

2011 – Virginia Tech Research Center, Arlington VA

The conference is organized to further the discussion on five resiliency topics and issues

- The central role of leadership in building resilience
- The critical role of engaging citizens and practitioners in a dialogue on community resilience in their jurisdiction
- The challenges to resiliency presented by incremental global changes
- Events in Japan have highlighted the seriousness of the cascading effects of environmental events on our socio-technical systems. It is essential for the security of our communities in the future to better understand how to protect against the more egregious impacts of the complex coupling of socio-technical system under stress.
- Massive casualties and disruptions evident in Japan and Haiti require us to focus on the world's ability to respond with humanitarian aid to regions under extreme stress. We must be proactive in planning for large-scale humanitarian efforts or run the risk of stretching our capacities beyond our ability to respond effectively when the need occurs. The nature of that planning effort and coordination of aid are topics to be considered at this year's conference.

Program

Opening Address

Charles Steger, President, Virginia Tech

"Role of Land Grant Universities in Building Community Resilience"

Plenary Address

Susan Cutter, Director of Hazards Lab, University of South Carolina

"Understanding Relationships Between Resilience and Sustainability"

Panel: Dimensions of Resiliency

Chair: Chris Zobel – Virginia Tech

Resiliency, a concept long used to describe ecological and physical systems, is being adopted and adapted to frame the interaction between extreme events and human social and economic systems. What does resiliency mean in this context? How to we describe, measure, and achieve resiliency at a community, regional or national level?

- Richie Rotanz, Executive Director, Applied Science Center of Innovation and Excellence in Homeland Security (former Commissioner for Emergency Management, Nassau County, NY)
- Gavin Smith, Executive Director, Center for the Study of Natural Hazards and Disasters, University of North Carolina
- Walter Peacock, Director, Hazard Reduction and Recovery Center, Texas A&M University

Panel: Risk and Resiliency: Major Naturo-techno Catastrophic Events

Chair: Lamine Mili, Electrical and Computer Engineering, Virginia Tech

Resiliency is severely tested when natural disasters and technological events become interacting failures. Have we considered natural hazard risk in locating and designing facilities and systems that create technological hazards? How can we ensure that technological resilience supports our resilience to natural hazards rather than diminishing it? What strategies will enhance the resilience of communities exposed to potential simultaneous technological and natural hazards?

- Walter Ammann, President/CEO, Global Risk Forum, Davos, Switzerland
- BGen (ret) Gerald Galloway, Glenn L. Martin Institute Professor of Engineering, University of Maryland
- Fred Krimgold, Director, Disaster Risk Reduction Program, Advanced Research Institute, Virginia Tech
- Laura Steinberg, Dean, L.C. Smith College of Engineering and Computer Science, Syracuse University

Panel: Risk and Resiliency: Challenges from Incremental Threats

Chair: Kevin Desouza, Metropolitan Institute, Virginia Tech

The threats from climate change, sea rise, drought and desertification, food security, and many other slowly developing crises are not linked to dramatic events that focus media, public, and political attention. How well do we recognize and understand these

threats? How can existing scientific approaches help our understanding? What can be done to increase our resilience to them? What strategies could be used to obtain the resources necessary to make significant changes?

- Chris Barrett, Professor and Director, NDSSL and Virginia Bioinformatics Institute, Virginia Tech
- Ralph Dum, Future and Emerging Technologies Programme, European Commission
- William Hooke, Senior Policy Fellow and the Director of the Atmospheric Policy Program, American Meteorological Society
- Gerard Laanen, Director, Departmental Coordination Centre for Crisis Management for Infrastructure, Ministry of Infrastructure and Environment, The Hague Area, Netherlands

Panel: Resiliency and Citizen Participation

Resilience is ultimately a property of communities and their individual citizens. What are social and economic factors that tend to weaken community resilience and how can they be countered? What actions can be taken by individuals and communities to increase their resilience to natural and technological threats? What strategies will ensure that citizens and communities are aware of the benefit of resilience building actions and how can citizen participation in these decisions and activities be increased?

- Erik Johnston, Co-director of the Center for Policy Informatics, School of Public Affairs, Arizona State University
- Shirley Laska, Professor Emerita, University of New Orleans and founding Director, Center for Hazards Assessment, Response and Technology (CHART)
- Dr. Liesel Ritchie, Assistant Director for Research, Natural Hazards Center, University of Colorado

Panel: Resiliency and Leadership

Chair: James Bohland, VP of the National Capital Region Operations, Virginia Tech

Achieving resiliency will require significant social and economic change that will only be achieved through strong leadership from all levels and segments of society. Is this leadership emerging? How can future business, government, and community leaders be

informed and supported? How will the long term goals of resilience be adopted by political and business leaders who must meet short term expectations? What forms of organizational structure can help provide and support effective leadership?

- Brian Koon, Director, Florida Division of Emergency Management
- Jim Schwartz, Chief, Arlington County Fire Department, Arlington, Virginia
- Ellis Stanley, Director of Western Emergency Management Services, Dewberry Davis (former Emergency Manager, Los Angeles County)
- Scott Wells, Senior Homeland Security and Emergency Management Consultant Integrated Emergency Management (former Federal Coordinating Officer, FEMA)

Luncheon Speaker

Peter Walker, Director and Rosenberg Professor, Feinstein International Center, Tufts University

Panel: Challenges to Humanitarian Aid Provision in 21st Century

Chair: Nick Stone, Deputy Director, National Capital Region, Virginia Tech

Across the globe, populations living in areas exposed to natural and technological risks are growing. In many areas, factors such as climate change, sea level rise, industrialization and deforestation are increasing both the probability and potential consequences of extreme events. How can at risk countries and regions preserve the resiliency they have? How critical is international humanitarian aid to resiliency of developing and under-developed countries? How well will current humanitarian aid doctrine and resources scale to larger and more frequent extreme events?

- David Kauffman, Policy and Program Office Director, Federal Emergency Management Agency
- Gregg O'Ryon, Vice President, Disaster Services, American Red Cross
- Jeff Drumtra Bureau of Population, Refugees, and Migration, U.S. Department of State

Panel: Scientists and Practitioners – Living Lab Dialogue

Chair: Jack Harrald, Center for Community Security and Resilience, Virginia Tech

Resiliency must become both science based and practitioner accepted before it can be accepted as framing concept that defines policy and practice. What types of scientific

research are needed to provide a scientific and empirical basis for resilience policy and practice? Who should fund and support this research? Will practitioners and policy makers participate in living labs that will provide the dynamic environment to explore and test new concepts, technologies, and methods?

- Lauren Augustine Alexander, Director, National Academies Disasters Roundtable
- Jack Brown, Director, Arlington County Emergency Management
- Brent Woodworth, President – CEO, Emergency Preparedness Foundation
- Theresa Jefferson, Research Professor, Virginia Tech