NEHRP Update

Presentation to the NEHRP Advisory Committee on Earthquake Hazards Reduction 17 December 2008

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national earthquake hazards reduction program

Outline

- Workshops
- Strategic Plan
- Annual Report
- ACEHR Report Recommendations
- Management Plan



Program Workshops

- Existing Buildings Workshop
 - >ATC/EERI, Sept 2007
 - Reports ATC-71, ATC-73 available on NEHRP, ATC, EERI web sites
 - ATC-71: Technical, Practical, Regulatory, & Public Policy issues associated with implementation
 - ATC-73: Prioritized Research Needs



ATC-71 Highlights

- Biggest impediment to seismic rehabilitation is lack of market forces that support rehabilitation.
- Power, money, and knowledge were identified as major issues in advancing rehabilitation.
- Practitioners do not use language that adequately conveys seismic risk to owners and public – need an understandable seismic rating system.
- Risk to business revenue stream was identified as a persuasive argument.
- Even in regions of perceived seismic risk, and even where legislative mandates exist, cost remains a big impediment to rehabilitation.
- Evaluation and rehabilitation tools need to be improved technically and simplified via a program of focused research.
- Need prescriptive procedures for selected model building types.
- Need more and better education and training materials.



ATC-73 Highlights

Major Goals:

- Establish a coordinated research program as a part of NEES research.
- Perform research that mitigates building collapse risks,
- Advance guidelines and standards.
- Develop effective means of communicating risks.
- > Calibrate engineering tools with realistic data.
- Develop new materials and building systems.
- Major Research Needs (Over 50 Identified):
 - Develop fragility data for structural and non-structural components using a consistent framework.
 - Develop a non-proprietary building rating system.
 - > Develop risk-based approaches for selecting ground motions for building evaluations.
 - Perform full or large-scale shake table testing of complete building systems.



Program Workshops

Performance-Based Seismic Design Workshop

- ▶BSSC, May 2008
- Report now being finalized
- Major discussion areas:
 - Historical development of PBSD & resulting limitations of methodology.

Prioritized research that is needed immediately to support current practice and increase support for developing the next generation PBSD, critical research that is needed to foster future practice, and essential research that is needed to foster future practice.



Program Workshops

- Post-Earthquake Information Management System (PIMS) Workshop
 - ALA/BSSC/UIUC, July 2008
 - Report now being finalized

Scenario Workshop

- EERI, Sept 2008
- Included "old pros" as well as representatives of communities that could benefit.
- Report and web site in preparation.
- Web site to be major product a detailed "how to."



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Strategic Plan

- Plan released in October.
- Responses to public inputs posted on NEHRP web site.
- Many thanks to ACEHR for its wisdom and support!



Strategic Plan

for the

National Earthquake Hazards Reduction Program

Fiscal Years 2009–2013

October 2008



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national earthquake hazards reduction program

Annual Report

- Currently being drafted.
- Filson leading efforts.
- Agency inputs finalized (unless someone remembers a forgotten topic).
- Interagency Coordinating Committee to meet in January – will decide how to handle publication (FY 2009 budget and requested FY 2010 budget not yet known).



ACEHR Recommendations

- Program Coordination Working Group (PCWG) briefed Interagency Coordinating Committee in August.
- Formal clearance of responses to recommendations now underway (necessary because of budgetary recommendations).
- Responses will be presented to ACEHR and made public as soon as all clearances have been obtained.



Management Plan

- Required by statute to "implement" strategic plan.
- Program Coordination Working Group (PCWG) briefed Interagency Coordinating Committee (ICC) on proposed approach in August.
 - ICC approved general approach.
 - ICC proposed holding final decision on format for next Administration.
 - PCWG proceeding with drafting general outline of plan.

