

Utah Seismic Safety Commission

Meeting
July 11, 2008
Minutes

On July 11, 2008, a regularly scheduled quarterly meeting of the Utah Seismic Safety Commission (USSC) was held in the State Office Building Auditorium, Salt Lake City, Utah. Chairman Peter McDonough called the meeting to order at 9:00 a.m.

Members Present:

-Peter W. McDonough	Chair, American Society of Civil Engineers
-Walter Arabasz	University of Utah Seismograph Stations
-Roger Evans	Utah League of Cities & Towns
-Evan Curtis	Governor's Office of Budget and Planning
-Michelle Jones	Association of Contingency Planners
-Matthias Mueller	Utah Division of Facilities Const. & Management
-Jason Richins	Utah Department of Transportation
-Barry Smith	Western Mountain Region, American Inst. of Architects
-Jake Watson	Structural Engineers Association of Utah
-Doug Bausch	Federal Emergency Management Agency (Ex-Officio)
-Rick Allis	Utah Geological Survey

Members Not Present:

-Sheila Curtis	Utah Insurance Department
-Matt Cassel	American Public Works Association
-Jeff Graviet	Division of Homeland Security
-Rep. Michael Morley	Utah House of Representatives
-Senator Peter C. Knudson	Utah State Senate
-Mark Petersen	U.S. Geological Survey (Ex-Officio)

USSC Staff Present:

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

Guests Present:

-Steve Bowman	Geologic Hazards Program, Utah Geological Survey
-Gary Christenson	Friend of the Commission
-Jim Higbee	Utah Department of Transportation
-Mark Walton	State Farm Insurance Company
-Parry Brown	Reaveley Engineering
-Kevin Franke	Kleinfelder, Inc.
-Judy Watanabe	Division of Homeland Security
-Chris Purcell	State Farm Insurance Company
-Brad Bartholomew	Division of Homeland Security
-Jenefer Youngfield	State Office of Education
-Larry Newton	State Office of Education
-Rep. Larry Wiley	Utah House of Representatives
-Barry Welliver	Structural Engineers Association of Utah

➤ **WELCOME/OVERVIEW**

Chair Peter McDonough welcomed and thanked everyone for their attendance and asked for introductions.

➤ **APPROVAL OF MINUTES**

Peter McDonough asked for any corrections and comments to the minutes.

Motion: *Peter McDonough made a motion to approve the minutes from the last meeting held on April 4, 2008. Rick Allis seconded the motion and the minutes were unanimously approved.*

➤ **PRESENTATIONS – School Seismic Safety**

Bob Carey spoke about schools and their inclusion as government infrastructure. There is a national program for infrastructure, but the plan is primarily concerned with protection from terrorism. Under this plan, schools are considered part of the infrastructure under government facilities. However, schools often serve as evacuation shelters, due to the amenities located in the buildings, or incident command centers in disaster relief areas.

Larry Newton introduced Jenefer Youngfield as his newest staff member. She is educated in school construction inspection and is a certified plans examiner, building inspector, and energy inspector. Mr. Newton also distributed handouts summarizing the square footage of school buildings in districts both east and west of I-15. The list included schools that have gone through a seismic retrofit.

Barry Welliver reported on the status of the unreinforced masonry building (URM) inventory bill (HJR7). In a similar inventory, Oregon used the FEMA 154 rapid visual screening method to survey their school buildings and emergency facilities.

Typically this method uses a numbering system to rank the seismic vulnerability of buildings, which is used to determine if further investigations are needed. The Oregon program is a potential model for Utah to consider when identifying and assessing potentially hazardous buildings under HJR7.

Roger Evans and Parry Brown spoke about successes in the Salt Lake City school district. For example, seismic screening evaluations are ongoing in the Salt Lake School District. High schools were the first to receive seismic upgrading, including West High, which was the first high school to receive the upgrades. Seismic strengthening of structures during remodels is one of the best strategies, although this is not a complete seismic upgrade. The Salt Lake School District decided to make upgrades on building, knowing that time lost is more money needed in the future.

➤ **DISCUSSION – School Seismic Safety (Walter Arabasz, moderator)**

Walter led a discussion on the state of school seismic safety in Utah. The motivation for improving earthquake safety includes the “three d’s:” death, damage and disruption. Economics are an important part of potential disruptions. Walter stressed the need to retrofit URMs to prevent large numbers of casualties, particularly in high occupancy buildings and schools. Walter asked the commissioners for input to determine the interest level in addressing the seismic safety of Utah schools.

The Commission discussed the statutory definition of a *public* building as presented in HJR7. Public buildings include all state, local government, public school (K-12), college, and university buildings. The Commission also discussed HB-162 (Utah School Seismic Hazard Inventory), which deals with the public school buildings in Utah, defined as K-12 buildings. The proper term in dealing with public school buildings is “public education,” which refers to public schools and charter schools, but not private schools.

