carriers must immediately transmit a received State or Local WEA test to the geographic area specified, and carriers must provide their subscribers an option to opt-in to receiving these tests.

Wireless Emergency Alert (WEA) Upgrades

<u>Upgrade to WEA Coming on November 30, 2019</u>

- Carriers must deliver messages that are specified by a circle or polygon to an area that matches 100% of the target area with no more than 0.1 mile overshoot.

- If the carrier's network is technically incapable of matching the specified target area, then the carrier must deliver the alert message to an area that best approximates the target area.

- This will likely use cellphone software. Since customers typically keep phones for 3 years, this feature will be a slow phase-in.

Wisconsin Counties using IPAWS

Now up-and-running:
(24 counties / 33%)

Barron	**Milwaukee**	Authority in-progress:
Brown	**Outagamie**	(6 counties / 42%)
Burnett	**Ozaukee**	**Adams**
Columbia	**Pierce**	**Dodge**
Dane	**Portage**	**Florence**
Iowa	**Racine**	**Pepin**
Jefferson	**Sauk**	**Rusk**
Kenosha	**St. Croix**	**Taylor**
Langlade	**Walworth**	
Manitowoc	**Waukesha**	
Marathon	**Waushara**	
Menominee	**Winnebago**	Per FEMA as of 2/1/19

WEM REGION		TOTAL	IPAWS Active	IN PROCESS
SE (Waukesha)	[8 counties]	7	7	0
EC (Fond du Lac)	[14 counties]	6	5	1
SW (Madison)	[13 counties]	5	4	1
NE (Wausau)	[13 counties]	5	4	1
WC (Eau Claire)	[13 counties]	4	2	2
NW (Spooner)	[11 counties]	3	2	1
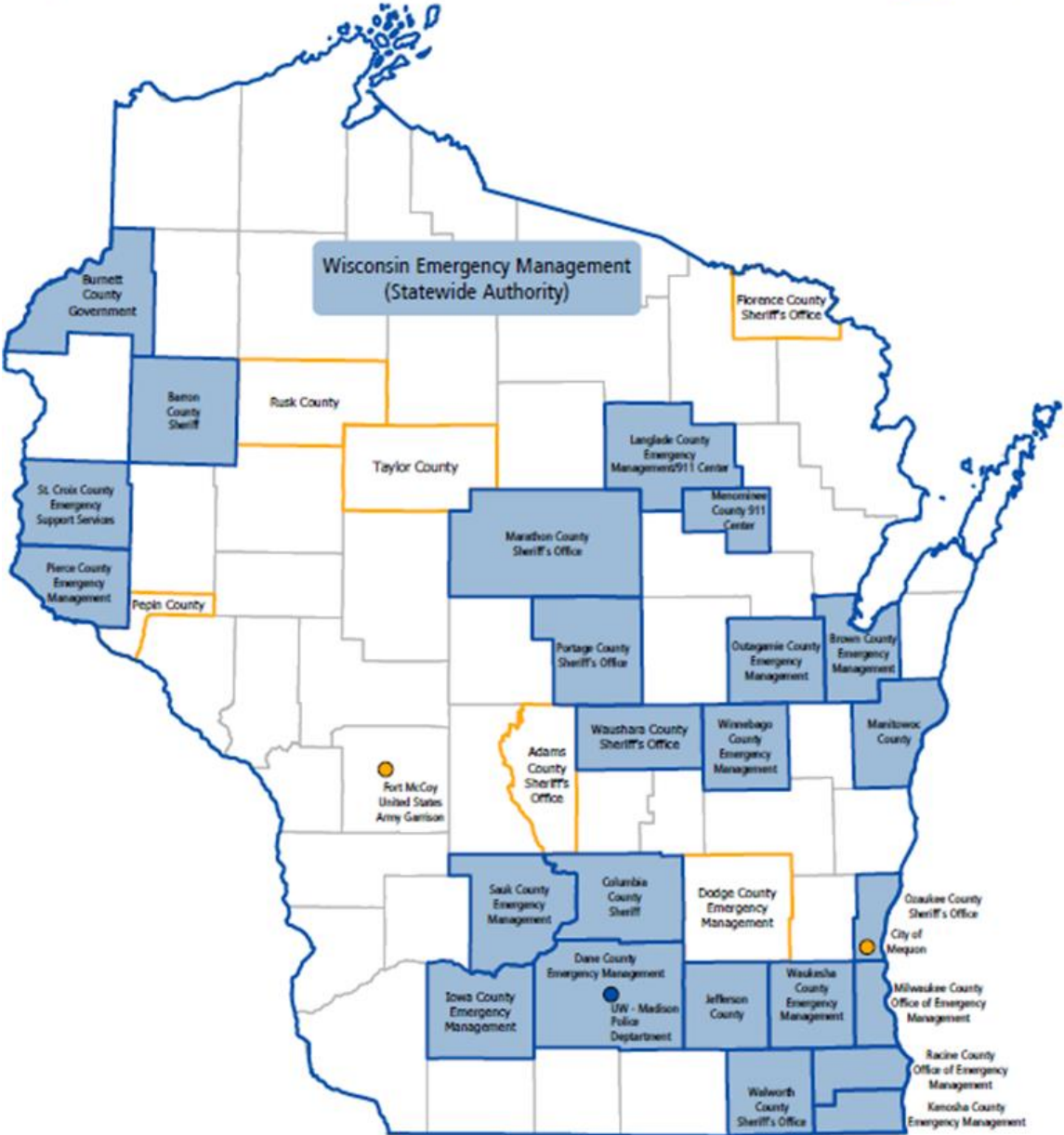
As of 02/01/2019

