

In this Issue

Hazus Conference 2015

Hazus Earthquake Study in Egypt

Upcoming Calls

User Group calls:

No December Call
January 12, 2016
February 9, 2016
March 8, 2016

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FEMA

Hazus Conference 2015 is Almost Here!

The 8th Annual Hazus User Conference is quickly approaching. It will be held from December 9–11, 2015 in Atlanta, Georgia at the Conference Center of the Centers for Disease Control and Prevention (CDC). This year's theme is "Hazus and the Emergency Management Life Cycle: From Practice to Policy."

The Georgia Hazus User Group (GAHUG) sponsored event brings Hazus users together and provides an information sharing platform for success stories, best practices, lessons learned, recent research, workshops, and discussions on Hazus topics of interest. Check out the [Hazus Conference website](#) for more information.

Registration is free and open to the public, but space is limited to 350 attendees, so be sure to sign up. The deadline for registration is **December 4th, 2015**. If you have any questions, contact the Hazus Outreach team at hazus@arcaspicio.com or the volunteer coordinator, Terry Jackson at ylt8@cdc.gov.

[Register now!](#)

With the deadline for abstracts submissions passed, the conference planning committee is finalizing the agenda. This year's discussions will feature a number of speakers from across the country, including local and state GIS experts, federal Hazus stakeholders, professors and academics, and Hazus users from around the world.



Some of the presenters and topics of discussion will include:

- Janey Camp, PhD, Research Assistant Professor at Vanderbilt University speaking on the "Use of Hazus and Regional Climate Models to Identify Vulnerable Transportation Infrastructure due to Future Extreme Precipitation Events"
- Francisco Dourado, PhD, and Edilberto Nunes de Moura of Brazil and Silvana Croope, PhD, of the Delaware Department of Transportation discussing natural hazard risk assessment in Brazil using Hazus
- Dr. Paula Aguirre of Chile discussing "Iquique: A Study Case for Hazus Implementation in Chile"
- Dr. Shane Parson, a Natural Hazard and Climate Change Modeling Analyst with AECOM, discussing "The 'Flood Risk' Awakens: The Emergence of Hazus within the FEMA NFIP Program."

Check out these and other interesting topics and presenters at the Hazus Conference 2015.

Hazus Adapted for Earthquake Risk Assessment in Egypt

As part of an ongoing partnership with the National Research Institute for Astronomy and Physics in Cairo, Egypt, FEMA Region VIII GIS, and Hazus users have helped members of the Egyptian government understand their earthquake risk. A two

week study was conducted in Cairo between FEMA researchers and local Egyptian emergency managers to help export the Hazus earthquake model for application in Egypt.

Continued on pg. 2...



Upcoming Courses

[E0176: Hazus-MH for Floodplain Managers](#)
December 14-17, 2015

[E0317: Comprehensive Data Management for Hazus-MH](#)
January 4-7, 2016

[E0296: Application of Hazus-MH for Risk Assessment](#)
March 21-24, 2016

Download the course schedule and enroll at the [EMI Courses Page](#)

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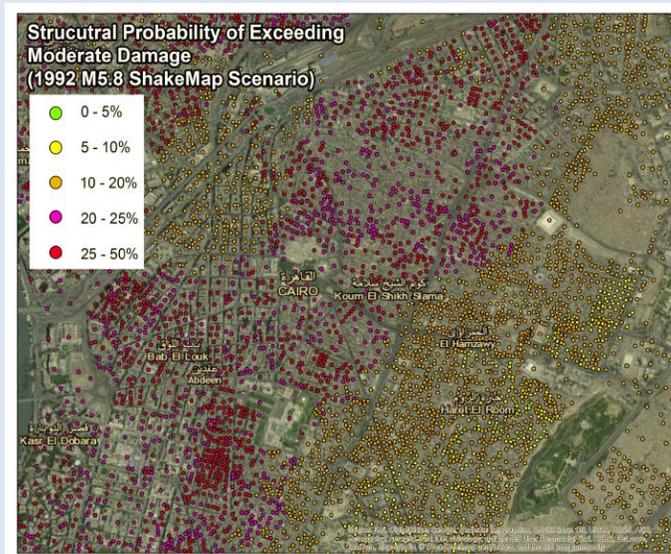
Earthquake Risk Assessment in Egypt, Continued

While Hazus was designed for use within the United States, the software has been adapted overseas, with researchers on six continents already having incorporated it into their mitigation planning processes. As with any of these prior collaborations, the Egypt study started with a Proxy Building Stock and replaced the information with local data. The overall goal was to focus their limited resources toward developing a powerful inventory of data, engineering parameters, and hazard data rather than trying to reinvent the wheel by developing software. Hazus allows researchers overseas to get right into data analysis and modeling, rather than having to duplicate efforts.

The team on the ground put together an international building inventory using Earthquake Engineering Research Institute's (EERI) [World Housing Encyclopedia](#), the Hazus Advanced Engineering Building Module (AEBM) and New Building Type Wizard, which are both included with the program download, the [Comprehensive Data Management System](#) (CDMS), and the [Rapid Observation of Vulnerability and Estimation of Risk](#) (ROVER) data collection tool. They were then able to integrate the data sources using the LANDSCAN 2012 Global Population database for Egypt. From there they completed a vulnerability assessment of the area.

The team spent time during the study looking at the history of Egypt's building codes, categorizing the data and results by the era during which the buildings were constructed. They cross-checked a summary of building type categories with local expertise. The results painted a startling picture of Cairo's earthquake risk after being catalogued with historical earthquake data for the region and tested with Hazus. While collapse rates in the U.S. generally teeter between 3 and 15 percent, those of certain building types in Egypt were as high as 60 percent. This was mainly attributed to a number of unreinforced building types which were used extensively in the pre-code era of Egypt construction.

As a whole, the collaboration effort allowed Egypt's emergency managers to see firsthand what their predicted economic and structural losses would be in a worst case scenario earthquake disaster. FEMA and the Hazus team hope to continue engaging in these types of international collaborations with researchers and planners looking to discover vulnerabilities in their cities. Details regarding this study were presented on the August 2015 [Hazus National Call](#). To get a copy of the slides for the August call or to learn more about this study, please contact the Hazus Outreach Team at hazus@arcaspicio.com.



This map showcases the structural probability of exceeding moderate damage for a Cairo earthquake using a 1992 historical example. For more information on international uses of Hazus or to get in touch with international users, check out the [Hazus User Groups](#) section of the [fema.gov](#) site.