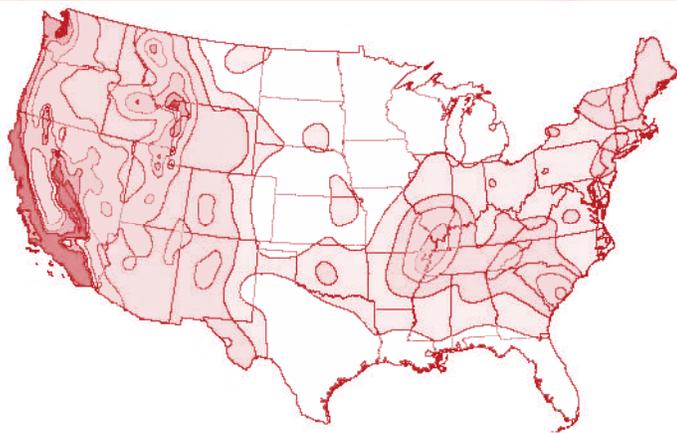


2ND NATIONAL EARTHQUAKE GROUND-MOTION MAPPING WORKSHOP



Sponsored by:
Applied Technology Council
U.S. Geological Survey

*Conducted under the auspices of the
ATC-35 Program to "Transfer U.S.
Geological Survey Research Results into Engineering
Design Practice."*

May 10 - 11, 2001
Radisson Miyako Hotel
San Francisco, California

Program and Registration Information

Purpose of the Workshop. Like the first ATC-35 National Earthquake Ground-Motion Mapping Workshop held in southern California in 1995, this Workshop will provide input from the structural engineering, geosciences and geotechnical engineering professions to the U.S. Geological Survey (USGS) on several key issues that affect the preparation and use of the second round of national earthquake ground-motion maps. The Workshop will also provide input to the USGS on new map-related products desired by users.

Workshop Focus. The following topics will be the focus of the Workshop:

- *Scientific Issues:* Near-fault directivity effects; time-dependent earthquake probabilities; ground motion attenuation relationships; uncertainty.
- *Issues for Design Maps:* Frequency of updating maps; degree of detail in maps; deterministic bounds; role of USGS.
- *Map Products and New Directions:* Current and planned map products; new directions in mapping.

In addition, Workshop participants will have the opportunity to review and provide input to the USGS on preliminary plans for changes to seismic source models in locations such as the Pacific Northwest and the New Madrid seismic zone.

Workshop Location

Radisson Miyako Hotel
1625 Post Street
San Francisco, California

Sponsoring Organizations

APPLIED TECHNOLOGY COUNCIL
555 Twin Dolphin Drive, Suite 550
Redwood City, CA 94065
Phone: 650/595-1542
Fax: 650/593-2320



U.S. GEOLOGICAL SURVEY
Reston, Virginia

Co-Sponsoring Organizations

STRUCTURAL ENGINEERING INSTITUTE OF THE
AMERICAN SOCIETY OF CIVIL ENGINEERS
BUILDING SEISMIC SAFETY COUNCIL
FEDERAL EMERGENCY MANAGEMENT AGENCY
FEDERAL HIGHWAY ADMINISTRATION
INTERNATIONAL CODE COUNCIL
MID-AMERICA EARTHQUAKE ENGINEERING RESEARCH
CENTER
MULTIDISCIPLINARY CENTER FOR
EARTHQUAKE ENGINEERING RESEARCH
NATIONAL FIRE PROTECTION ASSOCIATION
PACIFIC EARTHQUAKE ENGINEERING
RESEARCH CENTER
STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA

Organizing Committee. Arthur Frankel, E.V. Leyendecker,
Maurice Power, and Christopher Rojahn

Registration Information. The Workshop is open to the profession at large, though space and participation may be limited. Registration will be accepted on a first-come, first-serve basis. The Workshop registration fee is \$150 (\$120 for ATC subscribers) and includes the cost of workshop handouts, luncheons, and refreshments. A late fee of \$25 will be imposed on registrations postmarked after May 1, 2001. Persons interested in registering should complete, detach, and submit the Registration Form to ATC.

