



We develop seismic policies and share information to promote programs intended to reduce earthquake related losses.



A non-profit earthquake consortium for the western states

**Spring 2021
 e-Newsletter**

**Western States
 Seismic Policy Council**

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WSSPC NEWS

- **WSSPC Polices up for review this year have had their second committee review completed.** The public view of the drafts are on our WSSPC website at: <https://www.wsspc.org/public-policy/2020-wsspc-draft-policy-recommendations/>. The Policies will be provided to the WSSPC Board to be reviewed in advance of the WSSPC Spring Board and Annual Business Meeting. This year’s meeting will be virtual. Meeting information will be provided to all membership shortly.
- **WSSPC Award Nominations have been received.** The awards will be formally presented virtually during the National Earthquake Program Manager meeting in June. Once awarded, the plaques will be mailed to the winners.
- **WSSPC Workshops and Webinars** are being developed and scheduled. The WSSPC Fall Workshop will be presented virtually on November 9 and 10, 2021. We are currently planning two sessions each day lasting two hours each. The workshop covers the basics of developing a Clearinghouse Plan, accountability considerations, Emergency Management Assistance Compact (EMAC), partnerships, virtual reporting of conditions, outreach, and developing training.

The WSSPC Winter Workshop or webinar will be on the topic of Equity in Hazards. It is being developed in partnership with the American Geophysical Union, Hazard Equity Working Group. Co-Chairs of this workgroup are Dr. Tiegan Hobbs, Geological Survey of Canada, University of British Columbia and Matthew Wall of WSSPC. This virtual workshop/webinar is still being scheduled. It is currently expected the date(s) will be in February 2022.

Planning for the WSSPC Summer 2022 workshop/webinar has not yet been started. One proposed topic is Tsunamis—Planning, Building Code, and Evacuations Considerations. If you have topics you would like to propose for outreach, education, or training, please reach out to Matthew Wall at mwall@wsspc.org. Thank you!

- **For WSSPC members trainings being offered, be sure to check out pages 6 - 10 of this newsletter!**

WSSPC Members Recent Earthquakes (4.0 or higher with “Felt Reports”)

- [Pinnacles, CA](#) M4.3 2021-01-02
- [Aromas, CA](#) M4.2 2021-01-17
- [Point MacKenzie, AK](#) M5.3 2021-02-27

Upcoming Meetings and Conferences

(Note—Based on current conditions and social distancing requirements, WSSPC will not be posting in-person meetings unless we are relatively certain they will be happening.)

- **National Earthquake Program Manager meeting.**
June 15—17, 2021
Virtual Meeting
Registration is located at: [Annual NEPM Meeting \(eqprogram.net\)](#)

WSSPC welcomes all members of the professional community who share the common goal of reducing losses from earthquakes. As such, we’d like to extend one last Thank You to our 2020 Affliate Members!

Government

City of Las Vegas Building and Safety
Clark County Building and Fire Prevention

Non-Profit

Applied Technology Council
California Earthquake Authority

It’s Never Too Late to Join WSSPC as an Affiliate Member

Your benefits will include:

- Recognition of your support with a link on the WSSPC website to your organization
- The opportunity to participate on WSSPC Committees and provide input to policy recommendations
- Quarterly E-Newsletters and Monthly Bulletins
- Opportunities to exhibit and sponsor activities in coordination with any WSSPC events

For more information see: [Affiliate Members - Western States Seismic Policy Council \(wsspc.org\)](#)

There are so many ways to stay connected!

Online- www.wsspc.org
Twitter- [@WSSPC](https://twitter.com/WSSPC)
Facebook- www.facebook.com/WSSPC

NEWS

[Natural Hazards Have Unnatural Impacts— What More Can Science Do?](#)

It has been long established that, when all other things are equal, the people with the greater vulnerabilities will suffer greater impacts from a disaster. This vulnerability increases the need for better risk management for these populations.

This article, published in [EOS, Science News by AGU](#) proposes that a key consideration in developing better risk management is to address the “disconnect of science and policy.” As a quote from the article states, “... as [natural hazards](#) increasingly affect communities on multiple fronts, both scientists and policymakers have a challenging task: ensuring that solutions and recommendations arising from scientific research are communicated effectively and applied equitably.”

This quote clearly identifies a few major considerations in addressing equity in hazards. First, the concept of communication with shared understanding and goals. The article makes it clear that boots-on-the-ground practitioners need inputs from both the social and physical sciences.

Second, the difference between helping people equally (where people receive exactly the same assistance) or in dealing with people equitably (where people get

assistance based on their individual *continued* circumstance. When the idea of post-disaster assistance is expanded to communities, how are the needs identified and solutions implemented?

