

National Earthquake Hazards Reduction Program

... a research and implementation partnership

What the NEHRP Strategic Plan Could Mean for You ...

Workshop for Young Researchers, Professionals, and Faculty

25 July 2010



9th US National and 10th Canadian Conference on Earthquake Engineering: *Reaching Beyond Borders*

toronto july 25-29, 2010

9ième Conférence Nationale Américaine et 10ième Conférence Canadienne de Génie Parasismique: *Au delà des Frontières*

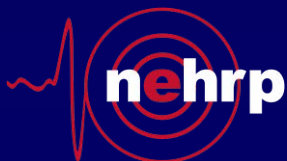


FEMA

NIST
National Institute of
Standards and Technology



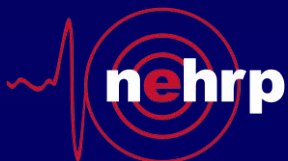
USGS
science for a changing world



national **earthquake** hazards reduction program

Presentation Outline

- Brief overview of NEHRP
- NEHRP Strategic Plan Overview
 - Outline
 - Vision
 - Strategic Planning Principles
 - Goals/Objectives
 - Strategic Priorities

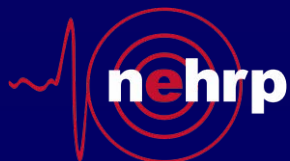


National Earthquake Hazards Reduction Program

A Statutory Multi-Agency Partnership



FEMA

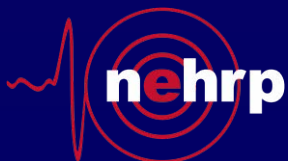
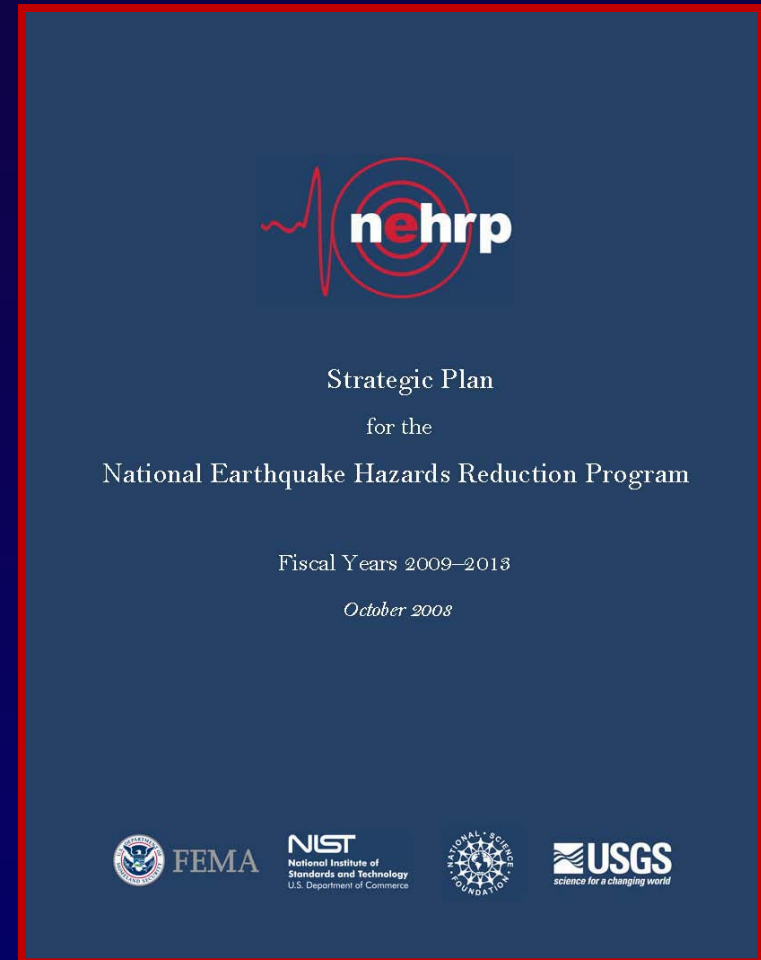


national earthquake hazards reduction program

NEHRP Strategic Plan

Strategic Plan Outline

- Executive Summary
- Introduction – Background (History, Prior Accomplishments)
- **Vision / Mission / Strategic Planning Principles**
- **Goals / Objectives / Outcomes**
- **Strategic Priorities**
- Summary
- Appendices

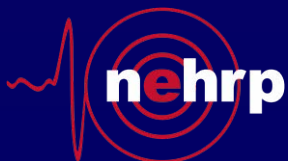


NEHRP Strategic Plan

National Vision Statement

A national vision for the future:

A nation that is earthquake-resilient in public safety, economic strength, and national security.



Strategic Planning Principles ... including ...

- Program impact through effective development and transfer of knowledge, tools, and practices
- Program revision – not reinvention
- Interagency coordination / cooperation / synergy
- Adoption of nine Strategic Priorities that support Program goals and objectives

Strategic Planning Principles (continued)

- Close partnerships with stakeholder communities
- Exploitation of ANSS, GSN, IRIS, NEES
- Multi-disciplinary approach
- Multi-hazard leveraging awareness
- Linkages with broader federal policies, plans, and priorities (*e.g.*, SDR *Grand Challenges for Disaster Reduction*)
- Increased international cooperation

Goal A: Improve understanding of earthquake processes and impacts

- Objective 1: Advance understanding of **earthquake phenomena and generation processes**
- Objective 2: Advance understanding of **earthquake effects** on the built environment
- Objective 3: Advance understanding of **social, psychological, and economic factors** linked to implementing risk reduction and mitigation strategies in the public and private sectors
- Objective 4: Improve **post-earthquake information management**

Goal B: Develop cost-effective measures to reduce earthquake impacts on individuals, the built environment, and society at large.

- Objective 5: **Assess earthquake hazards** for research and practical application
- Objective 6: Develop **advanced loss estimation and risk assessment tools**
- Objective 7: Develop tools to improve the seismic performance of **buildings and other structures**
- Objective 8: Develop tools to improve the seismic performance of **critical infrastructure**

Goal C: Improve the earthquake resilience of communities nationwide

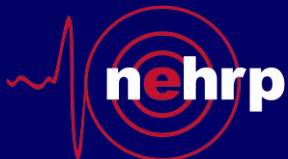
- Objective 9: Improve the accuracy, timeliness, and content of **earthquake information products**
- Objective 10: Develop comprehensive **earthquake scenarios and risk assessments**
- Objective 11: Support development of **seismic standards and building codes** and advocate their adoption and enforcement
- Objective 12: **Promote the implementation** of earthquake-resilient measures in professional practice and in private and public policies
- Objective 13: Increase **public awareness** of earthquake hazards and risks
- Objective 14: Develop the nation's **human resource base** in earthquake safety fields

Strategic Priorities

- Fully implement **Advanced National Seismic System (ANSS)**
- Improve techniques for evaluating & rehabilitating **existing buildings**
- Further develop **Performance-Based Seismic Design (PBSD)**
- Increase consideration of **socio-economic issues** related to hazard mitigation implementation

Strategic Priorities (continued)

- Develop a **Post-Earthquake Information Management System (PIMS)**
- Develop **advanced risk mitigation technologies & practices**
- Develop earthquake-resilient **lifeline** components and systems
- Develop & conduct earthquake **scenarios** for effective earthquake risk mitigation
- Facilitate improved earthquake mitigation at **state & local** levels



www.nehrp.gov



national **earthquake** hazards reduction program