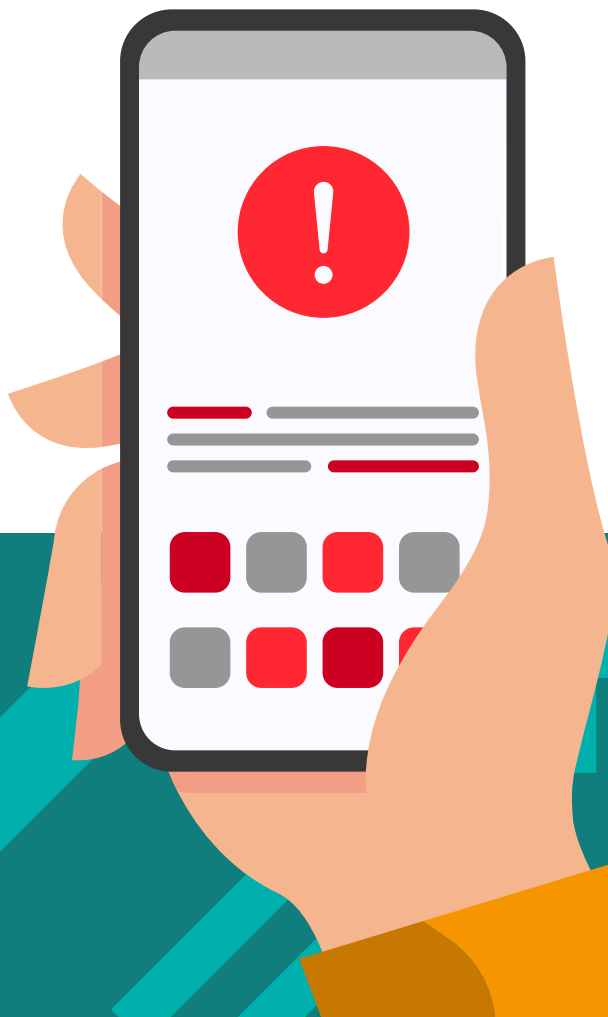


**CIVICREADY<sup>®</sup>**  
mass notification  
system

# How Public Safety Communicators Can Prove the ROI

Of an Emergency Mass Notification System





## Abstract

With the possibility of a natural disaster, an act of violence or terrorism, or a hazardous spill looming as constant risks, public safety leaders realize the imminent need to invest in technology to send urgent, potentially life-saving communications to residents and travelers in harm's way.

However, the reality facing all public sector leaders is that budgets and resources are tight—every dollar needs to be justifiable to elected officials, boards, councils, and taxpayers. The challenge for public safety communicators then becomes how to prove the hard return on investment (ROI) of an emergency mass notification system and the soft ROI of mitigating human casualties as its core value?





# Introduction

Placing a value on human life is a near impossibility. Every member of a community matters. Public safety leaders pledge to keep residents and travelers safe from harm. While sheriff's deputies, police officers, and firefighters are willing to lay down their lives for their neighbors in the line of duty, every municipality and public safety leader intends to mitigate risks before they happen to avoid the loss of any lives—residents or staff members.

**An essential component of risk mitigation is communication.** Every public safety leader who has ever ordered an evacuation in the days preceding an impending hurricane, shut down roads, or locked down schools upon receiving a report of an active shooter knows that communication is one of the most vital protections leaders can offer their communities.



"We are a helpful community. We have to be. We have less than one person per square mile. Everyone has their place in the community, and we don't want to lose anyone."

-Nina Sipes, Manter, Kansas Resident discussing the importance of the mass notification system that alerted town residents of an oncoming wildfire, saving countless lives and properties



# The Growth of the Mass Notification Technology Market

For this reason, mass notification technology has become one of the most highly invested technologies, not just in the public sector, but also in the private sector. Colleges, universities, and other entities also leverage emergency and mass notification technology to protect people from sudden or foreseeable risks. The global mass notification system market size was valued at [USD 8.90 billion](#) in 2021 and is expected to grow at a compound annual growth rate of 20.8% from 2022 to 2030. Particularly in the local government space, leaders who have long understood the critical importance of evacuation needs are increasing their understanding of mass notification technology as a viable tool to support their emergency situation and incidence management strategies.

For those governments that have not yet implemented such tools, many face the kinds of budget restrictions that force critical choices between investing in software, people, technology, or training. What complicates matters further is that safety technology systems inherently do not generate revenue—typically the most coveted return on any investment. Nevertheless, for those administrations experiencing barriers to the adoption of emergency mass notification software due to a cost concern, the following explanation of hard and soft ROI considerations can help create a financial case for a software investment that can offer invaluable benefits in the form of human safety.



# Calculating the ROI of Emergency Mass Notification Technology

When calculating the ROI of emergency mass notification technology, your goal should be to answer the question, "What specific benefits will our community get from this investment?"



