

TARGETING CITIZENS WITH **LOCATION BASED** NOTIFICATIONS

Introduction

State and local government departments, agencies and groups face a wide variety of events. Each have their own unique characteristics. This may require additional effort on the communication planning end, depending on how precise the location-based notifications need to be.

First, to affectively reach people, an organization's database has to be up-to-date and accurate. Correct and relevant contact and mapping data collection can ensure messages are received and responded to. Utilizing the citizens via self-registration and importing custom maps can be the most effective ways to gather this information.

To figure out how detailed and precise data needs to be would be beneficial to plan for the scenarios for which your organization would need to alert citizens. Low precision cases require a lot less from the organization, while those cases on the higher end need plenty of attention.

Gathering Location-Based Data

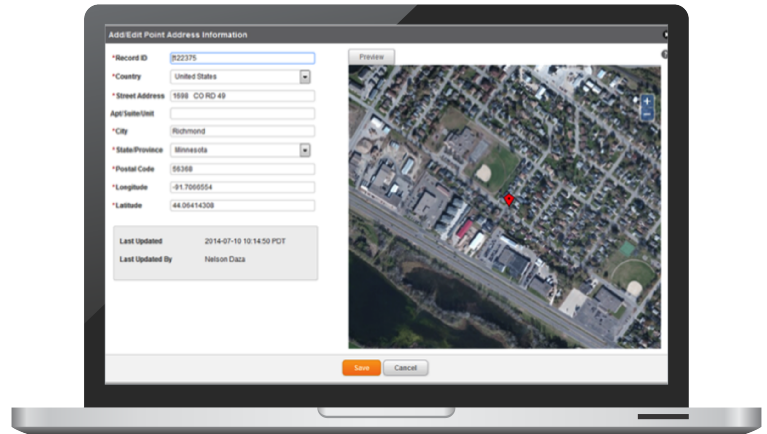
Notification systems need good data to be effective – this is even truer when notifications are meant to be location-based. The quality needs to be especially high if the scenario calls for extreme precision. To acquire that precision, state and local governments need to be diligent with their collection processes.



There are numerous ways of importing data – not all can be effective for these types of notifications. Traditional methods include importing white and yellow pages, providing names, land line numbers and addresses. While it isn't a bad thing to have this information, clearly it lacks the many other contact paths available, like cell phones and email. Other options that can give a wider range of paths include employee lists for government agencies, utility customer lists and cell carrier lists that provide cell information for residents.

Utilizing Self-Registration

Most notification systems today include a self-registration site or opt-in portal. It is key to properly take advantage of this tool. From these sites residents can input all of their information, including name, number, address and much more. Moreover, if mapping tools are available, citizens can use a pin drop to locate their actual address, rather than relying solely on where it's defaulted on a map. Having this option provides state and local government agencies with more up-to-date information relying on the citizen as the source, which saves time and increases the accuracy of the data. Because the information is of higher quality, these agencies have a better chance of reaching citizens during events and making sure events have more successful resolutions.



Importing Mapping Information

It might seem a bit obvious, but the information on a map is important. Commercial providers, such as Google or Bing are great sources for organizations or events that don't require extreme accuracy. They have free and readily available information that can be used for sending out alerts to specific locations. However, for significant events, government agencies should not use this alone. The main reason is they can miss some area details - like side streets or geographic data. Additionally, precise locations might be a bit off. A company might be listed at 1 Main St, while on the map the pin drop is actually down the street from that location.

During potentially devastating events where the utmost precision for location-based notifications is required, there are options available to ensure accuracy. The most reliable would be an organization's own custom map. These maps should typically include every detail of an area, including little known or hard to access roads and sections. Threat areas, such as low lying roads or potential flood zones can be identified, which would increase the accuracy of messages when being sent to citizens for related events.

Precision is Needed for Your Organization

To make decisions for location-based notifications, the importance of precise data can vary. The need for higher precision depends on the type of use case being faced. Additionally, some organizations will have large pools of use cases that they need to plan for, while others may have just a few, or even one. Because of this, every organization and agency should have their own set communication plan with roles, objectives and goals for as many of these cases as possible.

