

STATEMENT

OF

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BEFORE  
THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
SUBCOMMITTEE ON ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS, AND  
EMERGENCY MANAGEMENT  
U.S. HOUSE OF REPRESENTATIVES  
WASHINGTON, D.C.

**PACIFIC NORTHWEST SEISMIC HAZARDS:  
PLANNING AND PREPARING FOR THE NEXT DISASTER**

Submitted  
By

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May 19, 2015

## **Introduction**

Chairman Barletta, Ranking Member Carson, and Members of this distinguished Subcommittee, I am Robert J. Fenton, Deputy Associate Administrator of the Office of Response and Recovery at the Department of Homeland Security's (DHS) Federal Emergency Management Agency (FEMA). It is my pleasure to be here today to discuss FEMA's efforts within the realm of earthquake preparedness, response, and recovery.

As a fifth generation San Franciscan—who served for 13 years in FEMA's Region IX Office in Oakland and will soon be reporting as the Regional Administrator—I understand the significant threats that catastrophic earthquakes pose to our Nation. We have also recently seen the devastating consequences of the recent earthquakes in Nepal, and our thoughts continue to be with the survivors.

A catastrophic earthquake of that magnitude in an urban area of the United States would impact millions of people and cause profound social and economic impacts. The Federal government must maintain a forward-leaning posture and be ready to act decisively at the direction of the President to effectively support state, local, tribal and territorial governments in saving lives and protecting property. We are one part of a whole community effort that will be required to respond to and recover from such an event.

I appreciate the opportunity today to update you on FEMA and our whole community partners' efforts to improve our Nation's preparedness for earthquake threats and to maintain our readiness to respond. In my testimony today, I will highlight the progress we have made in identifying our highest earthquake risks across the country and developing deliberate plans that outline how the Federal government will support state, local, tribal, and territorial efforts in responding to these threats. I will also highlight how we are exercising our collective ability to execute these plans and incorporating lessons learned.

## **Catastrophic Preparedness and Planning Efforts**

In 2011, the President directed the development of a new National Preparedness System (NPS) that includes a National Planning Framework for each of five mission areas—prevention, protection, mitigation, response, and recovery. These Frameworks identify how the whole community will build and deliver the core capabilities required to address the threats that pose the greatest risks to our Nation. The President also directed the development of a Federal

Interagency Operational Plan (FIOP) to support each of these Frameworks and to describe how the Federal government will execute its responsibilities in support of state, local, tribal, and territorial efforts.

The FIOP for Response is an all-hazards plan based on a “maximum of maximums” scenario that includes multiple catastrophic incidents and cascading impacts, including a major earthquake, a major land-falling hurricane, or a nuclear incident. Such a scenario would occur over a large geographic area, affect millions of people, and require response and recovery capabilities from across the whole community to include government at all levels, public and private sector resources, non-governmental organizations, and individual citizens. The concepts and tasks outlined in the FIOP for Response are scalable, flexible, and adaptable and can be used regardless of cause, size, location, or complexity of incidents.

In addition to this national-level planning, FEMA and our partners also conduct regional catastrophic planning efforts to address threats with the greatest likelihoods of occurrence based on location. These plans focus on the immediate delivery of resources to meet life-saving and life-sustaining needs, with a goal of stabilizing an event within the first 72 hours. During the past two years, Regional All-Hazards response plans have been completed in all ten FEMA Regions in synchronization with the single FIOP for Response. Many of our Regions face significant earthquake threats, and I would like to highlight a number of significant planning activities we have undertaken to address those risks.

- To address threats posed by the 800-mile-long Cascadia Subduction Zone in the Pacific Northwest—and the tsunami that may occur from a catastrophic earthquake in that area—FEMA Regions IX, X, and the states of Washington, Oregon, California, Alaska, and Idaho, along with British Columbia, Canada, developed joint catastrophic earthquake and tsunami plans that represent capabilities from all levels of government, the private sector, and nonprofit organizations. These plans are the result of a collaborative process between hundreds of emergency management professionals who have also helped foster critical-public private partnerships.
- To address risks posed by the San Andreas Fault, FEMA Region IX worked with the State of California to develop the Southern California Catastrophic Earthquake Response Plan, to address a potential rupture on the southern fault.

