



HAZUS User Groups Success Story

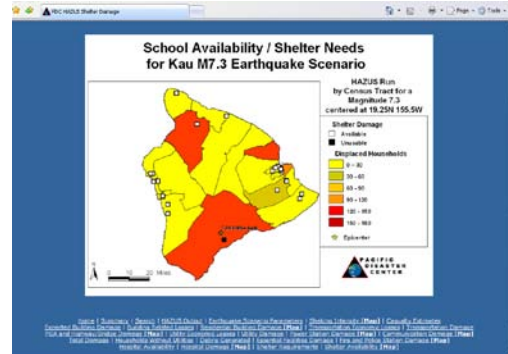
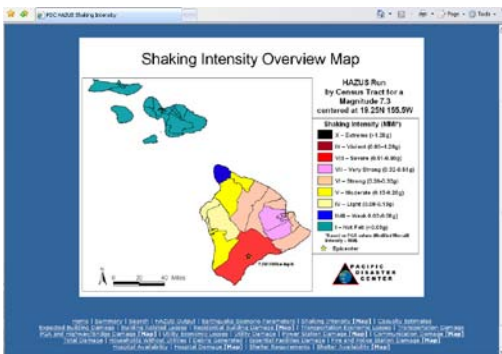
HIHUG

Hawaii HAZUS Atlas

To help Hawaii’s emergency managers better prepare for and respond to potentially devastating earthquakes, Pacific Disaster Center (PDC) – in collaboration with Hawaii State Civil Defense (HSCD) and the Hawaii State Earthquake Advisory Committee (HSEAC) – has developed the **Hawaii HAZUS Atlas (HHA)**.

Background

The Hawaii HAZUS Atlas (www.pdc.org/hha) was developed by Pacific Disaster Center working in close collaboration with Hawaii State Civil Defense (HSCD) and the Hawaii State Earthquake Advisory Committee (HSEAC). The Atlas was designed to provide emergency managers in the State of Hawaii with a better understanding of the potential earthquake risk and expected losses for Maui and Hawaii Counties. With the Atlas, communities can use HAZUS results to assist in disaster planning before, during, and after a destructive earthquake. Pacific Disaster Center is the official HAZUS results provider for the State of Hawaii. HAZUS is run at a Level 2 analysis in the State of Hawaii with Hawaii-specific infrastructure data for Maui and Hawaii Counties.



Hawaii HAZUS Atlas

The Hawaii HAZUS Atlas is a collection of 20 historical or plausible earthquake scenarios located in (and around) Maui and Hawaii Counties. The Atlas contains loss-estimation data and analyses based on HAZUS scenarios. The Atlas automates the 17 page global summary report provided by the HAZUS model into a series of tables in a slide format accessible via the internet. In case of an actual earthquake in Hawaii or Maui Counties, emergency managers would be able to instantly reference the Atlas 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 Atlas 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. The automation of the global report within the Atlas allows for a faster and more reliable method of disseminating real-time damage estimations to decision makers.

The Hawaii HAZUS Atlas has been used successfully to support State-wide tsunami and earthquake exercises. The Atlas was also used by Hawaii emergency management to assist in response efforts following the October 2006 M6.7 Kiholo Bay earthquake, off the coast of the island of Hawaii.

Occupancy Load	Level 1: Minor Injury	Level 2: Hospitalization	Level 3: Critical	Level 4: Death
2:00 AM				
Residential	351-162	87-218	8-19	7-33
Non-Residential	137-29	7-3	8-1	3-2
Commuta	0	0	0	0
TOTAL	366-870	69-226	4-20	7-35
2:00 PM				
Residential	119-306	32-71	1-6	2-11
Non-Residential	662-1722	102-628	16-51	23-34
Commuta	0	0	0	0
TOTAL	782-2,028	182-528	18-57	25-109
5:00 PM				
Residential	161-302	30-54	2-7	3-15
Non-Residential	181-227	44-117	2-13	8-29
Commuta	1-2	1-2	2-4	8-1
TOTAL	327-872	77-222	8-26	11-42

Total Damage in \$
(Millions of Dollars)

HAZUS reports the total economic damages as follows:

Building Losses	1,116 - 2,284
Transportation Losses	81 - 107
Utility Losses	24 - 51
Total Cost	1,222 - 2,421

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Links and Resources:

Hawaii HAZUS Atlas

www.pdc.org/hha

Pacific Disaster Center

www.pdc.org

Hawaii HAZUS User Group

www.hazus.org/HHUG/index.htm