Wisconsin IPAWS Alerting Authorities

- Approved
- In Progress

Wisconsin Counties Conducting IPAWS Testing

Current IPAWS EAS Tests being received in Wisconsin:

Day of Week	Time (Central Time)	Agency
Mon – Every Monday	11:00 AM	FEMA – sends statewide
Wed – First Wednesday of month	10:00-10:15AM	WEM – sends statewide
Wed – First Wednesday of month	11:00AM	Milwaukee County OEM
Wed – First Wednesday of month	12:10PM	Dane County
Wed – Second Wednesday of month	12:01AM + 3:00PM	Waukesha County
Thu – First Thursday of month	6:00A + 11:00A + 4:00P	Racine County [pending]
Sat – Third Saturday of the month	10:45AM	Kenosha County

Contact Gary Timm for <u>Guidance Document</u> on starting testing.

Advanced IPAWS Course: Effective Messaging

IS-251: IPAWS for Alerting Authorities

Increases skills to draft more effective messages.

Optional additional IPAWS training course, beyond required IS-247.

FEMA | Emergency Management Institute

Frequently Asked Questions

IS-251: Integrated Public Alert and Warning System (IPAWS) for Alerting Authorities

Course Date

6/12/2014

Course Overview

The integrated Public Alert and Warning System (IPAWS) Program Management Office designed this course to provide Alerting Authorities with an increased awareness about Collaborative Operating Groups (COGs)—how they are issued, their structure, their capabilities, and their responsibilities, and skills to draft more appropriate, effective, and accessible warning messages using best practices in alerting.

Course Objectives:

Upon completion of this course, you will be able to:

- Have an increased awareness about Collaborative Operating Groups (COGs)—how they are issued, their structure, their capabilities, and their responsibilities, and
- Have skills to draft more appropriate, effective, and accessible warning messages using best practices in alerting

Primary Audience

The Alerting Authorities

Prerequisites

None

CEUs:

0.2

Course Length:

2 hours

TAKE THIS COURSE

Interactive Web Based Course

TAKE FINAL EXAM

Please note that the IS Program now requires a FEMA SID to be used instead of your SSN. If you do not have a SID, register for one here.

Take Final Exam Online

NOTICES

Test questions are scrambled to protect test integrity

2018 DHS Report on Alerting Tactics

Alerting Best Practices:

- Clearly define <u>alert origination authorities</u> within your agency.
- Conduct <u>public education</u> on alerts and warnings.
- Use alerting <u>templates</u> to preapprove wording & minimize errors.
- Conduct regular <u>training</u> and <u>frequent usage</u> of alerting systems.
- Apply <u>lessons learned</u> to maximize alert effectiveness.
- <u>Measure alert effectiveness</u> with partners and the community.
- Plan <u>accessibility</u> to access/functional needs & limited English.

2018 DHS Report on Alerting Tactics

Effective Message Format:
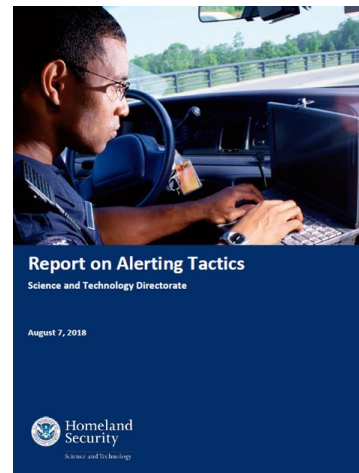
2018 DHS Report on Alerting Tactics

Highlights:

- Alerting Best Practices (we touched on earlier)
- Effective Combinations of Alerting Tactics (beyond IPAWS, to social media, smartphone apps, sensors, Next Gen TV, etc.)
- Effective Message Format (graphic we just looked at)

Email Paul or Gary for a copy:

PaulD.Hughes@Wisconsin.gov

GTEAS@sbcglobal.net

Report on Alerting Tactics
Science and Technology Directorate

August 7, 2018

Homeland Security
Science and Technology

WEM Duty Officer and IPAWS

- Contact WEM Duty Officer 24 / 7 for IPAWS assistance & origination
- Know what you want to message – you know what is going on
- Have you considered additional options? Social media? Twitter?
- FEMA will eventually require all COGs to perform monthly proficiency tests
- Draft with MS Word Pad or some simple text editor NOT WORD !

