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CALIFORNIA LEGISLATURE



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Joint Legislative Committee on Emergency Management

Assemblymember Bonnie Lowenthal, Chair

Emergency Communications: Who're You Going to Call?

Friday, August 12th at 2:00pm

Lakewood City Hall, City Council Chambers

Opening

- Honorable Bonnie Lowenthal - *Chair, Joint Legislative Committee on Emergency Management*

Setting the Stage

- Mike Dayton – *Acting Secretary, California Emergency Management Agency (CalEMA)*

State Perspective

- Karen Wong – *Deputy Director, California Technology Agency*

Local Perspective

- Lee Baca – *Sheriff, Los Angeles County*
- Laura Hernandez – *Assistant Director, Sheriff's Office of Emergency Services, Ventura County*
- Ron Lane – *Director, County of San Diego's Office of Emergency Services*

Private Perspective

- Don Boland – *Executive Director, California Utilities Emergency Association*
- Brad Gaunt – *Product Manager, Enterprise and Emergency Messaging Sprint/Nextel*
- Kent Ames – *AT&T E-9-1-1 Public Safety Solutions* and Peter White – *AT&T Global Public Policy*
- Jerome Candelaria – *Vice President and Counsel, Regulatory Affairs, California Cable & Telecommunications Association*



Cal EMA

CALIFORNIA EMERGENCY
MANAGEMENT AGENCY

Testimony of

MIKE DAYTON

Acting Secretary, California Emergency Management Agency

**Before the Joint Legislative Committee on Emergency Management
Lakewood City Hall, City Council Chambers**

Hearing:

“Emergency Communications: Who’re You Going to Call?”

August 12, 2011

Madam Chair and members of the Committee, thank you for the opportunity to provide testimony on the California Emergency Management Agency’s (Cal EMA) efforts, accomplishments and future goals in providing emergency alerts and warnings to the public.

As Acting Secretary of Cal EMA, I have the overarching responsibility to ensure that our efforts work to prevent, prepare for, respond to, and quickly recover from man-made and naturally occurring disasters that may impact California. Cal EMA coordinates homeland security and emergency activities to save lives and reduce property losses during disasters and works to expedite recovery from the effects of disasters. On a day-to-day basis, Cal EMA provides the leadership, assistance, and support to state and local public safety agencies in planning and preparing for the most effective use of federal, state, local, and private sector resources during times of emergencies.

When disasters strike, whether they are natural, accidental, or man-made, it has always been vital that alerts and warnings be reported accurately and in a timely fashion to those who may be in danger. Cal EMA’s role in alerts and warnings is multifaceted. The Agency is responsible for monitoring, informing, communicating and alerting of any natural or man-made

emergencies through the California State Warning Center (CSWC). We are also responsible for developing and implementing the California State Emergency Plan, which, in part, supports local government with alert and warning procedures and protocols. Finally, Cal EMA coordinates and provides guidance for broadcasters and cable industry through the California Emergency Alert System Plan.

Each jurisdiction within the State is responsible for preparing for a disaster, including establishing methods for alerting and warning the public. The CSWC is the official state level point of contact for emergency notifications. Operating 24 hours a day, 365 days a year, the CSWC has multiple communication methods for contacting local and state government emergency agencies that are directly responsible for the safety of people living in all 58 counties and receives over 570,000 notifications a year from local jurisdictions. Warning Center personnel maintain contact with County Warning Points, state agencies, federal agencies and the National Warning Center in Berryville, Virginia.

The State Emergency Plan outlines a state-level strategy to support local government efforts during a large-scale emergency. The plan provides methods for carrying out emergency operations; the process for rendering mutual aid; an overview of emergency services of governmental agencies; a description of how resources are mobilized; procedures for the dissemination of emergency public information; and how continuity of government will be maintained.

The Emergency Alert System (EAS) Plan is mandated by the Federal Communications Commission (FCC) and serves two basic purposes:

- 1) Describe how the Governor can provide emergency messages affecting a large area, multiple areas, or the entire area of the state.
- 2) Provide guidance for the broadcast and cable industry in the use of EAS, both voluntarily and in the event of a national alert from the President of the United States.

The EAS, jointly administered by the FCC, Federal Emergency Management Agency (FEMA), and National Weather Service (NWS), is a nationwide alert and warning system using media broadcasters. The EAS is a system for national, state or local emergency warnings to the public, and provides a means of distributing emergency information quickly by radio stations, television stations and cable entities and then to the general public. EAS does not, however, utilize other forms of communication, such as mobile phones or the internet.

EAS is built on a structure conceived in the 1950s when over the air broadcasting was the best available technology for widely disseminating emergency alerts to the public. The advent of new media has brought a significant shift in how the public consumes information. Given the highly mobile nature of the population and the diverse communication needs of the public, alerting systems must be modernized.

The State's equivalent of EAS is the Emergency Digital Information Service (EDIS), which is a statewide alerting system that supplements the National EAS. Developed soon after the 1989 Loma Prieta Earthquake, EDIS allows the public to subscribe to receive notifications and provides email and internet warnings with audio and pictures to the public. The system is the backbone of many county emergency systems and is available without charge to local, state, and federal agencies serving within the State. EDIS has provided 20 years of reliable service, but is in need of modernization.

