



NEHRP Office Update



Advisory Committee on Earthquake Hazards Reduction (ACEHR)
Meeting (#3 and #4)

May 20-21, 2025



Jay Harris, Acting Director

NEHRP Office

Engineering Laboratory

NIST



U.S. National Science Foundation
WHERE DISCOVERIES BEGIN



Presentation Topics

Presentation Content

(continuation from Meeting #2A – June 2024 and #2B – August 2024)

- **NEHRP Reporting Cycle – FY24-25 – Update**
- **ACEHR Membership**
- **NEHRP Reauthorization and Other Legislation or Directives - Update**
- **NEHRP Management Plan - Update**
- **ICSSC - Update**
- **ACEHR Assessment Recommendations - Update**
 - Reminder of Content from Meeting #2A/#2B – 2024 (topics will come back in Meeting #3)
 - Agency Activities Update Logistics
 - NEHRP Budget
 - NEHRP ICC Meeting
 - Lead Agency Roles

NEHRP Reporting Cycle – FY24-25

Time	Year 1 (starts Oct. 1)			Year 2 (ends Sept. 30)	
Meeting No.	#1	#2A	#2B	#3	#4
Meeting Type	Hybrid	Virtual	Hybrid	Hybrid	Hybrid
Est. Date	Feb.-Mar.	June-July	Aug.-Sept.	Feb.-Mar.	June-July
Meeting Objective	Program responses to recommendations provided in latest ACEHR report (primary), and updates on previous ACEHR reports (secondary).	Formal Program update on programmatic activities since start of FY (year one). (held over two afternoons: two agencies present at one meeting, then the other two agencies)	ACEHR discussion with Program and agencies regarding material presented in Meeting #2A.	Formal Program update on programmatic activities since Meeting #2. Activities List provided will be cumulative.	Meeting dedicated to writing ACEHR report. Program can give informal update on programmatic activities provided in Meeting #2 or #3 pertinent to ACEHR report.
Program Update	Yes	Yes	Yes	Yes	Yes
Agency Activity Presentation	No ¹	Yes	No ²	Yes	No ^{2,3,4}
External Group Presentation	Yes	No	Yes	Yes	No
ACEHR (tentative)			Day 1 Discuss themes/focus areas for report Day 2 Draft outline of report	Finalize outline content and start drafting report	Finalize draft report

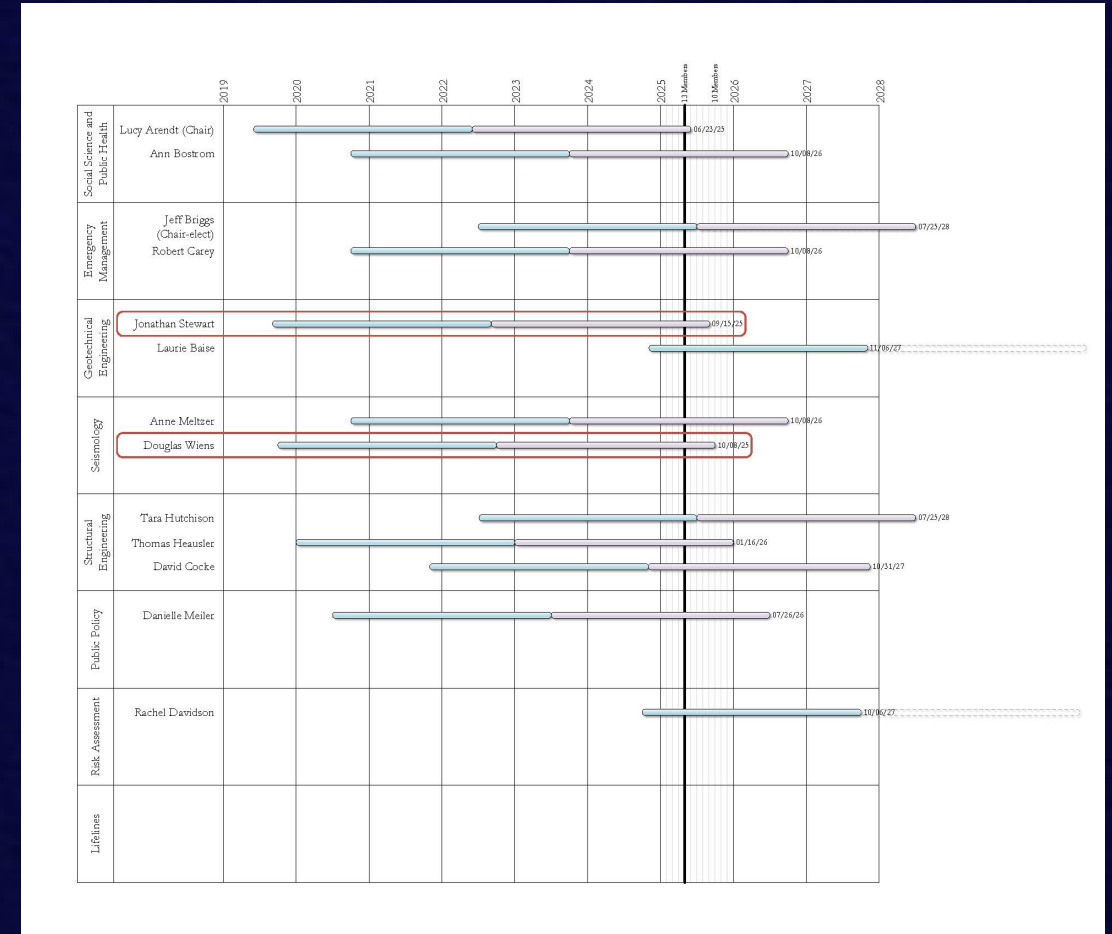
Notes:

