National Earthquake Hazards Reduction Program (NEHRP) Advisory Committee on Earthquake Hazards Reduction (ACEHR) National Institute of Standards and Technology Gaithersburg, MD

March 3-4, 2016

Meeting Summary

Meeting Attendance

Advisory Committee Members:

Laurie Johnson, Chair	Laurie Johnson Consulting
Ralph Archuleta	Ex-officio member of ACEHR as Chair of the U.S. Geological
	Survey Scientific Earthquake Studies Advisory Committee
Jane Bullock	Bullock & Haddow LLC
Craig Davis	Los Angeles Department of Water & Power
John Gillengerten	Consulting Structural Engineer
James Goltz	Advisor on Natural Hazards
Nathan Gould	ABS Consulting
Lisa Grant-Ludwig	University of California, Irvine
Robert Herrmann	Saint Louis University
Ronald Lynn	Clark County (NV) Department of Development Services
Peter May	University of Washington
Jack Moehle	University of California, Berkeley
Lori Peek	Colorado State University

NEHRP ICC Member-Agency Representatives and NIST Support:

Kent Rochford	NIST, Associate Director for Laboratory Programs
Gregory Anderson*	NSF, Program Director, EAR-Instrumentation and Facilities/SAGE
Rick Fragaszy*	NSF, Program Director, Division of Civil, Mechanical and
	Manufacturing Innovation
Howard Harary	NIST, Engineering Laboratory Director and ACEHR Designated
	Federal Officer
Jack Hayes	NIST, NEHRP Director, Materials and Structural Systems
	Division, Engineering Laboratory
Edward Laatsch	FEMA, Director, Safety, Planning and Building Science Division,
	Risk Management Directorate
William Leith	USGS, Senior Science Advisor for Earthquake and Geologic
	Hazards
Steven McCabe	NIST, Leader, Earthquake Engineering Group, Materials and
	Structural Systems Division, Engineering Laboratory
Michael Mahoney	FEMA, Senior Geophysicist

Joy Pauschke	NSF, Program Director, Engineering for Natural Hazards and Natural Hazards Engineering Research Infrastructure
James Schufreider	NIST, Director, Congressional and Legislative Affairs Office
Steve Cauffman	NIST, Materials and Structural Systems Division, Engineering
	Laboratory
Terri McAllister	NIST, Group Leader, Community Resilience Program, Materials
	and Structural Systems Division, Engineering Laboratory
Tina Faecke	NIST, Program and Management Analyst, Materials and
	Structural Systems Division, Engineering Laboratory
Saraí Peña	Outreach Process Partners, LLC
*participated via teleconference	

Summary of Discussions

I. Opening Remarks

Howard Harary, Designated Federal Officer, welcomed the attendees and opened the meeting by identifying the emergency exits first and then opened the floor for introductions and roll call. The NEHRP Secretariat is working on filling three vacant positions on the committee. There are three current members (James Goltz, Nathan Gould, and Peter May) who will complete their first terms in 2016, and one member (Jack Moehle) who will complete his second term in November 2016. Laurie Johnson, ACEHR Chair, acknowledged Jack Moehle's contributions to the committee and thanked him for serving two full terms. Harary informed the committee of Ugo Morelli's death, and acknowledged his outstanding support and efforts for NEHRP as a former FEMA employee and continued NEHRP advocate. Harary introduced Kent Rochford, the NIST Associate Director for Laboratory Programs, who was attending for Willie May, NIST Director.

Rochford welcomed the committee members and extended his appreciation to the group for taking time to participate in this important meeting, while recognizing that everyone is busy. He mentioned that he was representing Willie May, NIST Director, who was not able to attend the meeting. Rochford noted that May, as the Chair of the Interagency Coordinating Committee (ICC), was interested in the Committee members' thoughts on the revitalization and administration of the ICC, as well as the NEHRP reauthorization, as we approach a transition period for Congressional and agency leadership. NIST is working with the Office of Science and Technology Policy (OSTP), the Office of Management and Budget (OMB), and its NEHRP partner agencies to schedule an ICC meeting, and will let the ACEHR members know when this meeting is scheduled.

Laurie Johnson, ACEHR Chair, thanked her fellow Committee members, speakers, and guests for coming to the meeting. She gave an overview of the meeting agenda and highlighted the objectives of the meeting as identified at the top of the agenda, plus some additional topics that the Committee would like to discuss:

- The budget process in relation to NEHRP;
- Revitalization of the ICC;
- What the agencies are doing regarding the NEHRP reauthorization; and,

- The legislative authorization process, to obtain a clear understanding and determine whether the agencies or the committee can do anything to promote NEHRP reauthorization.

