



## HIHUG - Hawaii HAZUS Atlas

### Full Mitigation Best Practice Story

#### *State-wide, Hawaii*



**The State of Hawaii** - To help Hawaii’s disaster managers better prepare for and respond to potentially devastating earthquakes, the Pacific Disaster Center (PDC)—in collaboration with Hawaii State Civil Defense and the Hawaii State Earthquake Advisory Committee (HSEAC)—has created the Hawaii HAZUS Atlas (HHA).

The PDC formally unveiled the HHA at the HSEAC-sponsored workshop, Estimated Earthquake Losses for Hawaii County. Over 100 participants attended the event in Hilo, including Hawaii County Mayor Harry Kim. Stakeholders from emergency management and planning communities identified several potential applications of the HHA, ranging from assisting emergency response operations to supporting future exercises.

“HHA is a web-enabled tool that drastically saves time in delivering critical information to disaster managers,” states PDC Chief Scientist Stanley Goosby. “If a large earthquake were to strike Hawaii or Maui County in the middle of the night, emergency personnel would be able to instantly access extremely useful data to help assess impacts and potential losses.”

The HHA is a web-based catalog of 20 “plausible” hypothetical earthquakes based on historical events located in (and around) Maui and Hawaii Counties. The HHA contains loss estimation data and analyses based on HAZUS scenarios. With HHA, communities can use HAZUS results to assist in disaster planning before, during, and after a destructive earthquake.

Prototypes have also been used recently by Hawaii State Civil Defense to support statewide tsunami and earthquake exercises. For the tsunami exercise, the Atlas was used to examine the damage caused by the hypothetical earthquake in Maui and Hawaii Counties.

In case of an actual earthquake in Hawaii or Maui, emergency managers would be able to instantly reference the HHA to assess and visualize a scenario with a similar location and parameters. Simultaneously, HAZUS modelers at the Pacific Disaster Center would run the HAZUS application to produce a near-real time report of the event, including maps and tables.

The HHA application can also assist Hawaii’s decision makers by displaying data to support assessment of whether an earthquake’s damages are feared destructive enough to merit applying for federal assistance.

“HHA is a powerful new risk communication tool,” concludes Andrea Chatman, a geologist and modeling analyst at PDC. “Its detailed analysis of potential casualties’ damage is a tremendous asset for Hawaii’s emergency management planning communities.”

#### Activity/Project Location

Geographical Area: **State-wide**

FEMA Region: **Region IX**

State: **Hawaii**

## Key Activity/Project Information

Sector: **Public**  
Hazard Type: **Earthquake**  
Activity/Project Type: **HAZUS-MH**  
Activity/Project Start Date: **01/2006**  
Activity/Project End Date: **Ongoing**  
Funding Source: **State sources**

## Activity/Project Economic Analysis

Cost: **Amount Not Available**

## Activity/Project Disaster Information

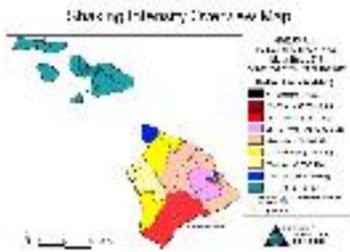
Mitigation Resulted From Federal  
Disaster? **Unknown**  
Value Tested By Disaster? **Unknown**  
Repetitive Loss Property? **Unknown**

## Reference URLs

Reference URL 1: <http://www.pdc.org>  
Reference URL 2: <http://www.hazus.org/HHUG/index.htm>

## Main Points

- To help Hawaii's disaster managers better prepare for and respond to potentially devastating earthquakes, the Pacific Disaster Center (PDC)—in collaboration with Hawaii State Civil Defense and the Hawaii State Earthquake Advisory Committee (HSEAC)—has created the Hawaii HAZUS Atlas (HHA).
- HHA is a web-enabled tool that drastically saves time in delivering critical information to disaster managers.
- If a large earthquake were to strike Hawaii or Maui County in the middle of the night, emergency personnel would be able to instantly access extremely useful data to help assess impacts and potential losses.
- Prototypes have also been used recently by Hawaii State Civil Defense to support statewide tsunami and earthquake exercises.
- In case of an actual earthquake in Hawaii or Maui, emergency managers would be able to instantly reference the HHA to assess and visualize a scenario with a similar location and parameters.



Shaking Intensity Overview Map