1. An agency can provide a verbal (informal) update to provide relevant information since start of cycle.
2. An agency can provide an update if needed to share new data with ACEHR since Meeting #2A or #3. Update can be in written form (formal), e.g., PowerPoint presentation similar to that given in previous meetings, or verbal (informal). If new data includes program activities, append to agency program activities list developed for Meeting #2A/#3 (identify additions as new).
3. Any relevant information anticipated after Meeting #4 should be addressed in Meeting #4. New information critical to assessment cycle after Meeting #4 will be provided as an update to the programmatic activities list developed for Meeting #3 or #4 if appended (see Note 2).
4. Agency updates at end of cycle do not need to address programming of new future projects that will occur in the next cycle.

ACEHR Distribution

ACEHR Balance – May 2025

- Emergency Management/Preparedness - 2
- Geotechnical Engineering – 3 (1 is ex-officio)
- Policy – 1
- Seismology – 2
- Social Sciences – 2
- Structural Engineering – 3
- Risk Assessment – 1



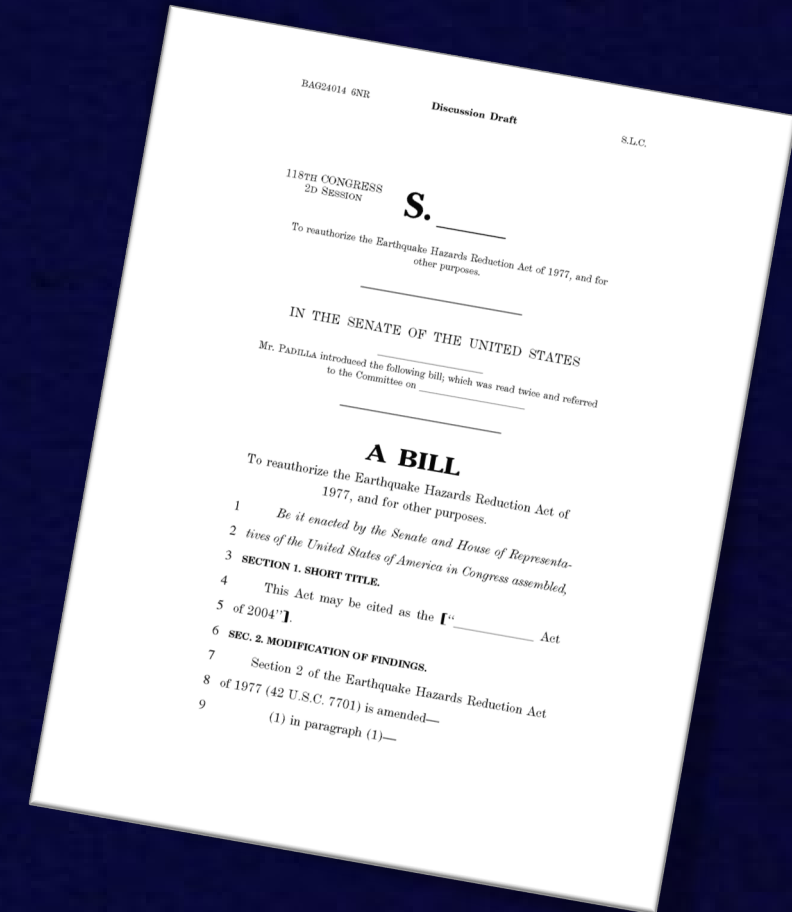
NEHRP Reauthorization and Other Legislation or Directives

Senate proposed bill (S.3606) in 2024, reintroduced (S.320) in 2025

- <https://www.congress.gov/bill/119th-congress/senate-bill/320>
 - Sent to Senate committee (C, S, & T) – 01/29/25
 - Passed out of Senate committee – 04/30/25

House proposed bill (H.R. 3168)