Over 33% of Wisconsin Counties are on IPAWS

Select IPAWS compatible software

Apply for a Memorandum of Agreement with FEMA

Apply for public alerting permissions

Complete IPAWS web-based training

County Sign-up Process Details:

- Usually an annual fee charged

- Send form to ipaws@fema.dhs.gov

- State must grant permissions

- County person must take FEMA training course IS-247

- Contact Paul Hughes for "Steps to Sign up" guide.

Report on WEM IPAWS Working Group

- Formed in January, 2019.
- Initial focus on establishing alerting roles and responsibilities during multi-jurisdictional events.
- Exploring how to keep all counties, both IPAWS-enabled and non-IPAWS counties, aware when IPAWS alerts are issued.
- Planning for IPAWS alerting use during future WEM exercises.
- Creating sample message templates.
- Looking to collect any templates from Wisconsin IPAWS users.

Kenosha Sheriff's Division of Emergency Management

Lessons Learned using IPAWS and WEA

Lt. Horace J. Staples, Kenosha County Director of Emergency Management

On 11/7/18, the Kenosha Sheriff's Department sent WEA messages regarding a missing special needs juvenile who walked away after school.

On 12/17/18, the Kenosha Sheriff's Department received a request from a local law enforcement agency to notify their residents of an armed barricaded individual in a residential area. The dwelling was surrounded by Kenosha Sheriff's SWAT team personnel.

- How well did drawing a polygon limit message dissemination?

  Answer: Drawing the polygon was effortless.

- Did the public heed the warning or draw more attention to it?

  Answer: Yes, residents within the area heeded the warning, and individuals outside the area were drawn to the targeted area.

- How did cancelling the alerts go?

  Answer: There were no major problems regarding cancelling the alerts.
  Nevertheless, we received a few inquiries on how to stop the alerts.

- Lessons learned about the mechanics or message content?

  Answers: WEA and Public Alerts received must to come from a unrestricted phone number.
  Some residents ignored the alerts because they assumed calls were from telemarketers.
  A few cellular customers outside of the targeted area, and received the WEA alerts.

Lessons Learned using IPAWS and WEA

- What would you do differently next time?

  Answers:

    - Increase public notifications

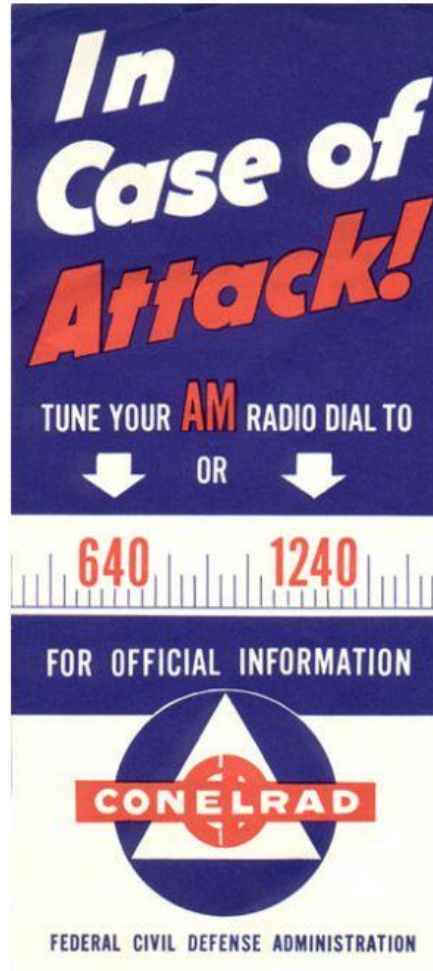- Further lessons learned for other alert originators?

  Answers:

    ✓ Conduct monthly IPAWS & WEA Tests (Third Saturday of each month)

    ✓ Encourage the public to sign up for notifications (Ad. Facebook and Twitter)

    ✓ Train all Kenosha Sheriff's Department Supervisors (Trained New/Current Supervisors)
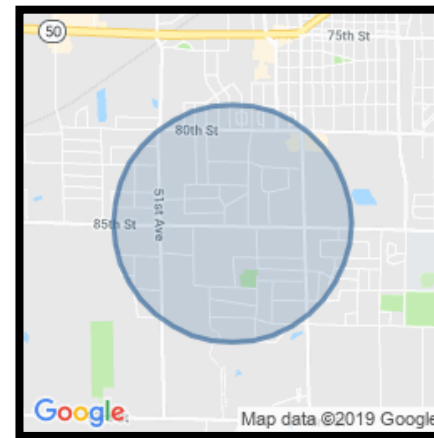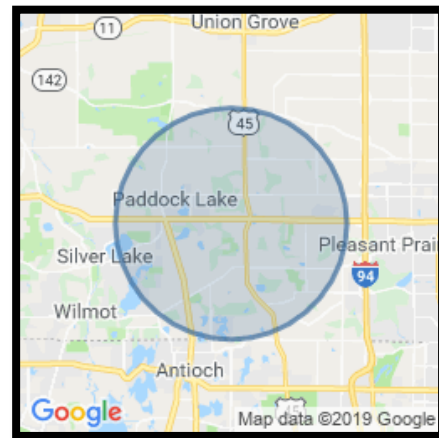
Questions?

Remember....

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