

NATIONAL
EARTHQUAKE
CONFERENCE



Understanding Earthquakes: From Research to Resilience

April 22-26, 2008
Westin Hotel, Seattle

CONFERENCE AGENDA

(As of April 11, 2008)

MISSION STATEMENT: The purpose of the conference is to provide a national forum for dialogue among emergency managers, earthquake researchers, government officials, and business leaders that build common ground to mitigate losses from earthquakes and increase social and economic resiliency.

Monday, April 21, 2008 Pre-Conference

3:00 PM - 4:30 PM **WSSPC Tsunami Hazard Mitigation Committee Meeting**
5:00 PM - 6:00 PM **WSSPC Board Meeting**

Tuesday, April 22, 2008 Pre-Conference

8:00 AM - 5:00 PM **State Earthquake Program Managers Meeting (see Agenda on www.earthquakeconference.org)**
10:00 AM - 3:00 PM **CREW Meeting**
1:00 PM - 5:00 PM **State Seismic Councils and Commissions Meeting (see Agenda on www.earthquakeconference.org)**
7:00 PM - 9:00 PM **WSSPC Annual Business Meeting**

Tuesday, April 22, 2008 Conference

4:00 PM - 7:00 PM **Registration
Exhibits**

5:30 PM - 7:00 PM **Hosted Hospitality Mixer**

Wednesday, April 23, 2008 Learning from the past

7:00 AM -
5:00 PM **Registration
Exhibits**

7:00 AM **Breakfast Meetings (Continental Breakfast Provided in Exhibit Hall)**

8:00 AM **Welcome**
Speakers: Bob Zimmerman, Conference Chair and President, Cascadia Region Earthquake Workgroup
Christine Gregoire (video), Governor, State of Washington
Jim Mullen, Director, Washington Military Department, Emergency Management Division
Susan Reinertson, Director, FEMA Region X

From Research to Resilience -- A short film highlighting the conference theme
Produced by Global Net Productions

8:30 AM **PLENARY 1: TOWARD RESILIENCY: WHAT WE'VE LEARNED FROM PAST EVENTS**
This opening session will set the stage for the conference by focusing on what we have learned from past events and putting a face on resiliency. Dennis Mileti will introduce the concept of resiliency, Lawrence Vale will offer examples from around the world and Anselm Smolka will present resiliency lessons learned from Hurricane Katrina.
Moderator: Bob Zimmerman, Conference Chair and President, Cascadia Region Earthquake Workgroup
Speakers: Dennis Mileti, Professor Emeritus, Department of Sociology, University of Colorado Boulder
Lawrence Vale, Professor and Head, Department of Urban Studies and Planning, Massachusetts Institute of Technology
Anselm Smolka, Head of Geological and Geophysical Risks, GeoRisks Research Group, Munich Reinsurance Corp.

10:00 AM **Break -- 30 minutes**

10:30 AM

PLENARY 2: NEHRP STRATEGIES AND CHALLENGES

The NEHRP Strategic Plan has been updated and NIST has settled in as the lead agency with a designated NEHRP Director. What changes have resulted from new leadership? What are the recent program accomplishments? What are the challenges continuing to face the NEHRP program? A panel consisting of representatives from each of the NEHRP agencies - NIST, FEMA, USGS, and NSF - will discuss their strategies for meeting their goals, coordinating with their agency counterparts, and responding to the Advisory Committee on Earthquake Hazards Reduction (ACEHR).

Moderator: Chris Poland, CEO, Degenkolb Engineers

Speakers: David Applegate, Senior Science Advisor for Earthquake and Geologic Hazards, US Geological Survey

Ed Laatsch, Chief, Building Sciences Section, Mitigation Division, DHS/FEMA

Dennis Wenger, Program Director, National Science Foundation

Jack Hayes, Director, National Earthquake Hazards Reduction Program (NEHRP) at the National Institute of Standards and Technology

12:00 PM

Lunch

Luncheon Speaker: Mark Myers, Director, US Geological Survey

1:30 PM

PLENARY 3: SCIENTIFIC AND ENGINEERING LESSONS FROM PAST EARTHQUAKES

Earthquakes are our best teachers, providing us with the observations that advance our understanding - usually incrementally, but occasionally in enormous leaps. In this session we learn about the major surprises and lessons nature has presented to us, during and following significant earthquakes, that have led to major advances in our understanding of earthquake science and engineering.

