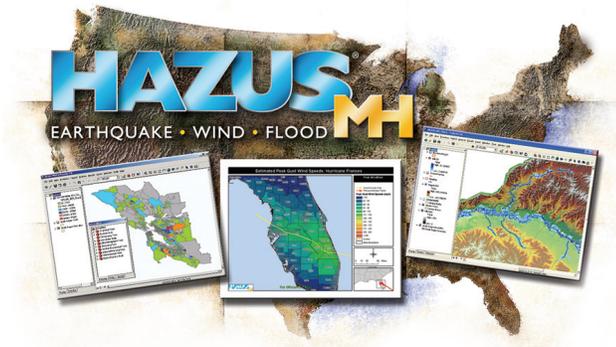


# HAZUS User Groups Success Story

## FEMA Region IV

Strengthens Disaster Preparedness Nationwide by Sharing HAZUS Expertise



### Background

FEMA Region IV is comprised of eight states in the southeast (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee). The Region has been using HAZUS successfully since 2004 in pre- and post-disaster capacities. Joe Rachel, FEMA Region IV, HAZUS Program Manager, formed the FEMA Region IV (Southeast) HAZUS Technical Team. This team is a type of HAZUS User Group combining the expertise of various stakeholders. With Joe Rachel's leadership, the Region has made a commitment to growing and sharing HAZUS capabilities within the Region as well as nationally. Joe Rachel and the HAZUS Technical Team are proponents of HAZUS User Groups nationwide. They supported the formation of the Florida HAZUS User Group and were integral in its success. Recently, the Emergency Management Institute (EMI) and FEMA Region VII looked to the FEMA Region IV HAZUS Technical Team for HAZUS guidance related to disaster exercises.

### Details

#### Hurricane "Alanzo" Exercise at EMI

In January 2008, EMI conducted a four-day, scenario-driven hurricane exercise for a class of about 75 participants. The scenario was a Category 3 early-season hurricane named "Alanzo" which made landfall in Horry County, South Carolina. FEMA Region IV HAZUS Technical Team produced a complete set of maps and reports for the class to analyze. The class participants created sample mitigation plans based on their analysis of the HAZUS reports.

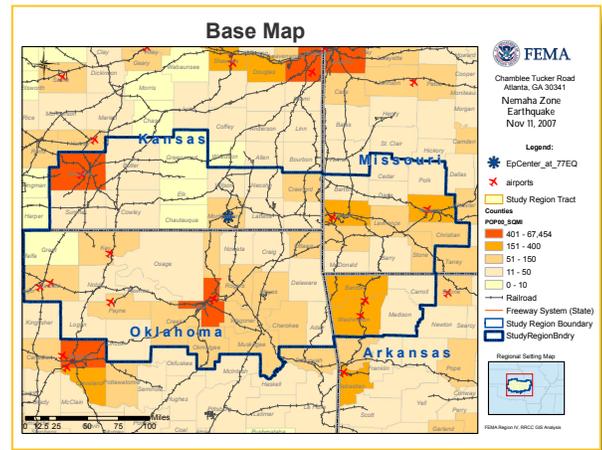
The data Region IV supplied through HAZUS enabled the class participants to evaluate post-landfall flooding levels and peak wind speeds. The Peak Gust Wind Speeds map was especially beneficial: it showed how the wind field greatly exceeded safe building design over broadly populated areas. Those populations had been building to minimum code designs that would not safely withstand the wind speeds shown on the HAZUS map. In addition, the HAZUS maps showing anticipated levels of schools' structural damage enabled the participants to make informed decisions about designating specific schools as shelters. In addition, it was determined which schools needed retrofitting prior to the next hurricane season.

Workshop members used HAZUS to compare projected damage reports to what actually happens in the field, used wireless technology that allowed for even more up-to-the-minute specificity, and discussed how reports might be best structured for optimum effectiveness.



## Four Corners Earthquake Exercise

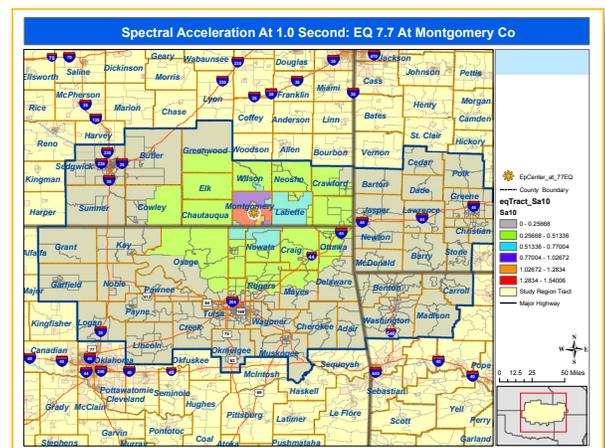
In December 2007, FEMA Region VII contacted Joe Rachel and the HAZUS Technical Team for assistance with HAZUS scenario maps for the Four Corners Earthquake Exercise. The Four Corners represents the area where Missouri, Kansas, Oklahoma, and Arkansas come together. The exercise focused on their shared susceptibility to the Nemaha Ridge Seismic Fault. The Nemaha Ridge Seismic Fault extends 400 miles vertically from southeastern Nebraska and northeastern Kansas through to northern and central Oklahoma. Its last notable earthquake occurred in 1952, causing moderate damage from the El Reno, Oklahoma epicenter, and slight damage in nearby towns.



AJ Lehman, Missouri's Exercise Officer, and Steve Besemer, Earthquake Program Manager, ran the exercise that allowed the four states to collaborate and solve emergency response issues. In order to make the exercise applicable to professionals present from all four states, the epicenter of the earthquake was located in southeast Kansas. The dozen maps and varied reports generated by the FEMA Region IV HAZUS Technical Team using HAZUS for the tabletop exercise allowed each of the four states to identify issues unique to each of them, as well as common areas of concern and how they could collaborate to solve problems. Some top concerns included: mass care, damage assessment, emergency protective actions, and transportation route restoration.

## Benefits

The many benefits of collaboration cannot be underestimated. Thanks to the leadership of Joe Rachel and the FEMA Region IV HAZUS Technical Team in Region IV, two diverse exercises, each examining a different hazard, provided experiential knowledge of the dynamic ways HAZUS software can help develop and refine emergency management plans across the country. According to "FEMA 404: How to Create a HAZUS User Group," HAZUS User Groups include data developers, data manipulators, data interpreters and decision makers. The HAZUS software is a powerful tool, and its power is multiplied when skilled people work together using it.



## Possibilities

FEMA Region IV HAZUS Technical Team will continue to assist HAZUS users in government, private industry, and educational sectors as they aim for the highest levels of preparedness, response, and recovery. The two examples above demonstrate how the FEMA Region IV HAZUS Technical Team provided HAZUS scenarios for disaster exercises which may directly lead to mitigation strategies and increased preparedness for those regions.

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By developing and expanding HAZUS collaboration and HAZUS User Groups and supporting all four levels of HAZUS users, the HAZUS software begins to work at its fullest potential. The commitment and expertise repeatedly demonstrated by Joe Rachel and the FEMA Region IV HAZUS Technical Team continues to multiply the value of HAZUS as it is shared and used across regions.

