

# Updating emergency communication system requirements on the basis of population growth and industrial expansion.

As populations grow and required warning coverage areas expand so does the need to expand emergency alerting and mass notification capabilities. That's why, in addition to assessing the latest technology, it is so important to conduct periodic evaluations of emergency communication systems.

In addition to population growth, it is also necessary for emergency managers to keep a close eye on the continually changing alerting and notification requirements resulting from the expansion of industrial plants and commercial facilities such as shopping malls, as well as educational and healthcare institutions, and large entertainment venues such as sports stadiums and concert halls.

In order to ensure that emergency communications capabilities keep pace with a growing population it is necessary to evaluate a number of constantly changing factors. These include assessing siren coverage for new housing developments and expansion of existing neighborhoods; analyzing new industrial parks for possible hazards; and evaluating emergency response requirements for shopping centers and large entertainment facilities such as theaters and sports stadiums.



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## County expands and updates alerting/notification resources in response to population growth and increased maintenance demands.

A rapidly growing population resulting in continued residential and industrial expansion prompted Marion County, Indiana to perform a comprehensive review of its outdoor emergency warning system. Covering approximately 400 square miles, Marion County includes Indianapolis, the largest city in the state and the 12th largest metropolitan area in the U.S.

Like so many Midwest communities, Marion County's alerting and notification requirements center on the threat of natural disasters, notably tornadoes and thunderstorms, as opposed to man-made events. By the same token, however, the county still shares many of the same concerns of other large metropolitan areas with regards to crime, fire prevention, industrial accidents and potential terrorist targets. As is typically the case with large population centers, the county is also faced with accommodating the public alerting and notification requirements of several major professional sports venues, large educational institutions, significant airport footprints and numerous industrial complexes.

It is worth noting that Marion county's population only recently passed the one million mark. With the growth in the number of citizens came both commercial and industrial expansion, including many companies who elected to move within the county's tax-friendly borders. At the same time, maintenance costs for the existing warning equipment continued to rise. Even as the local ABC television affiliate aired a "Special Investigation" on the alert system's performance in the wake of a recent severe weather event, Marion's emergency management team had already concluded that the county was outgrowing its current Thunderbolt siren Civil Defense system, which employed an outdated 1980s-style UHF RF control network.

This prompted the county to completely revamp their emergency alerting/notification system using technology that reflects the Best Practices in public safety. This called for the use of a special software tool to ensure optimal siren sound coverage to accommodate the expanding population and industrial facilities, as well as the county's unique and diverse range of terrain, and all likely severe-weather scenarios.

Key improvements of the county's new system included: the deployment of 168 sirens; repositioning the county's existing newer-generation sirens to optimized locations; capitalizing on the county's investment in a pager system to develop a secondary activation scheme; incorporation of a broadband Wifi control and monitoring platform that had never previously been employed in a municipal emergency warning application; plus much more. For more details on Marion County's comprehensive emergency communication strategy which was developed in cooperation with Federal Signal Corporation.



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