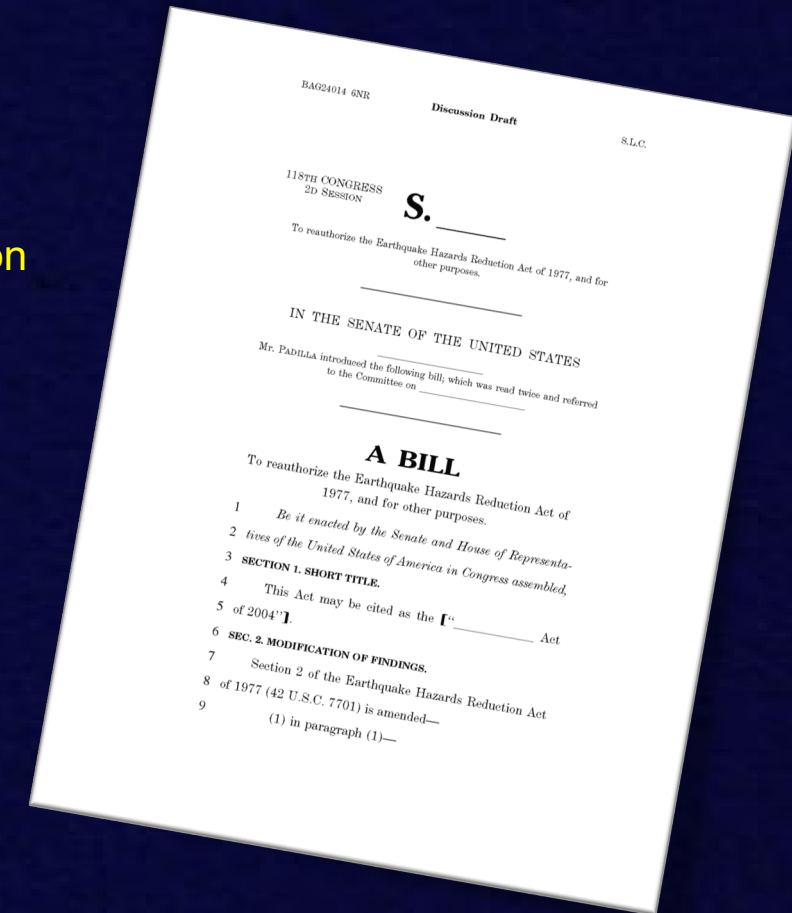
- <https://www.congress.gov/bill/119th-congress/house-bill/3168>
 - Sent to House committees (S, S, T; NR, & T and I) – 05/13/25
 - Committee meeting 5/20/25 (2:00 pm ET)



NEHRP Reauthorization and Other Legislation or Directives

House proposed bill (H.R. 2568) “Earthquake Resiliency Act”

- <https://www.congress.gov/bill/119th-congress/house-bill/2568>
 - Direct federal agencies to conduct a *national risk assessment* of earthquake resilience.
 - Require NEHRP to develop standards for lifeline infrastructure in coordination with a national lifeline infrastructure organization.
 - Direct USGS to support a new monitoring technology (geodetic networks) to improve prediction of large magnitude earthquakes.



NEHRP Strategic Plan covering FY22-29

NEHRP Strategic Plan

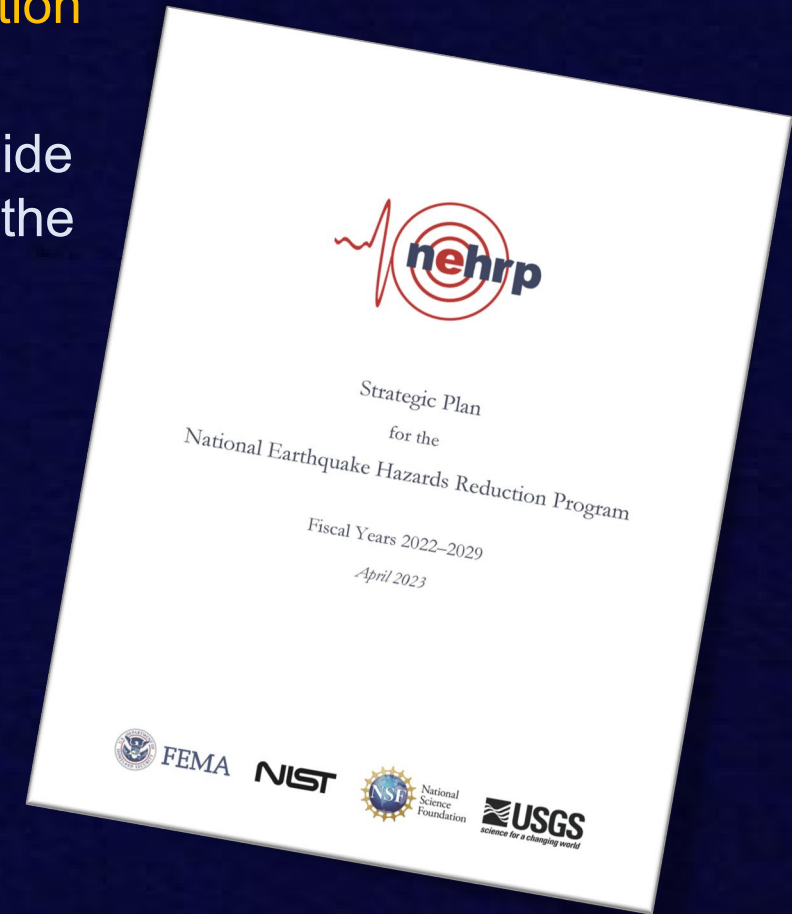
Responsibility of the NEHRP ICC in the Earthquake Hazard Reduction Act.

