



FEMA

IPAWS-OPEN Overview

May Wu
IPAWS Engineering
Sep 17th, 2021

Agenda



- IPAWS Systems Overview
- State and Local Adoption and Use
- Future Alert and Warning



National Alert & Warning Policy & Law



Policy:

- ***Executive Order 13407 - Public Alert and Warning System***

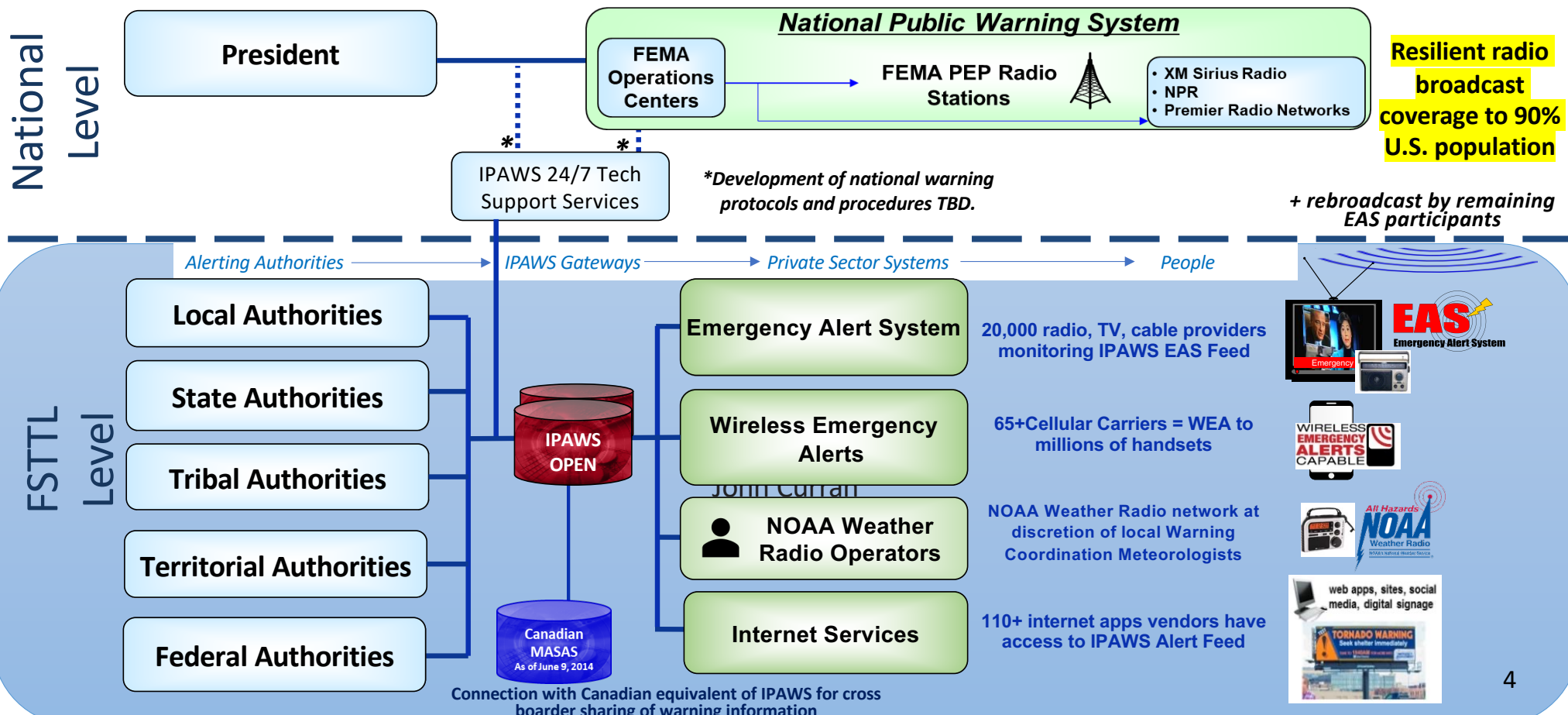
Law:

- ***National Defense Authorization Act of 2020 & 2021***
- ***Public Law 114-143, The IPAWS Modernization Act***
- ***Public Law 93-288, The Stafford Act***
- ***Section 706 of 47 U.S.C. 606, The War Powers Act***



IPAWS Architecture

“national system for local alerting”



Who is using IPAWS



1,582 Total IPAWS Public Alerting Authorities (as of April 2021):

1,495* Local
(*includes 21 military bases)