Typically, the hard ROI of a technology investment is calculated as:

$$\text{Net Gain} / \text{Cost} * 100$$



# Calculating Investment Costs

Your stakeholders will want to know how much your proposed emergency mass notification system costs. Ensure that when providing a figure, you consider the total cost of ownership, including:

## Subscription and User License Fees:

If you are obtaining quotes from technology providers, ask them to outline in their proposal the system's included features and the number of licenses or individual accounts you will receive

### Note:

Think of licenses or accounts as the number of people in your organization who can log in to send emergency notifications. Depending on the size and structure of your organization, these individuals might span departments and include representatives from your communications department, police or sheriff's department, fire department, parks and recreation department, or human resources department.

## Training, Implementation, and Custom Configuration Costs:

Ask any prospective partners to outline any one-time or ongoing implementation, training, or custom configuration costs if necessary.

## Technical Support:

If you experience any technical issues with the technology amid a crisis, the potential damage of miscommunication could be significant in terms of lost resident trust or lives. Ensure you know if you will have ongoing 24/7 emergency technical support and what it will cost annually.

## App Add-Ons:

A significant value of a mass notification system is that administrators can send messages anytime, anywhere, from any internet-enabled device—not just from their desktop computer. Mobile functionality is critical since local disasters aren't restricted to weekday daytimes while key staff members sit at their desktop computers. If your administration will need to pay additional fees for mobile access to your system, identify those costs and add them to your investment assessment.



#### **Message Limits:**

The most valuable emergency mass notification systems will not limit your ability to send potentially life-saving messages, nor will they offer tiered message limits or upcharges on overages. If you choose a partner that requires additional fees relative to message frequency, ask for such terms to be line itemed.

#### **Technology Integrations:**

In an emergency, communicators and public safety leaders must mitigate duplicitous communication data entry and dissemination so they can focus on other risk management responsibilities. A core value in a mass notification system is in its distribution of warnings, alerts, and instructions across communication channels. It should be equally streamlined to integrate such notifications with your community website and other critical technology systems.

#### **Human Resources and Upskilling:**

Emergency mass notification technology functionality should be easy to learn for all administrators, regardless of their technological proficiency. Otherwise, you risk an alert taking too long to craft and send or a team member not sending it out at all, out of fear of an error or discomfort with the system. In addition, if your intended system will require the hiring or upskilling of a staff member into a new, dedicated position that necessitates a higher pay grade, you will need to include salary in your calculations.

#### **Hardware Purchases:**

Your emergency mass notification system should leverage cloud-based technology and work with your existing desktop computers, mobile devices, road signs, in-office kiosks, and other hardware. If your software requires hardware upgrades, include those one-time costs in your calculations.

Once you calculate the entire investment total, carefully strategize how you want to message stakeholders about the total investment cost. Be transparent, but know your audience. Focus on the line items above that will be most important for your stakeholders to understand when considering the total one-time and ongoing costs for the emergency mass notification solution.



## Calculating Net Gain

Next comes the challenge of identifying the gain component of the equation, which is difficult to translate into a dollar amount in emergency mass notification software.

### Challenges:

With proper communication, emergency mass notification technology can decrease stakeholder awareness of community disturbances, which could prompt the question, “are we spending so much on a system we don’t use frequently?”

The answer to the posed question is likely two-fold. First, suppose your emergency mass notification system can geo-target notifications to only potentially impacted individuals. In that case, your stakeholders might not realize the frequency with which you are using it to notify individual neighborhoods about such inconveniences as road closures, downed powerlines, or fender benders taking busy roads down to one traffic lane.

The second part of the question is more easily answered with a question in return: “If a significant disaster impacted our community, like an active shooter or a tornado, how would we warn the public without an emergency mass notification system?”





# Calculating the Value of Safety

Any calculations you make relative to protecting people are estimates; however, it might help you showcase the value of your emergency mass notification system by framing its value relative to the following soft ROI factors (benefits that can't easily be quantified monetarily, but still provide value).

### Total Number of Protected People:

After implementing your emergency mass notification system, if you can anticipate that 40 percent of residents will sign up for alerts and notifications within the first year, you'll be able to calculate the total number of people you can protect. In addition, if your system integrates with the Federal Emergency Management Agency's (FEMA) Integrated Public Alert and Warning System (IPAWS), allowing you to reach non-subscribers in emergencies, you can offer warnings and protections to your community or those potentially impacted by a risk threatening only an isolated area.

### Time to Execute Communications:

Without an emergency mass notification system, if you need to warn citizens about a hazardous spill, you likely need to:

- Contact your local news outlets (15 minutes)
- Post an alert on the homepage of your website (5 minutes)
- Publish a message to Facebook (2 minutes)
- Publish a message to Twitter (1 minute)
- Send an email to internal employees (5 minutes)
- Send an email to citizen newsletter subscribers (5 minutes)

With an emergency mass notification solution, in a third of the time as it would take to issue all these redundant messages to separate communication channels you can fully amplify the reach of your message, saving critical staff members time and expediting essential news dissemination to your

### Resident Trust:

The COVID-19 pandemic created a shift in the relationship between residents and government, with community members proactively seeking information, resources, and guidance from local officials. The result is a strengthening of trust and appreciation by residents for their local leaders. Emergency mass notification systems that enable residents to continually receive the information they want and need from their government, how and when they want it, offer the same trust-building effects.

For more information on the value of an emergency mass notification solution, contact [CivicPlus](#).