Central HAZUS-MH Users Group Best Practice Series
FEMA REGION V

HAZUS-MH Project Documentation

Purpose

The HAZUS-MH user community strives to create projects that are based on credible scientific analysis of hazards. Part of the process of establishing credibility is proper documentation of the processes used and assumptions made with regard to a project. This document is intended to provide guidance to HAZUS-MH users that will assist them with properly documenting a HAZUS-MH project.

Disclaimer: The model referenced in this document does not replace or supercede any Flood Insurance Rate (FIRM) Maps or any other official document or product generated to meet the requirements of any state, federal, or local program. It is intended for planning purposes only.

Part I: Project Background

Which version of HAZUS-MH and ArcGIS was used? Be sure to include any patches that may have been installed.

> *Example:*
> *HAZUS-MH MR2 Service Pack 2*
> *ArcGIS 9.1 Service Pack 2*

Describe the purpose of the project (For example, was the HAZUS-MH project designed to address a regional/local need and/or it was part of a risk assessment):

> *Example:*
> *This project was completed to address a need to prepare a loss estimation for the community of Anycommunity, USA.*

Describe the project team including organization names. You may also want to include the names of key project staff:

> *Example:*
> *John Smith, Project Lead, Somewhere County, USA*
> *Jenny Smith, Technical Review Committee Chair, Somewhere County, USA*
> *Joe Johnson, Structural Engineer, FloodCompany*

Describe the project duration:

> *Example*
> *February thru May, 2007*

Part II: Inventory

If improvements were made in the HAZUS-MH provided inventory, provide the following information:

What inventory was updated? Include details of the updates to include the specific attributes that were updated as well as the source of the updates.

> *Example:*
> *The HAZUS-MH provided fire station inventory was updated for this study. Specific elements that were updated for the fire station inventory included geographic location, design level, and replacement cost. HAZUS-MH default values were applied for all other attributes. As part of the update process, new fire stations were added, fire stations that no longer existed were deleted, and incorrectly located fire stations were moved to the proper location.*
>
> *The inventory update source was the Anycommunity, USA county GIS system as well as input from the Anycommunity, USA County Fire Department.*

Provide any assumptions made during the course of updating attribute data. For example, if a value was applied to an entire field – as opposed to updating the attributes on a record by record basis, what criteria were chosen to determine the value?

> *Example:*
> *We applied a design level value of 2 (1950-1970) to all fire stations rather than using the default value of 0 (unknown). This, we believe, is a more accurate reflection of the fire stations in our community.*

Part III: Hazard

What criteria were used to identify the hazard to be used in the analysis?

> *Example:*
> *The objective of this project was to conduct a localized flood analysis. A level 1 approach in HAZUS-MH is generally most appropriate for a regional loss estimation. The level of accuracy sought for this project from such an analysis was not deemed acceptable. Therefore, it was decided that information from a local flood study would be*

Was any user developed hazard data included in the analysis? If yes, specify the source of the data and the process by which it was developed. For example, if you utilized a flood depth grid created with a model other than HAZUS-MH, specify the model from which the flood depth grid was produced as well as any important assumptions made with regard to that model.

Example:
This project used data created as part of the Anycommunity, USA flood study that generated a flood inundation map for a 100 year flood. This study produced the input required to use the HAZUS-MH Flood Information Tool. Specifically, these inputs included cross sections attributed with flood surface elevations, a digital elevation model with 10 foot resolution, and a flood extent boundary.

Part IV: Analysis Parameters

Did you modify any of the default HAZUS-MH analysis parameters? If no, proceed to Part V of this document. If yes, answer the next two questions.

What parameters did you modify and what was the justification for the change?

Example:
Damage curves for single family residential housing were inappropriate for long duration flooding events. The damage curves for single family residential housing were modified to reflect long duration flooding.

Indicate whether modifications were based on expert input and, if possible, identify the source of the input.

Example:
Input for damage curve modification was obtained from John Smith, Senior Hydraulic Engineer, TheBestFloodFirm, 999.999.9999. www.thebestfloodfirm.com.

Part V: Dissemination Policy

What policies or conditions are associated with dissemination of information created as part of the project?

> *Example:*
> *The output generated by the project is intended for internal use only.*

Who is the contact person for the project?   Include complete contact information.

> *Example:*
> *John Smith, Mitigation Director*
> *State Emergency Management Agency*
> *100 USA Highway*
> *Somewhere, USA 9999*
> *999.999.0000*
> *jsmith@hereIam.gov*