

Making a Difference: OR-Alert

Oregon's Statewide Alerts, Warnings, & Notifications Platform



Category: Enterprise IT Management Initiatives

Enterprise Information Services (EIS)

Project Completion: 11/30/2021

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Executive Summary

Following an incident involving major loss of life in another state, the Oregon State Interoperability Executive Council (SIEC) reviewed “after-action review” (AAR) reports (lessons learned documents following major incidents or exercises) and surveyed the state of alerts and warnings throughout the state. It was noted that significant similarities between the alerting and warning ecosystem in that state and throughout Oregon existed. Oregon counties and state alerting authorities operated independently, utilizing disparate technical systems, with no alignment on message content. Alert subscribers often were required to sign up with more than one jurisdiction to receive alerts where they lived and worked. Some jurisdictions lacked access to alerting systems at all, while 16 counties lacked access to FEMA’s Integrated Public Alerts and Warning’s System (IPAWS). Those jurisdictions with alert systems often had to prioritize cost savings over functionality which led to inconsistent types of alerting throughout the state. Oregon lacked governance and little training was provided to alerting authorities beyond initial training offered by individual alerting system vendors.

It was clear that there was a need to modernize emergency alerts and warnings throughout Oregon to prevent loss of life. To address the potential danger, the SIEC formalized their vision as an objective within the 2020 State Communications Interoperability Plan (SCIP). Stakeholder engagement throughout the state indicated that there was support for a statewide solution to improve capabilities, training, cross jurisdictional awareness, and governance for the existing patchwork alerting systems. State agencies could improve and bolster preparedness to issue emergency messaging should the need arise. Lastly, an enterprise system could be utilized by state agencies, tribal nations, and counties to enhance operational awareness throughout the entire state of Oregon. Based upon the SIEC’s recommendation, Enterprise Information Services created the OR-Alert Program.

The mission of OR-Alert is: “To ensure access to timely and informative alerts, warnings, and notifications (AWNs) through implementation of a statewide system that enables state, county, city and tribal governments to issue AWNs—**providing people in Oregon with meaningful opportunities to make life-saving decisions in the face of emergencies**”

To achieve this mission, the program is composed of several different components. The OR-Alert Governance Committee provides system user input and leads efforts across the state. The ORAlert.gov website links all county systems to their population, providing a single gateway to drive subscribers to sign up for alerts that is capable of handling traffic from the entire state of Oregon. Finally, jurisdictions are provided equitable access to a statewide, centralized, resilient, sustainable, scalable, and unified system for AWNs; one that can provide situational awareness amongst all participating tribes, counties, and state agencies.

Project Narrative

Section C: Idea: Description of OR-Alert

The OR-Alert Program is a state administered and managed, locally led, statewide emergency and continuity-of-operations AWN platform deployed by 20+ state agencies, 35 of 36 counties, and 1 tribe throughout Oregon. Use of the platform is supported by a robust governance structure made up of system administrators and stakeholders from all levels of government, known as the OR-Alert Governance Committee. The Committee is led by an executive group made up of representatives from rural and urban counties, state agencies, a tribal representative, and a liaison with Oregon SIEC. The Program is administered by the Statewide Interoperability Program, a division of Enterprise Information Services (EIS) and is funded at the enterprise level for all participants by the Oregon Legislature. The system provides a state-of-the-art, standardized set of alerting tools that alert originators can use to reach many different audiences depending on the scope and scale of the incident. OR-Alert is based on a Software-as-a-Service platform.

The program addresses many long-standing issues that plague alerting programs nationwide including: the need for software to access the FEMA IPAWS, lack of standardized training and governance, patchwork implementations of varying systems that require subscribers to sign up for different platforms, inability for emergency managers to maintain situational awareness of what alerts are going out near their jurisdictions, lack of mutual aid capabilities between jurisdictions and an overall lack of interoperability.

