



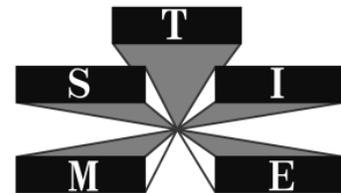
## TIEMS USA 2015 Conference Emergency Management in an Interconnected World



The conference was held June 23 -25, 2015 at Portland State University, who generously provided our meeting room and access to great event staff. All in attendance agreed the conference was a great success – excellent presentations, lots of discussion, and a great opportunity to learn and network. As expected, Portland provided beautiful summer days and nights as a backdrop to our meetings and social events. (See [TIEMS USA 2015 Conference Final Program](#))

The conference attendees came from Brazil, Indonesia, France, Nepal, New Zealand, Norway, and of course the United States, from California, Illinois, Indiana, Florida, Georgia, and Maryland, as well as locals from Oregon and Washington in the Pacific Northwest. It was remarkable to see how different perspectives and common goals led to presentations and discussions that engaged everyone.

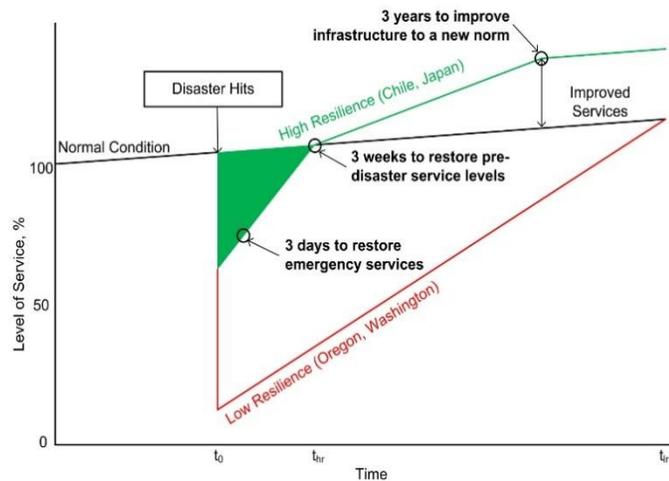
The conference was opened by conference organizer and TIEMS Director for North America **Tom Robertson**, who reiterated the conference theme – how interconnectedness and interdependence make disaster resilience an inherently international problem – and opportunity. TIEMS President **K. Harald Drager** led off Tuesday morning’s presentations, discussing TIEMS worldwide operations, and in particular two approaches to improve global resilience: using scientific projections to guide preparedness funding, and the TIEMS Global Educational Network for Emergency Resilience And Training Excellence (GENERATE).



For the second presentation of the morning we were honored to have **Meen Chhetri** provide a penetrating account of the recent earthquakes in Nepal, and an analysis of the challenges preparing for and responding to such disasters, given the multi-organizational and multi-national stakeholders involved. Disasters like this one in Nepal provide important lessons in both local and international response.



The Pacific Northwest can learn from Nepal: as **Matt Cutts** from the U.S. Army Corps of Engineers told us, in the next presentation, there is a 37% chance of a magnitude 8 or larger earthquake within the next 50 years, along the Cascadia subduction zone, which runs from northern California to northern Vancouver Island in Canada. Matt's talk further discussed the need for infrastructure investments, and the economic, political, and social challenges of deciding how to make these investments, which echoed Meen's discussion of similar challenges in Nepal.

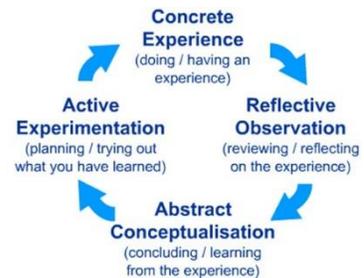


The last presentation of the morning by **Jim Hagen** was a very interesting discussion of multiple aspects of using small unmanned aerial vehicles in emergency management. He described types of vehicles, how they can be used in emergency management, as well as natural and man-made barriers to their use. These drones are becoming so popular they have spawned university degree programs in Unmanned Aerial Systems.



Tuesday's afternoon session began with three presentations dealing with global aspects of disease outbreaks. **Carl Taylor** enlightened and entertained us by describing "Seven Certainties" associated with disease outbreak in his talk "The Problem of Bugs, barriers, and Borders". **Tom Robertson** spoke to governance during disease outbreaks, emphasizing the paradigm shift from a paternal point of view to a more modern stance of self-reliance. **Jim Hagen** next presented a comprehensive overview of how we respond to pandemics as individuals, local communities, pharmaceutical providers, governments, and as international collaborators.

