

**COOK COUNTY
MULTI-JURISDICTIONAL
HAZARD MITIGATION PLAN
VOLUME 2 - Municipal Annexes**

Dixmoor Annex

FINAL

July 2019

Prepared for:



Cook County
Department of Homeland Security and Emergency Management
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Hazard Mitigation Point of Contact

Primary Point of Contact	Alternate Point of Contact
Ronald Burge, Police Chief and Mayor Assistant Telephone: 708-829-1494 Email Address: chiefofpolice@villageofdixmoor.org	Ron Smith, c/o Robinson Engineering 1700 South Park Avenue South Holland, Illinois 60473 Telephone: 708-210-5548 Email Address: rsmith@reltd.com

Jurisdiction Profile

The following is a summary of key information about the jurisdiction and its history:

- **Date of Incorporation:** 1922
- **Current Population:** The Village of Dixmoor population estimate for 2018 was 3,616 according to the US Census.
- **Population Growth:** From 2010 to 2016, Dixmoor has seen a downward trend in population, with a drop of over 2 percent.
- **Location and Description:** The Village of Dixmoor is located 20 miles southwest of downtown Chicago and is approximately one-square mile in size and generally bordered by the City of Blue Island on the north, the Village of Posen on the west, the City of Harvey on the south, and the Village of Riverdale on the east.
- **Brief History:** The Village of Dixmoor was incorporated in 1922 as a rural residential community under the name Specialville, but adopted the name Dixmoor shortly thereafter in 1929. Since its incorporation, the Village has grown to include a relatively even mix of industrial and residential areas with only modest clusters of commercial development and from which the bulk of the Village’s revenues are obtained. The retail enterprises in the Village consist primarily of small business operations.
- **Climate:** The Village of Dixmoor receives an average of 38 inches of rain and 32 inches of snow, per year. The U.S. average is 38 and 28 inches, respectively. Dixmoor experiences some kind of precipitation, on average, 124 days per year. On average, there are 189 sunny days per year in Dixmoor, compared to a U.S. average of 205 days. The Village’s average January low temperature is 18.2 °F and the average July high temperature is 84.2 °F, compared to the U.S. average of 21.7 °F and 85.8°F, respectively.
- **Governing Body Format:** The Village of Dixmoor is governed by a six-member Village Board of Trustees. The Village consists of six (6) departments: Building, Fire, Police, Human Resources, Public Works and Water Departments. The Village has four (4) Committees which report to the Village Board. This body will assume the responsibility for the adoption and implementation of this plan.
- **Development Trends:** The attraction of businesses and employers and the development of industrial and commercial areas are key components of the Village’s strategy for economic development. The Village’s economic development goals are articulated through the documented policies and administration of a variety of economic and community development tools, including participation in the Illinois Enterprise Zone Program, designation of tax increment financing and special service area districts, participation in the Cook County Community Development Block Grant Program, and application with neighboring south suburban communities to the United States Department of Housing and Urban Development for Enterprise Community designation in 1994. The Village also supports and follows the planning recommendations of CMAP (Chicago Metropolitan Agency for Planning)—the GO TO 2040 Plan. The Village planning and economic development strategies are grounded and guided by a

variety of goals and policies, including creation, retention, rehabilitation, and expansion of both industrial and commercial/retail businesses, rehabilitation, stabilization of residential areas, including improvement of public infrastructure and development of community facilities to help further the image of the Village as a good place to live and work as well as provide the necessary income to support strong municipal services.

Capability Assessment

The assessment of the jurisdiction’s legal and regulatory capabilities is presented in the *Legal and Regulatory Capability Table* below. The assessment of the jurisdiction’s fiscal capabilities is presented in the *Fiscal Capability Table* below. The assessment of the jurisdiction’s administrative and technical capabilities is presented in the *Administrative and Technical Capability Table* below. Information on the community’s National Flood Insurance Program (NFIP) compliance is presented in the *National Flood Insurance Program Compliance Table* below. Classifications under various community mitigation programs are presented in the *Community Classifications Table* below.

TABLE: LEGAL AND REGULATORY CAPABILITY					
	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements					
Building Code	Yes	No	No	Yes	Dixmoor Code of Ordinances, Chap. 8, “Buildings and Building Regulations” Original Code 1974. To be updated pursuant to ordinance(s) anticipated to be adopted by the Village Board on or about 2/27/14, so as to adopt the following codes currently in use: 2012 International Building Code; 2012 International Existing Building Code; 2012 International Plumbing Code; 2012 International Property Maintenance Code; 2012 International Code Council Performance Code for Buildings and Facilities; 2012 International Residential Code for One and Two-Family Dwellings.
Zonings	Yes	No	No	No	Dixmoor Code of Ordinances, Appendix A “Zoning.” Last updated