The Plan reflects congressional requirements and is intended to guide the **development and implementation of programmatic activities** by the Program agencies.

- Published April 2023 (available on [NEHRP.gov](https://www.nehrp.gov))

Next Steps:

- FY22-25 NEHRP report
- NEHRP Management Plan



NEHRP Management Plan

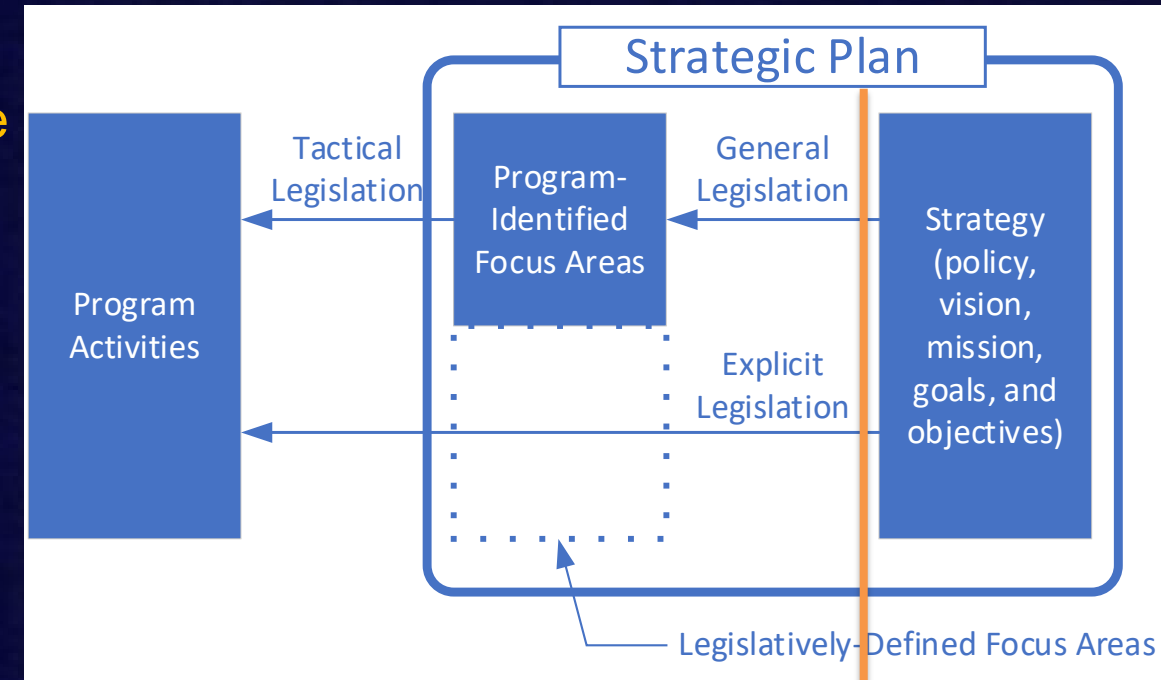
NEHRP Management Plan Development Status

Responsibility of the NEHRP ICC in the Earthquake Hazard Reduction Act

The Plan will address how the Program can implement the Strategic Plan by identifying the primary functions of conceptually broad goals and objectives

Is this a new document? Not necessarily. 2008 Strategic Plan, in a way, included aspects of a Management Plan

Not a roadmap of programmatic activities the Program agencies should conduct, but of how the strategic goals and objectives are implemented to support the stated mission and support Program-identified Focus Areas