Jack Hayes, NEHRP Director, went through the meeting logistics.

The agenda containing a link to each presentation from the meeting is available on the NEHRP website at: <u>http://www.nehrp.gov/pdf/ACEHRAgendaMar2016.pdf</u>.

II. Agency Overviews and Updates

A. Response to ICC and NEHRP Secretariat-related Recommendations in 2015 ACEHR Report

Harary reviewed and provided a response (available at

<u>http://www.nehrp.gov/pdf/ACEHRMar2016_HH.pdf</u>) to each observation and recommendation in the September 2015 ACEHR report related to the ICC and NEHRP Secretariat.

ACEHR's first observation was that the NEHRP reauthorization is essential for the long-term viability of NEHRP. Harary responded that the NEHRP agencies would welcome the reinvigorated partnership with Congress that NEHRP's reauthorization would represent; however, decisions on the reauthorization rest with Congress, not with NEHRP. Johnson wanted to know if the committee or the NEHRP agencies could be more proactive with Congress regarding the reauthorization. There was a consensus of the committee members that this issue was worth pushing and suggested that a draft reauthorization be prepared by the committee and reviewed during the next ACEHR meeting. Various committee members expressed their concerns that many of the terms used the in the previous legislation, such as "monitoring", need to be redefined. Even though the NEHRP budget authorizations expired at the end of fiscal year (FY) 2009, NEHRP agencies have continued to support the Program under the provisions of PL 108-360. The only NEHRP agency that currently has a NEHRP budget line item is USGS. The other NEHRP agencies allocate funding from their general appropriations to support their involvement in NEHRP.

The committee's second observation was that a fundamental assessment of the nation's earthquake risk reduction progress to date is essential for guiding future direction and funding levels for improving national earthquake resilience. Even though the NEHRP agencies value this observation and see it as a very worthwhile one, Harary stated that the agencies are not presently resourced for performing this assessment, without redirecting funding that is presently being expended for other efforts. NEHRP Director, Jack Hayes, said that a study was done on resilient lifelines, and a report was published entitled *Earthquake-Resilient Lifelines: NEHRP Research, Development and Implementation Roadmap* by the Applied Technology Council (ATC) using NIST funds. A copy of the report can be found on the NEHRP website at http://nehrp.gov/pdf/nistgcr14-917-33.pdf. ACEHR Chair, Laurie Johnson, expressed her concern that the committee was not communicating what they meant when they wrote this observation and suggested that the Committee should work with the NEHRP Secretariat to develop a more achievable scope of work that could cost-effectively assess nationwide earthquake risk reduction progress, gaps, and levels of preparedness.

ACEHR has also called upon the NIST Director, as Chair of the ICC, to revitalize the ICC as a mechanism for advancing NEHRP within the respective agencies. NIST is in the process of working with OSTP, OMB,

and its NEHRP partner agencies to schedule an ICC meeting. During this ACEHR meeting, the committee plans to develop a draft interim letter report highlighting this recommendation and suggest topics for the ICC to consider at its next meeting. [This interim letter report was finalized and submitted to Willie May, as the ICC Chair, in May 2016, and is available at

http://www.nehrp.gov/pdf/2016ACEHRReportInterim.pdf]

ACEHR members recommended that the NEHRP Secretariat work with the four NEHRP agencies to promote the development of consensus standards for a market-based, private-sector-led rating system for the seismic performance of buildings. The NEHRP agencies encourage the development and application of transparent, scientifically sound, and accurate national consensus building rating systems, in this case for the earthquake hazard, but also for other natural and man-made hazards. Such systems should be compatible with national consensus building codes and standards, recognizing that rating systems are not the same as codes and standards. The NEHRP agencies agree that, if applied appropriately, such building rating systems can improve community resilience. Harary concluded his presentation by highlighting that the NEHRP agencies do not have a regulatory role and cannot endorse a specific private sector building rating system. Johnson responded by saying that the committee was not asking for an "endorsement", but that they were trying to elevate this issue of helping to promote and achieve a consensus rating system by stating that is it not the responsibility of just one agency, but of all four. It was suggested by the ACEHR Chair that the NEHRP agencies look at what has been done by other federal agencies to help promote consensus rating systems, such as LEED, to come up with a process for obtaining consensus among various standards organizations for a building seismic rating system. (Harary's slides are available online at: http://www.nehrp.gov/pdf/ACEHRMar2016 HH.pdf).