The Integrated Public Alert and Warning System (IPAWS) is the nation's next-generation infrastructure of alert and warning networks. IPAWS will expand upon the traditional audio-only radio and television EAS by providing one message over more devices to more people before, during, and after a crisis so they may take mitigating actions to save lives and reduce damage to property. IPAWS will develop interoperable standards and interfaces to ensure disparate messages can travel many paths, such as through mobile devices or over the internet, in order to reach the American public.

Many communities also rely on an automatic calling notification plan, often referred to as “Reverse 9-1-1,” although REVERSE 9-1-1 is actually a trademark of Cassidian Communications, which develops public safety communication systems. The system requires citizens to register their phone numbers (land-lines and cellular) to receive emergency notifications, allowing public safety organizations to notify its citizens of emergency events occurring in a specific area. Various third party vendors provide this capability to public safety organizations for a fee, but individuals are not charged to receive emergency notifications. The system does have drawbacks in that individuals must register to receive alerts and non-residents visiting the impacted area will not receive alerts.

The Personal Localized Alerting Network (PLAN) is an alerting system designed to transmit emergency alerts to mobile devices, and is the result of a unique public private partnership between the FCC, FEMA, and the wireless industry. In 2008, the FCC adopted rules allowing wireless carriers to transmit text-like emergency alerts to mobile devices. PLAN Messages will use new technology and will not be impacted by network congestion. Alerts will be accompanied by a unique audio signal and vibration cadence for hearing and visually impaired citizens.

In October 2010, Cal EMA conducted the nation’s first test of PLAN with San Diego County and Sprint/Nextel in a four week trial with the goal to validate real time use cases, determine system performance and identify shortfalls. During the trial, they transmitted over 50 alerts simulating large & small scale disasters from tsunamis to hazardous spills. The system performed as designed and expected. T-Mobile, AT&T, Sprint Nextel and Verizon have committed to making PLAN available to the public by the Federal Communication Commission deadline of April 7, 2012.

PLAN differs from a reverse 9-1-1 system in that messages can be targeted to a location rather than relying on users to sign up and indicate the areas about which they are interested. Cellular customers will automatically be enrolled in PLAN at no additional cost, but can opt-out of receiving the alerts. There is also no charge to public safety organizations for delivery of the emergency alerts, where traditional reverse 9-1-1 systems can costs thousands in annual fees.

AB 2231 (Pavley, Chapter 764, Statutes of 2006) required the Director of the former Office of Emergency Services (now Cal EMA) to convene a working group, as specified, to make recommendations on a system for the transmission of emergency alerts to the public through a public-private partnership, and report the working group's findings and recommendations to the Legislature. Pursuant to the legislation, Cal EMA convened the Alert and Warning Working Group (AWWG), consisting of broadcasters, wireless service providers, emergency services, public safety officials, and academia.

The AWWG met throughout 2008 to review the current state of alert and warning messaging, technology, protocols, and identified four key areas of concern: (1) technical issues, (2) social issues, (3) standardization, and (4) funding, legal, and liability issues. This effort culminated in the "Alert and Warning Report to the California Legislature" that addressed current trends in alert and warning, including significant national initiatives in the process of being implemented, identified associated issues in California, and made a series of recommendations for development, maintenance, and operation of an integrated Alert and Warning system in California. In late 2009, Cal EMA reconvened the workgroup to begin implementing the recommendations of the report. The workgroup proposed addressing 13 key deliverables that address most of the 33 recommendations contained in the Report, including:

- Standards & Protocols
- Liability
- Technical Capabilities
- Accessibility for hearing and visually impaired citizens
- Training
- Costs

To date we have met 15 of the 33 recommendations from the Report; however, many of the recommendations are dependent on the adoption of federal standards and deployment of IPAWS. Others are not feasible at this time due to the need for more advanced technology or excessive cost.

So where do we go from here? Cal EMA is working to leverage new technology to reach the largest number of people. The future of alert and warnings in California includes earthquake early warning systems; using social media; and, Next Generation 9-1-1.

Earthquake Early Warning: This system will allow us to send warning messages to emergency responders, utilities and transportation agencies, providing 10 to 15 seconds of warning after a no-notice earthquake. This system will be accomplished in partnership with the U.S. Geological Survey (USGS) and the California Integrated Seismic Network (CISN).

Social Media: For over two years Cal EMA has leveraged social media resources to reach wider audiences with messages of emergency preparedness, response, and recovery in support of the agency's mission. Using Facebook, Twitter, YouTube, Wordpress, and Flickr, Cal EMA has been able to effectively communicate real-time information about several emergency incidents and events, as well as provide timely preparedness information related to potential seasonal hazards such as fires and severe weather. For example, Cal EMA utilized social media to monitor media reports and questions from the public regarding incidents such as the Haiti earthquake, San Bruno gas explosion, and Japan Earthquake. Social media has allowed for direct communication with the public, enabling them to see how the State is responding to emergencies.

Next Generation 9-1-1: The next generation of 9-1-1 systems will be capable of handling video, photos and text, and will have the ability to transfer 9-1-1 calls among communication centers. My colleague, Karen Wong from the California Technology Agency, will provide a more detailed overview of Next Generation 9-1-1.

As modes of communication continue to evolve, Cal EMA is committed to preserving lives and property by harnessing all technological avenues to ensure people are notified of an impending emergency in the most timely manner. Thank you again for bringing attention to this vital issue. I look forward to a continued partnership with this Committee in addressing critical emergency management issues and am happy to answer any questions you may have.