Moderator: David Applegate, Senior Science Advisor for Earthquake and Geologic Hazards, US Geological Survey

Speakers: Hiroo Kanamori, John E. and Hazel S. Smits Professor of Geophysics, Emeritus, at the California Institute of Technology

Chris Poland, CEO, Degenkolb Engineers

2:45 PM

Break -- 45 minutes

Poster Session

3:30 PM

Concurrent Workshops:

Session A

Critical Infrastructure. Critical Infrastructure is an integral component of communities large and small. A community's dependence on their critical infrastructure goes largely unnoticed until it is disrupted. This session will explore a number of critical infrastructure issues highlighting the dependence and vulnerability of these complex systems.

Moderator: Don Ballantyne, Senior Consultant, MMI Engineering

Speakers: Daniel V. Munger, Infrastructure Branch Chief, Mississippi Emergency Management Agency
Ron Tognazzini, Consultant and Former Emergency Manager of Los Angeles Department of Water and Power

Tim Ceis, Deputy Mayor, City of Seattle

Session B

Impact of Earthquakes on Rural Communities

The vulnerability of rural communities often goes unnoticed, due largely to the perception that there isn't a significant risk. The argument to place resources in larger, more urban communities rests on the perception that smaller populations are less at risk and have less infrastructure exposure to hazards. In reality, rural communities collectively represent a large percentage of the nation's population, while serving as the backbone of this nation. The vulnerability of these communities on a day-to-day basis is much greater than it is with larger communities. This session will explore those vulnerabilities and look at the role of mitigation in helping reduce these vulnerabilities.

Moderator: Craig dePolo, Research Geologist, Nevada Bureau of Mines & Geology

Speakers: Kelly C. Donoghue, Assistant Director, Clinton County (New York) Office of Emergency Services

Rex Nelson, Alternate Federal Co-Chairman, Delta Regional Authority

David Jackson, Mitigation Program Manager, Idaho Bureau of Homeland Security

Session C

Spreading the Risk: The Role of Earthquake Insurance in Economic Recovery

Insurance dollars are a major contributor to economic recovery following a natural disaster. This session will clarify what homeowners and business owners can expect from their earthquake insurance, what is included and excluded, and why. It will address what the challenges are to making earthquake insurance available and affordable, what motivates or deters homeowners and business owners from purchasing that insurance, and what is being done to improve market penetration.

Moderator: Paula Flowers, Senior Laboratory Risk Advisor, UT-Battelle, LLC, Oak Ridge National Laboratory, and former Commissioner, Department of Commerce and Insurance, State of Tennessee

Speakers: William R. Lacy, Director, Property & Casualty Division, Arkansas Insurance Department
Anselm Smolka, Head of Geological and Geophysical Risks, GeoRisks Research Group, Munich Reinsurance Corp.

Karl Newman, President, NW Insurance Council

Session D

Business Continuity Lessons Learned from Past Events: Hurricane Katrina, Kobe, Japan Earthquake and Research Findings

What has made the difference between business survival and failure following a disaster? This session will include experiences of businesses affected by Hurricane Katrina and the Kobe, Japan earthquake, and research findings from major disasters across the country. It will explore how business continuity planning, involvement with disaster-resistant and resilient community initiatives, and the ability to adapt to a changed environment affect businesses' ability to survive, remain viable, and ultimately recover from a major disaster.

Moderator: Diana McClure, Vice President and Director of Business Protection, Institute for Business and Home Safety

Speakers: Dana Eness, Coordinator, The Urban Conservancy's Stay Local! Program

Tsutomu Shigemura, Professor, Department of Architecture and Civil Engineering, Kobe University

Dan Alesch, Emeritus Professor, University of Wisconsin

Session E

Land Use Planning, Policy and Earthquakes 101

This session will help demystify the world of land use planning, policy and zoning as a tool for reducing loss of life and property from seismic events, highlighting the challenges and opportunities from academic and practitioners' perspectives.

Moderator: Rob Olshansky, Professor, Department of Urban & Regional Planning, University of Illinois Urbana-Champaign

Speakers: Jane Preuss, Principal Planner, Planwest Partners

Susan Chang, Technical Geotechnical Engineering Group Supervisor, Seattle Department of Planning and Development

Thomas A. Birkland, William Kretzer Professor, School of Public and International Affairs, North Carolina State University

Kenneth Topping, President, Topping Associates International, and Former Planning Director, City of Los Angeles

Session F

Scientific and Engineering Lessons from Past Earthquakes

This series of talks builds on plenary session 1, examining specific earthquakes and the lessons learned from them. We focus on both the scientific and engineering aspects of past earthquakes and related phenomena, and touch upon today's research and where it is heading.