And third, the recognition that individual communities may have different needs and goals. This third point requires the involvement of at-risk individuals in the both the policy making and in implemented actions.

[Hazard Mitigation Assistance \(HMA\) Annual Grant Cycle Submissions Summary](#) [| FEMA.gov](#)

On March 17, 2021, the Federal Emergency Management Agency released a summary of subapplications submitted to the Building Resilient Infrastructure (BRIC) and Communities and Flood Mitigation Assistance (FMA) programs. Total funding available for both programs was \$700 million.

Four top bullet points:

- FEMA received **1,216 subapplications** requesting an estimated **\$3.99 billion** in funding .
- **53 states and territories and 63 tribes** applied for grants.
- For BRIC, FEMA received 980 sub applications totaling \$3.6 billion. BRIC had \$500 million available.
- Of the 980 BRIC subapplications, 88 were from small and impoverished communities. This number represents approximately 9 percent of all BRIC applications received.

[Earthquakes: Progress Made to Implement Early Warning System, but Actions Needed to Improve Program Management](#)

On March 25, 2021, the [Government Accountability Office](#) (GAO) released their review of the US Geological Survey's Earthquake Hazards Program. This review was implemented because the [US Geological Survey](#) (USGS) is the federal entity charged with identifying earthquake hazards. Per the review, the GAO looked at the areas of:

- USGS actions to identify earthquake hazards,
- the extent USGS actions to achieve its earthquake hazard mission meet leading practices; and
- what progress USGS and its partners have made implementing ShakeAlert

The study findings included:

- A flat budget for most hazard reduction programs has meant vacancies and reduced USGS's ability, for example, to assess hazards and conduct research, stakeholders said
- USGS lacks a strategic plan that spells out the resources needed to meet program goals
- Its implementation of ShakeAlert, a system designed to warn about imminent strong shaking, could be improved with better activity tracking, timelines, goals, and more

continued

Based on these findings, the report made nine recommendations. In brief, these recommendations include:

- The development of a strategic plan which articulates the fundamental mission of the Earthquake Hazard Program. This plan should include long-term goals and the strategies and resources required to achieve these goals.
- The development of performance measures for the strategy.
- Consulting with Congress in the development of the strategic plan.
- Completing a staffing gap analysis for the program which is linked to the identified mission and long-term goals.
- Establishing a Work Breakdown Structure with identified costs for ShakeAlert consistent with best practices in GAO's cost guide.
- Establishing a schedule with identified milestones for ShakeAlert implementation.
- Update and complete the ShakeAlert Communication, Education, and Outreach Plan to clarify and define roles and responsibilities between USGS and all stakeholders.
- *(Secretary of Commerce)* Implement a memorandum of understanding between USGS and NOAA by establishing the Interagency Committee for Program Coordination.
- *(Secretary of the Interior)* Implement a memorandum of understanding between USGS and NOAA by establishing the Interagency Committee for Program Coordination.

[Wasatch Front Unreinforced Masonry Risk Reduction Strategy \(fema.gov\)](#)

In March, FEMA released a risk reduction strategy for targeting unreinforced masonry (URM) structures located along the Wasatch Front in Utah. URM structures are defined as buildings which are built of masonry type materials (cinder blocks, bricks, etc.) and where the load bearing walls, foundation, or appurtenances such as a chimney, are not braced with a reinforcing material, such as rebar embedded in the concrete. The issue is that the URMs have a significant chance of failure when impacted by an earthquake. This potential failure creates significant life safety and loss of residential space issues.

From the Executive Summary in the strategy, “The Wasatch fault poses one of the most catastrophic natural threat scenarios in the United States. The Wasatch Front has a 43% chance of a magnitude 6.75 or greater earthquake in the next 50 years, and experts project that such an event would be among the deadliest and costliest disasters in U.S. history. In a magnitude 7.0 earthquake on the Salt Lake City segment of the Wasatch fault, FEMA’s economic loss model, Hazus, estimates 2,000-2,750 fatalities, 8,000-10,000 injuries potentially requiring hospitalization, and roughly 78,000 displaced households.”

This document was written in coordination with the [Utah Department of Emergency Management](#) and was supported by numerous other organizations to include

[Salt Lake City](#). The strategy leveraged ^{continued} existing studies and practices, such as Salt Lake City’s [Fix the Bricks](#) program.

