



FEMA NEHRP Update

Activities Highlights and Agency Updates for FEMA—FY24-25

Advisory Committee on Earthquake Hazards Reduction (ACEHR)
Meeting #2A

June 12, 2024

Agency Representatives:

Bill Blanton

Drew Herseth

Jon Foster

Agenda

- FEMA NEHRP Updates
 - Staff and Budget
 - Statutory Requirements
 - Seismic Building Codes and Standards Activities
 - Seismic Resistant Design Guidance
 - Technical Training
 - National Earthquake Technical Assistance Program
 - State Assistance Grant Program
- Question and Answer



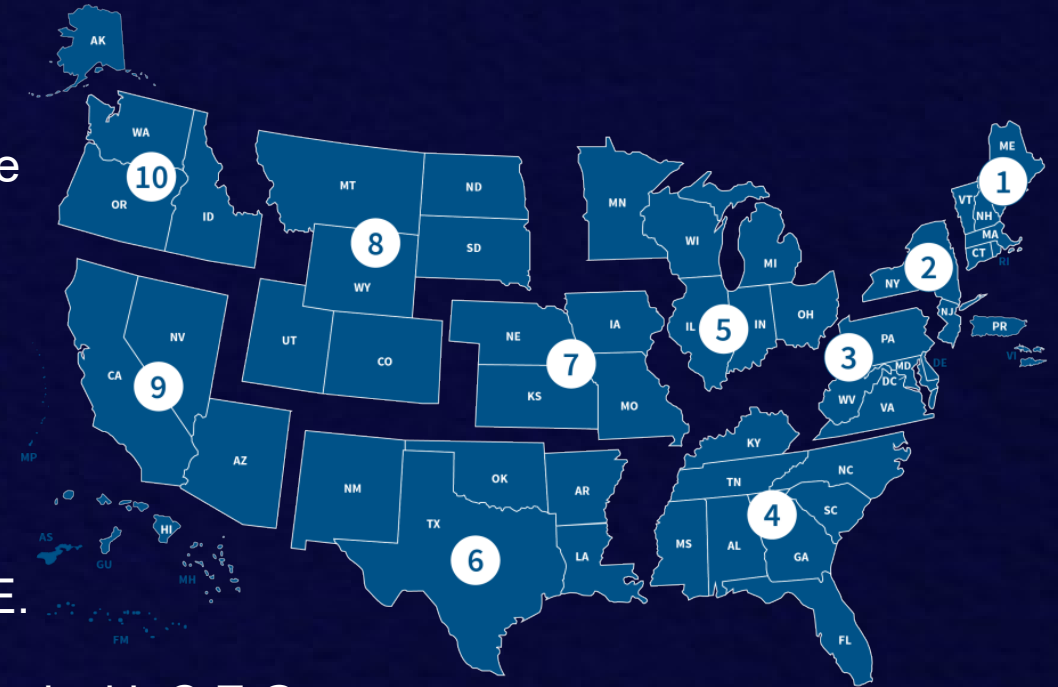
FEMA NEHRP Headquarters Staff

- Bill Blanton, C.F.M., Chief, Earthquake and Wind Programs Branch
- Drew Herseeth, P.E., S.E., Structural Engineer, NEHRP Technical Lead
- Christina Aronson, P.E., S.E., Structural Engineer, Seismic Guidance for Existing Buildings
- Pataya Scott, Ph.D., E.I.T., Civil Engineer, Multi-hazard Issues
- Mai Tong, Ph.D., Physical Scientist, Seismic Guidance for New Buildings
- Larissa Santoro, LEED A.P., Architect, Multi-hazard Issues
- Jon Foster, Senior Program Manager, NEHRP Program Lead
- Maigen Wise, Program Specialist, NEHRP State Assistance Grant Program



FEMA NEHRP Regional Staff

- Region 1 (CT, MA, ME, NH, RI, VT): Paul Morey
- Region 2 (NJ, NY, PR, VI): Jose Lebron, C.F.M.
- Region 3 (DC, DE, MD, PA, VA, WV): Kristen Jones
- Region 4 (AL, FL, GA, KY, MS, NC, SC, TN): Noriko Kibble
- Region 5 (IL, IN, MI, MN, OH, WI): Greg Tatara
- Region 6 (AR, LA, NM, OK, TX): Bart Moore
- Region 7 (IA, KS, MO, NE): Cheickh Koma
- Region 8 (CO, MT, ND, SD, UT, WY): Sean McGowan, P.E.
- Region 9 (AS, AZ, CA, FM, GU, HI, MH, MP, NV): Anne Rosinski, C.E.G.
- Region 10 (AK, ID, OR, WA): Hannah Rabinowitz, Ph.D.