Walter recommended that the Commission adopt a strategy to address the seismic weaknesses in Utah schools. For example, the Commission should elevate the seismic safety of Utah schools to a higher priority and consider ways to improve public awareness. The commissioners agreed, citing the need to pass a bill similar to 2008 HB 162. The main issue with HB-162 was funding. Limited funding is available, meaning that the worst buildings must be inventoried and prioritized. The commissioners noted that improving Utah schools is a “return on investment” and that the cost to improve them now is cheaper than it will be in the future. The commissioners also discussed the possibility of modifying HB-162 to include the need for a complete evaluation of public education buildings.

Jake Watson suggested a motion to form a sub-committee (under HJR7) to focus on the prioritization of public-education buildings.

Motion: *Jake Watson made a motion for the Commission to form a sub-committee to create an inventory of public education schools to be retrofitted. Roger Evans seconded the motion.*

The sub-committee would focus on public-education buildings under the committee formed to inventory all public URMs in Utah (under HJR7). Barry Welliver was appointed to list and prioritize public-education URMs. However, discussions continued and the Commissioners agreed that the intent of HJR7 is to inventory all public URMs, which includes public-education buildings, making a sub-committee unnecessary.

Motion: *Rick Allis made a motion to stay with the original committee formed to address public URMs. Jake Watson seconded motion. Motion was unanimously approved.*

➤ **APPRECIATION AWARDS**

The Commission presented plaques to Kerry Baum (former Commissioner), Gary Christensen (former staff member), and Amisha Lester (former staff member) thanking them for their service.

➤ **NOMINATION AND ELECTIONS**

Roger Evans nominated Peter McDonough as the chairman for the coming year. Walter Arabasz seconded nomination. Motion was unanimously approved.

Rick Allis nominated Jake Watson as vice-chair of the commission. Roger Evans seconded motion. Motion was unanimously approved.

Peter McDonough nominated Roger Evans as a second co-chair of the sub-committee. Bob Carey seconded the motion. Motion was unanimously approved.

➤ **PRESENTATIONS**

Chris DuRoss from the Utah Geological Survey presented the preliminary results of trench studies completed in May on the Brigham City segment of the Wasatch fault zone. The UGS and U.S. Geological Survey (USGS) excavated trenches at three separate sites along the Brigham City segment to investigate prehistoric, large-magnitude earthquakes. Existing paleoseismic data for the segment are limited, but suggest that the segment is overdue for a large earthquake.

Matthias Mueller from the Division of Facilities Construction and Management (DFCM) explained the methodology behind compiling a state building inventory list. Facility Condition Analysis (FCA) determines what the retrofit needs are for a building. Alterations, Repairs, and Improvements (ARI) is the estimated cost of improvements. Seismic safety is one item to be considered. The program was implemented in 1997 based on information compiled by DFCM with ARI. At the present time, the rough estimate of funding needed for repairs is a little over one billion dollars for the next ten years. Mr. Mueller explained what buildings are included in the list for repairs and upgrades.

Peter McDonough expressed the need to discuss plans for next years EERI meeting and WSSPC meetings. The meetings will be held in Salt Lake City, Utah, February 2009.

Motion: *Walter Arabasz made a motion for Roger Evans to be the representative from the Commission to sit on the Planning Committee for the EERI and WSSPC meetings. Rick Allis seconded motion. Motion was unanimously approved.*

➤ NEWS & UPDATES

The next meeting for the Capital Retrofit is being held on August 11, 2008, at the Uptown Hilton.

Peter McDonough reported on National Earthquake Conference held in Seattle. He thanked the Commission for funding the travel. Utah is doing better as a commission on the national level than most states. Walter Arabasz was given an award of excellence. The USGS has added a new program on their website called “Shake Cast,” which evaluates seismic risk to infrastructure. In addition the 2008 update of the USGS National Seismic Hazard Maps are available.

Bob Carey reporting on the beta testing of the new ROVER equipment held at the University. The Windows Mobile smart-phone and GPS devices are used to enter building condition after an earthquake and to determine if a more detailed evaluation is needed.

Bob Carey also gave a budget update and reported that the Capitol Campus will be closed on Fridays. A new facility or a different day needs to be decided. Matthias Mueller reported that there is a new Director of DFCM, Gregg Buxton.

Motion: *Peter McDonough made a motion to adjourn at 12:00 P.M. Motion seconded by Barry Smith.*

➤ NEXT MEETING

Date: Tuesday, October 28, 2008
Time: 1:00 p.m.
Place: State Capitol Building, Room B110
Salt Lake City, Utah

➤ ADJOURNMENT