- FEMA and our partners have also conducted extensive analysis and planning related to the New Madrid Seismic Zone in the central United States. FEMA Regions IV, V, VI, VII, and the states of Alabama, Mississippi, Tennessee, Kentucky, Indiana, Illinois, Missouri, and Arkansas developed joint plans to address the impacts from a catastrophic earthquake affecting communities across eight States. We tested these plans through the National Level Exercise in 2011.
- FEMA Region VIII and the State of Utah developed a joint catastrophic earthquake plan to address the impacts of an earthquake along the Wasatch Fault.
- Finally, FEMA and our partners are preparing and planning for potential tsunamis that may occur as a result of catastrophic earthquakes in areas in addition to the Pacific coast. We created catastrophic earthquake and tsunami plans in coordination with Hawaii, Puerto Rico, Guam, and the U.S. Virgin Islands

## **Exercising our Capabilities and Incorporating Lessons**

### ***2014 Capstone Exercise***

Another critical element of the National Preparedness System is exercising the plans we develop. FEMA's National Exercise Program (NEP) is the principal exercise mechanism for examining national preparedness and measuring readiness. The NEP serves as the cornerstone of a collective effort to test, improve, and assess national preparedness across the homeland security enterprise. Resilience is enhanced across the whole community through the design, development, conduct, and evaluation of a progressive cycle of exercises that tests the ability to prevent, protect, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.

As such, the 2014 Capstone Exercise engaged a whole community approach to examine our Nation's ability to respond to and recover from a catastrophic incident using the National Preparedness Frameworks, FIOPs, and other applicable plans. The exercise used a scenario involving multiple threats, including an earthquake, tsunami, and a nuclear accident. Using a common scenario and sequence of events, the exercise integrated and unified five National Exercise Program events:

1. **Alaska Shield** – Provided the core framework for the 2014 exercise and commemorated the anniversary of the 1964 9.2-magnitude Great Alaskan Earthquake by replicating the earthquake's effects and resulting tsunami;
2. **Ardent Sentry** – Aligned key U.S. Department of Defense components with

- Alaska Shield, focusing on the Defense Support of Civil Authorities mission;
3. **Nuclear Weapon Accident/Incident Exercise** – Involved the exercise scenario of a nuclear accident occurring during a secure transportation convoy of nuclear weapons within the continental United States;
  4. **Eagle Horizon** – Tested the Nation’s ability to conduct continuity of operations and reconstitution plans; and
  5. **Silver Phoenix** – Examined the full range of efforts required to support the recovery from an earthquake, tsunami, and nuclear weapons accident.

The 2014 Capstone Exercise included nearly 10,000 emergency management and homeland security participants from local communities, states, tribes, private sector organizations, and over fifty State and Federal departments and agencies. The exercise revealed many strengths, including successful sharing of geospatial information; the use of alternate public messaging strategies to reach audiences without communications and power; and the integration of mitigation efforts into response operations.

In addition to identifying many of the whole community’s strengths, the exercise also identified a number of key areas for improvement, including mission assignment and resource-request processes; processes and systems to create one accurate National common operating picture across local, state, regional, tribal, and federal partners, particularly with regard to movement of assets; and sufficient organizational structure for integrating recovery efforts into response operations.

Since the Capstone, FEMA has been working with our partners to address these lessons learned. For example, we have taken steps to ensure that all Mission Assignments required to support the first 72 hours of a response, as identified in our deliberate plans, are issued within the first three hours of an event. To further expedite our response, we are working to bolster our Pre-Scripted Mission Assignment (PSMA) program, including posting PSMA’s and the execution schedules they support to our crisis management system so they can be immediately tailored based on initial incident assessments. In 2015, we also updated the Mission Assignment Guide to ensure our processes are clearly defined and understood by our response and recovery staff and our partners.