**Joseph Pollack** next discussed how learning theory applies to making organizations that deal with emergencies **learning organizations**. He further discussed live and virtual training tools that can be integrated to allow organizations to get the most from their training exercises. **Andre LeDuc** described an impressive example of how organizations can learn from each other – the Disaster Resilient Universities Network, which over the last 10 years has grown to 1250 worldwide members, each member a university sharing information and experience concerning the multi-faceted challenges of managing emergencies in university communities.



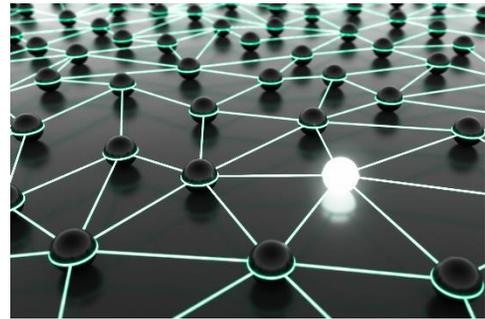
Tuesday's activities concluded with conference attendees enjoying food and drink and a beautiful summer evening on Nel Canto's outdoor patio, getting to know one other and discussing interests. We continued to learn about each other Wednesday morning, going around the room, each of us telling about

ourselves and our interests. We were a very interesting and diverse group – responders, government officials, technologists, academics, students, consultants, NGOs – from far away: Brazil, Indonesia, France, Nepal, New Zealand, Norway; not so far away: California, Florida, Georgia, Maryland, Illinois, Indiana; as well as from the local Pacific Northwest.



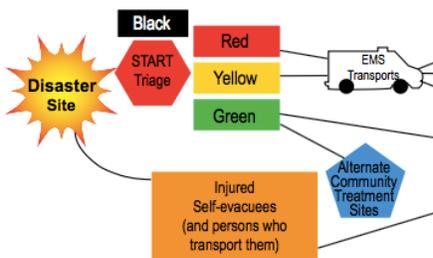
The first presentations on Wednesday morning dealt with cybersecurity, a significant issue in today’s interconnected world. **Megan Levy** provided an excellent overview of the elements of cybersecurity, and the importance to dealing with cyber threats of collaboration within and across organizations, and the need for every stakeholder to play their role. **Jack Whitsitt** provided a creative illumination of the multiple contexts that shape various stakeholder’s attitudes and behaviors around cybersecurity, and the complexities that make cybersecurity extremely challenging.

The last paper of the morning, presented by **Vaninha Vieira**, described an international project to develop a system that would exploit modern hand-held devices to support crowd-sourcing and crisis management during a crisis. While the technical feasibility of this approach seems clear, the comprehensive project is going beyond technical architecture to address critical considerations such as crowd source reliability, fusion and analysis of collected data, usability for different types of emergency responders, and commercialization for wide dissemination.



During Wednesday’s lunch we had a special treat, as **Amy Baker** and **Jane Wolfe** of Ready Set Go! Emergency Training led us through some experiential games that brought home the challenges of decision making and cooperation during stressful situations such as emergencies. After lunch, **Mary Tyszkiewicz** presented examples of how this sort of experiential training can be used to enhance the ability of small groups to respond to emergencies, performing on-the-spot rescues and innovative problem solving, and developing the relationships needed for effective collaboration and well-being.

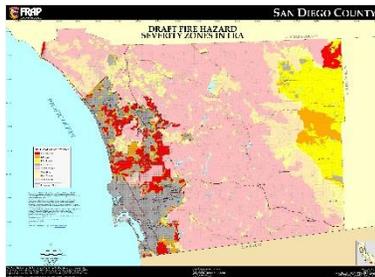
Pre-Hospital  
Medical Casualties



**Timothy Stevens** and **Will Myer** next discussed risks of emergencies in terms of health insecurity, and the special vulnerabilities and educational needs brought about by changing demographics, flood vulnerabilities, and correlations between health problems and poverty. They also discussed how coalitions of health organizations can improve resilience to hospital surge, often a consequence of large scale emergencies. Climate-related disasters are important drivers of hospital surge, and the next speaker, **Linda Kiltz**, provided an overview and led a discussion on how climate change is affecting critical infrastructure and

emergency management, encouraging each participant to consider how their organizations and communities can productively move forward in the face of these threats.