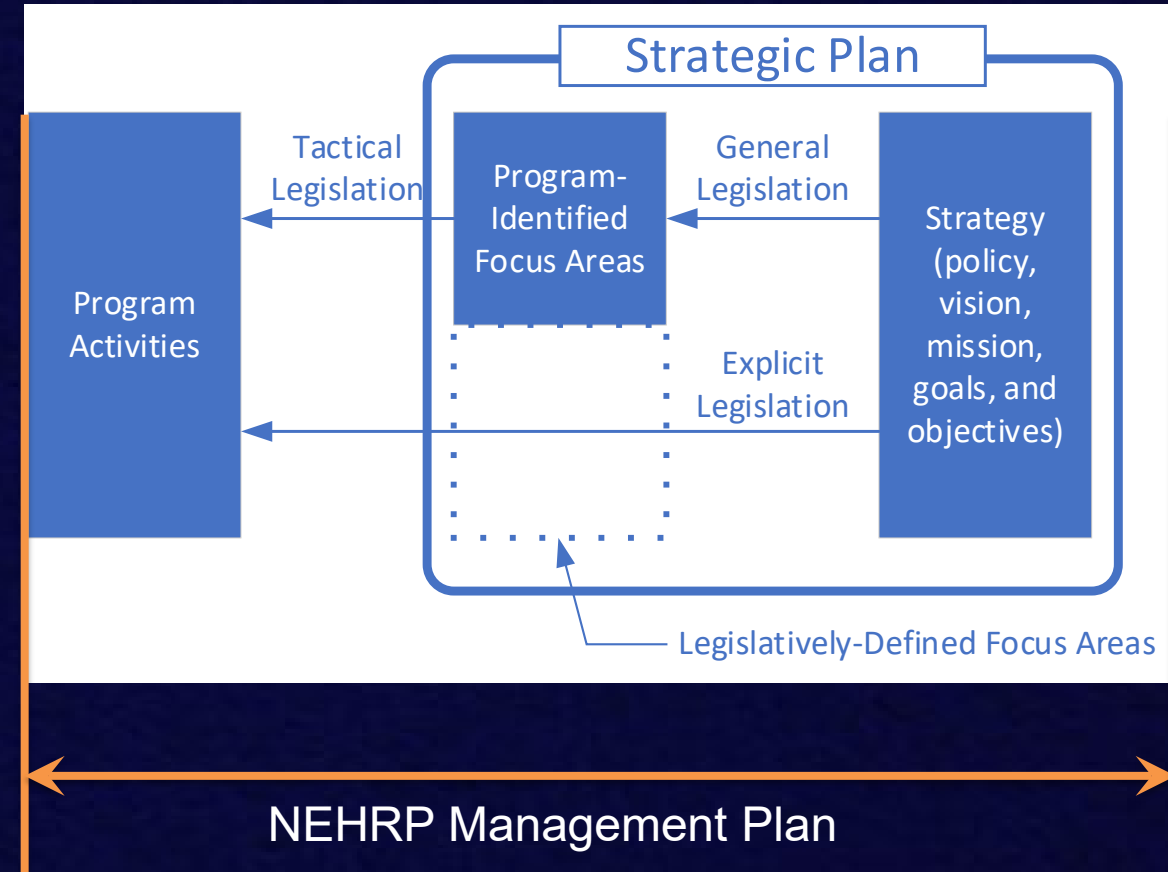


NEHRP
Management
Plan

NEHRP Management Plan

Where constructive, some components of the NEHRP Management Plan are being developed to support GAO recommendations.

- roles and responsibilities of the agencies, including resources, and a schedule to update programmatic publications;
- a mechanism to track and monitor efforts to support research priorities, and measure impact of activities;
- evaluation of other relevant federal earthquake risk reduction programs to understand the full range of resources available to achieve research priority outcomes; and
- a communication strategy that identifies dissemination mechanisms to inform stakeholders of outcomes from NEHRP agency-funded activities.



Considering the Management Plan would not cover a finite term (e.g., FY22-29), but a more global, organic document that includes the component on implementing the Strategic Plan.

NEHRP Management Plan

- Other topics to be addressed:
 - What is NEHRP in terms of its roles and responsibilities, as well as those of the principal agencies? How is the Program managed, the management structure, and what groups are involved.
 - How does the Program define key demographics to support equity in its mission?
- Special Objectives:
 - Consideration for development of a systemic methodology that results in a comprehensive, conclusive summary of several programmatic efforts occurring within a given cycle that can be used to support the development of the next NEHRP Strategic Plan.
 - Develop a conceptual framework and cost for conducting a national risk assessment in response to GAO-22-105016 and previous ACEHR reports (since 2015). *Could this be included within above?*

NEHRP Management Plan

- a systemic methodology to measure progress of the Program that includes gathering assessment and stakeholder input as to the impacts of such progress as well as research priorities that align with national needs;
 - Such a methodology could occur over a ten-year cycle and result in a comprehensive conclusive summary of several programmatic efforts occurring within the cycle that can be used to support the development of the next NEHRP Strategic Plan.

Objective

Action	Year											
	0	1	2	3	4	5	6	7	8	9	10	
NEHRP Strategic Plan	•											•
Biennial NEHRP Reports to Congress			•		•		•		•		•	
Biennial ACEHR Assessment Reports		•		•		•		•		•		
Post-earthquake Damage Assessment Reports	depends on earthquake activity											
HAZUS Annualized Loss Estimate Project (every ten years)					•							
NEW Select City Risk Assessments and Stakeholder Workshop/Survey (every ten years)							•				•	

This methodology could be a type of *national risk assessment* that identifies the progress made by the Program and communities to strengthen earthquake resilience, as well as gaps that remain.