B. NEHRP Overview

Jack Hayes provided a programmatic overview of the NEHRP. In addition to the activities and changing membership of ACEHR, his presentation covered the NEHRP agency budgets from FY05 to FY16, FY17 requested NEHRP budgets, program reauthorization legislation status, the NEHRP annual report for FY14 and FY15, Interagency Committee on Seismic Safety in Construction (ICSSC) related program activities, and Executive Order 13717 which was signed by President Obama on February 2, 2016.

Currently no new legislation has been introduced that would reauthorize NEHRP; however, the NEHRP agencies continue their ongoing activities and continue to fulfil their requirements under Public Law 108-360 which remains in effect. The last reauthorization hearing was conducted by the Technology & Innovation Subcommittee of House Science, Space, & Technology Committee on April 7, 2011. The Subcommittee also conducted a July 2014 hearing on the state of NEHRP, but it was specifically not billed as a reauthorization hearing.

The FY14 Annual Report is in its final stages of editing prior to publication.

The Interagency Committee on Seismic Safety in Construction (ICSSC), *Standards of Seismic Safety for Existing Federally Owned or Leased Buildings* (RP 8) – is now being updated with NIST funding by the Applied Technology Council (ATC) and should be available before the end of calendar year 2016. Hayes also provided an overview of Executive Order 13717, which revokes old Executive Orders 12699 and 12941. The new Executive Order focuses on strengthening national security and resilience for the earthquake hazard by directing federal agencies to use as a minimum national consensus codes and standards focus for seismic design of buildings and encourages the agencies to "go beyond" minimum codes and standards requirements in their buildings to achieve resilience. To conclude his presentation, Hayes thanked the committee for attending the meeting, and recognized the efforts of the NIST staff for managing the logistics. (Hayes' presentation and support documents are available online at: http://www.nehrp.gov/pdf/ACEHRMar2016_NEHRP.pdf).

C. USGS Earthquake Program Update

Bill Leith provided an update on the USGS Earthquake Hazard Program (EHP) activities, focusing on responses to the ACEHR 2015 recommendations, FY15 budget changes, FY16 appropriations and FY17 funding request, external funding history, program challenges, earthquake response exercises from 2009-2016, and FY16 program highlights. Leith explained that, for FY15, the EHP provided \$5M above FY14 levels toward the development of an Earthquake Early Warning (EEW) prototype for the West Coast. Also, for FY15, USGS requested and received a \$700K increase for induced seismicity studies.

Leith also went over the program highlights for 2016, which included the New Executive Order 13717 for Seismic Safety of Federal Buildings, the budget increases from Congress directed to EEW and the Global Seismographic Network, and the 28.7% EHP external funding, now at \$17.35M. In addition, USGS was tasked to "conduct a cost-benefit analysis and spending plan for the adoption of any remaining seismic stations, including any stations in final deployment, if included as part of the Advanced National Seismic System (ANSS)." This language relates to the final deployment in Alaska of the Earthscope Transportable Array.

Leith stressed the importance of EEW development activities at USGS. He mentioned that within the last eight months, USGS has received an increase of Congressional inquiries related to EEW, including interest in offshore monitoring. He also noted legislation was introduced requiring FEMA to develop an EEW system. On February 2, 2016, a White House-hosted "Earthquake Resilience Summit" was held to highlight how a whole-community approach is the best approach for improving resilience to earthquakes and other hazards and to explore how science and technology can improve our ability to detect and respond to earthquakes in the future. Leith concluded by presenting the 2015 USGS Scientific Earthquake Studies Advisory Committee (SESAC) recommendations. (Leith's presentation is available online at: http://www.nehrp.gov/pdf/ACEHRMar2016_USGS.pdf).

D. USGS Scientific Earthquake Studies Advisory Committee (SESAC) Update

Ralph Archuleta, as Chair of the Scientific Earthquake Studies Advisory Committee (SESAC), spoke about the role of SESAC and its recent observations and recommendations as highlighted in its July 28, 2015 Report to Congress and the USGS Director.

He noted that the USGS Circular 1188, which is the primary planning document for the Advanced National Seismic System (ANSS), is currently being updated. In addition, although the EEW system development continues to proceed, it has insufficient funds to cover the entire West Coast. The earthquake warnings will be called ShakeAlert, in keeping with other products derived from a fully operational national seismic system. In addition, USGS is continuing to develop a larger program to investigate induced seismicity, which has a major impact on the USGS National Seismic Hazard Maps. Maintaining an induced seismicity hazard map will require more resources than are now available.