Moderator: Stacy Bartoletti, Vice President & COO, Degenkolb Engineers

Speakers: Shri Krishna Singh, Departamento de Sismologia y Vulcanologia, Instituto de Geofisica, Universidad Nacional Autonoma de Mexico

Garry Rogers, Earthquake Seismologist, Geological Survey of Canada

Jim Malley, Senior Principal, Degenkolb Engineers

5:00 PM

Close

6:30 - 9:30 PM

Fee Event (Optional) - Boat Cruise to Blake Island. As participants, you will be driven from the conference center to Seattle's waterfront, board a large boat and cruise over the Seattle fault to Blake Island State Park. There you will dine in an authentic cedar longhouse while the Tillicum Village Dancers present traditional Northwest Coast dances. (Cost \$100, guests are welcome).

Thursday, April 24, 2008 (Dealing with the Present)

7:00 AM - 5:00 PM	Registration Exhibits
7:00 AM	Breakfast Meetings (Continental Breakfast Provided in Exhibit Hall) WSSPC Basin & Range Province Committee Meeting
8:00 AM	Welcome Speakers: Patti Sutch, Executive Director, Western States Seismic Policy Council Greg Nickels, Mayor, City of Seattle Timothy J. Lowenberg, Adjutant General, Washington Military Department
8:30 AM	PLENARY 4: EARTHQUAKE HAZARDS IN THE U.S. Earthquakes are a national problem, posing a significant risk to 75 million Americans in 39 states from Alaska to Maine. Planning for and responding to the risk requires understanding why, when, and where past earthquakes have occurred, the engineering issues they raise, and the processes that may govern future occurrences. The plenary focuses on understanding earthquake hazards nationwide, providing overviews of the geologic settings and processes and of the built environment they will affect. Moderator: Jill McCarthy, Chief Scientist, Geologic Hazards Team, US Geological Survey Speakers: Mary Lou Zoback, Vice President of Earthquake Risk Applications, Risk Management Solutions Jack Moehle, Director, Pacific Earthquake Engineering Research Center (PEER)
10:00 AM	Break -- 30 minutes
10:30 AM	PLENARY 5: NATIONAL EARTHQUAKE RISK - IMPACTS AND VULNERABILITIES Although most earthquakes are concentrated along the west coast of the United States, the earthquake risk in the U.S. (as measured by FEMA's Annualized Earthquake Loss Ratios comparing annualized earthquake loss to the national building stock) is a real threat in nearly every state. An earthquake occurring in the Midwest or Northeastern U.S., although it may occur less frequently than a west coast earthquake, could have similar devastating effects on the economy. This plenary focuses on conveying the national earthquake risk, social and economic impacts, and vulnerabilities. Moderator: Ron T. Eguchi, President and CEO, ImageCat, Inc. Speakers: Philip Schneider, Director, Hazards Risk Assessment Program, National Institute of Building Sciences Susan Cutter, Carolina Distinguished Professor, Department of Geography & Director, Hazards & Vulnerability Research Institute, University of South Carolina Keith A. Porter, Associate Professor, Civil Engineering Department, University of Colorado Boulder

12:00 PM

Lunch: National Awards in Excellence

Presenter: Jack Hayes, Director, National Earthquake Hazards Reduction Program (NEHRP) at the National Institute of Standards and Technology

Luncheon Speaker: Jim Stanton, Director, Communications, British Columbia Olympic and Paralympic Winter Games Secretariat

“Disaster-Resilient Businesses Within Disaster-Resilient Communities: A Case Study of EPICC”

Are businesses and industries in your community prepared and ready to cope with a disaster? Surviving the “Big One” is just as important for businesses as it is for communities. Emergency Preparedness for Industry and Commerce Council of British Columbia (EPICC) is a nonprofit government-endorsed society supported by, and for the benefit of, businesses and institutions throughout British Columbia to influence and help businesses prepare for emergencies and disasters. By forming partnerships with businesses, governments, and organizations such as the Cascadia Region Earthquake Workgroup and the Vancouver Board of Trade, EPICC strives to educate and motivate businesses and communities to endorse the principles of business continuity and emergency planning.

