

# Outdoor sirens/speakers continue to hold critical role in emergency warning/mass notification process.

When it comes to emergency warning and mass notification much of the conversation lately seems to focus on social media and other relatively recent technological developments such as cellular communications and text messaging. However, the ability of high-powered siren/speaker arrays to support wide-area emergency warning and instructions in real time continues to represent an essential layer of emergency communications. Beyond merely providing redundancy to support other modes of emergency communication, outdoor sirens remain an integral component of any overall emergency warning and public alerting strategy.

The sustained popularity of outdoor sirens and loudspeakers is evidenced by the many cities and communities throughout Kansas, Missouri and other states spread across the aptly named "tornado alley" that not only maintain such systems but are constantly upgrading them. The fact is: effective and comprehensive emergency notification systems demand multiple methods or communication "layers" for issuing warnings and alerts. Outdoor sirens clearly fulfill a vital role by ensuring the ability to reach people who are not within range of radio and television broadcast alerts, or who either do not have mobile phones or lack access to cellular service.



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Noting that the public view sirens as a necessity, Steve Ponto, Mayor of Brookfield, Wisconsin, claimed in a Weather Channel website article that it is essentially an issue of credibility. "...some people think that the media sort of over-hypes the weather. And what they really count on is when the government starts these sirens. Then they know it's serious."

Similarly, Andy Bailey, a warning coordination meteorologist for the National Weather Service (NWS) explains that while warning sirens do not necessarily target people who are indoors or asleep, they still have an important role in protecting communities. "The public is not going to allow you to remove them, so I think your best course of action is to make them as modern and as reliable as possible." Consequently, Bailey is not surprised that communities continue to invest in outdoor sirens and speakers, citing it as a "positive development".

Many communities have discovered during the upgrading process that outdoor sirens have undergone some significant improvements over time. For instance, they can now be connected directly to the electrical grid. They are also taking advantage of new solar and battery technology for backup power. Today's sirens can also be tested in silent mode, which not only eliminates any potential for panicking or confusing the public, but also limits how often they are sounded thereby addressing the issue of desensitizing people through unnecessary warnings.

The technological resurgence of sirens can also be seen in the expanded integration of outdoor sirens with public address systems that supply the option of both live and pre-taped voice alerts. There are now multiple ways to trigger siren alerts, including radio and phone activation. Additionally, today's upgraded siren systems also offer a broader range of tones, which enables public safety officials to tailor warning signals to different types of emergencies ranging from tornadoes, flooding and campus alerts, to a host of other hazardous and emergency situations.

**For siren information: [alertnotification.com](http://alertnotification.com)**



## Studies show siren warnings are critical to citizens' risk assessment.

Various studies of citizens' response to emergency communications, including numerous assessments conducted by the National Weather Service (NWS), reveal that people generally require more than one source of information before taking action in response to an emergency. This is true whether it involves the threat of a tornado, a wildfire, a terrorist attack or a catastrophic industrial accident. These same studies also demonstrate that siren warnings play a predominant role in how people perceive threats, as well as when these threats pose an immediate danger.

It is worthy of note that, after being exposed to a broadcasted radio or television alert, people more often than not identified siren alerts (along with visually spotting the hazard e.g., tornado, fire, flooding) as the confirming source of information that motivated them to take immediate protective action.

In its assessment of the Joplin tornado in May of 2011, NWS acknowledged that sirens are unable to convey either the nature or severity of a specific threat. Elaborating on this lack of specificity, the study adds that unless they are equipped with accompanying public address capabilities, sirens are unable to provide any type of instructions. However, despite their inability to personalize the threat for the individual—which is generally considered prerequisite for prompting people to take immediate action—sirens do in fact virtually always motivate people to check other sources of emergency information for confirmation.

Additionally, Joplin residents who survived the disastrous 2011 tornado confirmed to NWS surveyors that sirens were in fact their first risk signal for imminent severe weather.

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