



Cook County Multi-Jurisdictional All Hazards Mitigation Plan

Information Bulletin #7

Risk Assessment

Mission Statement

Identify risks and sustainable cost-effective actions to mitigate the impact of natural hazards in order to protect the life, health, safety, welfare, and economy of the communities of Cook County.

What Is Risk?

Risk is the possibility of experiencing some kind of loss or injury. Natural hazards, such as those being investigated for the Cook County All Hazards Mitigation Plan (see the list at right), create risk because they can cause damage to manmade features (such as buildings and roads) or natural elements (such as trees).

Any feature that might experience a natural hazard is said to be **exposed** to that hazard; those that are likely to suffer loss or injury due to the hazard are said to be **vulnerable** to the hazard.

Exposed features are vulnerable to hazards to varying degrees. Individuals, families, businesses and governments all have the ability to take steps to reduce their potential losses or injuries, thereby reducing their risks.

What Is a Risk Assessment?

A risk assessment for a hazard mitigation plan is a process to identify potential hazards and analyze what could happen if they occur. Risk assessment for the Cook County HMP consists of five steps: locating the hazards; creating inventories of buildings, infrastructure (such as roads and utilities) and critical areas; assessing the exposure of the inventoried buildings, infrastructure and critical areas; developing disaster scenarios or vulnerability assessments; and suggesting risk reduction measures.

Federal regulations require hazard mitigation plans to provide information on natural hazards and to analyze vulnerability to those hazards. For multi-jurisdictional plans, such as the Cook County HMP, the risk assessment must assess the risk from each hazard of concern to each participating jurisdiction, as well as to the county as a whole. The Cook County HMP will use powerful risk assessment software to analyze each natural hazard and the areas that each is likely to affect.

Cook County HMP Natural Hazards of Concern

Flood (Riverine & Urban)
Earthquake
Tornado
Severe Weather (Heat, Wind, Hail, Lightning)
Severe Winter Weather (Snow, Ice)
Drought
Dam/Levee Failure

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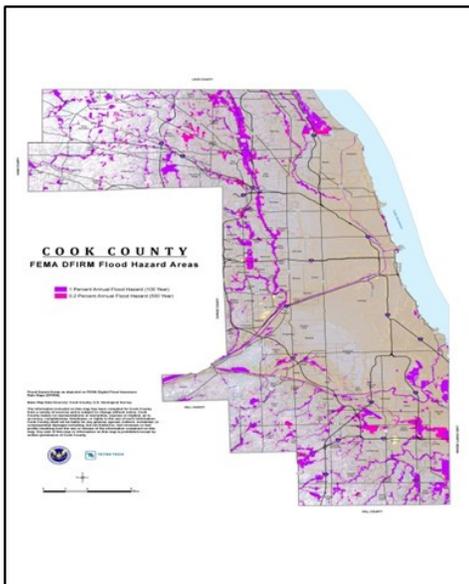
www.surveymonkey.com/s/CookCountyHazMit

Or use the camera on
your phone or tablet to
scan the code at right.



How Will the HMP Present the Risk Assessment?

To meet federal requirements, the HMP must describe the geographic area where each natural hazard can occur, as well as its potential magnitude or severity. The HMP also has to list previous occurrences of each natural hazard, with information on property damage, injuries or deaths and, where available, the costs of recovery from the event. The plan also must describe probability of future occurrences.



Although not required by federal regulations, the Cook County HMP will include risk assessment maps for each natural hazard. The maps will show the areas most likely to be affected by the natural hazards, which will enhance the understanding of the risk assessment information.

Some natural hazards, such as tornados and severe weather, do not occur within defined areas. Maps will be created for these hazards that show where they have occurred in the past. Other natural hazards, such as riverine flooding, occur in more predictable geographic areas and maps can be created showing the areas likely to see flooding in the future, based upon the severity of the storm. Maps showing annual average maximum and minimum temperatures and average annual precipitation will also be provided.

How Do We Reduce Our Risk from Natural Hazards?

The risk assessment will provide information that participating jurisdictions can use to develop the most effective strategies for reducing their community's risks from natural hazards. These strategies fall into four general categories:

- Manipulate the hazard (e.g., construction of structural measures to control flooding)
- Reduce exposure (e.g., public acquisition of at-risk property)
- Reduce vulnerability (e.g., retrofitting of exposed structures)
- Increase capability (e.g., technical assistance or planning).



For more information visit our website:
www.cookcountyhomelandsecurity.org/hazard-mitigation-plan

For more information about this process and the plan, please contact:

- ◆ Rob Flaner, Tetra Tech HMP Lead, (208) 939-4391 or rob.flaner@tetrattech.com
- ◆ Sandy Anagnostopoulos, Tetra Tech Planner, (312) 201-7759 or sandy.anagnostopoulos@tetrattech.com
- ◆ Gene Ryan, Cook County DHSEM, (312) 603-8547 or gene.ryan@cookcountyil.gov
- ◆ Dana Curtiss, Cook County DHSEM, (312) 603-8191 or dana.curtiss@cookcountyil.gov
- ◆ Susie Park, Cook County DHSEM, (312) 603-8177 or susie.park@cookcountyil.gov