Furthermore, the USGS is looking to reinvigorate its research in the central and eastern US (CEUS). The acquisition of 159 stations from the NSF transportable array would be a major step in that direction.

Archuleta also went through some highlights of the September 25, 2015 SESAC letter which supplemented its July 28, 2015 annual report. A copy of the SESAC letter is available online at: <u>http://www.nehrp.gov/pdf/ACEHRMar2016_SESAC_letter.pdf</u> and a copy of the SESAC 2015 report is available at: <u>http://www.nehrp.gov/pdf/ACEHRMar2016_SESAC_report.pdf</u>.

To conclude his presentation, Archuleta asked the members of the committee to think about what it would take to have a fully developed Advanced National Seismic System (ANSS), a system that will exist permanently. He expressed the necessity of getting Congress to understand the need for ANSS, and to support it. SESAC is recommending that USGS develop a long-term budget to solve the problem for the foreseeable future. ACEHR members shared SESAC's interest and concerns and agreed that they should be looking at the big picture about what is needed in the future. (Archuleta's presentation is available online at: http://www.nehrp.gov/pdf/ACEHRMar2016_SESAC.pdf).

E. NSF Earthquake Program Update

Joy Pauschke provided an overview of the NSF role in NEHRP, responses to ACEHR 2015 recommendations, and updates on NSF earthquake related activities. NSF NEHRP activities fall under the Directorate for Engineering and the Directorate for Geosciences; there is no direct NSF funding allocation for NEHRP, and NSF reports on NEHRP related research conducted through programs that support solicited and unsolicited proposals. NSF's role in NEHRP is to support basic earthquake research, research centers, facilities such as SAGE and GAGE, and disciplinary and multidisciplinary research.

For the Directorate of Engineering efforts, all natural hazard research is combined under the Civil, Mechanical and Manufacturing Innovation (CMMI) Research Programs, which includes the Engineering for Natural Hazards, Infrastructure Management and Extreme Events, and Natural Hazards Engineering Research Infrastructure (NHERI). In FY16, three NHERI components are being competed under NSF 15-598, NHERI: Network Coordination Office, Computational Modeling and Simulation Center, and Post-Disaster, RAPID Response Research Facility.

Under Directorate for Geosciences efforts (GEO), the SAGE seismic facility continues to support multiple NEHRP efforts with operations planned through FY18; NSF supports the Central and Eastern US Seismic Network; and the GAGE geodetic facilities support multiple NEHRP efforts, including the Earthquake Early Warning (EEW) systems, with operations planned through FY18. Additional GEO activities include continued joint support (with USGS) for the Southern California Earthquake Center (SCEC); fundamental research via Geophysics, Tectonics, EarthScope, GeoPRISMS, Geomorphology & Land-Use Dynamics, and other core EAR programs, as well as the new program, PREEVENTS – Prediction of and Resilience against Extreme EVENTS. The PREEVENTS Program focuses on improving the fundamental understanding of processes underlying natural hazards and extreme events in geosciences and the capability to model such events and processes. (Pauschke's presentation is available online at: http://www.nehrp.gov/pdf/ACEHRMar2016_NSF.pdf).

Because NSF does not have "one NEHRP program" that supports all NEHRP-related activities, the ACEHR members expressed concern with the difficulty they have in gaining a complete picture of NSF's support for NEHRP-related work through its many unsolicited and solicited programs. Pauschke guided the members on how to review documentation online for further details and explained that NSF's funding structure as an agency is very different compared to the other NEHRP agencies. In addition, NSF representative Greg Anderson, from the Directorate for Geosciences, fielded questions from the Committee via conference call. Anderson and Pauschke highlighted numerous ongoing NSF programs that are earthquake-related activities at NSF.

F. FEMA Earthquake Program Update

Edward Laatsch provided an update on FEMA's Earthquake Program, including an agency overview, budget update, recent accomplishments, FY16 and FY17 planned activities, and responses to FEMA-related recommendations in the 2015 ACEHR report. FEMA NEHRP priorities include, building codes and standards, guidance and tool development, program implementation and outreach, consortia partnerships, support for Regional EQ Program Managers, disaster support, and critical infrastructure (which FEMA is not currently actively supporting because of budget limitations).