New items that could be needed

NEHRP Management Plan Development Project

- Project Objective
 - develop a comprehensive *draft* of the NEHRP Management Plan that aligns with NEHRP Strategic Plan for FY2022-2029

Contract awarded to Applied Technology Council (ATC) to provide a team of SMEs to work with the PCWG

NEHRP Management Plan Development Project

- Project broken down into Three Phases:

Phase 1

Task 1: Develop Project Team

Task 2: Develop Project Work Plan

Task 3: Develop Plan Outline

Phase 2

Task 4: Consolidate relevant information to support the outline

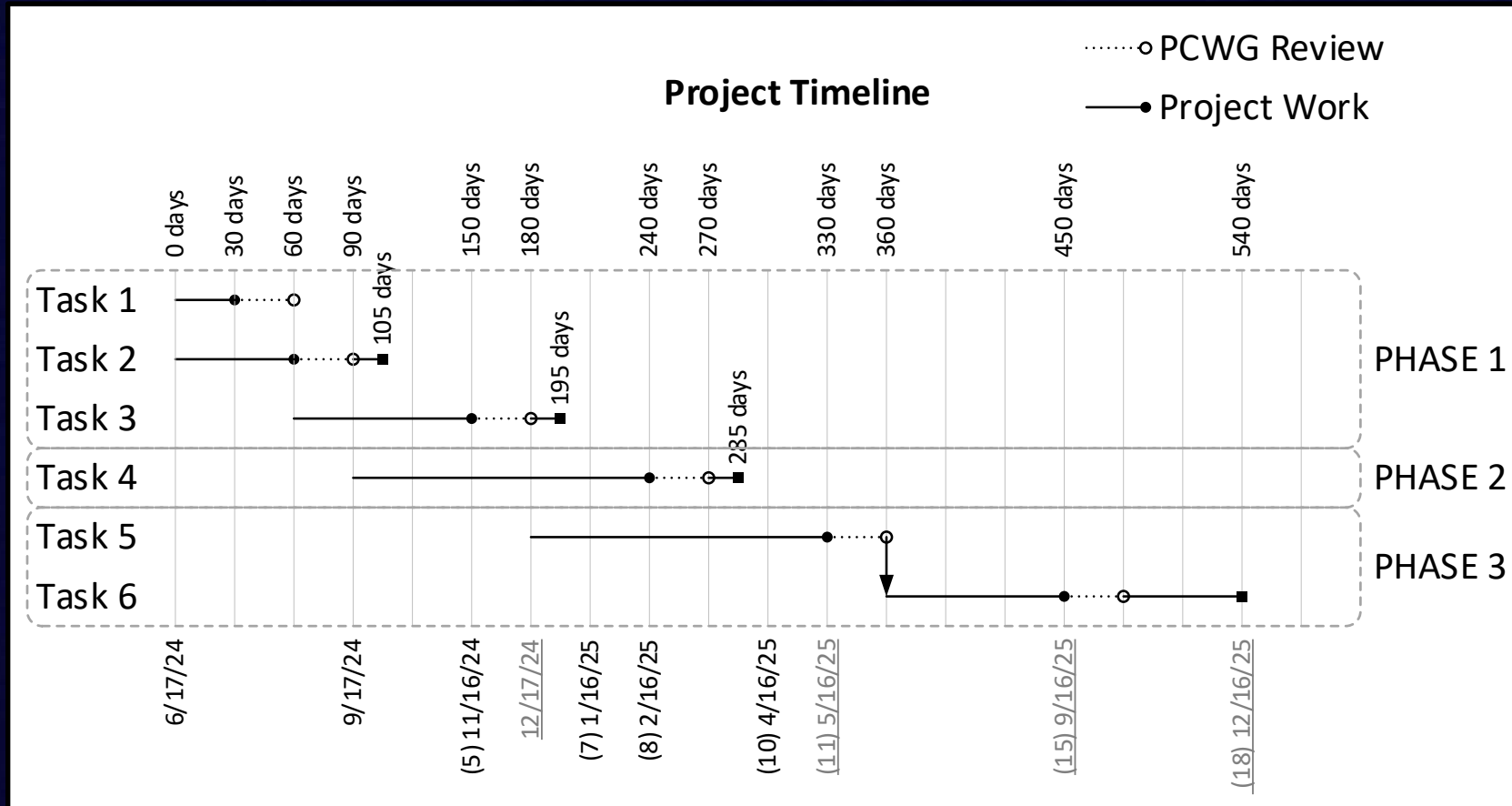
Phase 3

Task 5: Develop 50% draft

Task 6: Develop 100% draft

NEHRP Management Plan Development Project

- Schedule of the Three Phases (18 months):
- Awarded 06/17/24



- Intermediate dates subject to change based on project work plan (task 2)