FEMA has reformed our Incident Management Assistance Team (IMAT) program to better integrate capabilities required for both the response to and recovery from a catastrophic disaster. Today, our IMATs at both National and Regional levels better represent the core capabilities required by the National Response and Recovery Frameworks and include personnel who are accountable for coordinating the Federal response and recovery regardless of type of incident. The personnel on these teams train together through an intensive, twelve-week long academy and—to graduate from the academy—they must succeed together in high-stress exercise environments.

### ***2015 Southern California (SoCal) Earthquake Exercise***

FEMA most recently participated in the Southern California Earthquake Exercise (SoCal 15), which took place concurrently with both USNORTHCOM's 2015 Ardent Sentry exercise and the California Capstone exercise. The exercise scenario was similar to the 2008 Great Southern California Shakeout, involving a magnitude 7.8 earthquake on the San Andreas Fault in southern California. Participants in this exercise included the State of California, the Department of Defense, and a number of FEMA components, including the National Response Coordination Center, the Region IX Response Coordination Center, the FEMA Operations Center, and a National IMAT.

The purpose of FEMA's participation was to assess regional and national incident management and incident support capabilities to the State of California following a catastrophic earthquake in a major metropolitan area. FEMA's overarching objectives were to test our ability to integrate into whole community incident management and incident support structures; to collaborate with the whole community to address economic, social, political, geographic, legal, regulatory, policy, and other issues related to fostering the stabilization and recovery of affected communities; and to collect and analyze information collaboratively to promote effective data-driven decision-making.

Additionally, our overarching exercise objectives sought to test execution of the core capabilities within the National Response and Recovery Frameworks and supporting plans, including the core capabilities of Planning, Operational Coordination, Public and Private Services and Resources, Situational Assessment, Critical Transportation, and Mass Care Services. Together with our partners, we are currently analyzing the results of the exercise and will integrate lessons learned into our plans, doctrine, and operations as required.

## **Promoting Individual Preparedness**

In addition to the planning and exercising that FEMA supports with our whole community partners, I also want to highlight an important initiative through which we are working to improve individuals' preparedness for earthquake hazards.

### *America's PrepareAthon! and the Great Shakeout*

In September 2013, FEMA and our partners unveiled America's PrepareAthon! – a nationwide community-based campaign for action to increase emergency preparedness and resilience. The goals of the campaign are to encourage individuals to understand what type of disasters are most likely in their own communities, to know what to do to be safe and mitigate damage, to take action to increase preparedness, and to participate in community planning. Twice a year, the campaign brings together individuals, organizations, and communities to practice responding to local hazards to strengthen their ability to deal with future emergencies.

ShakeOut is a major activity of America's PrepareAthon! As part of the campaign, 18.8 million individuals participated in earthquake drills in 2013 for the one-day Great ShakeOut – Drop, Cover, and Hold on. In 2014, the number of participants rose by nearly 45 percent with approximately 27 million people participating. And this year, approximately 6 million people have already registered to participate in the Shakeout slated for October.

## **Every Second Counts: Earthquake Warning and Detection**

FEMA made significant strides in alert and warning systems through our Integrated Public Alert and Warning System (IPAWS) for All Hazards. In addition, I would like to highlight that FEMA routinely coordinates with our Federal partners including the United States Geological Survey (USGS) on earthquake early warning (EEW) systems to alert devices and people of potential earthquake activity – for example supporting USGS's ShakeAlert – a demonstration EEW system currently under development that is designed to cover the West Coast States of California, Oregon, and Washington.

In short, FEMA is committed to working with states such as California and Oregon and our federal interagency partners because we understand early detection for earthquakes is a key factor to life safety and sustainment.

## **Conclusion**

Finally, I hope what is apparent throughout my testimony today is that FEMA is one part of a whole community effort that is required to effectively prepare for, respond to, and recover from catastrophic disasters. The response to a major earthquake along one of our Nation's fault lines will require resources from across all levels of government, the private sector, non-governmental organizations, and the public. These are the scenarios that we are planning and exercising against, and we are adapting the way we do business based on lessons learned. I look forward to working with you, distinguished Members of this Subcommittee, and other Members of Congress to continue these important efforts. I am prepared to answer any questions the Subcommittee may have.