

National Earthquake Hazards Reduction Program (NEHRP)
Advisory Committee on Earthquake Hazards Reduction (ACEHR)
National Institute of Standards and Technology
Gaithersburg, MD
April 9 – 10, 2015

Meeting Summary

Advisory Committee Members:

Laurie Johnson, Chair	Laurie Johnson Consulting
Jane Bullock	Bullock & Haddow LLC
Craig Davis	Los Angeles Department of Water & Power
John Gillengerten	Consulting Structural Engineer
James Goltz	CA Emergency Management Agency
Nathan Gould	ABS Consulting
John Hooper**	Magnusson Klemencic Associates
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
Kenneth Stokoe**	University of Texas at Austin
Mary Lou Zoback	Stanford University
Ralph Archuleta	University of California, Santa Barbara; Ex-officio member of ACEHR as Chair of the U.S. Geological Survey (USGS) Scientific Earthquake Studies Advisory Committee (SESAC)

** Not in attendance

NEHRP ICC Member-Agency Representatives and NIST Support:

Willie May	NIST, Acting Director
Richard Cavanagh	NIST, Acting Associate Director for Laboratory Programs
Howard Harary	NIST, Engineering Laboratory (EL) Director and ACEHR Designated Federal Officer
Jason Averill	NIST, Chief, Materials and Structural Systems Division
Jack Hayes	NIST, NEHRP Director and ACEHR Alternate Designated Federal Officer
Ed Laatsch	FEMA, Chief, Building Science Branch

Joy Pauschke	NSF, Program Director, Engineering for Natural Hazards & Natural Hazards Engineering Research Infrastructure (NHERI)
Greg Anderson*	NSF Program Director, EarthScope
William Leith	USGS, Senior Science Advisor for Earthquake and Geologic Hazards
Joannie Chin	NIST, EL Acting Deputy Director
Steve McCabe	NIST, NEHRP Deputy Director
Tina Faecke	NIST, NEHRP Secretariat
Felicia Johnson	NIST, NEHRP Secretariat
Judith Small	NIST
Kenneth Snyder	NIST
Matthew Hoehler	NIST
Siamak Sattar	NIST
Matthew Speicher	NIST
Ben Davis	NIST
Kevin Wong	NIST
Marc Levitan	NIST
Lee Mueller	Outreach Process Partners, LLC
Darius Za Gara	Outreach Process Partners, LLC

**participated via teleconference*

Summary of Discussions

I. Opening Remarks

Jack Hayes opened the April 2015 National Earthquake Hazards Reduction Program (NEHRP) Advisory Committee on Earthquake Hazards Reduction (ACEHR) meeting and introduced Howard Harary, National Institute of Standards and Technology (NIST) Engineering Laboratory Director and ACEHR Designated Federal Officer. Howard Harary welcomed two new members to the ACEHR – Dr. Lori Peek from Colorado State University, who was not in attendance, and Dr. Lisa Grant-Ludwig from the University of California, Irvine. Harary reminded the Committee of their charge per public law as a Federal Advisory Committee Act (FACA) committee, which was the subject of a presentation later in the meeting. Harary also noted that the key purpose of the meeting was to further develop the ACEHR 2015 report, but first the Committee would receive agency updates on NEHRP activities, as well as presentations on USGS SESAC, NEHRP Interactions with Other Hazard Communities and Organizations, and the NIST Community Resilience Program. In closing, Harary thanked the Committee members for their assistance and dedication, and noted that their observations and advice were very valuable to NEHRP.

Willie May, Acting Director of NIST, welcomed the Committee to NIST and provided opening remarks and a slide presentation (available online at: http://www.nehrp.gov/pdf/ACEHRApr2015_WM.pdf).

May gave an overview of the ongoing programs at NIST, noting the world-class research lab facilities and seven Centers of Excellence (CoE). May made special note of the Center of Excellence for Disaster Resilience, awarded to Colorado State University (CSU) to establish the Community Resilience Center of Excellence. The CSU CoE award is for \$20 million over five years; the Center will kick off on May 1, 2015, as part of NIST's effort to address contemporary societal needs. He also noted that advisory committees, such as ACEHR, are important in ensuring that NIST is "doing what we should, not what we could" to serve the needs of the Nation. May gave an overview of the President's requested FY16 NIST Budget, specifically noting efforts that would fall under NIST's Disaster Resilience Initiative, such as the Disaster Resilient Buildings and Infrastructure, which would look at earthquake resiliency and lifelines, as well as other natural hazard issues. May fielded several questions from Committee members regarding this requested FY16 initiative, which could provide funding totaling \$10 million.