Laatsch provided an update on the FEMA staffing status. Only seven out of the 12 positions for the Regional Earthquake Program Managers (PMs) are filled. Regional PMs are key staff since they are key in implementing FEMA NEHRP activities. FEMA continues to collaborate with other organizations and establish cooperative agreements with the Earthquake Consortia to leverage FEMA's NEHRP resources. Laatsch discussed the FEMA NEHRP budget, which has been relatively consistent since 2009. The Committee congratulated FEMA for the good work they are doing with the limited budget they have.

Laatsch also touched on the Federal Insurance and Mitigation Administration (FIMA) reorganization and highlighted that NEHRP is now part of the Risk Management Directorate. Laatsch is the Director for the new Safety, Planning and Building Science Division, which better aligns NEHRP with regional structure and other statutory programs in FEMA. Plans for FY16 and FY17 include looking at the possibility of re-visiting Earthquake State Assistance, beginning work on the next NEHRP Recommended Provisions, including the ATC-17 project, proposed changes to the 2018 International Building Code, and Building Rating System developments. He concluded his presentation by going through the 2015 ACEHR observations and recommendations for FEMA activities, and by providing examples of what FEMA is doing to achieve its goals. (Laatsch's presentation is available online at: http://www.nehrp.gov/pdf/ACEHRMar2016 FEMA.pdf).

G. NIST Earthquake Program Update

Steven McCabe provided an overview on the research projects and accomplishments of the Earthquake Engineering Group. McCabe noted the completion of three internal research reports on Assessment of First Generation Performance Based Seismic Design (PBSD) Methods for New Steel Buildings (NIST Technical Note 1863). Copies of these reports are available on the NEHRP web site at <u>http://nehrp.gov/library/index.htm</u>. McCabe highlighted that ASCE 41 and the LA Tall Buildings Council have engaged NIST on the results of this work and he was invited to give a presentation at the LA Tall Buildings Council meeting in May 2016. In addition, one journal article has been accepted and there is another one awaiting review. NIST has several NEHRP extramural projects with the Applied Technology Council, including TechBriefs, Roadmap reports and applied research projects. A new-start project for FY16 is a study of available information concerning liquefaction. McCabe concluded his presentation by responding to the 2015 ACEHR recommendations regarding NIST research and by sharing an updated outreach report which included website traffic statistics. (McCabe's presentation is available online at: <u>http://www.nehrp.gov/pdf/ACEHRMar2016_NIST.pdf</u>).

III. Community Resilience Updates

A. NIST Community Resilience Program Overview

Steve Cauffman spoke about the work of the NIST Community Resilience Program. He presented an overview on how the built environment (buildings and infrastructure) can contribute to disaster resilience in communities. The emphasis is not only on mitigating risk, but also on expediting recovery. He highlighted the development of the *Community Resilience Planning Guide*, the work of the Disaster Resilience Fellows, and the Community Resilience Panel. Cauffman noted that NIST is initiating research to develop a systems-based modeling environment for evaluating the impacts of loss of function in the built environment and the consequential effects on community response and recovery. The long-term objective is to provide decision-makers and professionals with methods and tools to support cost-effective infrastructure designs and investments that make our communities more resilient.

Goals of the Community Resilience Panel include: engage and connect community and cross-sector stakeholders; identify policy and standards-related gaps and impediments to community resilience; raise awareness of sector dependencies and cascading effects of disasters; identify or develop consistent definitions and metrics relating to resilience for use across sectors; contribute to current and future community resilience guidance documents; reduce barriers to achieving community resilience; and develop and maintain a Resilience Knowledge Base (RKB). (Cauffman's presentation was combined with the next presentation by Terri McAllister and is available online at: http://www.nehrp.gov/pdf/ACEHRMar2016 Resilience.pdf).

B. NIST Community Resilience Center of Excellence

Terri McAllister provided an overview of the NIST Community Resilience Center of Excellence. It is a fiveyear cooperative agreement initially awarded in February 2015, and renewable up to 10 years. McAllister highlighted the objectives of the Center, which are to: (1) develop an integrated, multi-scale, computational modeling environment (NIST-CORE) for community systems to support standards and tools for assessment and decision making; (2) foster the development of data architectures and data management tools to enable disaster resilience planning; and, (3) conduct studies to validate resilience data architectures, data management tools, and models. (McAllister's presentation was combined with the previous presentation by Steve Cauffman and is available online at: <u>http://www.nehrp.gov/pdf/ACEHRMar2016_Resilience.pdf</u>).