NEHRP Management Plan Development Project

- Project Technical Committee (PTC)
 - Project Technical Director (PTD) – Lucy Arendt
 - Project Technical Committee (PTC) – Chris Poland, Ann Bostrom, Rachel Davidson, Greg Deierlein, Tom O'Rourke, Lori Peek
- NEHRP PCWG

NIST Jay Harris (COR) Siamak Sattar	NSF Luciana Astiz Joy Paushke Dan Linzell	USGS: Gavin Hayes Mike Blanpied	FEMA: Jon Westcott Drew Herseth Jon Foster
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The Project Team shall be responsible for the technical quality and practical direction of the project, under the direction of the PTD. The PTC shall be responsible for reviewing project deliverables, providing advice and consultation throughout the project, and serving as a liaison to the PCWG through the NIST COR.

Interagency Committee on Seismic Safety in Construction (ICSSC)

History

The Interagency Committee on Seismic Safety in Construction (ICSSC) was created as a function of the NEHRP in 1978 and is composed of representatives of all federal agencies engaged in construction, financing of construction, or related activities to implement earthquake hazards reduction measures in their ongoing programs.



ICSSC serves as a forum for seeking a consensus among federal agencies on earthquake risk reduction measures and for assisting agencies in developing and adopting such measures. ICSSC also issues seismic guidelines and standards; these are advisory only, unless made mandatory by executive order.

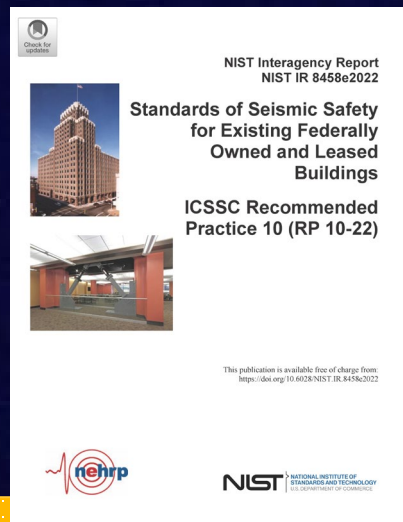
ICSSC membership is open to all federal agencies that construct, manage, or lease space, as well as agencies that conduct research on earthquake risk reduction.

<https://www.nehrp.gov/about/icssc.htm>

Interagency Committee on Seismic Safety in Construction (ICSSC)

Standards of Seismic Safety for Existing Federally Owned and Leased Buildings, ICSSC Recommended Practice 10 (RP 10-22)

- The intent of the *Standards* is to recommend common seismic evaluation techniques and minimum performance targets so that an agency can identify potential unacceptable seismic risks that an existing building may pose to the agency given an earthquake.
- Published Jan. 18, 2023
- <https://doi.org/10.6028/NIST.IR.8458e2022>
 - RP 10 minor update planned for publication in early CY26.



RP 10 Update Needs

Tentative Minor Updates for 2025:

- (NIST) EDITORIAL: updates to referenced codes, standards, and guidelines in Section 1.0 to reflect recently published editions (e.g., 2024 IBC, IRC, and IEBC)
 - Address other industry standards to reference in general comment (e.g., NRC)
- (GSA, DOC, FAA) TECHNICAL/EDITORIAL: updates to language regarding leased buildings and leased space within a building
- (NIST, VA, ACE, DIA) TECHNICAL/EDITORIAL: language needed to align with the IEBC 2024
 - structurally-independent and structurally-dependent additions
 - how to treat additions (major or minor?)
 - when to evaluate the existing building for a structural-independent addition?
- (FEMA) EDITORIAL: updates to language regarding seismic evaluation and retrofit of one- and two-family dwellings
- (ACE, NIST, USDA) EDITORIAL: enhancing commentary where needed
 - "fit-out" guidance
 - 10% increase on buildings partially constructed
- (NIST, GSA, VA, FAA, IC, USDA) TECHNICAL/EDITORIAL: *Design Life* – 50-years
 - All applications are consistent (leasing, benchmarking, federally owned, etc.)
 - Jay to call Jim Harris, others to discuss code intent?
 - Reset button for a specific time (years)
- (VA, NIST, DOE) TECHNICAL/EDITORIAL: Benchmarking
 - Philosophical – use *design life*?
 - 10% or more increase in seismic hazard to **benchmark**?
 - Reach out USGS about mapping this
- (IF ENOUGH TIME AND RESOURCES) EDITORIAL: Scenario/organizational Guidelines/Guidance
 - workflow in appendix converted to flowchart

Others TBD by Working Group:

- (IC, NOAA) Couple items from Ben Bookhultz
 - Use of FEMA P-154 Level 1 or 2 Score for Screening

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Interagency Committee on Seismic Safety in Construction (ICSSC)