Laurie Johnson, ACEHR Chairperson, thanked her fellow Committee members, speakers, and guests for coming to this meeting and asked everyone to introduce themselves. She gave an overview of the meeting agenda and highlighted the objectives of the meeting – to work together to develop the Committee's draft report. She also urged the NEHRP representatives to emphasize areas and topics during their presentations they would like the ACEHR to consider during their report discussion.

Alice McKenna, Senior Counsel, General Law Division, Department of Commerce, provided the ACEHR with an overview of the FACA, outlining how advisory committees are governed per the Act. McKenna highlighted that the core principles of advisory committees are that "committees advise and the federal government implements", and the presumption of openness. The public must be given fair notice of Committee meetings through the Federal Register, and all open meeting material is public information. The Committee can establish sub-committees and workgroups for development of materials, but all reports/materials must be submitted to the full Committee for open deliberation. Overall, Committee members and NIST agreed that ACEHR would like to work as liberally within this law as possible as to not hamper the coordination needed to complete the work ACEHR is charged to do.

Jack Hayes wrapped up the opening remarks with meeting logistics. The agenda containing a link to each presentation from the meeting is available on the NEHRP website at: <http://www.nehrp.gov/pdf/ACEHRAgendaApr2015.pdf>. Any subsequent teleconference meetings to finalize the ACEHR report must be scheduled at least one month in advance and the public must be officially notified via the Federal Register.

II. Agency Overviews and Updates

A. NEHRP Overview

Jack Hayes provided a programmatic overview of the NEHRP. Hayes' presentation covered ACEHR staffing, which currently has 15 active members; NEHRP agency budgets from 2005 to 2015, followed by the 2016 Administration-requested NEHRP Agency Budgets; and a legislation status update. Currently, there has been no movement on the reauthorization of NEHRP. The NEHRP Secretariat developed and NIST released the FY13 NEHRP Annual Report in January 2015 and is currently developing the FY14 Annual Report to capture NEHRP activities. Hayes

highlighted the recently released *Earthquake-Resilient Lifelines: NEHRP Research, Development and Implementation Roadmap*, which is a good roadmap for lifeline resilience for hazards beyond earthquakes and displays how work within the earthquake field can impact the national resilience effort.

Hayes also highlighted some non-NEHRP activities, including the NIST Community Resilience Program, NIST program restructuring, and a planned contract with the Applied Technology Council (ATC) for 2015 to update the Interagency Committee on Seismic Safety in Construction (ICSSC) RP-8, *Standards of Seismic Safety for Existing Federally Owned or Leased Buildings*, for current code applicability. Hayes concluded his presentation by recognizing the efforts of the NIST NEHRP Secretariat staff to administer NEHRP. (Jack Hayes' slides are available online at: http://www.nehrp.gov/pdf/ACEHRApr2015_JH.pdf).

B. USGS Earthquake Program Update

Bill Leith provided an update on USGS earthquake activities with a focus on FY14 accomplishments, activities included in the FY15 budget, the FY16 proposed budget and unmet needs within the USGS earthquake programs. Leith discussed USGS' role in NEHRP which includes earthquake monitoring and notifications, hazard assessments, targeted research and public awareness. USGS, in partnership with NSF, supports the Global Seismographic Network (GSN), which is the workhorse for global seismology and learning. In FY14, USGS secured funding to upgrade several GSN station sensors to improve the quality of data. Significant interest has been generated concerning the Earthquake Early Warning project, with Congressional support to further develop the system for the West Coast. Leith highlighted USGS' successful Napa Earthquake response efforts, including ongoing efforts to document the after slip that is occurring. Also in FY14, USGS completed and released a major update to the National Seismic Hazard Maps, which inform the development of building codes; induced seismicity impacts were not added so that building codes are not influenced by induced seismicity until further work in developing hazard maps of these areas concludes.

Leith touched on induced seismicity as a topic of focus for the USGS as areas of the country beyond historically active seismic zones are seeing excess seismicity. Studies and monitoring are ongoing in several states, including Oklahoma. Committee members expressed interest in the USGS' work in induced seismicity, questioning if there was any partnership/information sharing with the industry, if there is direct correlation between increased injections and increased seismicity, if induced seismicity could trigger tectonic earthquakes, and if areas are at risk for larger earthquakes as a result of the smaller earthquakes triggered by induced seismicity.