NEHRP Agency Budgets

Enacted NEHRP Agency Budgets (\$M)					
Fiscal Year	FEMA	NIST	NSF	USGS	NEHRP Total
2005	14.7	0.9	53.1	58.3	127.0
2006	9.5	0.9	53.8	54.5	118.7
2007	9.1	1.7	54.8	55.4	121.0
2008	6.1	1.7	55.6	58.1	121.5
2009	9.1	4.1	55.3	61.2	129.7
2010	9.0	4.1	55.3	62.8	131.2
2011	7.8	4.1	53.3	61.4	126.6
2012	7.8	4.1	53.2	60.4	125.5
2013	7.7	3.9	52.2	55.7	119.5
2014	7.8	3.9	51.0	58.7	121.4
2015	7.4	3.9	52.2	64.4	127.9
2016	8.5	5.2	54.2	67.0	134.9
2017	8.5	5.2	54.2	70.9	138.8
2018	8.5	5.2	65.7	90.1	169.5
2019	8.7	5.2	60.5	90.1	164.5
2020	8.9	4.8	53.4	92.1	159.2
2021	8.9	4.8	52.23	92.6	158.53
2022	8.5	4.8	54.0	97.2	164.5
2023	8.5	4.8	52.0	99.9	165.2
2024 (Requested)	8.5	4.8	54.0	109.7	177.0

FEMA NEHRP Statutory Requirements

National Earthquake Hazards Reduction Act of 1977 (PL 94-125) as amended and most recently authorized by the National Earthquake Hazards Reduction Act of 2018 (P.L. 115-307)

(A) PROGRAM RESPONSIBILITIES

The Administrator of the Federal Emergency Management Agency:

- (i) shall operate a program of grants and assistance to enable States to develop mitigation, preparedness, and response plans, purchase necessary instrumentation, prepare inventories and conduct seismic safety inspections of critical structures and lifeline infrastructure, update building, land use planning, and zoning codes and ordinances to enhance seismic safety, increase earthquake awareness and education, and provide assistance to multi-State groups for such purposes;
- (ii) shall support the implementation of a comprehensive earthquake education, outreach, and public awareness program, including development of materials and their wide dissemination to all appropriate audiences and support public access to locality-specific information that may assist the public in preparing for, mitigating against, responding to and recovering from earthquakes and related disasters;
- (iii) shall, in conjunction with the Director of the NIST, other Federal agencies, and private sector groups, use research results to support the preparation, maintenance, and wide dissemination of seismic resistant design guidance and related information on building codes, standards, and practices for new and existing buildings, structures, and lifeline infrastructure, aid in the development of performance-based design guidelines and methodologies, and support model codes that are cost effective and affordable in order to promote better practices within the design and construction industry and reduce losses from earthquakes;
- (iv) shall enter into cooperative agreements or contracts with States and local jurisdictions and other Federal agencies to establish demonstration projects on earthquake hazard mitigation, to link earthquake research and mitigation efforts with emergency management programs, or to prepare educational materials for national distribution
- (v) shall support the Director of the NIST in the completion of programmatic goals.

Seismic Building Codes and Standards Activities

- FEMA NEHRP is presently monitoring and developing seismic-related building code change proposals during the International Code Council (ICC) code development process for the 2027 editions of the ***International Building Code (IBC)***, ***International Residential Code (IRC)*** and ***International Existing Building Code (IEBC)***. Also closed out this reporting period was the ICC publication of the 2024 editions of the ***IBC, IRC, and IEBC***, which include more than 50 seismic-related building code changes successfully submitted by FEMA NEHRP, as well as new or updated seismic-related building code commentary on more than 100 sections submitted to ICC by FEMA NEHRP.
- FEMA NEHRP technical staff are serving as associate members of the ***American Society of Civil Engineers (ASCE)/ Structural Engineering Institute (SEI) 7-28 Minimum Design Loads and Associated Criteria for Buildings and Other Structures*** on the Seismic Subcommittee and the Functional Recovery Task Committee. Additionally, FEMA NEHRP technical staff are participating on a coordination team with the ASCE/SEI 7-28 Seismic Subcommittee to adopt and use the ***NEHRP Recommended Seismic Provisions for New Buildings and Other Structures*** when developed by the 2026 Provisions Update Committee.
- FEMA NEHRP technical staff are preparing to serve on the ***ASCE/SEI 41-29 Seismic Evaluation and Retrofit of Existing Buildings*** committee, which is currently being established for the new cycle, and will coordinate with the ***FEMA NEHRP Recommended Revisions to ASCE/SEI 41-29 Seismic Evaluation and Retrofit of Existing Buildings*** as part of the project with the same name.

