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## 2014 Hazus Conference Highlights

On August 4-6, 2014, Hazus users from around the country and abroad came together for the 7<sup>th</sup> Annual Hazus Conference at the Indiana Government Center in Indianapolis, IN. Over the course of three days, attendees learned about the Hazus Modernization effort, Hazus activities occurring throughout the FEMA Regions, and innovative projects applying Hazus to topics such as public health and climate change. In addition to the presentations, the conference provided an avenue for users to meet and discuss their own work and plan future collaborations.



Dave Coats introducing the schedule of events.

Special highlights included a State of Hazus presentation by Hazus Program Manager Eric Berman and a series of three presentations describing upcoming changes to Hazus, led by the Hazus Modernization Project Lead, Doug Bausch, and the Modernization development team. Additional presentations were given by individuals from academia, local governments, FEMA-contracted companies, companies in the emergency management field, and several FEMA Regions.

The Conference also featured a reception at the Indiana War Memorial Museum. Attendees were able to tour the museum and shrine room while discussing all they had learned during the event.



Conference attendees enjoy the reception at the Indiana War Memorial Museum.



Hazus Conference attendees network over refreshments between presentations.

The final day featured a keynote address by the Indiana Geographic Information Officer, Jim Sparks, and a user recognition award ceremony presented by Eric Berman. Congratulations to the following awardees:

**Jan Crider** (Hazus Lifetime Achievement Award)  
**Silvana Croope** (Hazus User of the Year)  
**Zack Baccala** (Hazus Excellence Award)  
**Brandon Chiazza** (Hazus Excellence Award)  
**Dave Coats** (Hazus Excellence Award)  
**Cynthia McCoy** (Hazus Excellence Award)  
**Allison Miskiman** (Hazus Excellence Award)



Jan Crider, Hazus Lifetime Achievement Awardee

Thank you to all participants who attended the 7<sup>th</sup> Annual Hazus Conference and a special thank you to the event host, the Central Hazus User group, event sponsors: Arc Aspicio, Esri, IMPLAN, Atkins, IBM, and The Polis Center and all of the presenters.

Conference proceedings, including copies of the presentations given, are now available at [www.hazusconference.com](http://www.hazusconference.com).

## Upcoming Training

E0190: ArcGIS for  
Emergency Managers  
October 20-23, 2014

E0176: Hazus-MH for  
Floodplain Managers  
November 10-13, 2014

E0172: Hazus-MH for  
Flood  
December 1-4, 2014

To download the course  
schedule and enroll, visit  
[http://training.fema.gov/  
EMICourses](http://training.fema.gov/EMICourses). For updated  
training information visit  
[http://www.fema.gov/  
hazus-training](http://www.fema.gov/hazus-training)

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# Hazus Success Story: Earthquake Analysis in Western Canada

Nicky Hastings, Natural Resources Canada, CanHUG Leader

Over the past six years, Nicky Hastings, a scientist and project manager at Natural Resources Canada and the leader for the Canadian Hazus User Group, has led a team at the forefront of adapting Hazus methodologies for hazard assessment in Canada (Hazus Canada). Her team's efforts help build community resiliency and reduce risks associated with natural disasters.

### Background

Under an agreement with FEMA to adapt the earthquake model for use in Canada, Natural Resources Canada chose North Vancouver, British Columbia as a study region for an earthquake analysis. This area is highly vulnerable to earthquakes due to its close proximity to the Pacific Coast and the Cascadia Subduction Zone, and it exhibits potential site amplification (amplified motion in loose sediment) and liquefaction hazards.



Nicky Hastings presenting her work at the 2014 Hazus Conference in Indianapolis

The Province was recently declared to be unprepared for a significant earthquake event by the Auditor General of British Columbia, making this case study a valuable tool for illustrating how hazard risk assessments can translate and drive mitigation and strategy for governments. It demonstrates the value of building trusting partnerships and engaging municipalities from start to finish in efforts to inform policy makers and prioritize mitigation activities in an opportunistic and achievable manner, rather than with a "doom and gloom" negative perspective.

### Application of the Tool

The research team's assessment considered the hazards that are experienced from earthquakes, including ground shaking, site amplification, liquefaction, and landslides.

The study involved collecting and inputting many datasets from various government agencies and partners, such as community shared parcel data and infrastructure data. Collecting the various datasets required the establishment of strong relationships and articulation of the purpose and need for high quality data to produce a sound and robust risk analysis.

Describing the underlying social vulnerability trends was an important piece in telling the story and providing historical context to why these trends developed over time. Economic prosperity along the coast of Vancouver led to substantial residential and commercial growth in the area. Among the top factors considered in the study's social vulnerability index were: income, language and ethnicity, education, age, family size, mobility, and gender, which were examined alongside building construction type and building codes in the analysis.

### Results and Lessons Learned

To help tell the story, Nicky illustrates the difference between hazard and risk assessments to the community officials. At first municipalities were discouraged and overwhelmed as to how to act; however, walking through the assessment and breaking it down helped paint a picture of how the community can act and prioritize mitigation activities.

The assessment findings were shared with municipal staff and elected officials, and with the public soon thereafter, in an effort to promote community awareness and resilience. Improvements to emergency management capabilities and land use planning are underway through an Earthquake Ready Action Plan that examines the full picture and addresses vulnerability gaps, including "hot spots" for seismic activity.

## 2015 Hazus Conference



The Georgia Hazus User Group will host the 8<sup>th</sup> Annual Hazus Conference in Atlanta, Georgia. The event will continue to bring Hazus users together from around the world to share best practices, discuss recent research, network, and explore potential avenues of collaboration.

To get the latest news about the 2015 Conference, visit [www.hazusconference.com](http://www.hazusconference.com) and stay connected to the Hazus community on [LinkedIn](https://www.linkedin.com) or follow us on Twitter [@HazusCommunity](https://twitter.com/HazusCommunity).