FY24-FY25 Efforts

- NEHRP Office, secretariat of the ICSSC, recently established an Executive Committee (ExCom) that will be responsible for leadership, oversight, and strategic direction of the ICSSC
- In accordance with EO 13717, NEHRP Office will published the EO Compliance Report for 2022-2024. These are referenced in the NEHRP biennial reports
- ICSSC working on a position paper to provide guidance to agencies on “beyond code” in EO 13717 interpretation and implementation, including new initiatives
 - [EO 13717](#) - Establishing a Federal Earthquake Risk Management Standard
 - [M-24-03](#) - Advancing Climate Resilience through Climate-Smart Infrastructure Investments and Implementation Guidance for the Disaster Resiliency Planning Act
 - [NSM-22](#) - National Security Memorandum on Critical Infrastructure Security and Resilience

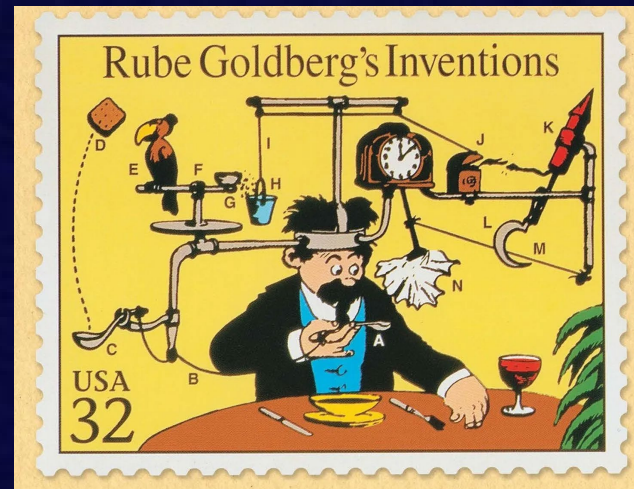
ACEHR Assessment Recommendations

List of ACEHR Recommendations since 2004 (creation)

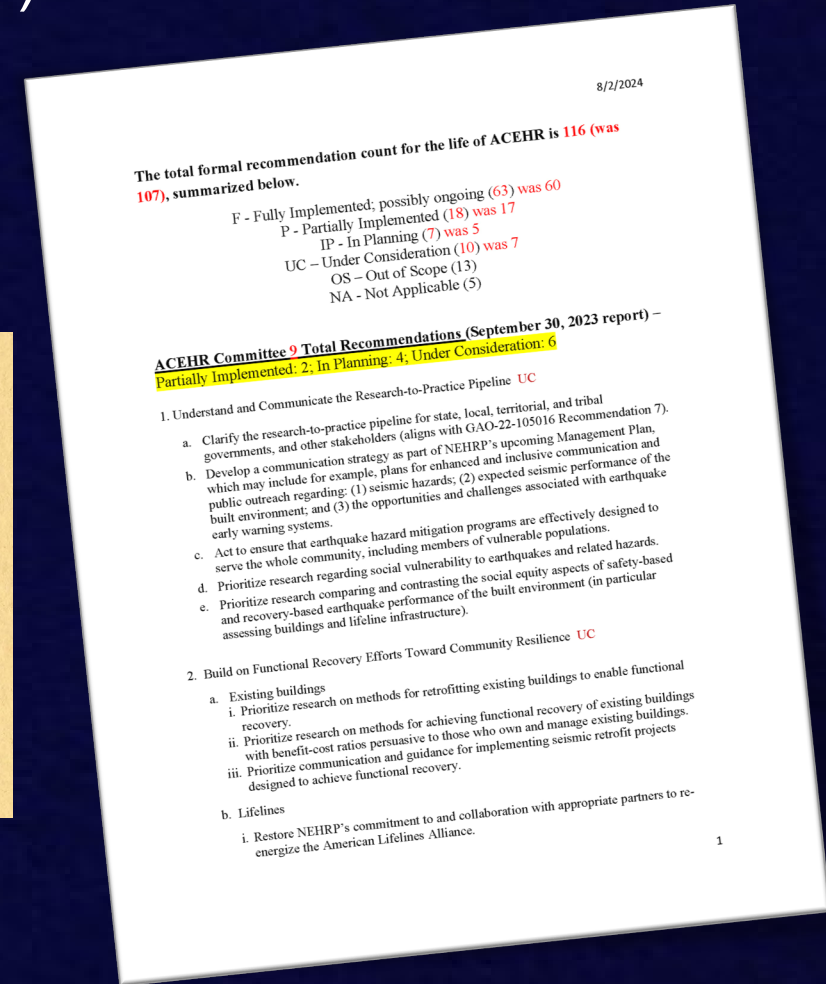
<https://www.nehrp.gov/committees/reports.htm>

- **Total Recommendations = 116**

- Fully Implemented = 63
- Partially Implemented = 18
- In Planning = 7
- Under Consideration = 10
- Out of Scope = 13
- Not Applicable = 5



How can ACEHR and NEHRP address outstanding recommendations that removes firewalls between biennial assessment reports?



Questions