Hotel Reservations. A block of rooms is being held at the Radisson Miyako Hotel until April 9, 2001 at a special negotiated rate of \$189 per night (single or double occupancy). Parking is available adjacent to the hotel at a rate of \$12 per day. To reserve a room and get detailed directions to the hotel, contact the reservations department at 415/922-3200 or 800/533-4567. Mention the ATC/USGS Workshop to get the discounted rate.

THURSDAY, MAY 10, 2001

8 a.m.: Workshop Registration

8:30 a.m.: Welcome and Introduction

Session I: Scientific Issues for Models for Probabilistic National Ground-Motion Mapping and Effects on Ground-Motion Hazard; Maurice Power, Moderator

8:45 a.m.: Results of Regional Workshops and Preliminary USGS Plan for National Ground-Motion Mapping; Arthur Frankel; Mark Petersen

Discussion and Summary

10 a.m.: Coffee Break

10:15 a.m.: Issue A: Should Near-Fault Directivity be Modeled in National Ground-Motion Mapping?

Description of Near-Fault Directivity Effects; Current Directivity Models; Effects on Ground Motion; *Paul Somerville; Arthur Frankel*

Discussion and Summary

11:45 a.m.: Lunch

12:45 p.m.: Issue B: Should Time-Dependent Earthquake Probabilities be Modeled in National Ground-Motion Mapping?

Difference between Time-Dependent and Poisson Earthquake Probabilities; Current Knowledge and Models of Time-Dependent Behavior; Effects on Ground Motion; *Allin Cornell; David Schwartz; Robert Youngs; Mark Petersen*

Discussion and Summary

2:15 p.m.: Issue C: Which Ground-Motion Attenuation Relationships Should be Used in National Ground-Motion Mapping?

Current Knowledge of Ground-Motion Attenuation in Different Tectonic Environments of the United States; Alternative Choices for Attenuation Relationships; Effects on Ground Motion; *C.B. Crouse*

Discussion and Summary

3:45 p.m.: Coffee Break

4 p.m.: Issue D: How Should Uncertainty in Seismic Sources and Attenuation be Incorporated in National Ground-Motion Mapping?

Sources of Uncertainty in Modeling Seismic Sources and Ground-Motion Attenuation; Choices for Incorporating Uncertainty in Probabilistic Analyses for Ground-Motion Mapping; Effects on Ground Motion; *Norman Abrahamson; Chris Cramer*

Discussion and Summary

5:30 p.m. End of First Day

FRIDAY, MAY 11, 2001

**Session II: Issues for Design Maps;
E.V. Leyendecker, Moderator**

8 a.m.: Decisions Made in Developing Current MCE Design Maps; Remaining Issues; Joe Hunt

8:45 a.m.: Issue E: How Often Should Design Maps be Updated?

Building Design Perspective; *Robert Bachman*

Bridge Design Perspective; *Richard Land*

Discussion and Summary

9:45 a.m.: Coffee Break

10 a.m.: Issue F: What Should be the Degree of Detail in Design Maps? Should Contours or Zones be Used?

Building Design Perspective; *Ronald Hamburger*

Bridge Design Perspective; *Charles Ruth*

Discussion and Summary

11 a.m.: Issue G: Should Deterministic Bounds be Incorporated in Design Maps? Where? How Should They be Determined?

Building Design Perspective; *John Hooper*

Bridge Design Perspective; *Paul Liles*

Discussion and Summary

12 Noon: Lunch

1:15 p.m.: Issue H: What Should be the Role of USGS in Preparing Design Maps?