Countless AARs and lessons learned documents from throughout Oregon and across the country have all consistently pointed to AWNs as a weakness that needs improvement. Alerts and warnings are identified in the National Emergency Communications Plan which calls for enhancement and coordination of these systems. The harsh reality is that when they fail, or when they are not utilized properly, people die. Alerts, warnings, and notifications are of the utmost importance in times of emergency. OR-Alert is a vital program meant to address these universal issues and provide alerting for all of Oregon.

Implementation: Roadmap, Participants, Resource Needs and Delivery

The Oregon SIEC identified the value of modernizing emergency alerts and warnings, and the SIEC formalized their recommendation as an objective within the 2020 State SCIP.

The Statewide Interoperability Program, a division of Enterprise Shared Services, is tasked with carrying out the SIEC's goals and objectives outlined within the SCIP. Recognizing that all emergencies start and end locally, and that alerting is an inherent responsibility of local government, program staff convened a broad stakeholder advisory group of SIEC members, state agency representatives, local and county emergency

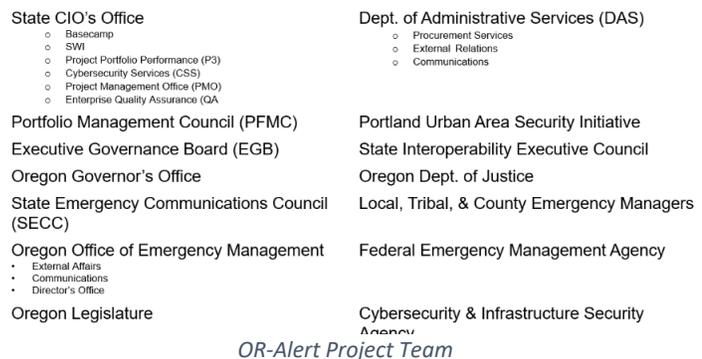
managers and public safety leaders, 911 Center representatives, and others in order to scope the problem and identify possible solutions. Together, this group identified the creation of a statewide, shared, interoperable and resilient alerting platform, funded and managed by the state but operated by local and county governments as the solution with the best chance of succeeding and saving lives.

The Statewide Interoperability Program conducted research into alerting tools, technologies, governance, costs and best practices; examined AARs and lessons learned documents; conducted interviews with alert originators and system administrators; and evaluated current alerting programs in Oregon and in other states, before developing a business case for the creation of the system. The proposal was presented to the Oregon Legislative Emergency Board (E-Board) and approved in October of 2020.

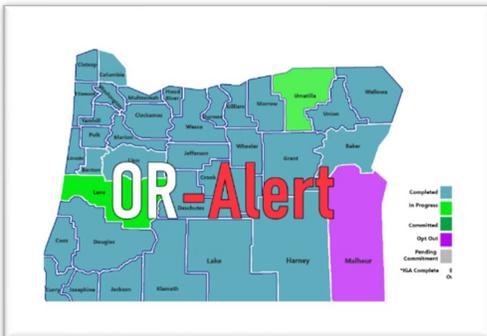
Following E-Board approval, Enterprise Shared Services established a dedicated Or-Alert Project Team made up of the business owner, the program manager, project sponsors, and a project manager. EIS was able to assign an Oversight Analyst, a Business Information Security Officer

to work with the team to ensure project management and cybersecurity best practices were followed throughout project execution. Finally, the team was assisted by the Department of Administrative Services procurement team, Governor’s Office and DAS external communications staff, and an Assistant Attorney General from the Oregon Department of Justice. A goal to procure the system was set for December 31, 2020.