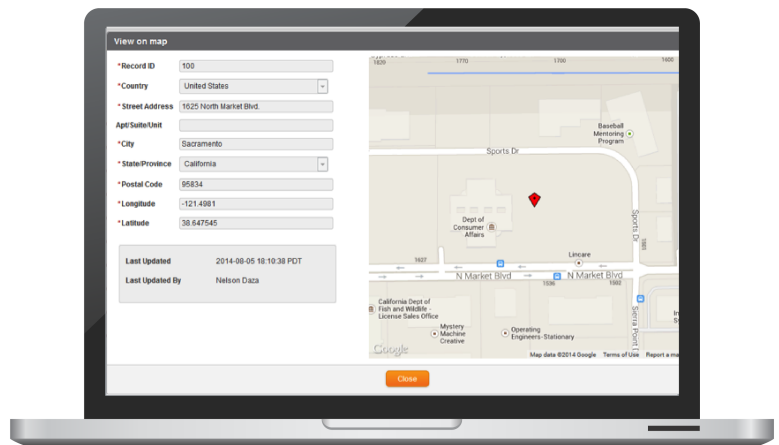
Low Precision

In a communication plan you need to identify the type or types of events you will face or be accountable for sending alerts. Doing this will allow you to decide on how precise a location or contact on a map has to be. Let's look at a large event, with possible catastrophic implications, like an earthquake, that requires a very far and wide notification reach. The main purpose of a notification in this instance is simply to blast out a warning to everyone, including all their devices and contact paths - no one should be excluded. With a notification system, organizations should use web postings (Facebook or Twitter) and the Federal IPAWS system, if available. The best quality of IPAWS is an approved IPAWS vendor, like Everbridge, isn't required to have individual's names, phone number, emails or any other contact method. Basically, it doesn't matter if a person is a resident or someone driving through the town – visitors and residents will all get a notification, increasing the chances everyone is alerted about the situation. Events like these also require the least amount of effort when planning.

High Precision

Some events aren't as cut and dry as others. Ones that require high precision in their messaging are definitely a bit complicated. First, pin-point accuracy is needed – if a message is sent to 1 main street and all contacts associated with it, those people have to be notified and no one else. To have this accuracy, a lot of effort and work must be put

in to build out and maintain the database. Contact information from residents can't just be collected once either, but verified again and again. Maps must show just about everything from elevation to hidden dirt roads, while making sure addresses shown on a map are at the exact location they are supposed to be.

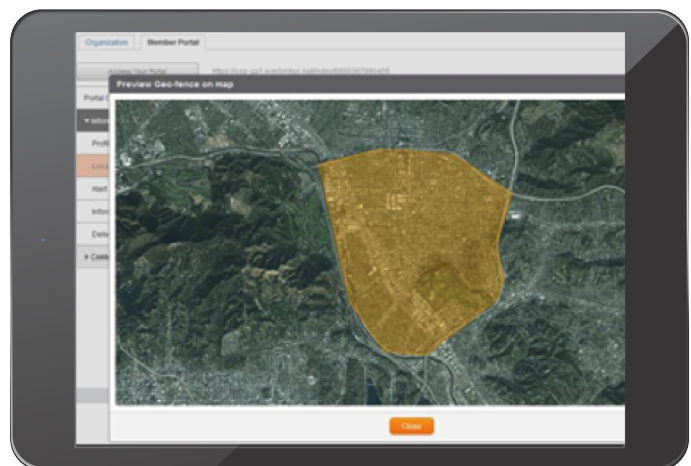


During an extremely dangerous and concentrated threat, such as a hostage situation, you can't just blast alerts to everyone and everywhere because it can be more detrimental than beneficial – rather, messaging based on precise contact and map locations is needed. Imagine if a suspect was on a school campus in specific building. You would want to alert and update almost everyone as the situation progressed in surrounding areas. The people you would exclude from the notification are the ones who are in the building or room with the suspect – excluding anyone linked to that address or location. This protects those inside, but also ensures that the suspect is not tipped off.