1:30 PM

PLENARY 6: EARTHQUAKE RISK MANAGEMENT FROM A FINANCIAL ACCOUNTABILITY VIEWPOINT

There are many ways to manage financial risks created by earthquakes -- redundancy, hardening, insurance, take a chance and do nothing, or some combination of these. A panel of speakers will represent a financial accountability viewpoint from a variety of business types, and share how they currently manage their earthquake risk.

Moderator: Ines Pearce, Chief Executive, Pearce Global Partners

Speakers: Jill Combs, Vice President & Assistant Risk Manager, Wells Fargo Bank

Joel Gaither, Property Insurance and Fire Protection Manager, Weyerhaeuser Co.

Rebecca McQuade, Director of Risk Management, Paccar Inc.

Steve Miller, Executive Vice President and COO, PEMCO Insurance Companies

3:00 PM

Break -- 45 minutes

Poster Session

3:30 PM

Concurrent Workshops:

Session A

Tools of the Trade: ShakeMap, ShakeCast, PAGER, ENS, HAZUS, GIS, Scenarios, AGORA

Over the past two decades, a number of technologies have emerged that have greatly benefited earthquake response and hazard mitigation. Some of these tools are available to emergency managers in near real-time and provide critical information including earthquake magnitude, location, distribution of ground shaking and probable damage. Others provide estimates of dollar loss, casualties, displaced population, damage to critical facilities and other parameters for hazard mitigation, scenario development, and recovery. This session will feature both designers of these tools and their users.

Moderator: Jim Goltz, Earthquake and Tsunami Program Manager, California Governor’s Office of Emergency Services

Speakers: Rich Eisner, Government Liaison, BayPrep, Fritz Institute

Doug Bausch, Physical Scientist, DHS/FEMA Region VIII

Dave Wald, Seismologist, US Geological Survey

Keith A. Porter, Associate Professor, Civil Engineering Department, University of Colorado Boulder

Session B

Building Earthquake Science and Engineering into Codes and Policies

This breakout session will explore how the National Seismic Hazards Maps produced by the U.S. Geological Survey are used and integrated into the building codes, the differences between probabilistic and scenario hazard assessments and the impacts the codes have from a state perspective.

Moderator: Mike Mahoney, Senior Geophysicist, Building Sciences Section, Mitigation Division, DHS/FEMA

Speakers: Mark Petersen, Seismologist, US Geological Survey

Alan Carr, Senior Staff Engineer, International Code Council

Paula Flowers, Attorney, Farmer & Luna, PLLC, and former Commissioner, Department of Commerce and Insurance, State of Tennessee

Session C

Temporary Populations: Evacuation, Planning, Problems and Procedures

This session will examine the role of emergency management when dealing with transient populations and large scale special events such as the Olympics. The session will begin with how earthquakes affect the tourism industry, why tourists are “different” from a sociological perspective, and some of the best practices for dealing with this population. The following presentations will focus on large scale events and key points will include preparing for “worst-case” scenarios, the importance of developing strong leadership skills, and the need for excellent communications skills. The Salt Lake City Winter Olympics and upcoming 2010 Olympics will serve as a backdrop for discussions of the lessons learned and planning initiatives in the Vancouver area.

Moderator: Larry Pearce, Partner, Pearces 2 Consulting Corporation

Speakers: Mike Stever, Emergency Program Manager, Salt Lake City Office of Emergency Preparedness
Kevin Wallinger, Director, Integrated Public Safety Unit, Provincial Emergency Program, Government of British Columbia

Nicole Dash, Assistant Professor, Department of Sociology, University of North Texas

Session D

Addressing Tsunami Risk

Emergency managers ask for increasing levels of certainty from different scientific fields to best determine tsunami hazard areas, the level of exposure to the public, and the most effective means to detect and warn for a potential tsunami. This session will connect state-of-the-art hazard assessment, vulnerability analysis, and warning methodology to improve public education and emergency decision-making.

Moderator: Jay Wilson, Hazard Mitigation Coordinator, Clackamas County Emergency Management

Speakers: George Priest, Geologist, Oregon Department of Geology and Mineral Industries, Coastal Field Office

Nathan Wood, Geographer, US Geological Survey

Vasily Titov, Chief Scientist, NOAA Center for Tsunami Research, Pacific Marine Environmental Laboratory

Session E

Communicating Risk and Risk Reduction

Communicating risk and vulnerabilities is not easy. This session will focus on the communication from two different but interrelated perspectives. The first part will focus on strategies and tools for understanding and communicating vulnerabilities related to critical infrastructures and interdependencies to different audiences. The second part will examine how risk and vulnerability factors can be used to engage and encourage community initiatives to reduce the likelihood of hazardous events and their adverse impacts.