For FY15, the USGS has an improving NEHRP budget that will allow it to continue to develop the Earthquake Early Warning System (EEWS), continue research on induced seismicity, and administer external grants and cooperative agreements. The USGS Earthquake Hazards Program's budget is currently \$64.356M, including the USGS portion of the GSN. Leith noted that earthquake monitoring is close to half of the budget. Per the FY16 requested budget, the initiative "Natural Hazards Science for Disaster Response" would provide funds for several ongoing efforts including EEWS in California, but provides only a portion of the funding needed.

Several objectives will not be met with the FY16 budget proposal, including long-term operation of the Central and Eastern U.S. Seismic Network, full implementation of the EEWS, and the replacement of GSN sensors. (Leith's presentation is available online at: http://www.nehrp.gov/pdf/ACEHRApr2015_BL.pdf).

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

Ralph Archuleta provided an update on SESAC, a FACA committee which exists to advise USGS Earthquake Hazards Program, highlighting activities, areas of concern and recommendations (slides available online at: http://www.nehrp.gov/pdf/ACEHRApr2015_RA.pdf). Archuleta expressed concern that the USGS Earthquake Hazards Program budget has hardly changed since 1977, but the program's responsibilities have increased significantly, specifically noting concern about long-term operational costs for the maintenance of instruments as the USGS absorbs more stations, and the requirements to develop and maintain an effective EEWS. Archuleta discussed USGS' induced seismicity research, noting that there is a need to determine how to incorporate induced seismicity into the National Seismic Hazard Maps to inform the public.

Overall, SESAC is concerned that there is a lack of balance between monitoring and assessment in the USGS budget; monitoring is important, but there needs to be an assessment of data and applied research. Archuleta also discussed NSF's plans for the 2018 re-competition for *Seismological Facilities for the Advancement of Geosciences and EarthScope (SAGE)* and the *Geodesy Advancing Geosciences and EarthScope (GAGE)* Facilities, which are large efforts NSF supports to provide geodetic, seismic, and related geophysical instrumentation, data, and educational capabilities to a wide range of NSF Earth Sciences-supported communities. SESAC noted concern about the future funding of these programs emphasizing their importance to USGS.

ACEHR members shared Archuleta/SESAC's interest and concern in balancing monitoring and assessment within the USGS Earthquake Hazards Program, and ensuring the future of SAGE and GAGE, given their importance.

D. NSF Earthquake Program Update

Joy Pauschke provided an update on NSF earthquake activities and noted items for the consideration of ACEHR (slides available online at: http://www.nehrp.gov/pdf/ACEHRApr2015_JP.pdf). NSF NEHRP activities fall under the Directorate for Engineering (ENG) and the Directorate for Geoscience (GEO); there is no direct budget allocation for NEHRP within NSF's annual budget and NSF reports out on research that supports its role in NEHRP. Overall, NSF's role in NEHRP is to support basic earthquake science and engineering research, research centers, facilities such as SAGE and GAGE, and disciplinary and multidisciplinary research. Several NSF-supported research accomplishments were captured in NEHRP Seismic Waves articles.

Within the Directorate for Engineering, the Division of Civil, Mechanical and Manufacturing Innovation (CMMI) has combined several of its natural hazards engineering research programs into one core research program, Engineering for Natural Hazards (ENH), which supports earthquake engineering research and combines the former George E. Brown, Jr. Network for

Earthquake Engineering Simulation (NEES) research program with the hazard mitigation portions of the former Hazards Mitigation and Structural Engineering program and the former Geotechnical Engineering program. CMMI also supports earthquake engineering research under the Infrastructure Management and Extreme Events program and will support earthquake engineering research infrastructure under the new Natural Hazards Engineering Research Infrastructure (NHERI), which continues NSF's emphasis on earthquake engineering research infrastructure previously supported under NEES as part of NEHRP but now broadens support to also include wind engineering research infrastructure.

Under the Directorate for Geosciences (GEO), the SAGE seismic facility continues to support multiple NEHRP efforts with operations planned through FY18; NSF will join other partner agencies to support the Central and Eastern US Seismic Network; and the GAGE geodetic facilities continue to support multiple NEHRP efforts, including the EEWS, with operations planned through FY18. Additional GEO activities include support for the Southern California Earthquake Center (SCEC) and a planned FY16 effort called PREEVENTS – Prediction of and Resilience against Extreme Events.

