

Utah Seismic Safety Commission Quarterly Meeting Minutes

On October 27, 2016, a regularly scheduled quarterly meeting of the Utah Seismic Safety Commission (USSC) was held in the Kletting Room of the Utah State Senate Building. Chair Leon Berrett called the meeting to order at 9:00 a.m.

Members Present:

M. Leon Berrett, Chair	American Public Works Association
Kris Pankow for Keith Koper	University of Utah Seismograph Stations
Roger Evans	Utah League of Cities and Towns
Peter McDonough	American Society of Civil Engineers
Patrick Tomassino	Utah Division of Facilities Construction and Management
Steven Bruemmer	American Institute of Architects, Utah Disaster Assistance
Meldee Love	Utah Insurance Department
Rick Allis	Utah Geological Survey

USSC Staff Present:

Steve Bowman	Utah Geological Survey
Adam Hiscock	Utah Geological Survey
Bob Carey	Utah Division of Emergency Management
John Crofts	Utah Division of Emergency Management

Guests Present:

Walter Arabasz	University of Utah Seismograph Stations
Emily Kleber	Utah Geological Survey
Glen Palmer	Palmer Engineering
Jenefer Youngfield	Utah State Board of Education
Bruce Spiegel	Utah Division of Risk Management
Casey Coleman	Utah Division of Public Utilities
Barry Welliver	BHW Engineers

Members Not Present:

Rep. Gage Froerer	Utah House of Representatives
Sean McGowan	Federal Emergency Management Agency, Region VIII (Ex-Officio)
Chris DuRoss	United States Geological Survey (Ex-Officio)
Gerald McKenzie	Structural Engineers Association of Utah
Carmen Swanwick	Utah Department of Transportation
Kris Hamlet	Utah Division of Emergency Management
Senator Jerry Stevenson	Utah State Senate

Welcome

Leon Berrett made introductions and recognized guests. **Pete McDonough** made a motion for the approval of the July 14, 2016 Meeting Minutes, and **Roger Evans** seconded the motion with stated corrections. The minutes were approved.

Status of USSC Progress Report

Bob Carey discussed the USSC Progress Report and discussed all the accomplishments the Commission has achieved. Bob recommended having everyone participate in writing the USSC Progress Report and suggested creating a committee to complete the report. **Rick Allis** suggested a January deadline for the draft. **Leon** asked everyone to review the Commission's accomplishments over the last ten years to pass them on to Leon or Bob. Discussion of contributions from Commission members could conceivably be completed by January. Various items in the previous report were discussed and some of those will carry over into the current report.

Bob asked the Commission to review what was included in the previous report and update the accomplishments. URM manual, scenario report, and other activities should be included. **Leon** asked everyone to review USSC contributions and accomplishments and to get back with Bob or Leon.

USSC Resiliency Letter Discussion

Leon presented a draft of the All Hazards USSC Resiliency Letter. Background of the letter is that USSC supports an All Hazards Resiliency Plan and that Utah Division of Emergency Management (DEM) take the lead. The Commission discussed the letter, who to address the letter to, and who to copy on the letter. **Bob** recommended that this letter be sent to the DEM Director so as not to surprise the Utah Department of Public Safety Commissioner or the Governor. He discussed lines of authority with the Director, Commissioner, and Governor. He suggested DEM push the letter up to the Commissioner and the Governor. There was additional discussion to include the Governor's office. Suggestions for improvement of the draft would be discussed and sent out later.

Questions and discussion were held regarding that the Commission letter is partially on Utah Geological Survey (UGS) letterhead. Discussion included that the Commission needs to have either the DEM letterhead or the Utah Geological Survey letterhead. The Commission agreed that UGS letterhead would remain on the letter.

The Commission agreed to send the letter directly to the DEM Director. **Leon** emphasized that he would like to have Commission support directly from the Governor and expressed his strong hope that the Governor would be supportive of the Commission's efforts. **Walter Arabasz** recommended editing the letter to include forecasting increased likelihood of earthquakes (Probabilities Report). **Steve Bowman** recommended putting a URL on the letter for reference. **Leon** concluded the discussion with a motion for support. **Rick** made a motion for the letter to be completed with suggested edits and **Steven** seconded the motion. The motion passed. **Leon**

followed the vote with discussion that he would work with Kris Hamlet and Bob to finalize the letter.