Moderator: Kathleen Tierney, Director of Natural Hazards Center, University of Colorado Boulder

Speakers: Laurie Pearce, Associate Faculty, Royal Roads University

Stephanie E. Chang, Associate Professor, Community and Regional Planning, The University of British Columbia

Session F

Turning Mitigation into an Economic Advantage

Mitigation is a choice for businesses, but those who have seen the value to protect their employees, property, and customers before disaster strikes are also seeing the economic advantage it provides. This could take the form of a better prepared workforce, employee or customer loyalty, reduction in post-disaster costs, and better resiliency. Every company customizes its solutions and choices to fit their specific business priorities and culture for long-term gains.

Moderator: Ines Pearce, Chief Executive, Pearce Global Partners

Speakers: Jennie Clinton, Senior Program Manager, Enterprise Business Continuity, Microsoft

Krista Dillon, Associate Director, Oregon Partnership for Disaster Resilience, University of Oregon

Annie Searle, Senior Vice President, Enterprise Risk Services, Washington Mutual

5:00 PM

Close

7:00 PM

LEARNING FROM THE DECEMBER 2004 TSUNAMI WEBCAST

A panel of practitioners from impacted countries will discuss the steps taken toward recovery and making their countries more resilient. This plenary session will permit representatives from impacted countries to participate remotely. Questions will be received from Seattle based and virtual participants and translators will be available. The session is being held in the evening to allow for participation across the Indian Ocean and will be open to the general public.

Moderators: George Crawford, Earthquake Program Manager, Washington Military Department, Emergency Management Division

Brian Atwater, U.S. Geological Survey and University of Washington

Chris Jonientz-Trisler, Chief, Hazards Mitigation Assistance Branch, DHS/FEMA Region X

Eddie Bernard, Director, Pacific Marine Environmental Laboratory, National Oceanographic and Atmospheric Administration

Speakers: Dr. Ananda Mallawatantri, U.N. Development Program, Sri Lanka

Ms. Patra Rina Dewi, Executive Director, KOGAMI (NGO), West Sumatra, Indonesia

Tsunami Session Webcast Sponsored by Federal Signal

Friday, April 25, 2008 (Future Directions)

7:00 AM -
5:00 PM

Registration

7:00 AM

Breakfast Meetings (Continental Breakfast Provided in Exhibit Hall)

8:00 AM

Welcome

Speakers: Ed Fratto, Executive Director, Northeast States Emergency Consortium
Robin Friedman, Director, King County Office of Emergency Management
Ron Sims, King County Executive

8:45 AM

PLENARY 7: OVERVIEW OF RESILIENCY -- A WORKING GOAL

This session will provide an overview of the latest in research and knowledge on community resiliency; showcasing the latest thinking on how to create a groundswell for change in communities, influencing policy makers, facilitating and activating change in local communities, regions, countries, and new approaches.

Moderator: Maiclaire Bolton, Head, Seismic Program, British Columbia Provincial Emergency Program
Speakers: David Maurstad, Assistant Administrator, Mitigation Division, DHS/FEMA
Kathleen Tierney, Director of Natural Hazards Center, University of Colorado Boulder
Richard K. Eisner, Government Liaison, BayPrep, Fritz Institute

10:00 AM

Break -- 45 minutes

10:45 AM

PLENARY 8: BUILDING COMMUNITY RESILIENCE -- APPLICATIONS OF RESILIENCY

This plenary highlights applied, on-the-ground initiatives that are succeeding in making communities more disaster-resilient. Initiatives to be covered range from business preparedness and recovery, to downtown and neighborhood retrofit programs, to a statewide partnership for pre-disaster mitigation.