ACEHR members expressed interest in understanding the path forward for SAGE and GAGE, with a planned 2018 recompetete for each program, specifically whether or not the program would continue and if the community would have the opportunity to provide input to guide the solicitation. Joy Pauschke committed to having Greg Anderson from GEO available via conference call for the next day (April 10) to address specific questions from ACEHR members about the GEO support for NEHRP-related activities.

ACEHR members also expressed interest in getting a clearer picture regarding what NSF activities are funded in association with NEHRP; Pauschke indicated that research awards related to earthquakes science or engineering are tagged by NSF staff with the NEHRP code – 1576, although all related research may not be captured under this code.

On Friday, April 10th, NSF representative, Greg Anderson, from GEO fielded questions from the Committee via conference call. Committee members expressed interest in the NSF research that is being funded related to NEHRP; Anderson highlighted numerous ongoing NSF programs that are earthquake-related activities at NSF, including SCEC support, research in the Cascadia region, Geodynamic Processes at Rifting and Subducting Margins (GeoPRISMS), EarthGov, and other targeted research. Anderson also addressed questions regarding SAGE and GAGE and NSF's efforts in preparing the solicitation for the recompetete in 2018, which have and will include community input, a workshop, a white paper and meetings.

Committee members also expressed an interest in whether or not NSF has earthquake-specific solicitations, and how NSF funds are allocated to NEHRP activities since there is no direct allocation for the program. Anderson highlighted that much of the NSF research is multi-hazard and interrelated; therefore, NSF reviews their portfolio of research and determines which activities are earthquake-related research and supportive of NEHRP. Pauschke also mentioned that the NEES operations and NEES research solicitation sand the ENH research program description have explicitly mentioned that earthquake engineering awards made under these solicitations/programs contribute to NSF's role in NEHRP.

Overall, Committee members expressed concern about the transparency regarding the NSF research related to NEHRP, and expressed a concern that as NSF moves to multi-hazard programs and multi-hazard research that the earthquake-related research may become diluted. Committee members agreed to outline the priorities they see as appropriate for NSF to be supporting within earthquake research and ask NSF to demonstrate how they are supporting these priorities—especially since NSF support for operations of the George Brown Jr. Network for Earthquake Engineering Simulation (NEES) ended on September 30, 2014 despite repeated NEHRP ACEHR reports encouraging its continued operation. Pauschke clarified that NSF’s new program, the Natural Hazards Engineering Research Infrastructure (NHERI), is the next generation of NSF support for large facility operations to conduct natural hazards engineering research, and NHERI will continue support for earthquake engineering research infrastructure.

E. FEMA Earthquake Program Update

Ed Laatsch provided an update on FEMA NEHRP priorities and items for consideration by ACEHR. Staffing for FEMA earthquake activities is an issue; however, FEMA recently filled the Regional Earthquake Program Manager (PM) positions in Regions 9 and 10. This is important because the Regional PMs are the true implementation points for FEMA NEHRP activities and interact the most with the states. Building codes and adoption of building codes continue to be key programs for FEMA; overall, there is a steady upward trend in community adoption of building codes for flood, earthquake, hurricane and other hazards. ACEHR members expressed interest in getting more detailed information about community adoption of earthquake-related building codes, especially in high hazard areas, and understanding what this means for NEHRP activities.

Laatsch highlighted the multiple guidance documents, tools and outreach products recently developed, some of which are technical and some public-facing. Through NEHRP, FEMA continues to provide training and technical assistance with the Earthquake Engineering Research Institute (EERI) and the National Earthquake Technical Assistance Program (NETAP). FEMA also continues to collaborate with other organizations and establish cooperative agreements with the Earthquake Consortia to expand the reach of FEMA’s NEHRP activities. Laatsch discussed the FY15 budget, which has remained flat from previous years, with \$8.5M allocated including salaries and expenses. Laatsch highlighted recent accomplishments (as shown in slide presentation available online at: http://www.nehrp.gov/pdf/ACEHRApr2015_EL.pdf), FY15 and FY16 priorities, specifically noting that FEMA is revisiting direct earthquake state and territory support. ACEHR members expressed support in the reevaluation of direct earthquake support to states and territories.