73 State-wide

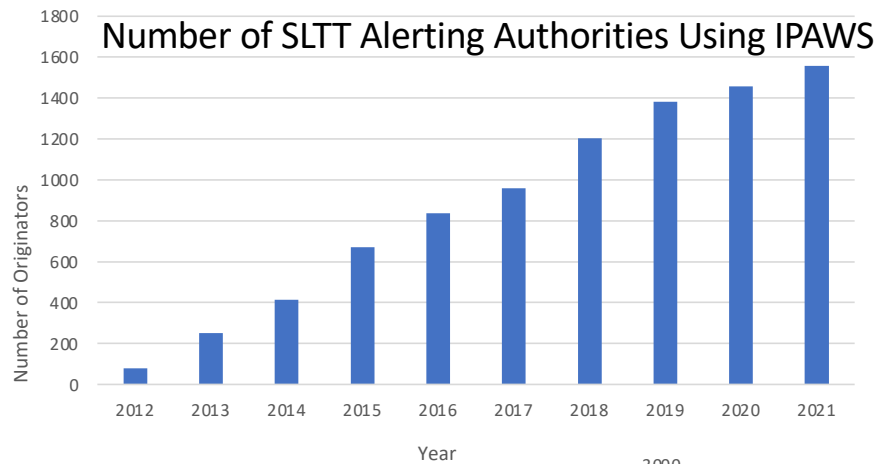
3 Territory

8 Tribal

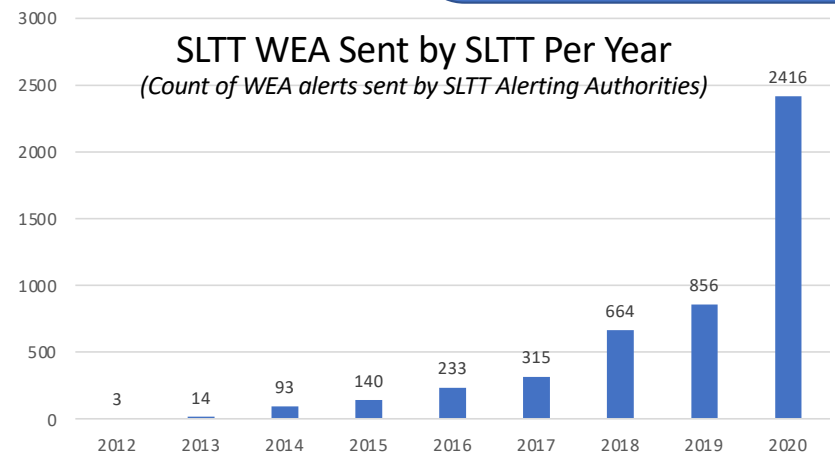
3 National



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Twice the number of SLTT agencies used IPAWS in 2020 than in 2019 to send 182% more alerts to the public



When is IPAWS Used?



Anytime a local authority determines local need to communicate emergency info to the public

- Severe Weather
- Wildfires
- Earthquakes
- Missing Persons
- Water Supply Issues
- 911 Outages
- Power Outages
- Hazardous Spills
- Volcanos
- Shelter-In-Place Orders
- Curfew Lockdowns
- Dam Failures
- Chemical Spills
- Law Enforcement Situations
- Radiological Incidents
- Road Closures
- Disaster Relief Info



- COVID-19 Usage – started March 2020 and ongoing
- Civil Unrest/Curfew Usage – Late May and Early June, again in late August and early September

In 2020:	WEA	EAS	Total
COVID	508	89	597
Civil Unrest	257	40	297

- Wildfire emergencies
- Law Enforcement emergency information
 - Missing people
 - People of interest
 - Amber Alert safely recovered 92 missing children since 2012



5:19

Friday, April 3

! EMERGENCY ALERTS

now

Emergency Alert

Attention all healthcare workers: New York City is seeking licensed healthcare workers to support healthcare facilities in need. Visit [NYC.gov/helpnow](https://www.nyc.gov/helpnow) to volunteer.

! EMERGENCY ALERTS

now

Public Safety Alert

Anyone entering RI after out-of-state travel for non-work purpose must quarantine 14 days.