					(approx.) Ord. No. 00-004, Sec. 1, 5/24/00. To be updated pursuant to ordinance anticipated to be adopted by the Village Board on or about 2/27/14, so as to adopt the 2012 International Zoning Code.
Subdivisions	Yes	No	No	No	Plats and platting ordinances saved from repeal, Ordinance No. 74-8, Sec. 3, subparagraph (j), p. ix of the Dixmoor Code of Ordinances. Original Code 1974.
Stormwater Management	No	No	Yes	No	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Village networks with MWRD relative to water policies and procedures.
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	No	No	No	No	
Site Plan Review	No	No	No	No	See Table 1-1, Building Code above
Public Health and Safety	Yes	No	Yes	Yes	Dixmoor Code of Ordinances, Chap. 6, Article II, Dogs; last updated Ord. No. 14DO-02, 1/9/14; Dixmoor Code of Ordinances, Chap. 12, Garbage, Trash and Refuse; Dixmoor Code of Ordinances, Chap. 16, Licenses and Miscellaneous Business Regulations; Dixmoor Code of

					Ordinances, Chap. 13, Health and Sanitation, Article II, Specific Health Nuisances; Article III, Weeds; Article IV, Mosquito Control; Dixmoor Code of Ordinances, Water, Sewers and Sewage Disposal; last updated Ord. No. 13-DO-04, 9/11/13.
Environmental Protection	No	No	Yes	Yes	Village refers to IEPA and U.S. EPA regulations
Planning Documents					
General or Comprehensive Plan	No	No	No	No	Village is currently working with CMAP to implement a comprehensive and strategic plan for the community.
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>					Pending
Floodplain or Basin Plan	No	No	No	No	Village refers to FEMA relative to MWRD requirements.
Stormwater Plan	No	No	Yes	No	Regional stormwater impacts are managed by MWRD. The Village lies within the Little Calumet River watershed planning area of MWRD's comprehensive Stormwater Master Planning Program
Capital Improvement Plan	No	No	No	No	
<i>What types of capital facilities does the plan address?</i>					Village is in the process of developing a capital improvement plan with CMAP.
<i>How often is the plan revised/updated?</i>					Pending
Habitat Conservation Plan	No	No	Yes	No	Village currently utilizes South Suburban Mayors and Managers Association planning documents.

Economic Development Plan	No	No	Yes	Yes	Village is currently working with CMAP to implement a comprehensive and strategic plan for the community.
Shoreline Management Plan	No	No	No	No	
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	Yes	Yes	Cook County DHSEM
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County DHSEM Preparing THIRA
Terrorism Plan	No	No	Yes	Yes	Cook County DHSEM
Post-Disaster Recovery Plan	No	No	No	No	Cook County DHSEM
Continuity of Operations Plan	No	No	Yes	No	Cook County DHSEM
Public Health Plans	No	No	Yes	No	Cook County DPH

TABLE: FISCAL CAPABILITY	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes, through federal, state and local grants
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes

Development Impact Fees for Homebuyers or Developers	No
Other	

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY

Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering consultant acting as Village Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering consultant acting as Village Engineer
Planners or engineers with an understanding of natural hazards	Yes	Engineering consultant acting as Village Engineer
Staff with training in benefit/cost analysis	Yes	Administrator, Treasurer or Finance Committee
Surveyors	Yes	Engineering consultant acting as Village Engineer
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium & Village Enginee
Scientist familiar with natural hazards in local area	Yes	Engineering consultant acting as Village Engineer
Emergency manager	Yes	Cook County DHSEM
Grant writers	Yes	Director, Community Development & Village Engineer

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

What department is responsible for floodplain management in your jurisdiction?	Public Works Department; consulting engineer acting as Village Engineer
Who is your jurisdiction’s floodplain administrator? (department/position)	Village Engineer
Are any certified floodplain managers on staff in your jurisdiction?	Village Engineer
What is the date of adoption of your flood damage prevention ordinance?	8/13/2008

When was the most recent Community Assistance Visit or Community Assistance Contact?	10/11/1995
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes, technical training and equipment
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	Yes
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No; Yes

TABLE: COMMUNITY CLASSIFICATIONS

	Participating?	Classification	Date Classified
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	Yes	Unknown	Unknown
Public Protection/ISO	Yes	Unknown	Unknown
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	No	N/A	N/A

Jurisdiction-Specific Natural Hazard Event

The information provided below was solicited from the jurisdiction and supported by NOAA and other relevant data sources.

The *Natural Hazard Events Table* lists all past occurrences of natural hazards within the jurisdiction. Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: 3
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment
Flooding	-	9/3/2018	-
Severe Storms, Straight-Line Winds, Flooding	DR-4116	4/26/2013	-
Severe Winter Snowstorm	DR-1960	1/31/2011	-
Severe Storms and Flooding	DR-1935	7/19/2010	-
Severe Storms and Flooding	DR-1800	9/13/2008	-
Severe Storms and Flooding	DR-1729	8/20/2007	-
Illinois Flooding	DR-1188	8/16/1997	-
Illinois Flooding	DR-1129	7/17/1996	-

Jurisdiction-Specific Hazards and Impacts

Hazards that represent a county-wide risk are addressed in the Risk Assessment section of the 2019 Cook County Multi-Jurisdictional Hazard Mitigation Plan Update. This section only addresses the hazards and their associated impacts that are **relevant** and **unique** to the municipality.