Moderator: Diana McClure, Vice President and Director of Business Protection, Institute for Business and Home Safety
Speakers: Krista Dillon, Associate Director, Oregon Partnership for Disaster Resilience, University of Oregon
LuAn Johnson, Public Education Program Manager, Washington Military Department, Emergency Management Division
William Matthews, Former Manager, Resilient Communities Disaster Preparedness Project, Canadian Red Cross (Western Canada)

12:00 PM

Lunch: An open discussion of the future directions and setting the stage for the New Madrid National Earthquake Conference in 2011 or 2012 through the use of hand-held polling devices.
Moderator: Jim Wilkinson, Executive Director, Central US Earthquake Consortium

1:30 PM

Concurrent Workshops:

Session A

Establishing State Post-Earthquake Technical Clearinghouses

Many states have either not considered or not accomplished setting up a post-earthquake technical clearinghouse for the large influx of researchers who may visit their state after an earthquake. As data is being collected, how is the data captured by the state? The WSSPC model of how to establish a clearinghouse plan will be presented, followed by an example of an operational state plan and how the clearinghouse concept was adapted in Hurricane Katrina.

Moderator: Doug Bausch, Physical Scientist, DHS/FEMA, Region VIII

Speakers: William Lund, Senior Scientist, Utah Geological Survey

Craig dePolo, Research Geologist, Nevada Bureau of Mines & Geology

John Pine, Associate Professor of Research, Department of Environmental Studies, University of Louisiana

Session B

Public/Private Partnerships for Economic Resiliency

Communities cannot survive a disaster unless the economy survives. Small to medium-sized businesses are the backbone of the American economy, but most do not plan for a major business interruption.

Two available models will illustrate how to motivate business owners to develop plans, to recognize that their recovery is tied to community-wide disaster resistance and resilience, and to institutionalize business continuity planning into their business practices.

Speakers: Diana McClure, Vice President and Director of Business Protection, Institute for Business and Home Safety

Ines Pearce, Chief Executive, Pearce Global Partners

Session C

Creating and Using Earthquake Scenarios

Scenarios provide an opportunity to examine alternative futures and stimulate creative thinking about policies and programs. Risks that seem remote are made real, enabling policy makers and others to better understand and plan for the inevitable. Scenarios provide a vehicle to transfer knowledge from research to implementation, and transform current scientific and technical knowledge into socially beneficial uses. Currently earthquake scenarios are being developed in the central U.S., Southern California, and Cascadia.

Moderator: Susan Tubbesing, Executive Director, Earthquake Engineering Research Institute

Speakers: Greg Hempen, Geophysicist, URS Corporation

Brandon Hardenbrook, Deputy Director, Pacific NorthWest Economic Region (PNWER)

Lucile Jones, Multi Hazards Coordinator, Southern California (USGS)

Session D

Cultural Implications of Earthquakes and Tsunamis

Major earthquakes and tsunamis have affected settled populations for thousands of years, but written history documents only a few of these events. This session will feature the oral history, legends, and myths of indigenous people through which these events have been passed from generation to generation and are available to us through the research and documentation of our panelists. We will also hear how these stories and the experiences they embody have been integrated into public information materials and planning activities among tribes of the Pacific Coast as well as the general population, and have both deepened and enriched our understanding of these hazards.

Moderator: Jim Goltz, Earthquake and Tsunami Program Manager, California Governor's Office of Emergency Services

Speakers: Ruth Ludwin, Former Research Scientist, Department of Earth and Space Sciences, University of Washington

Viola Riebe, Hoh Tribe

Vicki Ozaki, Geologist, Redwood National and State Parks

Nathan Kent Moran, Research Associate, Center for Earthquake Research and Information

Session E

Motivating and Preparing the Next Generation

This student-led panel discussion will evaluate the effectiveness of the Conference with respect to motivating and educating students who may become tomorrow's leaders in the natural hazards science, engineering, policy, and preparedness fields. Results and suggestions for future Conferences will be summarized in the closing session. All meeting attendees are encouraged to participate and listen.

Coordinator: Arleen Hill, Assistant Professor, Department of Earth Sciences, University of Memphis

Speakers: Students who were offered scholarships to attend the conference:

Brian O'Dell, University of Washington, Strategic Planning for Critical Infrastructures Program

Fred "Sonny" Kunchick, Western Washington University, Disaster Reduction and Emergency Planning Program

Azadeh Alipour, University of California Irvine, Department of Civil & Environmental Engineering

Behrouz Shafei Pamsari, University of California Irvine, Department of Civil & Environmental Engineering

Session F

Volcano Science, Hazard, and Risk

Volcanic processes and the hazards they pose vary widely, from slow, localized emission of environmentally dangerous gases to violent eruptions that potentially alter the global climate. This session provides an overview of the richness of these processes, from a scientific perspective and from the view of those who assess, prepare for, and respond to them. Discussion of the challenges and strategies for meeting these hazards will follow the overviews.

