

RESOLUTION R2008-02

Whereas, DeKalb County is subject to natural hazards such as floods, tornadoes, earthquakes and severe winter and summer storms, and

Whereas, the County of DeKalb did apply for and receive a grant from the Illinois Emergency Management Agency (IEMA) to develop a county-wide plan to mitigate natural hazards, and

Whereas, Federal Programs including, but not limited to, 44CFR Part 201- Mitigation Planning, Interim Final Rule, in accordance with the Stafford Act (42 U.S.C. 5165), and 44 CFR Part 78.5 – Flood Mitigation Plan Development, in accordance with the National Flood Insurance Act of 1968 (42 U.S.C. 4104c et seq) require that DeKalb County and any of its cities, towns, townships and villages have an adopted natural hazard mitigation plan to qualify for their benefits, and

Whereas, the DeKalb County Board did, on September 20, 2006, adopt Resolutions 2006-53 and 2006-54 agreeing to participate in this planning process and appointing a Hazard Mitigation Planning Committee, and

Whereas, the DeKalb County Hazard Mitigation Planning Committee that consisted of representatives of many of the cities, towns, townships and villages of DeKalb County as well as other stakeholders and citizens worked throughout 2007 with the County's consultant (Molly O'Toole of O'Toole and Associates) to develop the DeKalb County Hazard Mitigation Plan that is attached to this Resolution and hereby incorporated by reference, and

Whereas, this Plan has been reviewed and accepted by the Illinois Emergency Management Agency (IEMA) and the Federal Emergency Management Agency (FEMA) and is recommended to the DeKalb County Board by the DeKalb County Hazard Mitigation Planning Committee.

NOW, THEREFORE BE IT RESOLVED that the DeKalb County Board does concur in the findings and recommendations of the DeKalb County Hazard Mitigation Planning Committee and does hereby adopt the attached Hazard Mitigation Plan for DeKalb County in the interest of further promoting the health, safety and welfare of the citizens of DeKalb County, and

Be it further resolved that the DeKalb County Hazard Mitigation Committee, created by County Board Resolution R2006-53 is hereby established as a permanent advisory body.

PASSED AT SYCAMORE ILLINOIS THIS 16TH DAY OF JANUARY 2008 A.D.

ATTEST:

SIGNED:

Sharon L. Holmes
County Clerk

Ruth Anne Tobias
County Board Chairman



DeKalb County All Hazards Mitigation Plan

Including:

Town of Cortland
City of DeKalb
Village of Hinckley
Village of Kingston
Village of Kirkland
Village of Lee
Village of Malta
Village of Somonauk
City of Sycamore
Village of Waterman
Kishwaukee College
Northern Illinois University
DeKalb County School Districts
DeKalb County Townships

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**DeKalb County Hazard Mitigation
Planning Committee**

January 2008



This *All Hazards Mitigation Plan* was prepared with the technical support of Molly O'Toole & Associates, Ltd., 450 S. Stewart Avenue, Lombard, IL 60148-2851, OToole450@aol.com. Traci Lemay also contributed to the development and writing of the *Plan* as an intern from the Federal Emergency Management Agency's Emergency Management Institute.

DeKalb County All Hazards Mitigation Plan

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Executive Summary

DeKalb County is subject to natural and manmade hazards. Severe storms and flooding impacted the County in 1973, 1974, 1996 and 2007, and caused substantial property damage. A blizzard struck in 1979. A microburst in 1998 seriously injured 20 people. The *DeKalb County All Hazards Mitigation Plan* identifies activities that can be undertaken by both the public and the private sectors to reduce safety hazards, health hazards, and property damage caused by natural and manmade hazards. The *Plan* focuses on the six major natural hazards facing DeKalb County:

- Severe winter storms
- Severe summer storms
- Extreme cold events
- Extreme heat events
- Tornadoes
- Floods

And four manmade hazards:

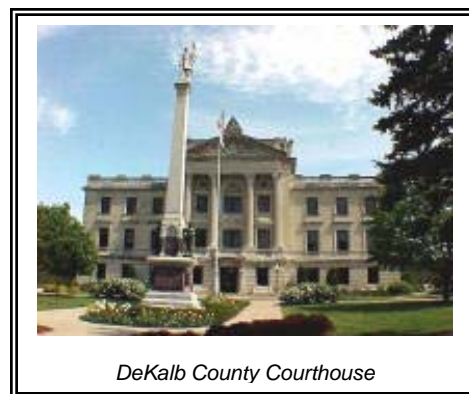
- Radiological release incidents
- Utility interruption
- Transportation related incidents
- Hazardous material incidents (HazMat)

This *Plan* fulfills the federal mitigation planning requirements, and provides the County and its municipalities and institutions with a blueprint for reducing the impacts of these natural and manmade hazards on people and property. This *Plan* meets the requirements for federal mitigation funds, according to Section 104 of the Disaster Mitigation Act of 2000 (42 USC 5165) and 44 CFR (Code of Federal Regulations) Part 201 for funding under the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation Program and the Hazard Mitigation Grant Program. This *Plan* also meets the requirements of Stafford Act (42 USC 5165) and 44 CFR Part 78.5 for FEMA's Flood Mitigation Assistance Program.

