



## HAZUS - The SW Florida Pilot Project

### Full Mitigation Best Practice Story

#### *State-wide, Florida*

**The State of Florida** – The state of Florida is a leader in the use of HAZUS-MH. Interest in HAZUS-MH took off after the 2004 hurricane season, with the model was used by FEMA and the Florida Division of Emergency Management (DEM) for hurricanes Charley, Jeanne, Frances and Ivan.



In the months leading up to the 2004 hurricane season, FEMA Region IV worked closely with Florida DEM to develop Standard Operating Procedures for the use of HAZUS-MH for hurricane impact assessment and disaster response operations.

Three important products emerged from the 2004 hurricane season:

1. HAZUS-MH Standard Operating Procedures for Disaster Operations, which included standardized HAZUS-MH templates,
2. Documentation of lessons learned from the use of HAZUS-MH for response, and;
3. Extensive damage data collection for HAZUS-MH validation studies, which compared HAZUS-MH predicted damages against actual or observed damages.

In the aftermath of Hurricane Charley, the City of Punta Gorda – under the leadership of Rick Burgess, GIS Coordinator – embarked on a major effort to collect building damage data. This project was coordinated with the Charlotte County Long-Term Recovery Planning initiative, and HAZUS-MH.

It was during this collaborative effort that FEMA and Florida DEM – in coordination with the City of Punta Gorda – launched the SW Florida HAZUS Pilot Project in January, 2005, which was guided by four objectives:

1. To develop a technical capacity in SW Florida to effectively use HAZUS-MH to assess potential impacts of hurricanes and floods in support of ongoing planning and hurricane preparedness initiatives.
2. To identify, prioritize, collect and enter data into HAZUS-MH that will enable the state of Florida and participating counties to carry out advanced (Level 2) HAZUS-MH analyses.
3. To promote the use of HAZUS-MH by the State of Florida and SW Florida counties to analyze mitigation options, and to use the analysis in preparation of local mitigation plans and strategies.
4. To promote the use of HAZUS-MH by the State of Florida and SW Florida counties to support pre-and post-disaster planning for response and recovery.

The SW Florida HAZUS Pilot Project accomplished these objectives. More specifically, the project brought together GIS professionals and emergency managers from eight SW Florida counties, FEMA and the State to focus on HAZUS-MH and potential applications, and resulted in the formation of three work groups: Mitigation and Recovery, Data Acquisition and Stewardship, and Preparedness and Response.

In addition, the SW Florida HAZUS Pilot Project put the spotlight on HAZUS-MH in Florida, laying the groundwork for the formation of the Florida HAZUS Users Group (FLHUG).

One of the more innovative initiatives under the SW Florida project was a partnership effort with FEMA and Florida DEM to develop the HAZUS-MH Map Series. The idea was simple. Develop a HAZUS-MH template that could be used to depict a range of model outputs and potential applications of those outputs.

For each map-based template, the following information was compiled: 1) HAZUS-MH map; 2) Data and Analysis Displayed; and 3) Potential Uses, organized by pre-disaster uses and post-disaster uses of the analysis.

The SW Florida HAZUS-MH Pilot Project ultimately brought together representatives from eight SW Florida counties, FEMA, Coastal Services Center (NOAA), Southwest Florida Regional Planning Council, Institute for Business and Home Safety, and several local consulting firms. These organizations have all become active in the Florida HAZUS User Group (FLHUG).

#### Activity/Project Location

Geographical Area: **State-wide**

FEMA Region: **Region IV**

State: **Florida**

#### Key Activity/Project Information

Sector: **Public/Private Partnership**

Hazard Type: **Severe Storm; Flooding; Hurricane/Tropical Storm; Coastal Storm**

Activity/Project Type: **HAZUS-MH**

Activity/Project Start Date: **07/2004**

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? **No**

Value Tested By Disaster? **Unknown**

Repetitive Loss Property? **Unknown**

#### Reference URLs

Reference URL 1: [http://www.fema.gov/plan/prevent/hazus/hz\\_esf14.shtm](http://www.fema.gov/plan/prevent/hazus/hz_esf14.shtm)

Reference URL 2: <http://flhug.hazus.org/>

## Main Points

- In the months leading up to the 2004 hurricane season, the Standard Operating Procedures for the use of HAZUS-MH for hurricane impact assessment and disaster response operations was developed.
- In the aftermath of Hurricane Charley, the City of Punta Gorda embarked on an effort to collect building damage data.
- It was during this collaborative effort that FEMA, Florida DEM , and the City of Punta Gorda launched the SW Florida HAZUS Pilot Project guided by four objectives.
- The SW Florida HAZUS Pilot Project accomplished these objectives.
- The project brought together GIS professionals and emergency managers from eight SW Florida counties, FEMA and the State to focus on HAZUS-MH and potential applications, and resulted in the formation of three work groups.
- The SW Florida HAZUS Pilot Project put the spotlight on HAZUS-MH in Florida, laying the groundwork for the formation of FLHUG.
- The SW Florida HAZUS-MH Pilot Project ultimately brought together representatives from eight SW Florida counties, FEMA, Coastal Services Center (NOAA), Southwest Florida Regional Planning Council, Institute for Business and Home Safety, and several local consulting firms.