F. NIST Earthquake Program Update

Steve McCabe provided an update on NIST earthquake activities, with a focus on current and planned projects. McCabe highlighted a NIST NEHRP milestone on ASCE 41 with the completion of three reports on the validation of ASCE 41 procedures in performance-based seismic engineering, which are available for download on NEHRP.gov. McCabe also discussed several internal ongoing and planned technical seismic evaluations (see slides for details available online at: http://www.nehrp.gov/pdf/ACEHRApr2015_SM.pdf). NIST has a large number of NEHRP extramural projects as well, which include work through ATC on TechBriefs,

roadmap reports and applied research projects, and two experimental projects at outside laboratories (one performed by ATC and one by the US Army Engineer Research and Development Center). McCabe specifically highlighted the recently published ATC 103/TO 28, *Research Plan for Earthquake Resilient Lifelines: NEHRP Research, Development and Implementation Roadmap*, as a document that would be of interest to the ACEHR.

McCabe also presented statistics for the NEHRP website, www.nehrp.gov, showing data on website traffic, number of visitors, most popular pages and time spent per visit, as well as trends over time from 2013 to 2015. Committee members expressed interest in further understanding how visitors are using [NEHRP.gov](http://www.nehrp.gov) and the specific materials they are reviewing/downloading. Committee members also expressed an interest in understanding how the ASCE 41 work will guide current and future building practices as NIST continues to evaluate ASCE 41 and ASCE 7.

III. Executive Branch Hazards Activity & Community Resilience Overview

(Cauffman and Harary presentation order was switched based on availability.)

A. NIST Community Resilience Program Overview

Steve Cauffman provided an overview regarding NIST's efforts in the development of the NIST Community Resilience Program. NIST has recognized the importance of resiliency to address problems of the losses the Nation incurs and the increased burden of cost, as well as to account for the changing nature of hazards and the interconnectivity of infrastructure. NIST's efforts will include significant stakeholder engagement, as outlined in the President's Climate Action Plan, research and pilot studies. Cauffman highlighted the first deliverable – the draft Community Resilience Planning Guide (previously called Disaster Resilience Framework), which will be released to stakeholders and the public on April 27, 2015 in Houston, Texas. Since April 2014, NIST has been convening workshops engaging a broad network of stakeholders to help develop this Guide and the Disaster Resilience Standards Panel (DRSP), with a focus on the role that buildings and infrastructure systems play in ensuring community resilience. A 60-day public review period of the Guide will be announced in the Federal Register, and additional information may be found on NIST's Community Disaster Resilience website at:

http://www.nist.gov/el/building_materials/resilience/. Next steps for the Resilience Program include launching the Disaster Resilience Standards Panel, which will help further develop the Disaster Resilience Framework v2.0; identifying pilot communities to engage in resiliency planning activities; and developing Model Resilient Guidelines for critical buildings and infrastructure systems. (Cauffman's presentation is available online at: http://www.nehrp.gov/pdf/ACEHRApr2015_SC.pdf).

ACEHR members encouraged Cauffman to engage with the many other resiliency programs underway throughout the country. Cauffman highlighted the many organizations and efforts NIST has collaborated and shared information with. Committee members also highlighted the importance of communities understanding their risks prior to undertaking resiliency planning.

B. NEHRP Interactions with Other Hazards Activities

Howard Harary provided a presentation regarding how NEHRP does and could interact with other hazards activities. Harary highlighted that disaster and risk mitigation is a Federal priority, and that there are many interrelated activities ongoing, including NEHRP. Harary encouraged

NEHRP to continue interacting with different entities and programs, including the National Science and Technology Council Committee on Environment, Natural Resources and Sustainability; Presidential Policy Directive (PPD)-8 and PPD-21 National Planning Frameworks; Mitigation Framework Leadership Group; National Tsunami Hazard Mitigation Program; and the ICSSC. (Harary's presentation is available online at: http://www.nehrp.gov/pdf/ACEHRApr2015_HH.pdf).

ACEHR Chair Johnson requested information on the status of the ICSSC and Hayes replied that it had been four years since the Committee last met. Johnson also inquired why it had been so long since the Interagency Coordinating Committee (ICC) last met. Harary noted the difficulty of scheduling a meeting for the assigned agency representatives; however, they have had success in engaging on an executive staff level and have met multiple times in the last year and a half.