Seismic Resistant Design Guidance

Publications Now Available

- ***FEMA P-2343 Improving Performance of Buildings in Very High Seismic Regions***, published in March 2024.
- ***FEMA and BSSC Functional Recovery Planning Committee Report: Functional Recovery Task Committee Recommended Scope, Organization and Deliverables***, published in 2023.
- ***FEMA P-2192-4 2020 NEHRP Provisions: Seismic Design Category Maps for 2024 International Residential Code (IRC) and International Building Code (IBC)***, published in 2023.
- ***Recommendations for Cordoning Earthquake-Damaged Buildings (FEMA P-2055-2)***, published January 2024.
- ***Guidance and Recommendations for the Seismic Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings with Weak First Stories (FEMA P-807-1)***, published January 2024.
- **FEMA NEHRP Recommended Revisions to ASCE/SEI 41-17 Seismic Evaluation and Retrofit of Existing Buildings (FEMA P-2208)**, published in October 2023.

Seismic Resistant Design Guidance, *continued*

Publications in Progress

- ***FEMA Homebuilders Guide to Earthquake Resistant Design and Construction (FEMA P-232)***, which will include provisions of the 2024 IRC, will be published in 2024.
- Developing the next edition of the ***FEMA NEHRP Recommended Seismic Provisions for New Buildings and Other Structures***.
- Developing next cycle of ***FEMA NEHRP Recommended Revisions to ASCE/SEI 41 Seismic Evaluation and Retrofit of Existing Buildings***.
- Developing ***Guide for Repair of Damaged Buildings to Achieve Future Resilience***.
- Continuing development of performance-based seismic design guidelines initiated in 2001 and completed in 2018 with the publication of the ***FEMA P-58 Seismic Performance Assessment of Buildings Methodology and Implementation Volume 8***.
- Developing ***A Framework to Establish Lifeline Infrastructure System Service Recovery Goals for Seismic Resilience (FEMA P-2234)***.

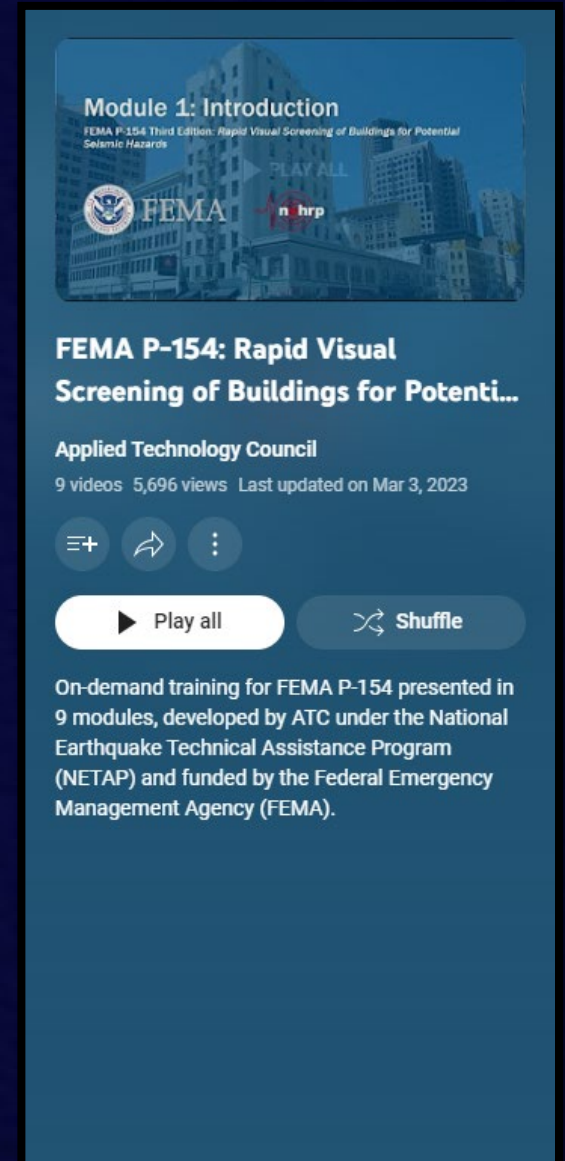
Technical Training materials under development