IV. ACEHR Discussions

A. ACEHR Open Discussion: NEHRP Reauthorization Process

ACEHR Chair Johnson began the open discussion and introduced James Schufreider, Director of the Congressional and Legislative Affairs Office at NIST, who provided an overview on the NEHRP reauthorization process. Schufreider shared his views on the difficulty of the NEHRP reauthorization since it is an interagency program involving multiple agency commitments, jurisdictions, and agency priorities. Each agency has its own way of operating. He explained that part of his job consists of ensuring that Congress understands the purpose of the Program and making the process go smoother. He also explained that the Program continues to be funded, even though agency budget authorizations expired in 2009. Members of the Committee participated in a very interactive discussion, shared examples and asked questions about what they can do as a Committee or as individuals to push the reauthorization along. The Committee expressed concerns about not having Congressional support from someone who is familiar with the Program, since most of the Congressional staff members are very young and the majority of the members who worked on the previous legislation are gone. Schufreider highlighted that since this is an election year, he is not hopeful about getting a reauthorization from Congress this year because of limited time in session. A question was raised by a Committee member whether the Committee or the NEHRP agencies could write their own reauthorization bill. Schufreider responded that he believes you can; there is no law saying you can't. Johnson stressed that this Committee is committed to move the reauthorization process along and offered to work with the NEHRP agencies on a new bill or edit the current one. The Committee members agreed that it would be a good idea for them, as a Committee, to work with the four NEHRP agencies in editing the current legislation. Committee Chair Johnson asked if the September 30, 2015 ACEHR report was submitted to Congress. Hayes responded by saying the report was delivered to the NIST Director but not to Congress, although the report was posted for the public on the NEHRP web site. Schufreider offered to go back to his office and transmit their report to Congress as well as all future Committee reports. The Committee thanked Schufreider for his commitment to transmit their reports to Congress and also for taking the time to come to the meeting.

B. ACEHR Open Discussion: Draft ACEHR Interim Report

ACEHR Chair Johnson and the Committee members went through a draft interim report letter to NIST Director, as Chair of the ICC, to supplement the more detailed report submitted on September 30, 2015 on the effectiveness of the NEHRP. The Committee focused on four questions that it would like the ICC to address: (1) What is the future of NEHRP? (2) What are the key gaps in the nation's earthquake resilience? (3) How can NEHRP agency coordination be improved? And, (4) How can implementation in research be advanced to increase the knowledge of earthquake risk? The Committee members discussed, edited, and then approved the content of the draft letter. The ACEHR Chair offered to polish, finalize, and sign the letter and send it to the NIST NEHRP Secretariat to deliver it to Willie May, NIST Director and Jim Schufreider, who will transmit it to Congress.

C. ACEHR Open Discussion: Reinvigorating NEHRP

Chair Johnson shared a short presentation which focused on: Reenergizing the brand and pride of NEHRP accomplishments of the past 40 years; the need for strong leadership and broader and sustained stakeholder and public education; the criticality of reauthorization and revitalization of the ICC as a

mechanism for advancing NEHRP within the respective agencies; and, encouraging better collaboration among the four NEHRP agencies. She expressed concern that a NEHRP vision for the next administration is lacking among the agencies. Johnson hopes the ICC meets soon so that the work being done by the agencies can be highlighted. Johnson emphasized that it is important for the NEHRP agencies and ACEHR to work together to communicate the earthquake risk issue, help communities to understand the earthquake risk and resilience issues, and work with them to solve it. She expressed her concern that resilience is not something that communities typically understand or that the public thinks about until a truly devastating earthquake happens. She called upon the NEHRP agencies and ACEHR to focus on collaboration and team work. Several other ACEHR members shared their personal stories on how earthquakes have affected their lives.

Johnson asked Howard Harary about the status of the NEHRP Deputy Director. Harary said he was reaching out to the other NEHRP agencies to determine if there was any interest from within the other agencies to serve in that capacity before it was advertised, but he intended on filling that position.

D. ACEHR Open Discussion: Next Committee Meeting

The Committee discussed a schedule for the next meeting and recommended that they wait to meet face-to-face after the ICC meets. Harary will keep all the members posted on the progress of scheduling an ICC meeting date.

V. Adjournment

No members of the public registered with the NEHRP Office to provide input at this meeting, nor did any members of the public announce their presence or request to speak during the meeting. The Chair thanked the Committee members for their hard work and thanked the NIST staff for planning and hosting the meeting. The meeting was adjourned at 12:38 p.m. on Friday, March 4, 2016.