USGS Post-EQ Reconnaissance
Past Activities and Future Perspectives

Roger D. Borcherdt

Geotechnical Engineering Earthquake Reconnaissance (GEER)

NSF Sponsored Joint Advisory and Working Group Meeting

October 7 & 8, 2004

Richmond, CA
Outline

• USGS Post Eqk. Reconnaissance –
  Re: “The Plan to Coordinate NEHRP Post-Earthquake Investigations” (Holzer, et al., 2003)

• USGS Past and Future Activities -
  Re: “USGS Draft Plan for Post Earthquake Investigations” (Mortensen, et al., last draft, 2001)
The Plan to Coordinate NEHRP Post-Earthquake Investigations

Oversight Committee

Daniel Abrams, Mid-America Earthquake Engineering Research Center
Jonathan Bray, Pacific Earthquake Engineering Research Center
James Davis, Association of American State Geologists
Richard Eisner, California Office of Emergency Services
William Elliott, American Society of Civil Engineers, Technical Council on Lifeline Earthquake Engineering
Richard Franko, National Science Foundation, Division of Civil and Mechanical Systems, Arlington
Edward Freitas, Northeast States Emergency Consortium
Robert Hendererot, Structural Engineers Association of California
Leigh House, National Science Foundation, Division of Earth Sciences
Thomas Jordan, Southern California Earthquake Center
George Lee, Multidisciplinary Center for Earthquake Engineering Research
Jill McCarthy, U.S. Geological Survey
Ron Nelson, National Council of Structural Engineers Associations
Timothy Shealkler, Federal Emergency Management Agency
S. Shyam Sunder, National Institute of Standards and Technology
Susan K. Tabberer, Earthquake Engineering Research Institute
Frank Yovan, Incorporated Research Institutions for Seismology
James Wilkins, Jr., Central United States Earthquake Consortium
Phillip Yen, Federal Highway Administration

Circular 1242
U.S. Department of the Interior
U.S. Geological Survey
The Plan to Coordinate NEHRP Post-Earthquake Investigations

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Prepared in Coordination with the Federal Emergency Management Agency, National Science Foundation, and National Institute of Standards and Technology

Circular 1242

U.S. Department of the Interior
U.S. Geological Survey

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USGS Role- Domestic Earthquakes
from “Plan to Coordinate NEHRP Post-Eqk. Reconnaissance”

Activities timeline for NEHRP post earthquake investigation plan – domestic earthquakes.

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- Event Web site established – USGS
- NSF/USGS/NIST/FEMA priority setting workshop – EERI
- Proposal solicitation – NSF/USGS/FEMA/NIST
- Event summary report – USGS/EERI
- Proposal awards – NSF/USGS
- Local workshop (Implications) – State/USGS/FEMA/NIST
- Final technical report – USGS/NIST/NSF
- Clearinghouse established – State earth science agency/State emergency services/USGS/FEMA/EERI/Engineering and earth science centers
- NEHRP Investigations Coordinator designated – USGS
- NCST investigation decision – NIST
- Phase II meeting – NEHRP Investigations Coordinator
- Summary assessment report – NEHRP Investigations Coordinator
- Budget supplemental meeting – FEMA, NIST, NSF, USGS
- Incident report – USGS
- Plan Implementation Decision – USGS/FEMA/NSF/NIST/EERI/State earth science agency
USGS Role- Foreign Earthquakes

from “Plan to Coordinate NEHRP Post-Eqk. Reconnaissance”

Activities timeline for EERI post-earthquake activities – foreign earthquakes.

- Proposal awards — NSF
- Newsletter report — EERI
- Proposal solicitation — NSF
- NSF priority setting workshop — EERI
- Technical briefing of foreign hosts and U.S. embassy — EERI
- Phase II meeting — EERI team leader
- Reconnaissance team deployed — EERI
- Clearinghouse established — EERI
- Reconnaissance team formation — EERI
- Event Web site established — EERI
- Reconnaissance Team Leader designated — EERI
- Begin regular reporting to NEHRP of U.S. groups planning or conducting field investigations — EERI
- Incident report — USGS

Final journal articles

$d = \text{day}$

$mo = \text{month}$

$yr = \text{year}$
EXECUTIVE SUMMARY

This Plan serves to coordinate the U.S. Geological Survey response to future significant earthquakes. It gives primary emphasis to field investigations of U.S. earthquakes, but also includes a general outline of coordination of USGS response to foreign earthquakes. Because of the mutual dependence of some kinds of USGS field investigations and emergency management actions taken by other governmental agencies, parts of the Plan address coordination between USGS response and responses by other agencies. Elements of the Plan that pertain to post-earthquake information dissemination are intended to be compatible with the Proposed National USGS Post-Earthquake Media Response Plan of the Media Response Working Group (Steve Kirby, Leader).
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   - III.A.1. Scientific Response Coordinator
   - III.A.2. Out-Region Coordinator and Regional-Center Coordinator
   - III.A.3. Information Coordinator
   - III.A.4. FEMA Liaison
   - III.A.5. Principal Investigator

#### III.B. ADDITIONAL POSITIONS THAT MAY BE ACTIVATED AFTER A SIGNIFICANT EARTHQUAKE IN THE U.S.

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   - III.B.1. Field Operations Coordinator
   - III.B.2. Logistics Coordinators
   - III.B.3 Scientific Advisory Committee
   - III.B.4. Regional-Center Coordinator
   - III.B.5. NEHRP Partner Coordinators

#### III.C. RESPONSIBILITIES ASSIGNED LONG-TERM TO INDIVIDUALS IN THE REGULAR HAZARDS TEAMS STRUCTURES

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   - III.C.1. Geologic Hazards (CR) or Earthquake Hazards (WR) Chief Scientists
   - III.C.2 Team Administrative Officer
   - III.C.3 Hazards Teams Section Chiefs
   - III.C.4 On-Duty Seismologist
   - III.C.5 Project Chief
   - III.C.6 National Facilitator of Earthquake Information
   - III.C.7 USGS scientist

#### III.D. POST-EARTHQUAKE RESPONSIBILITIES ASSOCIATED WITH PERMANENT AND TEMPORARY POSITIONS AT THE NATIONAL LEVEL

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   - III.D.1. National Earthquake Program Coordinator
   - III.D.2. Reston Earthquake Information Liaison

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