- *FEMA P-232, Homebuilders' Guide to Earthquake-Resistant Design and Construction*
- *FEMA P-646, Guidelines for Design of Structures for Vertical Evacuation from Tsunamis*
- *FEMA P-807-1, New Guidance and Best Practices for the Seismic Evaluation and Retrofit of Multi Unit Wood Frame Buildings with Weak First Stories*
- *FEMA P-2055-1, Guidance for Accelerated Building Reoccupancy Programs*
- *FEMA P-2055-2, Recommendations for Cordoning Earthquake-Damaged Buildings*
- *FEMA P-2208, NEHRP Recommended Revisions to ASCE/SEI 41-17, Seismic Evaluation and Retrofit of Existing Buildings*
- *FEMA P-2343, Improving Performance of Buildings in Very High-Seismic Regions*
- *Introduction to Performance-Based Design*

National Earthquake Technical Assistance Program

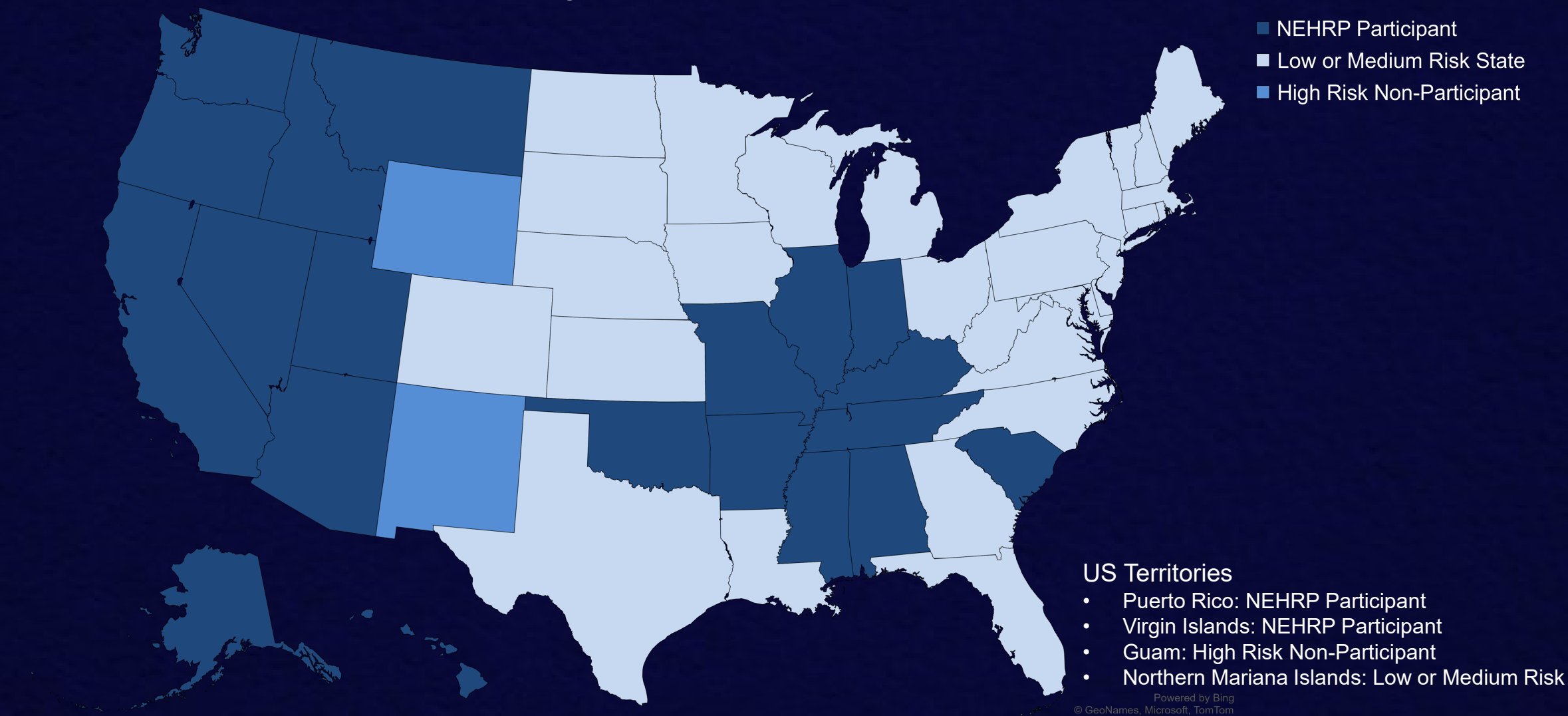
FEMA continues to provide free risk reduction training on seismic-related topics, including new recorded trainings for selected NETAP programs now available on YouTube, including:

- *FEMA P-154 Third Edition: Rapid Visual Screening of Buildings for Potential Seismic Hazards* ([YouTube link](#))
- *FEMA P-1000: Safer, Stronger, Smarter: A Guide to Improving School Natural Hazard Safety* ([YouTube link](#))