This *Plan* was prepared by the DeKalb County Hazards Mitigation Planning Committee, created by a resolution of the DeKalb County Board on September 20, 2006. The Committee's members include representatives of County offices, interested municipalities, educational institutions, and public and private stakeholder organizations.

DeKalb County and the natural and manmade hazards that can impact the County have been assessed in Chapters 1 through 3. Goals and guidelines established by the Committee are the focus of Chapter 4. Six mitigation strategies are the subjects of Chapters 5 through 10 in this *Plan*:

- Preventive
- Property protection
- Resource protection
- Emergency services
- Structural projects
- Public information



Chapter 11 presents the Action Plan for implementation of this *Plan*. The Action Plan also includes items for plan maintenance.

1. Introduction

DeKalb County is located in northern Illinois. The County Seat is Sycamore, Illinois, which is located approximately 50 miles west of Chicago. DeKalb County is 18 miles wide (east to west) and 36 miles long (north to south), and covers approximately 634 square miles. DeKalb County is comprised of 14 municipalities and 19 townships.

In 2000, DeKalb County had a population of 88,969, which was a decrease of 14 percent from the 1990 census. The 2005 population estimate was 97,635, which represents a growth of 9.7 percent. The 2000 census estimates that there are approximately 33,000 housing units in DeKalb County. The labor force is about 54,000 people and the college and university enrollment is over 36,000.

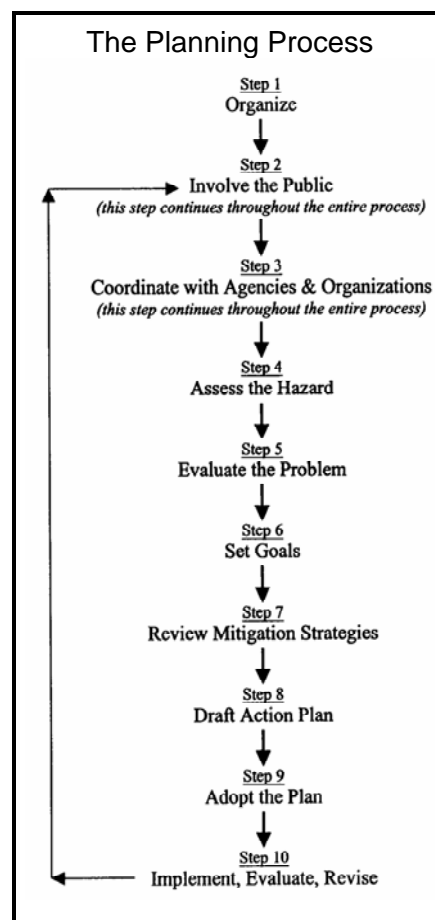
The Hazard Mitigation Planning Committee followed a standard 10-step process, based on guidance and requirements of the Federal Emergency Management Agency (FEMA). The Committee met eight times from November 2006 through October 2007. It reviewed the hazards and their effects on people and property, considered a variety of ways to reduce and prevent damage, and recommended the most appropriate and feasible measures for implementation. Existing plans and programs were reviewed during the planning process. This *Plan* does not replace other planning efforts within the County or communities; this *Plan* complements those efforts.

The public was invited to participate through several concurrent means, including contact with Committee members and their organizations, press releases provided to local newspapers, advertisement of Committee meetings and posting of meeting minutes on DeKalb County's website. A public meeting was held on November 13, 2007 at the DeKalb County Gathertorium.

DeKalb County critical facilities have been identified in this *Plan* and categorized as hazardous materials sites, health facilities (hospitals and nursing homes), emergency response facilities (police and fire stations, public works sites), utilities, schools, places of assembly, and bridges. Table 1-4 in Chapter 1 summarizes the County's critical facilities.

2. Hazard Analysis

The Committee reviewed a wide range of natural and manmade hazards, and evaluated them based on what causes them, their likelihood of occurring, and their impact on



people, animals, property, critical facilities, and the local economy. The information was based on available technical studies, reports by the participating agencies and communities on their past experiences.