! EMERGENCY ALERTS

now

Emergency Alert

Governor's Order: Getting to Utah? Fill out a COVID declaration at <https://entry.utah.gov>

! EMERGENCY ALERTS

Public Safety Alert

From the Executive Office of the Governor: The State of Michigan's Stay Home Stay Safe order takes effect at midnight tonight. Nonessential travel is prohibited. As necessary, you may leave your home for health and safety reasons, to get groceries and supplies, for certain outdoor activities, and to care for others. See www.michigan.gov/coronavirus

Emergency alert

This is the Peoria City/County Health Department. COVID-19 information is evolving. We urge you to learn about the virus & what to do if you experience symptoms. Please call or visit: IL Coronavirus Hotline at [1-800-889-3931](tel:1-800-889-3931). United Way @ 2-1-1. Health Dept @ www.pcchd.org/ COVID19 Centers for Disease Control at www.cdc.gov

Type: Public safety alert

OK

View

! EMERGENCY ALERTS

now

Emergency Alert

All parks and recreational areas are now closed to the public and off limits. Public and Private gatherings of any number of people are prohibited. Anyone returning from travel of 100+ miles outside the City must self-quarantine for 14 days. For more info visit EPStrong.org

3:00

Monday, March 30

! EMERGENCY ALERTS

now

Public Safety Alert

PUBLIC HEALTH EMERGENCY ANNOUNCEMENT: Gov. Hogan issued a Stay-at-Home Order, effective at 8 pm tonight. No Marylander should leave their home unless it is for an essential reason. Gatherings are limited to 10 or fewer. Grocery stores and essential services remain open. We are counting on you to help us stop the virus. More: <https://coronavirus.maryland.gov>

! EMERGENCY ALERTS

now

Emergency Alert

Gov. Northam has issued a stay at home order. No Virginian should leave their home except for essential reasons. Grocery stores and essential services remain open. Keep 6 feet apart from others whenever possible. Your neighbors are counting on you to help stop the spread of COVID 19.

! EMERGENCY ALERTS

now

Emergency Alert

ANUNCIO DE EMERGENCIA PUBLICA: Gov Northam emitio una estancia en casa. Ningun Virginiano debe salir de su casa a menos que sea por una razon esencial. Las tiendas de comestibles y los servicios esenciales permanecen abiertos. Contamos con usted para ayudarnos a detener la propagacion del coronavirus. Mas:

! EMERGENCY ALERTS

1m ago

Public Safety Alert

Mayor Bowser is ordering a citywide curfew for the District of Columbia from 11:00 p.m. on Sunday, May 31, until 6:00 a.m. on Monday, June 1. She has also activated the DC National Guard to support the Metropolitan Police Department.

! EMERGENCY ALERTS

now

Emergency Alert

Mayor Bowser is extending the curfew for the District of Columbia for Monday, June 1, and Tuesday, June 2. Curfew starts each night at 7pm until 6am the next morning.

AT&T LTE



8:12

Saturday, May 30

Notification Center

X

! EMERGENCY ALERTS

Emergency Alert

The city of Minneapolis is under a strict curfew, beginning at 8pm. Go home or to safe inside location. Avoid the outdoors. The curfew is enforceable by law.

! EMERGENCY ALERTS

Emergency Alert

The City of San Jose has implemented a citywide curfew effective today, via a Local Proclamation of Emergency. The curfew will be in effect from 8:30 pm to 5 am, beginning Sunday, May 31 for the next 7 days or until further notice. More information and this message translated into Spanish, Vietnamese, and Chinese may be found at: <http://tinyurl.com/sccalert>

! EMERGENCY ALERTS

22m ago

Public Safety Alert

A curfew for the City and County of Denver is in effect May 30 at 8 pm to June 1 at 5 am. The order goes into effect Sat & Sun. Travel for essential activities needed for health and safety is permitted. Employees who need to travel to and from work are exempt. Info: Denvergov.org

1 more notification

! EMERGENCY ALERTS

now

Emergency Alert

Curfew in effect for all neighborhoods in City of Cincinnati tonight 5/31/2020 and Mon. 6/1/2020 from 9PM-6AM. Get more info: <https://www.cincinnati-oh.gov/cityofcincinnati/news/curfew-in-effect-for-city-of-cincinnati/>.

! EMERGENCY ALERTS

1m ago

Emergency Alert

We are all in this together. The curfew is now in effect until 6 a.m. tomorrow morning. Help your SPPD Officers keep Saint Paul safe by staying home and staying secure.

