TIP 36: The IPAWS Symbol Set

The IPAWS Program Management Office (PMO) brings you standardized symbols for every IPAWS Event Code through a joint effort with the National Alliance for Public Safety GIS (NAPSG) Foundation, the Department of Homeland Security (DHS) Geospatial Management Office, and the DHS Science & Technology Directorate.
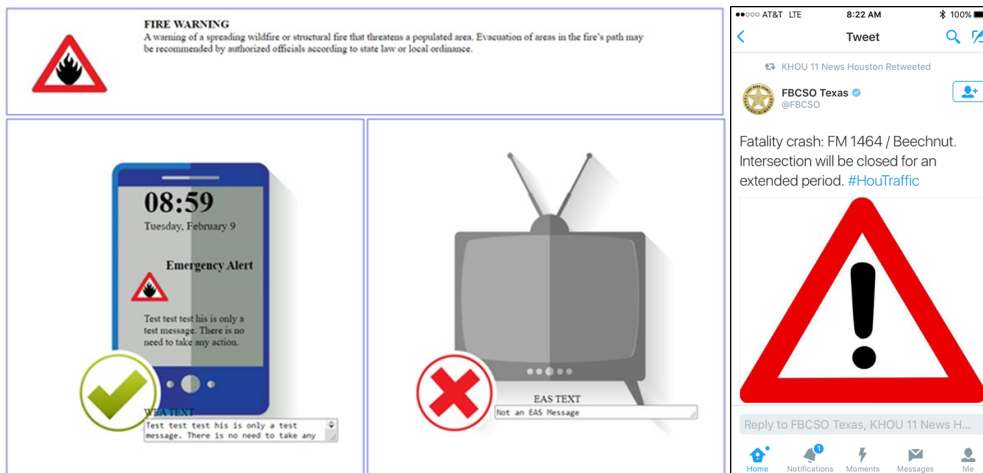
More than 30 local, state, and federal public safety stakeholders were engaged in the development of these symbols as well as social science working groups, non-English speaking populations, and people with disabilities.

Use Cases for the Symbols

The symbols can be used in desktop and mobile applications, GIS and decision support tools, situational awareness platforms, documents such as education and outreach information, signage, videos, and television broadcasts of emergencies and incidents.

The IPAWS Message Viewer uses the symbols.   Social Media (Twitter)

Why Use the Symbols?

The symbols can help make public alerts and warnings more effective for people with disabilities, those with limited English proficiency, and the whole community. The symbols apply a common language for communicating incident information.

The Symbol Elements

The symbols are based on two primary elements and one secondary element. The reserved triangle shape is applied to public alert and warning symbols, consistent with the NAPSG Foundation Incident Symbology Guideline. The simple icons within the triangle are used to convey the specific threat, hazard, action, or event type for each of the key event codes. The secondary element, triangle color, is not necessary to understand the basic message.

Warning   Watch   Statement

Hazardous Materials Warning   Avalanche Watch   Child Abduction Emergency

Who Can Use the Symbols?

Anyone. Alerting Authorities can use within their mass notification tools and social media platforms for example. IPAWS alert redistributors can incorporate the symbols into their products, services and alert content.

In regard to WEA...

The IPAWS system can support the transmission of symbols via links or an additional info block using the standardized symbology set, however, mobile phones cannot currently display the symbol with the alert.

In regard to EAS...

The NextGen Video Information Systems Alliance (NVISA), a cross-industry coalition focused on enhancing the development and deployment of advanced video systems, such as ATSC 3.0 for NextGen TV, has recommended specifications intended to help improve the accessibility of emergency alert displays. These recommendations incorporate the IPAWS Symbol Set with some minor adjustments.

The NVISA VIDS specification can be found here: https://www.nvisa.org/documents. The specifications are intended to enhance the accessibility of emergency alerts, regardless of language, ability or culture and have already been put into operation in some U.S. television stations.

Access the Symbols

NAPSG makes the Symbol library tool publicly available at no-cost:

https://www.napsgfoundation.org/all-resources/symbology-library/ (click the "Public Alert" symbol set)

Symbols are available in multiple formats:

- PNG
- SVG
- True Type Font (TTF)
- Style Sheets
- Feature Service in ArcGIS Online

IPAWS Tips at Your Fingertips

Find all Tips from 2018 to the present, in IPAWS Tips on the FEMA website. Share your ideas and suggestions for future Tips with the IPAWS PMO at fema-ipaws-stakeholder-engagement@fema.dhs.gov.

The Integrated Public Alert & Warning System (IPAWS) is FEMA's national system for local alerting that provides authenticated emergency and life-saving information to the public through mobile phones using Wireless Emergency Alerts, to radio and television via the Emergency Alert System, and on the National Oceanic and Atmospheric Administration's Weather Radio.