



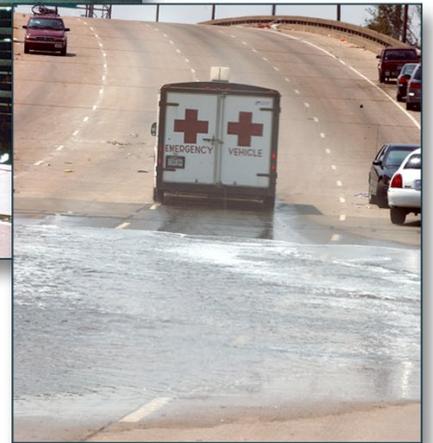
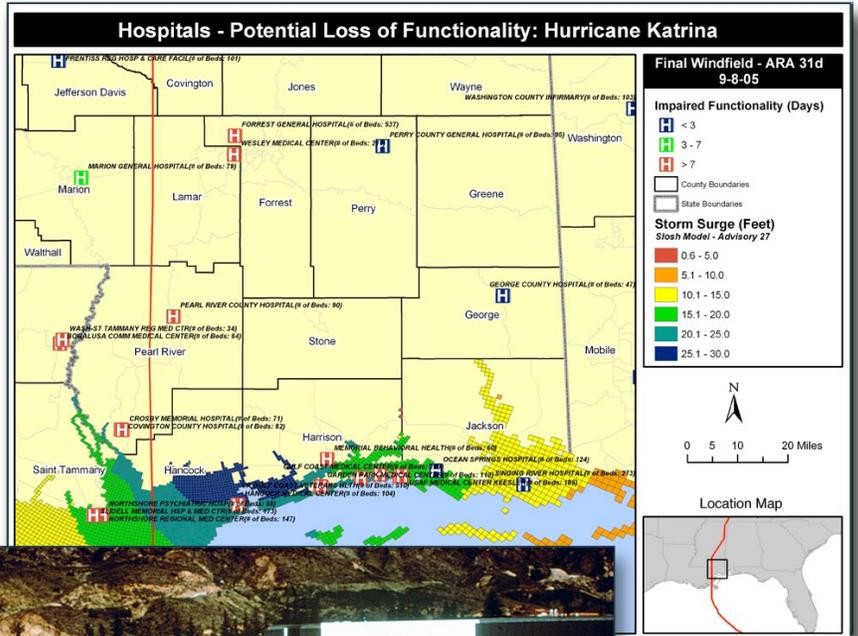
FEMA

HAZUS-MH: Preparedness and Response Planning

Which essential facilities in your region may be impacted by an earthquake?

Will the local hospitals be functional three days after a hurricane?

What routes should emergency vehicles travel to avoid flood waters?



HAZUS-MH has the answers!

HAZUS-MH combines science, engineering and mathematical modeling with GIS technology to estimate losses of life and property. HAZUS-MH estimates impacts to the physical, social and economic vitality of a community from earthquakes, hurricane winds and floods. HAZUS-MH is the tool that state and local governments use in all phases of emergency management planning. HAZUS-MH is used to create customized maps showing hazard risks to decision makers, community leaders and project managers. HAZUS-MH is a modeling tool that provides data to strengthen preparedness and response capabilities by assessing risk and forecasting losses. HAZUS-MH regional loss estimates have been validated and proven to be accurate.

HAZUS-MH Estimates Potential Hurricane Impacts for Preparedness and Response Planning.

Generate HAZUS-MH templates for pre-landfall analysis and decision-making, and for post-landfall analysis of damage and loss due to hurricane winds.

Possible pre-disaster damage analysis templates include:

- Area of projected damage from the effects of hurricanes
- Population at risk from the effects of hurricanes
- Expected damage to essential facilities
- Expected sheltering requirements
- Expected residential damage from the effects of hurricanes
- Amounts of debris generated from hurricane damages

Seamlessly Import Local Data with CDMS!