! ALERTAS DE EMERGENCIA

Alerta de emergencia

Curfew in effect for Miami-Dade County from 10pm, Sat., May 30 until 6am, Sun, May 31, 202

Future Use Case

- **Smart Home Technologies**
 - Connected devices have the capability to ingest IPAWS alerts and display information



- **Smart Buildings**
 - Signage
 - Speakers
 - Mobile apps
 - Desktop alerting



- **Smart Appliances**
 - Visual display of emergency information



- **Smart kiosks**
 - Display emergency information on outdoor and indoor kiosks
 - Campuses, Malls, Airports
 - Are capable of pulling IPAWS alerts similar to radio and television



IPAWS Disseminate Channels



- **Current**

- Cable TV, Radio via EAS
- Mobile device via WEA
- Display board, Siren, Website, Social media via Public Feed

- **Future Potential Disseminating End Point**

- Computers
- Streaming Device
- Smart TV app
- AI Assistant Devices
- WIFI enabled Device
- Gaming Devices
- Smart Kiosk



**Internet based
Application/Devices**

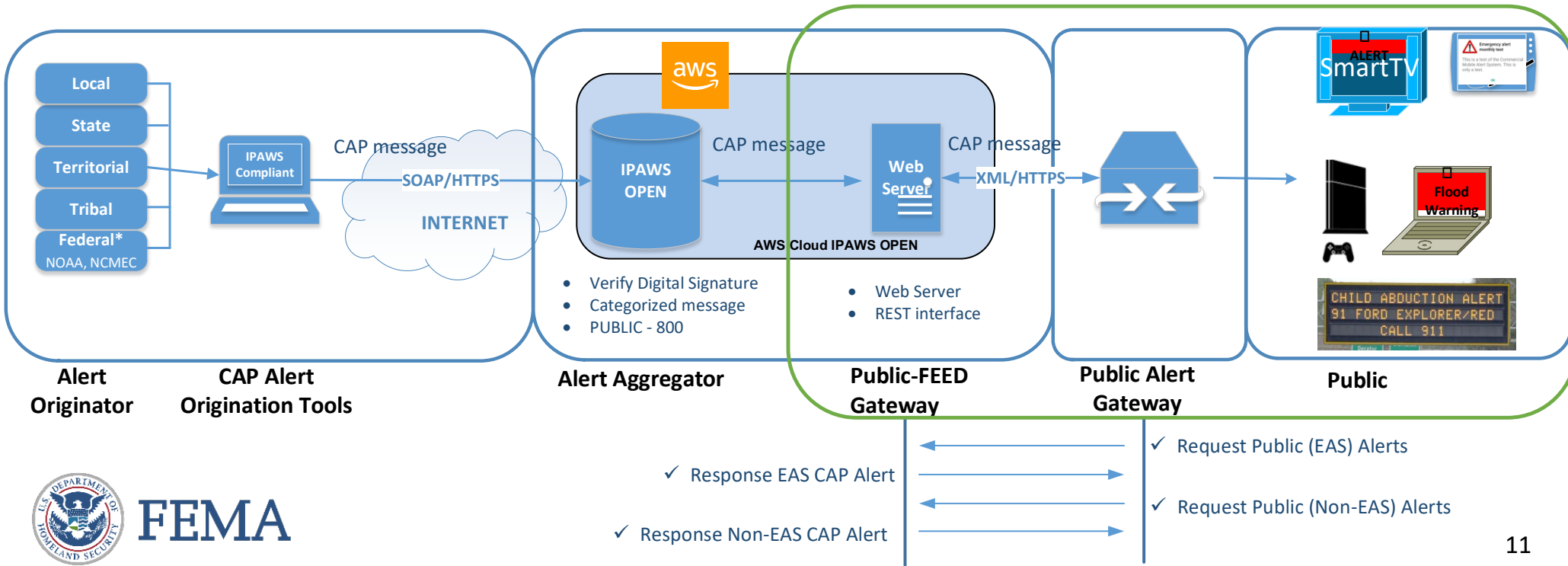


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Public Feed - Internet Connected Services



Public FEED

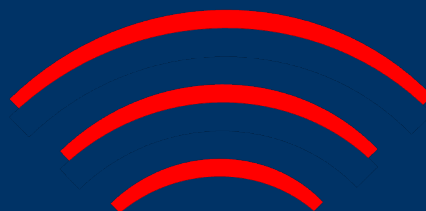


Organizations Utilizing Public Feed



- Able to monitor over an Internet connection
- Incorporate Common Alerting Protocol (CAP) international standard
- Complete a Memorandum of Agreement (MOA)
- Receive IPAWS Program Management Office (PMO) approval
- Access, monitor, and retrieve public alerts from the IPAWS Public Feed
- Redistribute public alerts to end customer





IPAWS

Integrated Public Alert & Warning System

QUESTIONS or COMMENTS?

Please contact us at IPAWS@fema.dhs.gov



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