

A Gold Standard in Emergency Preparedness: How Contra Costa County Protects Over One Million People from Earthquakes, Chemicals, and More



A chemical spill puts an entire neighborhood at risk of exposure to carcinogens. An apartment fire threatens to spread to surrounding buildings. A storm causes a flash flood, destroying countless homes and properties.

No matter how safe a community seems, things can go wrong in an instant. And when they do, effective communication is essential. Ensuring the right people get the right message at the right time is critical.

It means first responders can go where they're most needed. It means citizens can stay up-to-date from a trusted source, rather than relying on panic-inducing news reports and social updates. And ultimately, it means government agencies can fulfill their fundamental duty of care – to keep their people safe.

Contra Costa County's Office of Emergency Services understands this well.

Contra Costa County

Industry:

Government

Location:

California

Product:

BlackBerry® AtHoc®

Website:

www.cocosherriff.org



A Unique Approach To Disaster Preparedness

“Our duty of care is towards the people of Contra Costa County, for which we are the primary source of public alerts and warnings,” explains Heather Tiernan, Contra Costa County’s Community Warning System Manager. “The county’s populace is quite diverse, and that informs one of our core priorities as an emergency management agency. We cannot simply spread the word about an emergency – we need to do so in a way that can reach and be understood by everyone in the county.”

As part of the Contra Costa County Sheriff’s Office, the Office of Emergency Services (OES) takes a unique approach to protect the county’s 1.1 million residents. Instead of separating into distinctive regions, the OES is the sole point of coordination for the entire area, connecting with towns, cities, villages, emergency responders, special districts, and government agencies.

“Most places have some separation in their emergency preparedness agencies,” notes Tiernan. “We’ve found it far more effective to centralize our emergency response. It’s more efficient, and presents more unified, uniform messaging for both partners and community members.”

Interoperability is the chief roadblock to such an approach. Even before the Internet of Things started to gain ground, different government and emergency services agencies all had their own messaging solutions. The emergence of new technologies has only exacerbated the issue, resulting in a patchwork of networks, platforms, devices, and media.

For some, this would be an insurmountable challenge. The OES, however, was determined to see things through. It knew that, if it were to leave things as they were, fragmentation and misinformation in larger emergencies were inevitable. Given the county’s large, expansive petrochemical industry, this was unacceptable.

That’s why, in the late 1990s, Contra Costa County deployed one of California’s first mass notification systems, a solution that has continued to evolve to this day.

Blazing a Trail in Emergency Alerting

Contra Costa County’s petrochemical industry is one of its chief distinguishing features. The county is home to the largest collection of industrial and chemical facilities in the state. Transport trucks containing hazardous materials are a common sight on Contra Costa’s roads.

In the 1990s, fires and chemical spills were common, confusing affairs. In lieu of a consolidated, unified response, incidents would often see a staggered response from several different agencies, each acting independently. This inefficiency and lack of coordination was a money pit at best; at worst, it could result in injury or loss of life.

Contra Costa County needed to do better.

It recognized its duty of care towards its people and communities, and understood that it must take the initiative to be better at notifying both first responders and civilians of developing emergencies, as well as disseminating information and advice about what to do in a crisis to protect both people and infrastructure.

Contra Costa deployed a radio-based, public-facing emergency notification platform, integrated with its sirens and landline phones.

“Twenty years ago, our emergency response process involved calling people on their landlines and sounding sirens. Since then, a great deal has changed, and we’ve been able to change with it. Through BlackBerry AtHoc, we’re able to leverage many different communication channels – social media, mobile devices, federal alerting systems, and more.”

- Heather Tiernan,
Community Warning System Manager,
Contra Costa County

“Contra Costa County’s emergency alerting system was the first of its kind,” says Katie Haun, the BlackBerry Account Relationship Manager working with Contra Costa County. “At the time, there wasn’t anything like it. There wasn’t anything in the alerting community that would take all the different modalities, vendors, and communication channels and connect them through a single platform.”

The system has continued to evolve since its inception, transitioning to a web-based platform and adding a multitude of new features. Most recently, the OES identified the need to improve coordination with community partners and emergency responders. [BlackBerry® AtHoc®](#) provided it the opportunity to do so.

A comprehensive crisis communication and emergency alerting platform, BlackBerry AtHoc empowers organizations, people, and communities to communicate and collaborate during critical events. Contra Costa County uses [AtHoc® Alert](#) for emergency notifications and [AtHoc® Connect](#) for inter-organizational communication.

Evolve, Connect, Protect

Consistent messaging in an emergency can be challenging, but it’s also critical to public safety. By the time word of a situation starts to spread on social media, agencies must already be in the process of responding. More importantly, citizens must be kept apprised of developing situations through a trusted source.

As such, Contra Costa County brands all alerts it sends through local agencies and jurisdictions. That way residents of a city can hear from a trusted source such as their police department or local government about a crisis. They do not need to rely on unverified, untrusted third-parties.

