California Earthquake Early Warning | Sector Implementation

## FIRST RESPONDERS



**First responders** play a critical role in the aftermath of an earthquake, both helping those that are injured and limiting additional damage (e.g., fire control).

First responders may include:

- · Law Enforcement, Firefighters
- Emergency Medical System and Technicians (EMTs)
- Safety, Rescue, and Volunteer Organizations
- Private Security Guards

Earthquake Early Warning (EEW) may provide public safety organizations time to drop, cover, and hold on, and decrease the likelihood of injury from falling equipment. For example, firefighters in the field may enter a dangerous environment and be susceptible to intense shaking, either from an earthquake or an aftershock, that could result in injury or fatality.

Additionally, without an automatically activated garage door system, there is the potential for a firetruck to be stuck in the station, if the doors sustain damage during an earthquake. This would prevent firefighters from responding effectively to an emergency.

## **EEW AUTOMATED ACTIONS**



**Bay Doors.** EEW alert activates bay doors to open and triggers automatic backup systems for operations and communications.



Warning Alarm. EEW alert activates warning alarm to first responders, allowing for protections actions such as DCHO and/or avoiding dangerous areas and situations.



Generators and Back-Up Power. Activate back-up power generation, during power failure.



**Water Control.** Automated and manual selected water supply shutoff.



**Automatic Shut-Off.** Gas valve controls/shut-off.

## BENEFITS AND OUTCOMES

- Enhanced situational awareness.
- Injury avoidance (response center, headquarters and in the field).
- Improved emergency response.
- Increased speed and efficacy of Drop, Cover, Hold On (DCHO).
- Reduced response impediments.
- Faster overall response and effectiveness.

## **GOALS AND FOCUS AREAS**

- Reduce risk to life, property, community lifelines, and the environment through the adoption, implementation, and integration of earthquake early warning technology and systems.
- Enable ALL Californians, industries, and tourists to utilize EEW technology in their everyday life.
- Expand partnerships: engage CBOs, NGOs, Industry Associations/Sectors, as well as federal, state, tribal, local organizations, and agencies.
- In collaboration with USGS, work with entities and potential partners throughout the ShakeAlert Pilot License Agreement (PLA) and License-to-Operate (LtO) partner processes to deploy EEW automations throughout key sectors.

