

# **Utah Seismic Safety Commission**

Meeting  
April 22, 2010  
Minutes

On April 22, 2010, a regularly scheduled quarterly meeting of the Utah Seismic Safety Commission (USSC) was held in the Kletting Room of the Senate Building on Capitol Hill in Salt Lake City, Utah. Chair Roger Evans called the meeting to order at 9:00 AM.

**Members Present:**

-Roger Evans, Chair	Utah League of Cities & Towns
-Peter W. McDonough	American Society of Civil Engineers
-Walter Arabasz	University of Utah Seismograph Stations
-Barry Smith	Western Mountain Region, American Inst. of Architects
-Rick Allis	Utah Geological Survey
-Sheila Curtis	Utah Insurance Department
-Leon Berrett	American Public Works Association

**Members Not Present:**

-Keith Squires	Division of Homeland Security
-Carmen Swanwich	Utah Department of Transportation
-Matthias Mueller	Utah Division of Facilities Const. & Management
-Michelle Jones	Association of Contingency Planners
-Evan Curtis	Governor's Office of Budget and Planning
-Jake Watson	Structural Engineers Association of Utah
-Senator Peter C. Knudson	Utah State Senate
-Mike Morley	Utah House of Representatives
-Mark Petersen	U.S. Geological Survey (Ex-Officio)
-Doug Bausch	Federal Emergency Management Agency (Ex-Officio)

**USSC Staff Present:**

-Bob Carey	Mitigation & Natural Hazards Section, DHS
-Karen Vetterli	Mitigation & Natural Hazards Section, DHS
-Chris DuRoss	Geologic Hazards Program, Utah Geological Survey

**Guests Present:**

-Barry Welliver	Structural Engineers Association of Utah
-Steve Bowman	Utah Geological Survey
-Jenefer Youngfield	Utah State Office of Education
-Rachel Dunn	In Harm's Way
-Emily Esplin	In Harm's Way
-Judy Fahys	Salt Lake Tribune
-Mark Walton	State Farm Insurance

-

➤ **WELCOME/OVERVIEW**

Chair Roger Evans welcomed and thanked everyone for their attendance and asked for introductions.

Commissioners reviewed and made corrections to the minutes of the January 21, 2010 meeting.

**Motion:** *Rick Allis made a motion to approve the minutes. Motion seconded by Sheila Curtis. Motion was unanimously approved.*

➤ **Legislative updates**

**Roger** acknowledged the support of the Parent Teacher Association (PTA) and other groups during the legislative session. He also indicated that recent earthquakes have helped to create a better environment for discussing the earthquake vulnerability of Utah's buildings.

Roger discussed three House Bills, 45, 183, and 308, which are part of the Uniform Building Standards Act, which goes into affect on July 1, 2010. He noted that the Web site of the Division of Occupational and Professional Licensing (DOPL) was being revised to reflect changes in the building code from the legislative session. He indicated that HB 45 has a 1% surcharge on permits to be placed in an education fund that is now non-lapsing, meaning that any unused funds will be moved into the general fund. DOPL has an education calendar on their website that shows upcoming training.

➤ **Existing Buildings Committee Update**

**Barry Welliver** updated the Commission on House Bill 72 – School Seismic Hazard Inventory or Rapid Visual Screening (RVS) of Utah's schools. The bill did not pass this legislative session, however it passed to the Senate, but did not make it to the Senate floor for consideration. After the session, as part of a master study resolution, HB 72 will be further studied by an interim committee. Barry suggested that Commission be more proactive with the committee that the bill is assigned to next year.

Barry pointed out the differences between House Joint Resolution (HJR) 7 and HB 72. HJR 7 is looking at public unreinforced masonry (URM) buildings. The Existing Buildings Committee has been reviewing higher education buildings as part of HJR 7. HB 72 is concerned with all seismically unsafe school buildings. Barry will be reporting back to the Commission on the progress of the school building inventory which will be incorporating data collected by the Utah State Office of Education (USOE). The Existing Buildings Committee has a Federal Emergency Management Agency (FEMA) cooperative agreement, which will provide \$50,000 to perform a RVS sampling of schools (RVS Pilot Project). With the data provided by USOE and this sampling, the Existing Buildings Committee can provide the Commission with a report that the Commission could send onto the Legislature. A draft report on HJR 7 should be available at the next quarterly meeting of the USSC.