Natural hazards were prioritized as severe winter storms, severe summer storms, extreme cold events, extreme heat events, tornadoes, and floods. Manmade hazards were prioritized as radiological release incidents, utility interruptions, transportation incidents, and HazMat incidents. The following table is from Chapter 2 and summarizes the natural and manmade hazards that are the focus of this *Plan*:

DeKalb County Summary of Hazard Probability

	Annual Chance	Impact Location	Square miles Affected	Safety Assessment
Natural Hazards:				
Severe Winter Storms	100%	Countywide	636	Medium
Severe Summer Storms	100%	Countywide	10	High
Extreme Cold	20%	Countywide	636	High
Extreme Heat	10%	Countywide	636	High
Tornadoes	40%	Countywide	636	High
	0.001%	Single Location	1	High
Floods	1%	Floodplains	(Floodplain)	Medium
Manmade Hazards:				
Radiological Incident	---	Region of County	50	High
Utility Interruption - Electrical	---	Region of County	200	Low
Utility Interruption - Communications	---	Region of County	200	Low
Utility Interruption – Natural Gas	---	Region of County	200	Medium
Transportation Incident – Air	---	Single Location	1	Medium
Transportation Incident – Rail	---	Single Location	1	Low
Transportation Incident – Truck	---	Single Location	1	Low
Hazard Material Incident	---	Single Location	1	High

3. Hazard Vulnerability Assessment

The vulnerability assessment estimates the past and future hazard impacts, in terms of people and costs in DeKalb County. Impacts are summarized as damage to buildings, damage to critical facilities, health and safety, and economic impact (damage to businesses and infrastructure).

4. Goals

The Committee established the following hazard mitigation goals and guidelines for the planning process:

The overall direction of this *Plan* can be summarized under the six goals established in Chapter 4:

- Goal 1. Protect the lives, health, and safety of the people and animals of DeKalb County from the impact and effects of natural and manmade hazards.
- Goal 2. Protect public services and critical facilities from loss of use during, and potential damage from, natural and manmade hazard events.
- Goal 3. Mitigate to protect against economic and transportation losses due to natural and manmade hazards.
- Goal 4. Ensure that new developments do not create new exposures to damage from natural and manmade hazards.
- Goal 5. Identify specific projects to protect lives and mitigate damage where cost-effective and affordable.
- Goal 6. Protect historic, cultural, and natural resources from the effects of natural and manmade hazards.

The seven guidelines from Chapter 4 set the direction or the strategy for the mitigation activities developed or recommended in Chapters 5 through 10. The guidelines also set the direction for the action items in this Chapter.

- Guideline 1. Focus natural hazards mitigation efforts on severe winter storms, severe summer storms, extreme cold and heat events, tornadoes, and floods.
- Guideline 2. Focus manmade hazard mitigation efforts on radiological release incidents, utility disruption, and transportation related incidents.
- Guideline 3. Make people aware of the hazards they face and focus mitigation efforts on measures that allow property owners, service providers, and pet owners to help themselves.
- Guideline 4. Create and foster public-private partnerships to accomplish mitigation activities.
- Guideline 5. Seek state, and federal support for mitigation efforts.
- Guideline 6. Use available local funds, when necessary, to protect the public services, critical facilities, lives, health, and safety from natural and manmade hazards.
- Guideline 7. Strive to improve and expand business, infrastructure, education and housing opportunities in DeKalb County in conjunction with planned mitigation efforts.

5. Preventive Measures

The Committee reviewed a variety of mitigation measures to protect new construction from hazards and see that future development does not increase potential losses. It was concluded that all communities should, if not already, adopt the International Building Codes. Land use plans, zoning ordinances and subdivision standards could better address natural hazards.

6. Property Protection

Property protection measures are used to modify buildings or property subject to damage. Most measures are implemented by the property owners, so appropriate government activities include public information, technical assistance and financial support. Special attention should be given to repetitively flooded areas, including areas impacted by the August 2007 flood event, and safe rooms for tornadoes.

7. Structural Projects

The Committee recommended that the County continue its efforts in the development of the countywide stormwater management program. The Committee recommended setting criteria to ensure structural flood control projects do not adversely affect other properties or natural functions. It also recommended each community establish a formal and regular of drainage system maintenance program, and that the siltation of the South Branch and East Branch of the Kishwaukee River be addressed.

8. Resource Protection

Resource protection activities are generally aimed at preserving (or in some cases restoring) natural areas. They include preserving wetlands and farmland, erosion and sedimentation control, preventing dumping in streams and urban forestry. Urban forestry programs are encouraged to protect utility lines during wind and ice storms.

9. Emergency Services

Emergency services include threat recognition, warning, response, and recovery. The Committee recommended making effective use of the County's GIS capabilities to better prepare for natural and manmade incidents. Outdoor warning systems are limited in the County and should be improved. The Committee also recommended additional training for NIMS and emergency response.