FEMA NEHRP State Assistance Grant Program

FY24 Participating States and Territories



FEMA NEHRP State Assistance Grant Program

FY 2024 Funding Opportunities

- Individual State Earthquake Assistance (ISEA)
 - \$2,096,364 anticipated to be awarded to (22) States and Territories designated as high and very high-risk earthquake areas.
 - The application period is May 17 through June 24, 2024, at 5:00 pm E.T.
 - All awards are anticipated to be made by August 1, 2024.
 - A tentative 18-month period of performance is scheduled for September 1, 2024, to February 28, 2026.
- Multi-State and National Earthquake Assistance (MSNEA)
 - \$1,312,636 available as competitive grant funding for eligible nonprofit organizations and institutions of higher education.
 - The application period is May 8 through June 14, 2024, at 5:00 pm E.T.
 - In June 2024, FEMA will conduct a National Panel Review of all submitted applications to determine the grant awardees.
 - All awards are anticipated to be made by August 1, 2024.
 - A tentative 18-month period of performance is scheduled for September 1, 2024, to February 28, 2026.



\$2,096,364



\$1,312,636

FEMA NEHRP State Assistance Grant Program, *continued*

- FEMA GO

- The FEMA NEHRP State Assistance Grant Program is now fully integrated into FEMA GO, FEMA's new grants management system.
- The State Assistance Grant Program was onboarded into FEMA GO in 2023, requiring extensive training to internal and external users.
- As of May 2024, FEMA GO now maintains more than 84,000 active internal and external users in support of 36 of 40 grant programs administered by FEMA.
- FEMA GO supported (57) funding opportunities to obligate \$5.3 billion in grant awards.
- FEMA GO has been used to process \$2.1 billion in grant award payments and reimbursements to recipients.



- New Supplemental Application Documents

- In 2024, a series of (8) new supplemental application documents were developed by customer request to assist applicants with completing a grant application.
- The documents have been published to fema.gov/earthquake.
- The FEMA NEHRP website now offers a new feature to provide customers with a list of upcoming workshops and training opportunities for the State Assistance Grant Program.



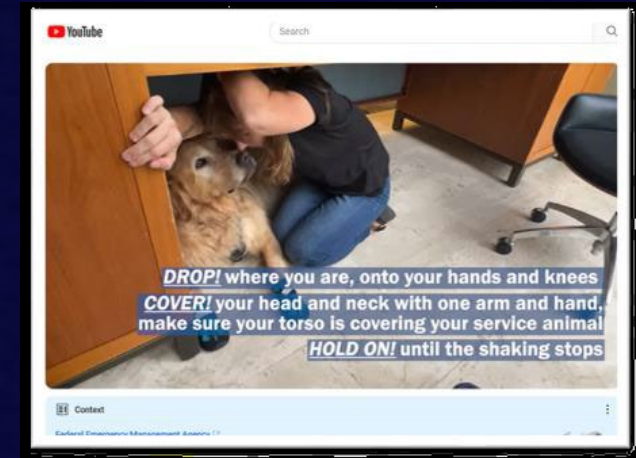
FEMA NEHRP State Assistance Grant Program, *continued*

- National Earthquake Program Manager (NEPM) Meeting
 - In 2024, the NEPM meeting was conducted from April 22-25 in St. Louis, Missouri.
 - Nearly 60 NEHRP stakeholders participated in the annual meeting, including grant recipients of the ISEA and MSNEA State Assistance Grant programs.
 - The meeting provided a unique opportunity for FEMA NEHRP stakeholders to collaborate and share best practices related to earthquake preparedness, mitigation, and grant management.
 - Presentations included:
 - Information about grant and funding opportunities
 - Hazard Mitigation Access and National Earthquake Technical Assistance (NETAP) updates
 - FEMA GO
 - Perspective on Evolving Seismic Risk Estimates in the U.S.
 - Hazard Mitigation Planning for Seismic Risks Workshop
 - Earthquake Insurance, and more.



FEMA NEHRP State Assistance Grant Program, *continued*

- Great ShakeOut Earthquake Drills
 - Annual earthquake safety exercise conducted on the 3rd Thursday of October
 - Provides annual opportunity to increase public awareness of earthquake safety preparedness and mitigation
 - October 19, 2023
 - 57 million participants worldwide
 - 2023 New Initiatives for FEMA's Participation
 - “Drop, Cover and Hold On” Video with a Service Animal
 - Ad Hoc Messaging
 - Opt-In Text SHAKEOUT to 43362 (with a Spanish option)



Questions?