IV. ACEHR Report Discussion

A. ACEHR Discussion: Report Overview and Structure

The ACEHR members began their discussion regarding the development of the 2015 ACEHR Report. ACEHR Chair Johnson opened the discussion by recapping the recommendations made previously by the Committee. Johnson expressed concern that agency priorities and activities do not necessarily match up with the NEHRP legislation, and the ACEHR report needs to reflect these differences and the challenges associated with this. Johnson also noted that ACEHR could recommend changes to the NEHRP legislation if they deemed it appropriate.

Committee members highlighted the need for the Committee to ensure the report has a clear and focused message on what the ACEHR recommendations are, and to link to previous reports and efforts by ACEHR. Committee members also highlighted the need for ACEHR to note accomplishments by NEHRP, discuss news trends and developments in the field, and use these items to guide the recommendations, as well as to use research/documentation to back statements made in the report.

To help advise the NEHRP agencies effectively and to provide clear recommendations to the agencies in the 2015 report, Johnson recommended breaking up into informal working groups. The working groups were asked by the ACEHR Chair to review each agency individually, specifically considering what each agency is doing well, where there is room for improvement, and where the ACEHR felt they should focus their attention. To ensure cross-fertilization, these points were brought back and presented to the full ACEHR.

B. ACEHR Discussion: Recommendations for Agencies, Overarching Considerations, and Trends and Developments

Each ACEHR working group presented their agency-specific assessments and recommendations to the full committee for their review and consideration. Several agency-specific recommendations were developed, as well as overarching considerations and trends and developments within the earthquake field.

For the overarching considerations, Committee members expressed an interest in seeing more information on how the NEHRP agencies coordinate and support one another in their work.

Also, the Committee noted that there are several critical programs that require long-term maintenance, such as SAGE and GAGE, and it would be important to recommend that those programs are supported moving forward. The Committee discussed the overall theme of implementation deficit - the amount of knowledge and research present in the earthquake community not being implemented and put to use. In addition, the Committee expressed interest in an overarching assessment of “where we are” - the current status and effectiveness of NEHRP – which is needed to inform strategic planning and identify priorities moving forward.

For trends and developments, the Committee considers the Building Rating System as a growing trend and not a task for one specific agency. The Committee felt many parties need to play a role in developing a standard and implementation framework, and made the recommendation that the American National Standards Institute (ANSI) be brought in. The Committee also discussed the variability, and even lack, of appropriate hazard mapping for consideration in community resilience planning as a potential trend.

During the NSF discussion, the Committee focused on the desire for a more transparent budget and activities reporting process, especially as NSF moves into a multi-hazard program structure. The Committee recognized the broad external research and data and archiving facilities NSF supports, and the overall outstanding contributions that the NEES program provided. For the development of the ACEHR Report, the Committee recommended a focus on social sciences, developing plans and mechanisms to sustain projects like SAGE and GAGE, and the vehicles ACEHR can use to encourage NSF to develop specific focused earthquake-targeted solicitations and research.

In the discussion regarding FEMA, the Committee supported FEMA’s promise to revisit the state assistance funding through the Consortia partners. The Committee recommended a focus on building code adoption and identifying high hazard communities with a low percentage of adoption to further guide activities under NEHRP.

In the discussion regarding NIST, the Committee recommended a focus on lifelines with an emphasis on seismic issues, and the further development of building codes for new and existing buildings with an emphasis on common building types.

In the discussion regarding USGS, the Committee recommended a focus on understanding the seismic threat in central and eastern United States, and the EWS.

C. ACEHR Discussion: ACEHR Report Structure

Based on the priorities discussed, the Committee outlined the report structure as follows:

- a. Introduction and Broad Historical Context of NEHRP
- b. Overarching Considerations
- c. NEHRP Program Overview
- d. NIST Recommendations
- e. FEMA Recommendations
- f. USGS Recommendations
- g. NSF Recommendations
- h. Detailed Trends and Developments

D. ACEHR Discussion: Timing of Next Committee Meeting

The Committee discussed a schedule for preparing the ACEHR Report and having a conference call to finalize the ACEHR Report. Based on calendars and availability, the Committee suggested a two-hour ACEHR conference call meeting for June 12th from 1:00-3:00p.m. EDT via WebEx. The NEHRP Secretariat will obtain confirmation of availability for each ACEHR member and will ensure the public is notified of this meeting via the Federal Register.

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. ACEHR Chair Johnson thanked the Committee members for their hard work and thoughtful input, and thanked the NIST staff for their work on planning and hosting the meeting. The meeting was adjourned at 1:15 p.m. on Friday, April 10, 2015.