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How the National Earthquake Hazards Reduction Program Is Advancing Earthquake Safety

Bridging Boundaries to Reduce Risk

The Natural Hazards Center

arthquake risk reduction efforts are, metaphorically, all about bridge building and boundary breaking. NEHRP operates not only across multiple agencies, but also across multiple environments (natural, built, social), disciplines (earth sciences, engineering, social sciences), and interests (e.g., research, policy making, hazard mitigation, disaster response).

The bridge that is the most fundamental to NEHRP is that between research and practice, mediated by public- and private-sector policy making. The Natural Hazards Center (NHC), located at the University of Colorado at Boulder, has for many years played a unique and critically important role in strengthening and sustaining this bridge for NEHRP.

A Holistic Focus

As its name suggests, the Natural Hazards Center works to reduce losses from all natural hazards including earthquakes. It does this primarily by strengthening communication among loss-reduction researchers, practitioners, and policy makers. This work generates synergistic benefits for the earthquake community by bringing together those who develop, translate, and apply new knowledge about earthquake loss reduction, and by connecting these groups to their counterparts focused on other hazards.

The National Science Foundation (NSF, a NEHRP agency), which supports the development of new knowledge that can be applied to reduce risks posed by earthquakes and other hazards, has provided major support for the NHC.¹ Over the years this funding has leveraged additional support from an array of other agencies, which have included the Federal Emergency Management Agency and U.S. Geological Survey, both of which participate in NEHRP. This reflects the supporters' interest in creating—and transferring into practice—knowledge that responds to the needs of those responsible for reducing hazard-related losses, as well as NEHRP's recognition of the NHC's distinctive role in facilitating this knowledge transfer.



An Iconic Workshop

Perhaps no other NHC activity is more emblematic of the center's role in stimulating communication than its Annual Natural Hazards Research and Applications Workshop. Hosted by the NHC each year since the founding of the center in 1976, the workshop is carefully structured to increase cross-boundary communication among hazards researchers, practitioners, and policy makers.

Workshop attendance is purposely limited to approximately 400 invitees to facilitate give-and-take among participants; ensure representation of research, practice, and policy perspectives; and bring together those who can speak to critical issues, findings, and lessons drawn from across the communities involved in natural hazards loss reduction. Session topics are solicited from these communities months in advance of the workshop, which is customarily held over 3 days in July near the NHC in Colorado.

¹ The NHC currently receives support under NSF grant award number CMMI-1030670 (see the award abstract on the NSF website at www.nsf.gov/awardsearch/showAward?AWD_ID=1030670&HistoricalAwards=false).



A Multifaceted Approach

Along with its annual workshop, the NHC conducts a variety of other activities to strengthen cross-boundary communication on hazard risk reduction:

Natural Hazards Observer

Published every 2 months, online and in print, for thousands of readers around the world, the Observer newsletter provides news and commentary on research, practice, and policy issues related to society's vulnerability to extreme events.

Disaster Research

This e-newsletter complements the Observer by ensuring quick dissemination of time-sensitive information about hazard events, policy developments, upcoming meetings, and more. Every 2 weeks a new issue is sent to more than 6,000 subscribers and is accessed by many others via NHC and partnering websites.

Web and social media resources

The center website (www.colorado.edu/hazards), accessed by roughly 60,000 unique visitors each year, provides information about the NHC and its activities as well as access to center publications and numerous helpful resources and links. The NHC moderates the Disaster Grads e-mail listsery, a forum for information sharing among hundreds of students from many disciplines and nations who are engaged in hazards- or disaster-related research. The center also disseminates news via Twitter (www.twitter.com/hazcenter).

Natural Hazards Informer

Each issue of the Informer, published intermittently as topics arise, provides an in-depth, up-to-date summary of research and policy developments related to a topic of interest to hazards and disaster practitioners.

Natural Hazards Review

This unique quarterly journal covers cross-disciplinary approaches to studying and managing natural hazards, merging insights from the engineering, policy, and regulatory communities and the social, behavioral, and physical sciences. It is published by the American Society of Civil Engineers in partnership with the NHC.

Library and information services

By regularly reviewing numerous print and online publications and resources with information relating to social, economic, behavioral, or policy aspects of extreme events, center staff are able to screen items for inclusion in the center's newsletters and library (see box) and respond to requests for information received from constituents and the news media.

Building a Fully Accessible Library

The center has amassed a unique collection of approximately 35,000 print, digital, and audiovisual publications and resources pertaining to the social, behavioral, economic, and policy aspects of natural hazards and extreme events. New items continue to be added each month. In 2014, the library will finish digitizing these holdings, a process begun several years ago. A new online catalog will then allow users to retrieve full-text electronic copies of items in the collection, and borrow physical copies through the national interlibrary loan system. For more information about these developments and current library policies, see www.colorado.edu/hazards/library/.

Research and Researcher-Training Activities

The NHC is involved in several research-focused efforts in addition to its communication activities. The Quick Response Research Program provides modest grant awards to help cover the travel expenses incurred by social and behavioral scientists who visit sites of recent disasters to gather perishable data. The grants often serve an important training function by enabling graduate students to participate in postevent studies. The center further supports the development of new generations of researchers through its graduate research fellowship and student paper competition, and by providing students with opportunities for paid and volunteer research work at the center. Many of these opportunities arise through research projects, conducted by center-affiliated university faculty, that align with the multidisciplinary, hazards orientation of the NHC.

For more information, visit www.nehrp.gov or send an email to info@nehrp.gov.







