Filling a Critical Gap in Oregon's Emergency Alert System

Emergency Alert System Resiliency

Oregon's Emergency Alert System (EAS) serves as the first line of information dissemination in the event of both local and statewide emergencies. The system allows county and state emergency managers to broadcast messages to the public with critical messages. In the event of an emergency the EAS will likely be residents' only method of accessing vital services. Broadcasters throughout the state have invested in equipment that allows them to receive emergency messages, national, statewide and local, and push them out to specific audiences. The current EAS system is all-digital and relies on electricity and internet to broadcast messages. In the event of a catastrophic emergency, such as a fast-moving wildfire or a Cascadia earthquake, electricity and internet are compromised, and emergency managers will not be able to send messages to broadcasters for dissemination.

Following the breakdown of the EAS during September 11 the Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA) developed a digital, nationwide system tied to a central server in Washington D.C. Called the Common Alerting Protocol (CAP) the system has been shown to be very effective, as seen through the successful use of Amber Alerts. Prior to this transition to a digital program, the system was based on a series of encoders and decoders that could transmit and receive messages without the need for electricity or the internet. Broadcasters in Oregon are equipped with decoders that allow them to interpret messages sent from encoders and transmit them to an audience.

Most emergencies are local. When the digital system fails, state and local authorities will be dependent on this Legacy System, the series of encoders and decoders. While a few Oregon counties have encoder units, most do not. Placing an encoder unit in the Emergency Operations Center (EOC) of every county in the state will allow for a swift, local and accurate response to local and statewide emergencies when the CAP system is not functioning. Emergency Managers can use the encoders to transmit potentially lifesaving information to broadcasters, who have the ability and equipment to reach the target audience.

OPB Signal Distribution System

Oregon Public Broadcasting's signal distribution system is aging and reaching end of life. This terrestrial distribution system operates completely independent of fiber connections, which will likely be unavailable during a natural disaster. This independent infrastructure allows OPB to distribute local, state and national emergency messages to the citizens of Oregon. The budget to harden the system and build in much needed redundancy is $300k.

A $1.1 million investment from the state will ensure that in a critical emergency, county and state emergency managers will be able to broadcast vital information to residents.