10. Public Information

Public information is important for mitigation of all natural and manmade hazards. The Committee identified numerous subject areas that would benefit from a public information program. The Committee reviewed outreach projects, providing background information to libraries and on websites, and providing technical assistance. Top messages to convey were identified along with the types of media that should be used to convey those messages.

11. Action Plan

After a review of the recommendations from Chapters 5 through 10, the Committee created an "Action Plan" that specifies recommended projects, who is responsible for implementing them, and when they are to be done. The Action Plan is included in Chapter 11 of this *All Hazards Mitigation Plan*. A table summarizing the action items and the responsible agencies is presented on page ES-7.

There are 22 action items. The first three action items are administrative in nature, but very important for the continued success of hazard mitigation in DeKalb County. These items call for the formal adoption of this *Plan*, the conversion of the Hazards Mitigation

Planning Committee to a permanent advisory body, and plan maintenance procedures. Formal adoption ensures that County and municipal staffs are authorized and instructed to implement the action items. Adoption is also a requirement for recognition of the *Plan* by mitigation funding programs. The Committee will provide the mechanism and a vehicle for the *Plan* to be implemented, monitored, evaluated and updated. The Committee will provide a means for continued public involvement. The Committee will report to the County Board annually, and a five year update to the *Plan* is required for FEMA's mitigation funding programs.

Fourteen of the action items are mitigation program items. Most require staff time of the County and municipal staff. About eight of the action items identify funding needed from state and federal mitigation agencies.

Five of the 22 action items are public information activities. These items are aimed directly at the Committee established planning guideline to make people aware of the hazards that they face.

Plan Adoption

This *Plan* serves to recommend mitigation measures. Implementation of these recommendations depends on adoption of this *Plan* by the DeKalb County Board and the city council or board of trustees of each participating municipality and institution. It also depends on the cooperation and support of the offices designated as responsible for each action item.

Formal adoption of the *Plan* ensures that County, municipal and institution staffs are authorized and instructed to implement the action items, as resources become available. Adoption is also a requirement for recognition of the *Plan* by mitigation funding programs.

The County and participating communities and schools should adopt this *DeKalb County All Hazards Mitigation Plan* by passing a resolution. The County's resolution creates the permanent Mitigation Planning Committee. The municipal resolutions adopt each action item that is pertinent to the community and assigns a person responsible for it.

Action Items, Responsible Agencies and Deadlines

	Administrative			Mitigation Program														Public Information				
Responsible Agency	1. Plan Adoption	2. Hazard Mitigation Planning Committee	3. Plan Maintenance and Monitoring	4. Building Code Improvements	5. Critical Facility Design with All Hazards Protection	6. Mapping of Hazards	7. Mitigation for Floodplain Properties and Critical Facilities	8. Property Protection Checklist	9. Include the All Hazards Plan into Other Plans	10. Grant Funding for Safe Rooms	11. Watershed Studies	12. Structural Flood Control Projects	13. Drainage System Maintenance	14. Participation in StormReady	15. NOAA Weather Radios	16. Improved Threat Recognition	17. Improved Emergency Response	18. Information for Floodplain Property Owners	19. Educate Property Owners on Safe Roads	20. Public Information - Hazard Mitigation Materials	21. Public Information - Outreach Projects	22. Property Protection References
Hazard Mitigation Committee			X					X										X	X	X	X	X
DeKalb County																						
County Board	X								X	X												
Administrator		X	X						X											X	X	X
ESDA		X	X		X		X	X	X					X	X	X			X	X	X	X
Planning & Zoning		X	X	X	X		X	X	X		X	X	X					X	X	X	X	X
Transportation					X				X													
GIS						X			X													
Health									X											X	X	X
Community Services									X											X	X	X
Municipalities																						
City Council/Village Board	X	X							X													
Emergency Management		X	X		X			X	X	X				X	X	X			X	X	X	X
Designated department(s)		X	X	X	X			X	X	X	X	X	X					X	X	X	X	X
Institutions																						
Northern Illinois University	X	X		(x)	X			X	X	X				X	X	X	X			X	X	X
Kishwaukee College	X	X		(x)	X			X	X	X				X	X	X	X			X	X	X
Regional Office of Education	X	X	X	(x)	X			X	X	X						X			X	X	X	X
Townships		X	X		X				X				X							X	X	X
Other Agencies																						
Illinois Agencies					X																	
American Red Cross									X									X	X	X	X	X
Deadline for first product (months)	6	--	--	18	--	12	24	18	--	36	36	--	36	24	24	18	18	18	24	12	12	12

(x) Can be recommended

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