The OR-Alert project team continued to meet with multiple stakeholders and alerting authorities throughout the state to develop requirements for the system and charter the OR-Alert Project Steering Committee to guide the team. Project team members also leveraged the state’s Basecamp program to reach out to other states, and provided research, evaluation and recommendations based on other agreements from other large alert and warning contracts. The project team consulted with other statewide alerting programs, federal staff, and alerting subject matter experts around the country. In total 70+ requirements for the future system were developed including access to the FEMA IPAWS, an opt-in portal for people in Oregon to provide their addresses and contact information, keyword and zip code-based alerting, multi-modal communications pathways for alerting including via email, SMS text, telephone voice call, mobile app, broadcast TV and radio, wireless emergency alerts and others. The system needed to be capable of displaying alerts that have been sent anywhere in the state onto a dashboard for situational awareness. The vendor would be required to assist with implementation and training and to procure and manage data sets of landline and



cellular contact information similar to a “reverse 911” database. The system was also required to be able to send alerts based on a geographic shape file, contact groups, and rules established by the sender, and support multiple languages.



Statewide Deployment Progress

Due to the complexity of the project and diverse needs of the stakeholders throughout the state, a critical aspect of contract execution included ensuring an agile project management method was selected for use by the vendor and stakeholder teams. Post-contract execution, the program staff worked quickly to onboard the vendor and develop training and implementation strategies for the entire state. This choice allowed the flexibility for continued progress during

responses to the COVID-19 pandemic, instances of severe weather, and wildland fire season; all of which required the attention of stakeholders who would ultimately be responsible for utilizing the system in their agency or jurisdiction.

The project was divided into five phases as follows:

- Phase 1: State Agency Pilots (Oregon Office of Emergency Management and the Governor’s Office)
- Phase 2: County Pilot (Klamath County)
- Phase 3: Counties and Tribes with no system or with systems that do not have IPAWS capabilities
- Phase 4: Existing Users of the vendor in the state
- Phase 5: Other vendor systems

It should be noted that participation in OR-Alert is not mandated by state law or policy and all participants do so *voluntarily*. This added an additional level of complexity for implementation, as in many cases, relationships had to be leveraged or built with the future system administrators prior to their commitment to join the statewide system.

Along with procuring a system that would provide a standardized set of tools for alert originators to reach specific audiences based upon the scope and scale of the incident they were responding to, it was recognized that there was also a need for statewide governance related to alerts and warnings, standardized training, and support for mutual aid. To address these issues, the project team worked to build a foundation for transitioning the OR-Alert Steering Committee into the OR-Alert Governance Committee. The establishment of the Governance Committee, made up of system administrators from all participating agencies, counties, and tribes, along with one SIEC member, ensures that alerts and warnings continue to improve throughout the state. As part of their work, the Governance Committee was tasked with developing the Subcommittee for Recommendations on Alerting Practices (ScRAP), who together with the Statewide Interoperability Program, will be working to establish Statewide Alerting

Guidance, shared Statewide Alerting Templates, a statewide call throttling strategy and other initiatives.

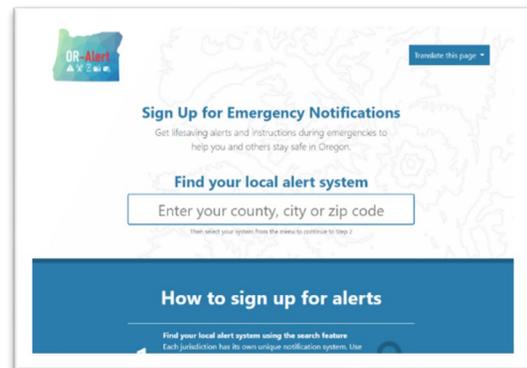
The selection and implementation of a state-of-the-art alerting solution, coupled with a strong governance foundation, has helped ensure that Oregonians and those that visit our state will be well informed before, during, and after a disaster or major incident, and will be empowered to make decisions for themselves and their families.

Section E: Impact: Substantial and Measurable Changes

OR-Alert has had a profound effect on the way the entire state responds to emergencies and incidents. Since January 2021, 22 state agencies, 34 of 36 counties, and 1 Tribal Government have adopted the system. More than 2,800 county, tribal, and state employees have completed the standardized training on how to use the system and send messages. Incorporating contacts from pre-existing alerting programs across the state, the system now has over 470,000 voluntary opt-in contacts including over 64,000 new subscribers. Emergency alerting authorities at the state and local level now have access to nearly 3 million verified residential and commercial landlines, VoIP numbers and cellular wireless contacts. Between October 2021 and March 2022, the system was used to message the public more than 845 times, reaching more than 1.86 million recipients. Finally, the ScRAP Committee has developed 21 statewide templates that have been professionally translated, reviewed for cultural competency and accessibility, and distributed across the enterprise, with an additional 9 developed for regional events. These templates make it easier for system users to quickly send out alerts with clear and consistent messaging.