In brief, some of the recommendations include:

- Validating and finalizing statewide inventories of URM school and government buildings.
- Assess the risks and, while taking into consideration building usage, prioritize mitigation strategies.
- Include and maintain stakeholder involvement.
- Create a state-level Hazard Mitigation strategy for inclusion into Utah’s State Hazard Mitigation Plan.
- Require seismic updates for URMs converted into condominiums.
- Amend the State Building Code to address seismic upgrades without triggering other code upgrade requirements.
- Develop, update or propose adoption of post-earthquake inspection, repair and retrofit standards for damaged buildings.
- Provide dedicated funding to the Utah Seismic Safety Commission (USSC) to maintain and oversee the state-level URM risk reduction program.

Beyond these, the strategy contains many other very good recommendations. Further, while this strategy was specifically written for Utah in reference to the Wasatch Front, the processes and recommendations developed and identified can be applicable to other states, territories, and local jurisdictions.

UPCOMING TRAINING

continued

The Cal OES Seismic Hazards Branch, Earthquake and Tsunami Program is pleased to announce two FEMA National Earthquake Technical Assistance Program (NETAP) funded trainings.

NETAP Web-Based Training: *Building Codes Overview*

Date & time: Wednesday, April 14, 1pm-3pm (PDT)

Instructor: Michael Griffin, President, CCS Group, Inc.

Description: This free web-based training provides an overview of the building code as it pertains to earthquake effects on buildings. It underlines the importance of code adoption and enforcement.

Audience: Building officials, building contractors, decision makers, emergency managers, and other stakeholders interested in seismic safety. (Note: Engineers and building professionals who are interested in communicating the importance of building codes to decision makers may also find this training useful.)

PDH eligible: Yes. (Note: In the case of multiple participants watching the training on the same device, a PDH certificate will only be issued to the individual who registered for the training.)

Register here: <https://attendeegotowebinar.com/register/2758074754598085132>

NETAP Web-Based Training: FEMA P-1000, *Safer, Stronger, Smarter: A Guide to Improving School Natural Hazard Safety*

Date & time: Tuesday, May 11, 9am-11am (PDT)

Instructor: Ines Pearce, CEO, Pearce Global Partners

Description: This free web-based training shows how to physically protect school facilities and operations before, during, and after a natural hazard event. It also provides guidance for developing a comprehensive strategy to address natural hazard safety in schools.

Document: [Link to view](#) (Please be patient as it may take a few moments to load the large document.)

Audience: School administrators, facilities managers, emergency managers, emergency planning committees, teachers and staff at K-12 schools, state officials, district administrators, school boards, and teacher union leaders.

PDH eligible: Yes. (Note: In the case of multiple participants watching the training on the same device, a PDH certificate will only be issued to the individual who registered for the training.)

Register here: <https://attendeegotowebinar.com/register/6291315788037728268>

UPCOMING TRAINING

continued

The Utah Department of Public Safety, Emergency Management is pleased to offer five FEMA National Earthquake Technical Assistance Trainings (NETAP). ***These training opportunities are open to anyone in Utah, Nevada, and Arizona.***

NETAP Web-Based Training:
FEMA P-154 *Rapid Visual Screening of Buildings for Potential Seismic Hazards (pre-disaster)* and **ATC-20 *Post-Earthquake Safety Evaluation of Buildings***

Dates & times:

P-154—Wednesday, April 7
1pm to 5pm (MDT)
ATC-20—Tuesday, April 13
1pm to 5pm (MDT)

Instructor: Barry Welliver, Owner and Principal Engineer, BHW Engineers

Description: The web-based training covers methods and processes that enable personnel to rapidly identify, inventory, and screen local buildings according to their expected safety and usability during and after earthquakes. Local officials can use these data to plan and prioritize further engineering and vulnerability analysis, emergency-response needs, and mitigation projects

Audience: Building officials, engineers, architects, building owners, emergency managers, risk analysts, and other interested citizens and volunteers.

Register here:

P-154 [Registration \(gotowebinar.com\)](http://gotowebinar.com)
ATC-20 [Registration \(gotowebinar.com\)](http://gotowebinar.com)

Note—Participants can sign up for one or both trainings. You are encouraged to sign up for both!

NETAP Web-Based Training:
FEMA P-1000, *Safer, Stronger, Smarter: A Guide to Improving School Natural Hazard Safety*

Date & time: Thursday, April 22,
1pm to 3pm (MDT)

Instructor: Ines Pearce, CEO, Pearce Global Partners

Description: This free web-based training shows how to physically protect school facilities and operations before, during, and after a natural hazard event. It also provides guidance for developing a comprehensive strategy to address natural hazard safety in schools.