Everbridge PrecisionGIS

Everbridge Suite offers a set of features that enable you to define the level of precision in your data to support your range of use cases. Whether you need to blast a message to everyone in your jurisdiction, alert subscribers of a community event, or target the notification to a specific neighborhood, Everbridge Suite offers a set of features designed to assist you in achieving your notification goals.

The Everbridge **Geo-Fence** lets you use a shape or combination of shapes to represent the boundary of your jurisdiction. This allows you to control the addresses your residents entered via the Everbridge Member Portal. You have the option of either preventing residents from entering an address outside of your geo-fence, or accepting any address for later reviewing on a report.



The next feature, **Custom Base Maps**, lets you use your preferred base map within Everbridge Suite for map-based notifications if the commercially available base maps are not sufficient for your notification needs. Your base map can contain any geographical and road network information your users need to make more informed decisions when preparing a notification. A custom base map must meet certain system requirements in order for your base map to function within the Everbridge Suite platform.

Lastly, **Point-Address Geo-Coding** allows you to upload a CSV-formatted file containing all the address points for your jurisdiction. The Everbridge application will use

your address points to offer suggestions to your residents who opt in their address for notifications using the Member Portal. This ensures your residents can select a correct and accurate address for their opt-in record.

These features offer numerous benefits. Most importantly, users have control over the quality of their own data, not relying on any outside sources. These functions are all self-service, enabling users to modify their configuration at any time and as many times as they need to keep their data current. Information on the base map and in the contact records is more likely to be accurate, instilling confidence in the true location of your resident's addresses, which in turn can ensure messages are received when being sent location-based.

Key Recommendations

Planning for location-based notifications can be a daunting task. Contact data cannot be limited to just importing lists. A good amount of effort should be placed on ensuring address, contact paths and much more are accurate. Reaching out to citizens for verification, such as an opt-in portal is definitely a good start since it allows them to verify their own information. To further ensure accuracy, maps that are used for notifications cannot be missing key information. It is the organization's responsibility to make sure neighborhood and geographic features are established on the maps.

Moreover, the main thing to consider is the range and type of issues your agency, department or organization will face. Precision needs can and will vary depending on the responsibilities and threats you are accountable for. If you have events that require extreme exposure to everyone, everywhere, the precision of your contacts' locations might not be that important – if you have an event like a wild fire that is isolated to one area where you need to notify those in its path to ensure their safety, you will need very precise location-based contact information. Identifying and understanding your obstacles and contact needs can make sure any of these events result in successful outcomes.



About Everbridge

Everbridge provides a unified critical communication suite that helps clients be better prepared, make better decisions, and respond quickly and confidently during disruptive events. When an incident happens, whether it's a natural disaster or an IT service outage, we automate communications to ensure that the right messages get to the right people at the right time.

Widely recognized by analysts as the market leader, Everbridge solutions are trusted by clients in all major industries and government sectors to connect with over 50 million people around the world.

THE ONLY END-TO-END PLATFORM

- **Planning:** Everbridge is easy to set up, maintain, and organize, meaning that you're always ready for a quick, coordinated response. Everbridge ensures that the right messages get to the right people - with the most advanced opt-in portal on the market, streamlined integration with internal and external data sources, and simple group and contact management.
- **Assessment:** When trouble strikes, you need rich insight, presented simply - so you can quickly assess potential impact and make an informed decision to avoid loss. Everbridge offers the only solution on the market that meets these demanding requirements, with the most advanced interactive dashboard in the industry.
- **Response:** In critical situations, ease-of-use can mean the difference between an effective response and a mistake that carries serious consequences. Everbridge is engineered to be simple to use under pressure, with a user interface that accelerates time-to-message and reduces the likelihood of errors.
- **Delivery:** Even during large-scale disruptions, Everbridge stays on. The most advanced platform in the industry ensures that you reach your contacts - every time. And with worldwide coverage and capabilities, including globally local calling infrastructure and data storage, we're ready to support you wherever your people are in the world.

Visit www.everbridge.com to learn more.