



FEMA



HAZUS Data Collection: Getting the Best Results

HAZUS combines science, engineering, and mathematical modeling with Geographic Information Systems (GIS) technology to estimate loss of life and property—and shows those losses on a map. HAZUS estimates the physical, social, and economic impacts to a community from earthquakes, hurricane winds, and floods.

Can I Use Local Data in HAZUS?

HAZUS comes pre-loaded with default data so anyone can use HAZUS out of the box and create loss assessments. However, given that local data is typically more accurate, users are encouraged to take advantage of local data whenever possible.

A Thorough Assessment of Your Community's Inventory is Critical to Achieving the Most Accurate Loss Estimations from HAZUS.

Knowing the precise characteristics of the population and structural environment that will be impacted helps planners, emergency managers, and decision makers get the best results and to understand the risk in their communities. For instance, users can load local property assessments into HAZUS, which gets multiplied by structural damage data to produce an accurate loss estimation.



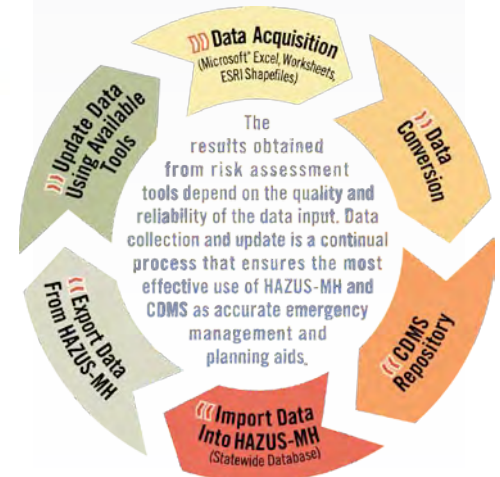
HAZUS Inventory Consists of Two Types of Data

Aggregated Census Block Level Data:

- General building stock (residential, commercial, and industrial—aggregated by square footage)
- Demographic data, which can be aggregated by age, income, sex, households, and other attributes

Site-Specific Data are Point Locations of the Following:

- Essential facilities (police stations, fire stations, emergency operations centers, schools, and medical facilities)
- Lifelines (utilities and transportation)
- High potential loss facilities (hazardous material facilities, dams, and nuclear power facilities)



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CDMS Allows Users to Import Local Data in HAZUS.

The Comprehensive Data Management System (CDMS) Version 2.5 is a complementary tool to HAZUS that gives users the capability to update and manage statewide datasets.

Before CDMS, HAZUS users were required to undertake a large amount of manual effort to incorporate new data into the statewide datasets according to their predefined formats. CDMS greatly simplifies this process so communities can share structure, population, infrastructure and other asset data between emergency managers, State and local decision makers, and private sector entities that participate in Emergency Support Functions.

This ability to integrate local data has also contributed to the strengthening of relationships between the GIS community and emergency managers who are now able to take advantage of the skills offered by GIS experts. CDMS functions as a single user or shared desktop application.

What is the Source of HAZUS' National Datasets?

FEMA has partnered and collaborated with numerous agencies and organizations over many years to make HAZUS one of the Nation's premier hazard loss estimation methodologies. HAZUS includes the following types of data:

- **General Building Stock** – U.S. Census Bureau and Dunn & Bradstreet
- **Essential Facilities** – Medical Care: American Hospital Association (2000); Emergency Response: InfoUSA, Inc. (2001); Schools: National Center for Education Statistics, U.S. Department of Education (2003); Police and Fire Stations: InfoUSA, Inc.
- **High Potential Loss Facilities** – Hazardous materials: Toxic Release Inventory Database, U.S. Environmental Protection Agency (1999); Dams: National Inventory of Dams, United States Army Corps of Engineers (2003); Nuclear Power Facilities: U.S. Nuclear Regulatory Commission (2003)

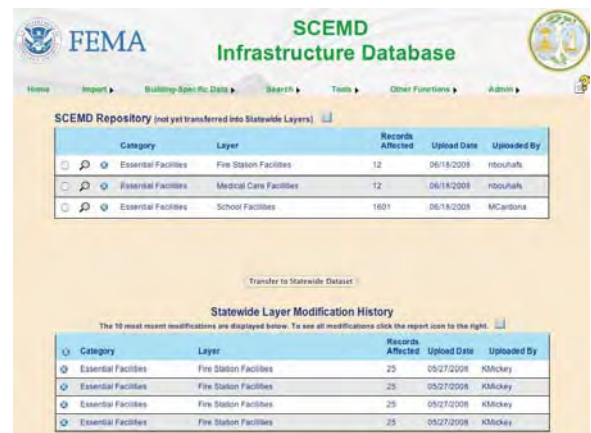
Get Started Today.

FEMA offers numerous courses to help users learn more about HAZUS. For a listing of course descriptions, information on requirements, enrollment, and fees visit: the www.fema.gov/plan/prevent/hazus For program-specific questions, contact Phillip Moore at (301) 447-1248 or Phillip.moore@dhs.gov.

South Carolina and Florida Pioneer the HAZUS CDMS Web Portals.

In 2008 FEMA funded the development of Web portals in South Carolina and Florida so that State and local governments could uniformly share information for a regional view of risk.

The South Carolina Emergency Management Division (SCEMD) asked all 46 counties in the State to update the five essential facilities including emergency operations centers, police stations, fire stations, medical centers, and schools through CDMS. This enabled SCEMD to begin updating the entire HAZUS database to foster a more consistent and accurate HAZUS analysis.



The screenshot shows the SCEMD Infrastructure Database web portal. It features a navigation menu with options like Home, Import, Building-Specific Data, Search, Tools, Other Functions, and Admin. The main content area displays a table titled 'SCEMD Repository (not yet transferred into Statewide Layers)'. Below this is a 'Transfer to Statewide Dataset' button. Further down is a 'Statewide Layer Modification History' table showing the 10 most recent modifications.

Category	Layer	Records Affected	Upload Date	Uploaded By
Essential Facilities	Fire Station Facilities	12	06/18/2008	rtouhahs
Essential Facilities	Medical Care Facilities	12	06/18/2008	rtouhahs
Essential Facilities	School Facilities	1601	06/18/2008	MCarlson

Category	Layer	Records Affected	Upload Date	Uploaded By
Essential Facilities	Fire Station Facilities	25	05/27/2008	KMickey
Essential Facilities	Fire Station Facilities	25	05/27/2008	KMickey
Essential Facilities	Fire Station Facilities	25	05/27/2008	KMickey
Essential Facilities	Fire Station Facilities	25	05/27/2008	KMickey

Florida followed closely behind South Carolina to become the second State to implement the CDMS Web Portal. The Florida Division of Emergency Management (DEM) began to develop an understanding of the CDMS Web Portal, identifying data layers of facilities and systems that could be useful in the statewide inventory so that emergency managers would be able to fully utilize the capabilities of CDMS throughout the State.

Contact your FEMA regional point of contact to learn more about developing a Web portal for your State. For a listing of your State contacts, visit www.fema.gov/plan/prevent/hazus/hz_contacts.

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