Audience: School administrators, facilities managers, emergency managers, emergency planning committees, teachers and staff at K-12 schools, state officials, district administrators, school boards, and teacher union leaders.

Register here: [Registration \(gotowebinar.com\)](http://gotowebinar.com)

UPCOMING TRAINING

continued

NETAP Web-Based Training: FEMA P-767 *Earthquake Mitigation for Hospitals*

Date & time: Thursday, May 20
1pm to 5pm (MDT)
12pm to 4pm (PDT)

Instructor: Barry Welliver, Owner
and Principal Engineer, BHW
Engineers

Description: In this web-based training, participants are introduced to earthquake hazards in health care settings and learn about methods that can be used to analyze and reduce risks of damage in hospitals and other medical buildings. Such facilities have unique nonstructural components, including equipment and infrastructure systems that can become sources of injury or damage even during smaller earthquakes. By implementing sound, cost-effective mitigation measures, health care facilities can reduce seismic risks and ensure that, in the event of an earthquake, they can remain in operation to serve their communities

Audience: School administrators, facilities managers, emergency managers, emergency planning committees, teachers and staff at K-12 schools, state officials, district administrators, school boards, and teacher union leaders.

Register here: [Registration
\(gotowebinar.com\)](http://gotowebinar.com)

NOTE—This training is being provided in coordination with the Arizona Geologic Survey.

NETAP Web-Based Training: FEMA 395 *Earthquake Safety and Mitigation for Schools*

Date & time: Tuesday, May 25
1pm to 4pm (MDT)

Instructor: Barry Welliver, Owner
and Principal Engineer, BHW
Engineers

Description: This free web-based training shows how to physically protect school facilities and operations before, during, and after a natural hazard event. It also provides guidance for developing a comprehensive strategy to address natural hazard safety in schools.

Audience: School administrators, facilities managers, emergency managers, emergency planning committees, teachers and staff at K-12 schools, state officials, district administrators, school boards, and teacher union leaders.

Register here: [Registration
\(gotowebinar.com\)](http://gotowebinar.com)

NOTE—This training is being provided in coordination with the Arizona Geologic Survey.

The Arizona Geologic Survey is pleased to announce two FEMA National Earthquake Technical Assistance Program (NETAP) trainings.

Web event:
NETAP Web-Based Training:
FEMA 395 Earthquake Safety and Mitigation for Schools

Date & time: Tuesday, May 25
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Instructor: Barry Welliver, Owner and Principal Engineer, BHW Engineers

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Audience: School administrators, facilities managers, emergency managers, emergency planning committees, teachers and staff at K-12 schools, state officials, district administrators, school boards, and teacher union leaders.

Register here: [Registration \(gotowebinar.com\)](http://gotowebinar.com)

NOTE—This training is being provided in coordination with the Utah Department of Public Safety, Emergency Management.

NETAP Web-Based Training:
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Register here: [Registration \(gotowebinar.com\)](http://gotowebinar.com)

NOTE—This training is being provided in coordination with the Utah Department of Public Safety, Emergency Management.

Introducing the Job Section

This is a new section which will be included in future WSSPC Quarterly Newsletters. The intent behind this section is to support WSSPC members by providing additional outreach efforts in their quests to hire the best and brightest for their respective agencies. This service will be provided for free.

As this section is to support WSSPC members it will list opportunities on behalf of the State Geologic Surveys and Emergency Management Agencies. There will be a case-by-case consideration of providing listings for non-profit partners where the listing is directly related to the Western States (as defined by our membership states and territories), Mission Statement, and objectives. At this point there is no consideration of including job listings for either private or public for-profit organizations.

To best facilitate the Jobs Section, the listing must be provided to WSSPC by the hiring organization, agency, or a representative. If you wish to provide a job to be listed, please send it to mwall@wsspc.org. If there are questions or clarification needed, we will reach out to you prior to publication.

Please note the deadline for you to provide a listing consideration for the WSSPC Summer 2021 Newsletter is June 15, 2021.

A Few Additional Notes:

- WSSPC is still accepting nominations for a Geologic Survey Director to fill the soon-to-be Board of Directors vacancy created by the resignation of Steve Masterman (AK). It has been our distinct honor to have had him as a member of our Board for these years. If you have questions regarding the responsibilities or time involvement of this position please feel free to reach out to mwall@wsspc.org.
- The WSSPC Spring Board and Annual Meeting dates are being finalized. Meeting documents will be provided to all voting members and/or their proxies no less than one week prior to the meeting.
- Thank you to ALL of our partners! Individually we do great things. Collectively we do even more.