**Doug Buman**, pinch hitting for Tom Stahr of the National Demolition Association (NDA), a key conference sponsor (thanks, NDA!) spoke about the barriers that prevent qualified demolition companies from being used to recover from a disaster. Local regulations and practices related to licensure, use of local contractors, wages, and liability often result in post-disaster demolition being carried out by non-qualified companies. This is an industry-wide problem, and the NDA is working to educate communities and decision makers and reform regulations that ultimately increase costs and hazards associated with post-disaster demolition.

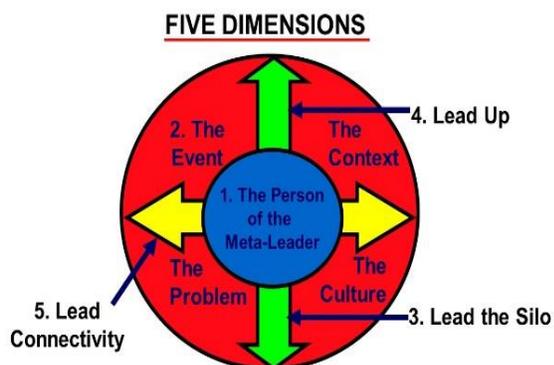


In the next presentation, **John Valencia** and **Mike Scott** presented the results of a project undertaken by the San Diego Urban area to develop a standard approach to digital mapping, making it easier for organizations in their region to share situational information. Although digital mapping is routinely used in every region, this capability is performed using a variety of software packages, making collaboration more difficult.

Finally, we ended the day with a presentation by **Lorraine Churchill**, who described the daunting challenges of emergency preparations for the n2014 G20 Brisbane Summit. While there were of course complexities inherent in this large, media-intensive event, Lorraine emphasized the particular communication challenges brought about by New Zealand's cultural diversity, and differences various stakeholders perceive value.



Wednesday evening afforded conference attendees an opportunity to enjoy another beautiful Portland summer evening. Some of us enjoyed a relaxing dinner cruise along the Willamette River on the *Portland Spirit*!



Thursday, the last day of the conference, opened with a presentation by **Ellis Stanley**, on the key ingredient to resilience – people and their relationships. His insightful model for effective emergency management is founded on **principles**, which provide a communication framework promoting open and cooperative relationships among individuals and agencies. His leadership model orients each leader to his or her context, promoting effective engagement and collaboration within one's own organizations, and with other organizations or "silos".

In the next presentation **Listya Kusumawati** discussed an exciting initiative to improve emergency management in Indonesia. Emergency management in Indonesia is particularly challenging – it is sometimes referred to as a “nature’s laboratory for natural disasters”, and its 250 million people share 1300 islands and 300 ethnicities. Listya and her colleagues are making great strides in unifying and improving emergency response in Indonesia, by creating One Map – synchronizing and harmonizing a geospatial picture across Indonesia, and One Data – standardizing data collection, analysis, and depiction.



For the next presentation, we were pleased to have **Myra T. Lee**, former Oregon Emergency Management Director, provide a valuable historical perspective on the evolution of emergency management as a profession and as state and national agencies. Her work in the field allowed her to share with us insights into the forces that shape agency and profession, even today. The paper sessions were concluded by **Tom Robertson’s** presentation of the Global Educational Network for Emergency Resilience and Training Excellence (GENERATE) initiative, which seeks to make emergency management knowledge, education, and certification more accessible around the world.

The conference wrapped up with a bus tour to Johnston Ridge Observatory (JRO) at Mount St. Helens, the site of a major volcanic eruption in 1980. Through excellent lectures by JRO staff, and some realistic movie depictions of the eruption, we learned details of the surprising and devastating event, which started off with a massive landslide, followed by a lateral blast of gas and debris, then lava flows, huge slurry flows from melted glaciers, and finally volcanic ash dispersed so high in the atmosphere that in two weeks it had circumnavigated the globe!



The TIEMS USA 2015 conference was an excellent follow-up to last year’s establishment of the TIEMS USA Chapter, and a prelude to the TIEMS 2016 Annual Conference, which will be held in the USA. TIEMS wishes to thank conference sponsors, Portland State University and The National Demolition Association, the conference organizers, and especially the speakers and other attendees who made this event such an interesting and enriching opportunity to explore the challenges and opportunities for emergency management in our interconnected world.