**Bob Carey** reported for Jake Watson on the RVS Pilot Project. FEMA funding is provided through a Cooperative Agreement for FY09 of \$50,000 and proposed funding from a Cooperative Agreement for FY10 should provide adequate funding for the pilot project. Barry Welliver has been working with FEMA on a demonstration project to utilize the Rapid Observation of Vulnerability and Estimation of Risk (ROVER) software to collect the field data as part of HB 72. Bob indicated that he believes we have adequate funding to capture the need field data for the project. He said that the Existing Buildings Committee was working through funding issues with Jake and SEAU. Walter inquired if there would be actual field work. Bob confirmed that there will be field data collection and explained the need for a scientific sampling to insure that there is no bias in the data collected. The school inventory will be using RVS standards. Bob also explained his concerns about incorporating existing data from other sources, which has been a concern of the Legislature. Barry provided the Commission with the names of the Oversight Committee for the school inventory pilot project, which includes, Roger Evan, USSC, Jake Watson, USSC & SEAU, Larry Newton, USOE, and Larry Wiley, Utah House of Representatives. The Oversight Committee reports to the Existing Buildings Committee. Barry provided information on a pilot project with FEMA and the Applied Technology Council (numbered ATC-67) that implements FEMA 154 in a mobile computing environment (ROVER), using Windows Mobile smart phones or Windows-based tablet PCs, digital cameras, GPS devices, and a central database. Barry suggested to FEMA to use our school inventory project as part of the ATC-67 pilot project. He presented the Commission with a draft proposal for FEMA to utilize ROVER as part of the Commission's school inventory project.

Jenefer Youngfield, USOE, and Roger reported on a meeting they had with Jake on the specifics of creating an RFP to start work on the field data collection. They also discussed the use of volunteers to assist in collecting information through Google, such as latitude and longitude and photos of the buildings. Barry Welliver indicated the benefits of using ROVER, one of which would be collecting spatial coordinates as part of the data collection process. Barry spoke to the group on how FEMA would train the engineers in the use of ROVER in a half day training before starting the field work. Walter asked if professional engineers would be used in the field data collection. Barry responded that professional engineers would be used.

Jenefer inquired on how the RFP was going to work. Bob indicated that he had spoken with the financial section in DHLS on providing a grant to SEAU to administer the individual engineer contracts. Jenefer mentioned that USOE had personnel who could do a statistical analysis of the data.

Rick Allis wanted the group, with the help from Larry Willy, to research what legislative interim committee was best suited to present our findings. Roger said that he had asked Larry to assist in finding the committee chair who be overseeing the hearing so the Commission could make contact with him and invite him to the Commission meetings. Roger mentioned that once the legislator is identified that the Commission could bring out-of-state speakers to present what they accomplished in their school inventories.

Walter suggested that, if funding were available, to produce a video to be placed on the Commission's and/or USOE websites about school seismic safety. Jenefer suggested that the website contain information about the building code level of school construction and what them means in seismic safety terms.

**Rachel Dunn and Emily Esplin** from In Harm's Way spoke to the groups work in the classroom to educate children about the correct earthquake safety procedures. This led to a discussion about how most issues concerning schools starts at the local district level. The important issues need to be bottom-up driven to garner the needed support when coming to the legislature for funding.

#### ➤ **Presentation of Recent Earthquakes**

**Walter Arabasz** gave a presentation entitled "A Year of Living Dangerously – Recent Damaging Earthquakes and Lessons for Utah." Walter pointed out that the current level of earthquake activity, based on the frequency, sizes, and locations of recent earthquakes, was normal. He spoke of informational tools from the USGS, ShakeMap and Pager. He compared the level of damage between the Haiti and Chilean earthquakes and how the use of building codes was directly related to the severity of damage. From a series of photos of damaged buildings, Barry Welliver described why the buildings were experiencing damage. He indicated that enforcement of buildings code is imperative. Walter discussed earthquake size, fault rupture and epicenter locations, and the relevance of epicenters. Walter reported on the Randolph earthquake, in particular about the number of people who felt the quake and how far from the epicenter the earthquake was felt.