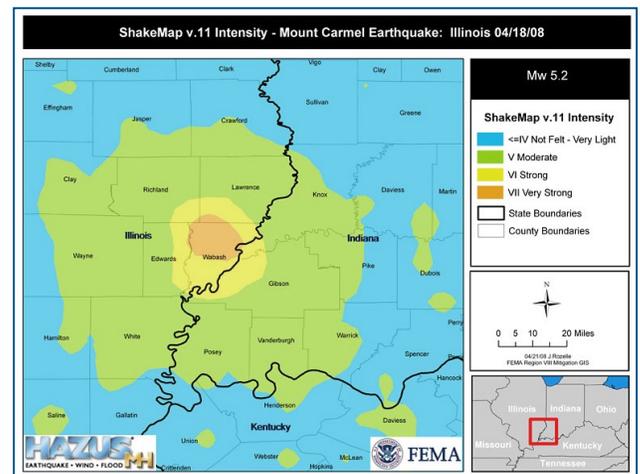
HAZUS' Comprehensive Data Management System (CDMS) enables HAZUS-MH users to import local data for more detailed analyses.

Applications Using HAZUS-MH for Preparedness and Response Planning.

Professionals Using HAZUS-MH	Key HAZUS-MH User Roles	Preparedness and Response Planning Applications
DPW, County Officials, Floodplain Managers, Building Code Officials, Tax Assessors	Data Developer: Collect and contribute data on the project area	Rapid impact assessment, preliminary damage assessment
GIS Professionals and HAZUS-MH Software Users	Data Manipulator: Run HAZUS-MH and compile and use the data collected by the data developers	Map and analyze areas of damage
Engineers, Consultants, Floodplain Managers, Building Code Officials	Data Interpreter: Analyze the results of a HAZUS-MH run	Building stock assessment, soil failures
Risk Managers, Mitigation Planners, Political Leaders, Building Code Officials	Decision Makers: Use the results of a HAZUS-MH run to establish priorities for mitigation projects and response and recovery operations	Post-disaster sheltering requirements

HAZUS-MH Supports Earthquake Operations.

On April 18, 2008, a magnitude 5.2 earthquake occurred in the Wabash Valley Seismic Zone, centered about six miles from Mount Carmel, Illinois and about 131 miles east of St. Louis, according to the U.S. Geological Survey. A team from FEMA Region VIII conducted a HAZUS-MH run to compare observed damages and reported damages. The HAZUS-MH analysis determined that Total Estimated Non-Structural Economic Loss to be approximately \$3.55 million. These estimates compare well with preliminary damage estimates for the two states.



HAZUS-MH Calculates Debris and Commodity Needs for Hurricanes.

Miguel Pavon, a modeler with the Texas Natural Resources Information Service created a spreadsheet that uses HAZUS-MH data to determine debris amounts and commodity needs following a hurricane. By using HAZUS-MH, the State of Texas can calculate hands-on disaster response and recovery information, such as the numbers of trucks needed to remove debris. The spreadsheet methodology combines HAZUS-MH data with a U.S. Army Corps of Engineers program that calculates commodities such as Points of Distribution (PODs), ice (bags), water (bottles), tarps (for temporary roof repair), meals ready to eat (MREs), personnel (for disbursement of supplies), and gallons of fuel needed to supply transportation modes used by people evacuating due to a hurricane. The spreadsheet designed by Mr. Pavon is flexible, user friendly and publicly available.

Maximize your HAZUS-MH results by working in collaboration with other professionals.

Participate in a HAZUS User Group. HAZUS User Groups are partnerships between public and private sector organizations that collaborate on projects, combine resources and share information, data, and tips on using HAZUS-MH. Over twenty HAZUS User Groups operate throughout the United States. Find one in your area by visiting www.fema.gov/plan/prevent/hazus.

Use HAZUS-MH before the next disaster strikes!

Training is widely available at FEMA's Emergency Management Institute, on-line and in the regions.

HAZUS-MH is Free!

Order your copy from FEMA's Publication Warehouse (800) 480-2520 or visit www.fema.gov/plan/prevent/hazus to learn more.