Utah Schools—Rapid Visual Screening (RVS) Update

Barry Welliver discussed the process of surveying all of Utah schools from a grant provided by the Governor's office. He reported that now a majority of schools have been reviewed. Barry said we are now approaching the point as to what do we do with this new information. He said that information could be shared with political leaders in the 2017 Legislative Session. Evan Curtis was instrumental in being liaison between Governor's office and Utah State Office of Education. Barry recommended engaging Evan assist in communicating with the elected leaders about this report.

Rick asked about number of schools that were completed. **Jenefer Youngfield** indicated the Utah State Board of Education (USOE) received \$150,000 that would be used to evaluate schools that had not already been evaluated using Rapid Visual Screening (RVS). The remaining schools that have not been evaluated will be reviewed by Barry and Bob. Jenefer handed out the RVS data sheet and explained the sheet and the facilities had been evaluated and which facilities remain. There was discussion of the remaining funds going towards developing a seismic report for schools.

Roger asked if there was some kind of report to give to Senator Bramble. The agreement was that it would not go out to anyone until after the analysis. At this point, **Jenefer** wants them to vet through the various engineers and suggested that Representative Froerer be involved and perhaps include a line-item for funding.

Bob mentioned this could be a challenge because previous collected data was collected using a different standard and this causes concern. One of the analyses is what was inputted and it may need to be adjusted and not sure how long or difficult it will be to review and analysis data. There were different processes on how to collect Data. That is why we have a list of smaller districts because they will be smaller. **Rick** asked about the final list of the report.

Barry said they will put it into two categories; the report will be used in the 40% of schools needing more work. The intent is to be inclusive of areas and assist school districts to be able to address funding. The intent of USOE, DEM, and move the conversation from a school district to a State responsibility to get schools and the vision of school safety. Barry welcomed the commission to provide advice.

Jenefer said more discussion needs to occur about high schools, Jr. Highs, and elementary schools. We should further examine buildings from the 1960s that have had seismic upgrades. She said that even engineers disagree and the report needs to provide "give and take" and flexibility. Elementary schools typically don't have the same upgrades as the high schools.

Barry said at this point, the question is if a building is vulnerable. Schools play an important role in resiliency (for instance there are more than 5% of schools that have vulnerabilities). School districts are making progress at the state level; however, there are opposing objectives.

Jenefer said schools often have their hands tied on how much debt they can incur. She said she wants to know which buildings need to be redone. Elementary schools are the buildings we have the most problems with because elementary schools are not being retrofitted. The *Students at Risk* report (<https://ussc.utah.gov/pages/view.php?ref=147>) demonstrates the earthquake risks to schools across the State—especially in rural areas. Funding for most construction is funded locally at the district level. When schools were built, they built them according to the codes at the time of construction. There is some pressure from USOE to provide this before the Legislature. The target date is six months from the time that all the data is brought up.

Jenefer said now we have \$8,000 left that we are not going to get through all the charter schools. She said the Governor's office gave approval to go onto the charter schools. **Leon** said that Bob would find some money. He said we should look for other funding resources.

Western States Seismic Policy Council Updates

Pete announced that he was appointed Chair for the Western States Seismic Policy Council (WSSPC). WSSPC is updating various earthquake publications, an earthquake booklet, an early warning systems document, and other seismic safety publications.

Pete invited the Commission to visit the WSSPC website (<http://www.wsspc.org/>) for more details. WSSPC is meeting on November 8th, and will be further evaluating WSSPC's goals. **Kris** suggested that if any on the Commission wished to give WSSPC feedback to provide Pete the information.

USSC Future Goals, Directions, Recommendations, Suggestions, and Public Relations

Leon suggested creating tools to increase the awareness of the USSC. He said we already have great information that isn't being utilized. Discussion ensued about creating a flyer or brochure of the USSC (tri-fold) that we all keep and share with others.

Bob said the Commission had created a tri-fold and he would find it. Safety fairs and other events throughout the State are activities where the brochure could be handed out. Discussion included having special events where we can share the Commission's messages to organizations like the Parent Teacher Association, Structural Engineers Association of Utah, American Institute of Architects, and other organizations.