“We needed a platform that could target specific people in specific areas on specific channels while simultaneously reaching partnered agencies,” says Tiernan. “That’s not something that can be achieved through a single mass notification.”

When someone calls about a developing emergency, the agency they reach already has the information on-hand. They are able to understand, manage, and react to the situation in a way that maintains order and public safety. There are no crossed wires, no mixed messages, and little risk of someone receiving advice that will put their life in danger.

“Whenever the county makes any major changes to the system, we don’t just do it with one group in mind,” Tiernan explains. “We do it with seven different groups, each of which are using the system a little differently. The flexibility of BlackBerry AtHoc allows us to do this seamlessly, and focus on training and optimization.”

The OES has also leveraged BlackBerry AtHoc in several other ways.

Even a momentary delay can cause a disaster to go from bad to worse. In light of this, the OES has created several pre-made templates through BlackBerry AtHoc. This improves both efficiency and decision-making during emergencies for on-call staff, who can activate the system from anywhere.

When an incident occurs, these agents no longer have to write manual alerts. They select a template, fill out incident-specific information, and send it out. It’s faster, more accurate, and less stressful for everyone involved.

The OES geotargets alerts based on several sources of information. First, it has access to both the county's 911 database and a list of landlines. It also allows residents to sign up for phone calls, text messages, and emails about emergencies in their area.

Each resident can register for multiple addresses. This may include schools, shopping malls, and churches, among other locations. Currently, approximately 13% of county-wide households have registered. Most counties in California have registration rates of less than 1%.

The OES also uses BlackBerry AtHoc for internal callouts. This allows more efficient activation of groups such as search and rescue, reserve police, and the county's SWAT team. It sends a single alert to all personnel, who leverage BlackBerry AtHoc's two-way communication to respond with availability.

Previously, a dispatcher would have to call each individual responder. This was a significant bottleneck, amplified by the fact that all interactions must be collected and collated by the agency. The OES now achieves this automatically through BlackBerry AtHoc's logging functionality.

Contra Costa County has also equipped its major hazardous materials facility with limited access to its crisis communications system. Each facility maintains on-site hardware that allows it to trigger a range of pre-set notifications. Front-desk dispatchers are trained in the use of the platform, and can quickly spread the word if something goes wrong.

Finally, Contra Costa County constantly seeks new ways to optimize its emergency response. In large part, it's able to achieve this thanks to BlackBerry AtHoc's detailed reporting functionality. By tracking alert success and sending, it can gather data about potential weaknesses in its alerting process.

"Today, Contra Costa County is a model in all things surrounding the hazardous materials industry, including notifications," says Tiernan. "We have an extensive, well-defined response process surrounding hazardous materials releases, and a lot of systems in place to make things easier and more streamlined for everyone involved."

Last year, the county sent out only 25 alerts. The yearly average before that totaled at approximately 15. Per Tiernan, this is because it reserves BlackBerry AtHoc for life-threatening scenarios.

One recent incident involved a severe fire spreading through two communities and across a major roadway – at 5:00 on a weeknight. Through BlackBerry AtHoc, the OES evacuated everyone in the area and kept people away. It also helped firefighters mount a faster, more efficient emergency response.

A Lasting Partnership

BlackBerry continues to maintain and monitor Contra Costa County's siren systems to this day. It helps the county stay on top of technical and industry challenges, and its reputation for security offers considerable peace of mind. The Office of Emergency Services can rest assured that the data it collects from residents is safe.

In the late 1990s, Contra Costa County passed a new industrial safety ordinance for hazardous materials – a set of landmark guidelines for emergency preparedness, refinery design, technology, maintenance, and training. Since then, that ordinance has become a new standard for the industry, with the entire State of California eventually following the County's lead in 2017. BlackBerry is proud to have been a part of this initiative, and proud that BlackBerry AtHoc helps the county keep its residents safe and secure to this day.

"Over the past several years, we've seen a lot of change surrounding public alerts and warnings," says Tiernan. "People are paying more attention to it, and there's more legislation surrounding it. Agencies are finally starting to understand the complexities and challenges involved in reaching everyone when you need to reach them, and why they need to overcome them."

"Throughout this evolution, BlackBerry AtHoc has been a constant," she continues. "It's helped us integrate an alerting system that's not only effective and reliable, but also easy to use – and that's extremely difficult to do. More importantly, it keeps us prepared for new technology and regulation, both through the platform's flexibility and BlackBerry's support."

About BlackBerry

BlackBerry (NYSE: BB; TSX: BB) provides intelligent security software and services to enterprises and governments around the world. The company secures more than 500M endpoints including 150M cars on the road today. Based in Waterloo, Ontario, the company leverages AI and machine learning to deliver innovative solutions in the areas of cybersecurity, safety and data privacy solutions, and is a leader in the areas of endpoint security management, encryption, and embedded systems. BlackBerry's vision is clear – to secure a connected future you can trust.

For more information, visit BlackBerry.com and follow [@BlackBerry](https://twitter.com/BlackBerry).