Moderator: Marianne Guffanti, former Coordinator, Volcano Hazards Program Office, US Geological Survey

Speakers: Stephanie Prejean, Research Geophysicist, Alaska Volcano Observatory, USGS Alaska Science Center

Steve Malone, Emeritus Research Professor, Department of Earth and Space Sciences, University of Washington

Steve Bailey, Director, Pierce County Department of Emergency Management

3:00 PM

PLENARY 9: CLOSING EVENT

NEHRP Agency leads, joined by Canadian and student representatives, will lead a discussion concerning future directions of the earthquake community. Discussion will be driven by results from luncheon real-time survey, student observations, and insights of panelists. Conference attendees will express their concerns by voting on offered concerns as was done during lunch.

Moderator: Kathleen Tierney, Director of Natural Hazards Center, University of Colorado Boulder

Speakers: Kathleen Tierney

David Applegate, Senior Science Advisor for Earthquake and Geologic Hazards, US Geological Survey

Ed Laatsch, Chief, Building Sciences Section, Mitigation Division, DHS/FEMA

Dennis Wenger, Program Director, National Science Foundation

Jack Hayes, Director, National Earthquake Hazards Reduction Program (NEHRP) at the National Institute of Standards and Technology

Laurie Pearce, Associate Faculty, Royal Roads University

One Student Scholarship recipient identified in Session E.

4:45 PM

END OF CONFERENCE

Saturday, April 26, 2008

Field Trips

Field Trip 1

Field Trip to Tsunami Sites, Leader: Brian Atwater, Geologist, US Geological Survey & Affiliate Professor, Department of Earth and Space Sciences, University of Washington. Examine geologic evidence behind today's building codes and tsunami preparedness in the Cascadia region. Board a bus at the Westin at 6:00 a.m. sharp for a 2.5-hour drive to the southwest Washington coast. Continue by canoe, riding an ebb tide down a sluggish tidal stream tributary to a coastal bay. Examine muddy creek banks exposed at low tide. Return to the Westin by bus by 7:00 p.m. (Cost: \$100, includes bus ride, lunch, waterproof clothing and canoe rental).

Field Trip 2

Field trip to UW Seismic Lab, Leader: Bill Steele, PNSN Director of Information Services, Earth and Space Sciences, University of Washington. Tour the University of Washington Seismology Lab and Campus. Meet in the Westin lobby at 9 a.m. and return before noon.

Field Trip 3

Tour of Seattle Fault, Leader: Tim Walsh, Head, Geologic Hazards Division of Geology and Earth Resources, Washington State Department of Natural Resources. This tour will begin at 9:00 a.m. from the Seattle Ferry Terminal and end before noon. Participants will ride the Ferry over the Seattle Fault and view escarpments from the Ferry's top deck. (Cost: \$25 includes cost of Ferry ticket purchased at the Ferry Terminal).

Field Trip 4

Tour of Seismic Retrofit Projects, Leader: Cale Ash, Degenkolb Engineers & Committee Chair, Younger Member Forum, Structural Engineers Association of Washington. This tour will leave the hotel at 9:00 a.m. and return by noon. Participants will ride public transportation through both older and new downtown commercial districts on the way to the University of Washington campus where we will view seismic upgrade projects completed as part of a campus-wide earthquake readiness initiative. (Cost: \$25 includes cost of Bus Ticket, \$1.50 each way).

Field Trip 5

Visit to Washington State Emergency Operations Center, Leader: George Crawford, Earthquake Program Manager, Washington Military Department, Emergency Management Division. Tour the Washington Military Department, Emergency Management Division's two-story, 28,000 square-foot Emergency Operations Center. The Building was designed to survive and be operational during and following a major earthquake with a steel-braced and framed building and a base-isolation foundation that acts as a shock absorber. With its own emergency power and auxiliary communications systems, the facility is a showcase for preparedness and hazard mitigation. The \$50 cost will cover transportation to the EOC and lunch provided by Washington EMD. Tour will leave hotel at 9:30 a.m. and return by 2:00 p.m.

Field Trip 6 - Cancelled - No trenches are open for viewing

Visit to an Active Trench, Leader: Brian L. Sherrrod, Geologist, Earthquake Hazards Team, U.S. Geological Survey.