Based upon open-source research, it is estimated that jurisdictions in Oregon spent on average, \$2.40 per capita on alert systems annually. OR-Alert has brought these costs down to \$1.45. In addition to lowering the system costs, participation in OR-Alert Governance and the ScRAP has allowed jurisdictions to pool resources to accomplish shared goals such as professional translation of templates, advertising, and exercises that benefit the entire program. The program was able to invest in the design and hosting of a website: www.oralert.gov, for a relatively low cost, that supports all counties throughout the state and provides a single site to advertise and drive traffic to, thereby increasing the number of subscribers into local instances who are then carried up to the state.

The OR-Alert Program hosts voluntary hotwash discussions after major events such a large-scale wildland fires, tsunami warnings or active violence events during which the



www.OR-Alert.Gov

system is utilized. These events allow participants to come together in a no-fault environment to learn about the alerting process, review what happened, the performance of the system, and discuss successes and opportunities for improvement. This process is offered in the hope that the next time such an event occurs, jurisdictions will be better prepared to respond to the incident. Hotwashes are intentionally facilitated as low stress, collaborative environments. Sessions are not recorded, and only basic notes are kept. When significant issues are identified during a hotwash, the program seeks to understand the root cause and will then work to solve the problem, whether

that means working with the vendor, the Governance Committee or others involved. If important knowledge is gained from a hotwash that would benefit others that participate in the program, hotwash participants are asked if they would be willing to share the information either through a formal written AAR or at the next Governance Committee meeting. Hotwashes and AARs have anecdotally illustrated the utility of the OR-Alert system and the success of the program, as we often hear how well the system performed or how easy it was to use. Lessons learned from hotwashes are often beneficial to many OR-Alert members and allow us all to learn from each other. In part because of the deployment of OR-Alert, the state of Oregon was awarded the Best in Enterprise Resiliency Certification – Gold in early 2022.

The OR-Alert Project successfully transitioned to a long-term program within Statewide Interoperability in late 2021. Under the program, the OR-Alert Governance Committee was successfully chartered and established, and the Governance Executive Committee was elected from the general membership. The committee is now self-governing and meets every other month. Working together with the Oregon Office of Emergency Management, the OR-Alert Program and Governance Committee have established long term goals to ensure that OR-Alert continues to grow and improve. Goals for the next year include:

- 100% of counties credentialed by FEMA to utilize IPAWS
- Approve and adopt Statewide Alerts and Warnings Guidance
- Prepare for upgrades to the system
- Increase public sign up and adoption
- Continue deployment to additional state agencies and tribes

Or-Alert is more than just an alerting tool. It is a commitment to work together to improve alerts and warnings throughout the state to protect the lives and safety of people in Oregon.

Making an Impact

"All emergencies are information emergencies. OR-Alert significantly increases our state's capabilities to provide Oregonians with the critical information they need to make life-safety decisions during emergencies. We can reach people where they are in real-time with a variety of alert delivery methods enabling Oregonians to customize how they receive alerts from their local government. The governance and subcommittee structure of OR-Alert fosters collaborative teamwork among local, county, tribal, and state agencies as well as community partners to continuously improve the state's emergency notification system. Significant improvements are being made in the equity and accessibility of emergency alert messages for all Oregonians, as well as the alignment of consistent messaging across jurisdictions through the OR-Alert subcommittee's template development process. Our ability to provide timely and accurate information to those impacted by emergencies allows people to make better decisions to protect themselves and their families." - Oregon Office of Emergency Management Director Andrew Phelps