Kris suggested leveraging ShakeOut to put out the Commission's message. She recommended the Commission start advertising now and get better chance of participation. Discussion of including DEM Public Information Officer, Joe Dougherty in assisting the Commission to communicate information sent to schools.

Walter said we could also advance public relations through safety advocacy. He suggested having someone from the Commission regularly send out information. Messaging is everything. The tri-fold could include items, such as do you know these facts and other valuable content that is simple. The information could create interest that captivates the reader to learn more. Further discussion continued about including little blurbs with important facts. Social media, such as

Twitter, are ideal because they are short. Just utilize something quick and get it into the public. Discussion included Twitter, other social media, emails, radio public service announcements, etc. A discussion of social media accounts continued. **Steve** discussed social media hits and tracking of visitors to the USSC website.

Frontier Observatory for Research in Geothermal Energy (FORGE) Geothermal Project and University of Utah Seismograph Stations (UUSS) Seismic Monitoring

Kris updated the Commission that Utah is one of two competing states to develop technology to recover geothermal energy. One of the big issues is induced seismicity. She discussed the preliminary seismic plan and the location of the site that is north of Milford, Utah. In the next four months, there will be an additional four monitoring stations included. In December, the array of seismic monitors will be established. The installation of the seismic monitors will help establish a baseline before we drill and frack. If Utah is selected on the third phase, then this will be a \$150 million project over the next five years. This project has strong support from Governor and all recognize that this will include a detailed seismic hazard analysis for the area. The benefits of utilizing Nodal seismometers are that many can be deployed in a dense area, in order to detect smaller earthquakes and develop a baseline seismic velocity model before drilling and fracking.

General Updates

WSSPC Rural Handbook

Bob discussed the WSSPC *Earthquake Emergency Handbook for First Responders and Incident Commanders* handbook (<https://ussc.utah.gov/pages/view.php?ref=1295>) and the challenges in making the document useful and helpful to small communities. He discussed Wells, Nevada and how this small, rural community struggled to deal with the earthquake. This handbook is designed to primarily help rural communities deal with immediate effects of an earthquake. Bob said the printing would be completed soon and he would provide the Commission with copies of the handbook. WSSPC is covering the cost of printing and shipping the handbooks. The Commission expressed interest in this new publication.

New and Updated Utah Geological Survey Geologic Hazard Investigation, Report, and Review Guidelines

Steve discussed the updated guidelines for investigating geologic hazards and preparing engineering geology reports with suggested approaches to geologic-hazard ordinances in Utah. He explained the benefits of this guideline for communities who wish to adopt ordinances and stated most communities do not have geologic hazard ordinances.

Steve said the new UGS/UUSS Utah earthquake map is being updated with much greater detail than the 1990 map with a more effective public outreach goal. They are wrapping up the last review and will then have a final review by January 2017.

USSC Statute Clarification

Leon gave copies to everyone that gave a summary of how a named member could use other people to vote in their place. Steve and Walter contributed and Steve provided a summary of the clarifications. The Utah Attorney General's Office provided guidance on how a Commission member may designate someone else to vote for them. It was recommended that the agenda provide a reminder to the Commissioners they notify Leon (or the Chair) who would be voting in their place as a designee. The "designee" vote would be noted in the meeting minutes.

Other General Updates

Bob discussed the Fix the Bricks program and Salt Lake City's unveiling of the program at a news conference. The Fix the Bricks Committee is now updating their website with the URM manual and allowing room for additional details to be included.

Leon discussed the updated URM manual, its use in the Fix Bricks Program, and highlighted some of the new updated details. He recommended the updates be included on the electronic copy. Discussion followed about how this program can expand.

Bob spoke about the SAP meeting held December 7th in Sandy. The SAP Committee is planning a workshop for local building officials on the SAP program. The workshop will provide information that will help building officials to become more familiar with the SAP program. He recommended a speaker from Missouri be present at the workshop. **Jenefer** requested that Bob work with her to schedule Safety Assessment Program (SAP) training for the Utah Facilities Operation & Maintenance Association.

Discussion of USSC goals in the future

By acclamation, the meeting was adjourned without a motion.

Next meeting is January 19, 2017 at the Salt Lake County-Public Works building.

Adjourn