

FEMA's Flood Assessment Structure Tool (FAST)

An open source tool to rapidly analyze structure-level flood risk

The Hazus Program designed FAST to make flood risk assessments quicker, simpler, and more cost effective. FAST provides planners, analysts and policymakers with a free and user-friendly tool to characterize flood risk in their communities using completely open methods and technology. FAST will help drive strategic risk reduction initiatives across the U.S. by making flood risk assessments more accessible.





Case Study: NYC Hazard Mitigation Plan

New York City's recent hazard mitigation plan update required a citywide multi-hazard risk assessment. Hazus FAST was used to calculate 100year flood losses at 800,000 structures across NYC in 8 seconds. Results from this risk analysis are helping NYC planners strategically distribute risk reduction efforts to high-risk neighborhoods.



How it works

Free & Open Source Python

Structure-Specific

- Supply a table of structures and a flood depth grid
- Economic losses from flooding are calculated at each structure using Hazus depth damage functions – read about the methodology <u>here!</u>
- No mapping or coding skills required
- Analyzes 10,000 structures per second!
- Built using HazPy, a completely free and open risk analysis library available on Anaconda and <u>GitHub</u>