#### ➤ **Earthquake Preparedness Week**

**Bob Carey** spoke to the activities connected with Earthquake Preparedness Week. A proclamation was signed by the Governor and distributed to local emergency managers. Bob reviewed last year's preparedness activities, the big production with the Governor and Lt. Governor and the signing of proclamation in the Gold Room with the limited media coverage. As the result of recent earthquakes, media attention was much greater this year. Bob indicated that he had numerous radio, television, and newspaper interviews. A state-wide earthquake drill was again requested of

schools. DHLS promoted the state's Be Ready Utah website for individual and business preparedness. A discussion ensued about the "Triangle of Life" and where to find resources to dispute it. The Commission's website does have information to help individual better understanding the Commission's position with regards to the "Triangle of Life" debate. Walter suggested to the Commission that there was a need for the Education and Awareness Standing Committee. The Commission is more technical and there needs to a user-friendly approach in presenting our issues to the general public. It was pointed out that the use of social networks, such as Facebook and Twitter, is another means to help educate the public.

### ➤ **News Items**

**Bob Carey** reported a balance of \$14,000. He stated that a letter had been sent to Roger outlining how DHLS was handling the Commission's account. Roger was satisfied with DHLS response. Walter inquired about the Student Grant Program which had one participating school this year. A discussion ensued about creating scholarships for middle, junior high and high schools to produce a video on earthquake preparedness. This effort could be tied to the 2012 earthquake exercise.

**Motion:** *Shelia Curtis made a motion to create a \$4000 fund for a scholarship/grant program to produce a video on earthquake preparedness. The participants would include middle school, junior high school, high school, college and university students. Grants would be \$500 to \$1000. Motion seconded by Walter Arabasz. Motion was unanimously approved.*

**Steve Bowman** spoke about the annual Utah Earthquake Working Groups, a UGS/USGS cooperative effort. The working groups include ground shaking, liquefaction, Quaternary faults parameters and Wasatch Front earthquake probabilities. The meeting are held in February at the UGS.

**Pete McDonough** spoke about the upcoming Western States Seismic Policy Council (WSSPC) meetings which included a session for Seismic Safety Commissions and Advisory Boards in Broomfield, Colorado on July 9 and 10, 2010.

**Motion:** *Pete McDonough made a motion for the Commission to pay for travel and other associated expenses for the Chair to attend and represent the Commission at the WSSPC sponsored Seismic Safety Commissions and Advisory Boards meeting in Broomfield, CO. Motion seconded by Barry Smith. Motion was unanimously approve with Roger Evans abstaining.*

**Chris DuRoss** gave a presentation on a reconnaissance field trip to Randolph after the earthquake to look for evidence of liquefaction. Several locations near the epicenter displayed several liquefaction sand blows. Chris pointed out this size of an earthquake, M4.9, was at the very lower end of earthquake size to produce liquefaction features.

**Bob Carey** requested that the Commission decide on whether they want to participate in the 2012 earthquake exercise. He also asked the Commission to

consider the concept of the next progress report. He notified the Commission of his new position at DHLS, Operations Section Manager and Operations Chief in the EOC. These are additional duties to his being the Earthquake Program Manager.

**Walter Arabasz** inquired about the status of the insurance brochure. Shelia indicated that it was in a rough draft form. Walter suggested that brochure speak to the availability of earthquake insurance in Utah. Shelia said that would be included and that she wanted to put the brochure on the Department of Insurance's website. She mentioned that the Insurance Commissioner is a big advocate of earthquake insurance. During the subsequent discussion, a recommendation to have a section on price ranges for earthquake insurance premiums be included in the brochure.

**Motion:** *The Chair made a motion to adjourn. Motion seconded by Barry Smith. Motion was unanimously approve*

➤ **NEXT MEETING**

**Date:** Thursday, July 15, 2010  
**Time:** 9:00 a.m.  
**Place:** Capitol Hill Kletting Room.

➤ **ADJOURNMENT**