

AFTER ACTION REPORT and IMPROVEMENT PLAN  
City of Seattle Tabletop Exercise  
February 13, 2008

On February 13, from 1300 hours to 1600 hours, the City of Seattle Office of Emergency Management hosted a Table Top Exercise (TTX). The TTX tested the response to a catastrophic earthquake based on the Seattle Fault Scenario.

The exercise was well attended. Almost all departments in the City participated as well as representatives from private critical infrastructure, local businesses, hospitals, and schools. The role of Mayor during the exercise was provided by one his senior staff. Also in attendance were representatives from Federal Emergency Management Agency (FEMA) and the Seattle City Council.

The TTX was part of an exercise series sponsored by Sound Shake 2008. The exercise had two primary objects:

- Identify gaps in the response to a catastrophic earthquake.
- Prepare EOC responders for the Functional Exercise scheduled for March 5<sup>th</sup>.

Exercise participants were provided an initial overview of the earthquake's impact on the community:

- 33 Billion in property damage and economic loss
- 1600 deaths
- 24,000 injured
- 9,700 building
- 29,000 buildings severely damaged, unsafe to occupy
- 130 fires
- Utilities out throughout the region
- Severe damage to major roads, freeways and bridges

The initial individual response to the earthquake was reviewed with an emphasis on the critical role personal preparedness plays in the response.

Next, the damage assessment process was reviewed. Discussion centered around which department is responsible for conducting damage assessment and how that information will be transmitted and to whom.

Expected responder actions were discussed. What do we expect our employees to do after a disaster strikes? Have they been properly trained?

Other issues discussed were:

- How will SFD will handle the response to multiple, simultaneous fires in the City and without access to mutual aid and without adequate water supply?

- The responder radio system will likely become overloaded in a short period of time, what communication options are available and are we capable of implementing those solutions?
- What impact will the earthquake have on health care?
- How will information on shelters and other critical issues be communicated to the citizens in a coordinated manner?
- What is the estimated level of citizen preparedness and how will it affect the response and recovery efforts?
- How soon will situational awareness be achieved in the EOC?
- How will information be managed in the new EOC?
- What does a disaster proclamation entail?

## LESSONS LEARNED

### EMPLOYEE PREPAREDNESS

All employees have been provided with preparedness training. It is difficult to know with certainty how many are truly prepared. Also, the City EOC does not have a stockpile of food and water for EOC responders. Lack of such supplies has the potential to seriously degrade the capability of the EOC responders to carry out their mission.

#### Recommendations **Completed**

- Preparedness requires continual attention at levels, training for new employees should continue and opportunities where the need for employee preparedness can be emphasized should be utilized whenever possible. Seattle Office of Emergency Management (OEM) will continue to support preparedness training for City employees and will ensure that the preparedness message is emphasized at appropriate venues.
- EOC responders have attended an orientation class for the new EOC facility. These responders have been warned that, following an earthquake, OEM will not be capable of providing food and beverages in the first 12 to 24 hours of an EOC activation and that responders should bring a disaster kit with them.
- OEM will submit a plan and budget for stockpiling emergency food and water in the EOC facility.

#### **DAMAGE ASSESSMENT – In progress/In 2011 OEM is rewriting the City Earthquake Annex to include a new plan for damage assessment.**

The Seattle Fire Department is the lead agency for the review of the City damage assessment plans. While many departments have developed solid plans for conducting an assessment, much remains to be done. The City does not have a coordinated plan for collecting, transmitting, analyzing and disseminating damage assessments.

#### Recommendations

- Determine which departments conduct assessments and how they are done. SFD is just finishing this assessment.

- Standardize how assessment information is reported, to include redundant communication plans.
- Define who needs the assessment information and how it will be disseminated.
- Develop plan for conducting additional assessments when aftershocks strike.
- The Seattle Office of Emergency Management will coordinate the resolution of these issues among several City departments. The Seattle Fire Department should continue the review of Citywide damage assessment with a goal of streamlining the process. The Disaster Management Committee Strategic Subcommittee will assist in reviewing and implementing proposed solutions.

**CONCEPT OF OPERATIONS – EARTHQUAKE RESPONSE – In progress/Plan rewrite should be completed in Feb. of 2011**

The City needs a detailed plan for earthquake response. This plan would provide clear direction on the overall strategy that should be employed during the initial response phase. The existing City Disaster Readiness and Response plan, and its annexes, provide a foundation on which to construct such a plan.

**Recommendations**

- OEM is currently writing an earthquake response plan. This effort should continue with all needed support provided.
- The Disaster Management Committee Strategic Subcommittee will conduct a series of facilitated discussions to better define the basic assumptions and response strategies to better guide the development of the plan.
- The Disaster Management Committee Strategic Subcommittee will be responsible for reviewing the initial draft earthquake plan.
- Seattle Public Utilities and the SFD intend to work together in re-establishing water service after an earthquake to support firefighting. Such efforts may include deploying special hoses purchased for such a contingency. As identified in the TTX, this effort needs more planning to ensure an efficient response, for example; in the exercise SPD was identified as playing an important role in crowd and traffic control to ensure such restoration efforts not impeded. OEM, SPU, SPD and SFD will be responsible for including emergency water service in the earthquake plan.

**OVERLOAD OF THE RESPONDER RADIO SYSTEM**

All participants agreed that the responder radio system, no matter how well designed and operated, will not support the significant increase in call volume expected following a major earthquake.

**Recommendations Completed**

- OEM is providing greater support, in the form of assigned workspace, equipment and training, to the Amateur Radio Emergency Services which will provide alternate means of communication.

- OEM, supported by the Radio Shop, will review the current configuration of the responder radio channels programmed into the desktop radios in the EOC to ensure the best configuration of channels.
- Dispatch Centers in the region should continue to practice implementing the Tactical Interoperable Communications Plan (TICP). The Seattle Police Department 911 Center is currently designing a full scale exercise to test the TICP.
- OEM and the Disaster Management Committee Strategic Subcommittee will ensure that the earthquake plan under development includes realistic and supportable strategies to address the issue of communication system overload.

## SITUATIONAL AWARENESS

The exercise highlighted the wide range of expectations for when situational awareness will be achieved in the EOC following a disaster. Current plans do not directly address this issue. Lacking a standard, EOC responders are at risk of the perception that they have not achieved situational awareness soon enough.

### Recommendations **In progress/Plan rewrite should be completed in Feb. of 2011**

- OEM will ensure that the earthquake plan currently under development addresses this issue. Assisted by the Disaster Management Committee Strategic Subcommittee, reasonable estimates of when situational awareness could and should be achieved will be defined.
- OEM will address this issue in the 2008 emergency management training for EOC Responders, the Mayor, the Mayor's Staff and City Council.

## EOC ORGANIZATION AND INFORMATION MANAGEMENT

The existing model that describes how EOC responders will be organized and exchange information effectively must be updated to reflect the enhanced capabilities available in the new EOC. For example, the new EOC can accommodate more responders than the old facility could. This means the amount of information needed and generated during activation increases as well. Some responders expressed during the TTX concerns that they are not always sure how they are to acquire and distribute information. Although not measured in the TTX, it is likely that Department Operating Centers (DOC) may share this concern as well.

### Recommendations **Completed**

- OEM is currently rewriting the EOC organization and information management plan. Once the plan is finalized in late April, EOC responders and the DOC personnel will be provided training in this area.