Building Design Perspective; *Guy Nordenson*

Bridge Design Perspective; *Ronald Mayes*

Discussion and Summary

2:15 p.m.: Coffee Break

Session III: Map Products and New Directions; Andrew Merovich, Moderator

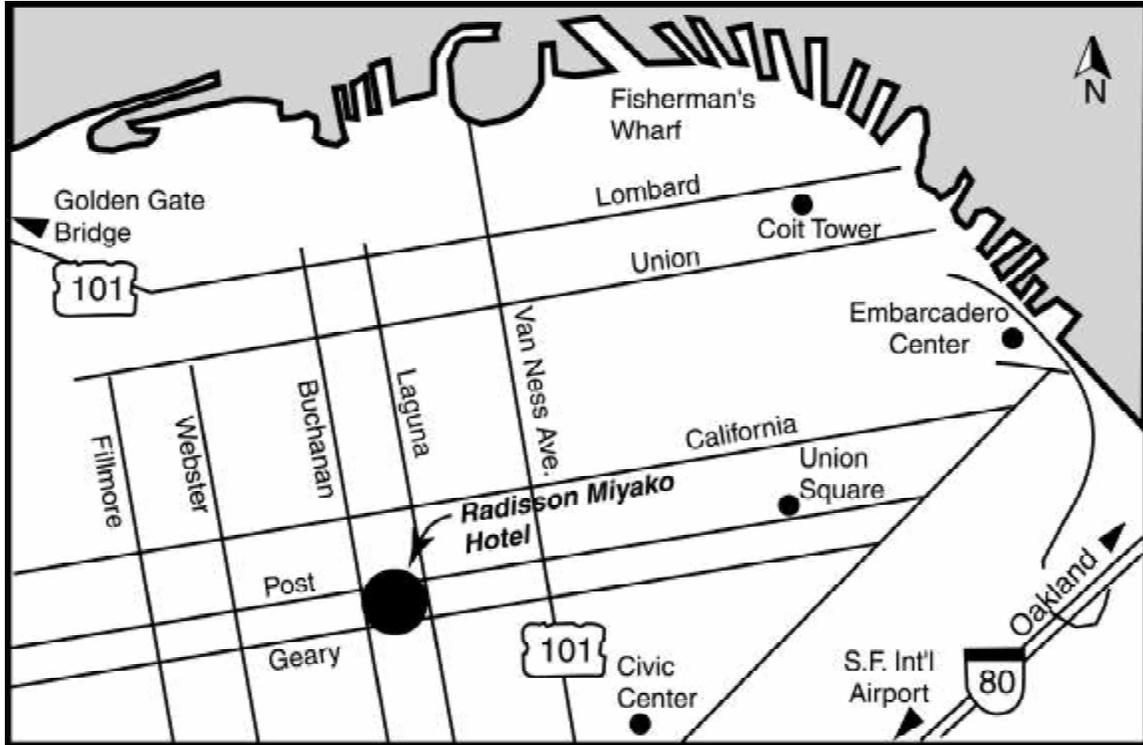
2:30 p.m.: Current and Planned USGS Map Products (Paper Maps, Internet Website Products, CD-ROM Products); Planned New Direction in Mapping; E.V. Leyendecker

3:15 p.m.: User Needs; Discussion and Summary

4:15 p.m.: Closing Remarks

4:30 p.m. Workshop Closure

Special Presentation. The Workshop organizers are also planning a special presentation on ground motions in the recent Nisqually earthquake in the Seattle region.



Map Showing Location of Radisson Miyako Hotel

2ND NATIONAL EARTHQUAKE GROUND-MOTION MAPPING WORKSHOP REGISTRATION FORM

NAME(S) _____

ORGANIZATION _____

ADDRESS _____

CITY/STATE/ZIP CODE _____

BUSINESS PHONE AND FAX NUMBERS _____

Seminar Registration Fee: \$150 per registrant (\$120 per ATC subscriber) \$ _____

Please enroll me as an ATC subscriber (\$25 per year, individual rate) \$ _____

Late Registration Fee: add \$25 per registrant (if postmarked or faxed after May 1, 2001) \$ _____

TOTAL ENCLOSED \$ _____

Payment may be made by check or credit card (MasterCard or VISA). If paying by credit card, please provide the following information: MasterCard VISA # _____ Exp: ____/____/____

Cardholder's signature _____

Checks should be made payable to ATC. Please mail or fax your completed form with the appropriate payment to:
Applied Technology Council, 555 Twin Dolphin Dr., Suite 550, Redwood City, CA 94065 FAX: 650/593-2320