Dam/Levee Failure: The Village has experienced minimal issues pertaining to Water Dam/Levee Failure. There is no Dam/Levee within corporate boundaries.

Flood: The Village of Dixmoor has been susceptible to flooding along the Little Calumet River on the northside of the Corporate boundaries. In addition, there has been flooding within many residential properties in the past during heavy rainfall accumulation.

Extreme Heat: The potential negative impacts extreme heat events could cause the Village should be addressed based on circumstances/as needed.

Lightning: The potential negative impacts lightning could cause the Village should be addressed based on circumstances/as needed.

Hail: The potential negative impacts hail could cause the Village should be addressed based on circumstances/as needed.

Fog: The potential negative impacts fog could cause the Village should be addressed based on circumstances/as needed.

High Winds: Due to the Village's aging infrastructure, high winds play a factor with the electrical grid causing power outages which impacts the residential village stakeholders negatively.

Earthquake: The potential negative impacts earthquake could cause the Village should be addressed based on circumstances/as needed.

Drought: The potential negative impacts a drought could cause the Village should be addressed based on circumstances/as needed.

Snow: Previously, heavy snowfall has impacted the Village, due to lack of snow removal resources.

Blizzards: Previously, blizzards have impacted the Village, due to lack of snow removal resources.

Extreme Cold: The potential negative impacts extreme cold events could cause the Village should be addressed based on circumstances/as needed.

Ice Storms: Due to the Village's aging infrastructure, ice storms play a factor with the electrical grid causing power outages

Tornado: A tornado would devastate all of the Village's resources to mitigate a hazard in the community.

Hazardous Materials Incident: Although incidents of severe magnitude are not overly frequent, they have happened in Dixmoor in the past. For example, a hazardous materials response was called to Rhodia's Dixmoor plant in 2011 after sulfur in an outdoor storage tank caught fire. The incident caused residential evacuations in one of the South suburban areas of the Village.

Hazard Risk Ranking

The *Hazard Risk Ranking Table* below presents the ranking of the hazards of concern. Hazard area extent and location maps are included at the end of this chapter. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes.

TABLE: HAZARD RISK RANKING		
Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Severe Weather	54
2	Severe Winter Weather	54
3	Tornado	54
4	Flood	42
5	Earthquake	32
6	Drought	2
7	Dam Failure	0

Mitigation Strategies and Actions

The heart of the mitigation plan is the mitigation strategy, which serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The mitigation strategy describes how the community will accomplish the overall purpose, or mission, of the planning process. In this section, mitigation actions/projects were updated/amended, identified, evaluated, and prioritized. This section is organized as follows:

- New Mitigation Actions - New actions identified during this 2019 update process
- Ongoing Mitigation Actions - Ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.
- Completed Mitigation Actions - An archive of all identified and completed projects, including completed actions since 2014.

The *Hazard Mitigation Action Plan Matrix Table* below lists the actions that make up the jurisdiction’s hazard mitigation plan. The *Mitigation Strategy Priority Schedule Table* identifies the priority for each action.

TABLE: HAZARD MITIGATION ACTION PLAN MATRIX						
Status	Hazards Mitigated	Objectives Met	Lead Agencies	Estimated Cost	Sources of Funding	Timeline/Projected Completion Date (a)
Action D4.1 —Educate property owners about flood mitigation techniques including using outreach activities to facilitate technical assistance program that address measures that citizens can take or facilitate funding for mitigation measures.						
Ongoing	Flood, Severe Weather	1, 12	City	Low	Local, Grant	Short-term
Action D4.2 —Improve stormwater drainage capacity by increasing the capacity of the City’s storm sewer drainage system						
Ongoing	Flood, Severe Weather	1, 2, 9, 13	City	High	CIP, MWRD Phase II, FEMA Grant	Long-term
Action D4.3 —Assess vulnerability to severe wind using GIS to map areas that are at risk to the wind hazard associated with straight-line wind conditions.						
Ongoing	Severe Weather	3, 4, 10	City	High	General Revenue	Short-term
Action D4.4 —Incorporate a GIS system/management plan for tracking permitting, land use patterns, tracking hazard data, and mapping risk for various hazards.						

Ongoing	Multi-hazard	3, 4, 10	City	Medium	General Revenue	Short-term
Action D4.5 —Working with Cook County Sheriffs Department to set up system for tracking.						
Ongoing	Multi-hazard	8, 12, 13	City	TBD	Local Funds	Long-term
Action D4.6 —Protect infrastructure and critical facilities from damage by engineering and/or retrofitting roads to withstand hazards.						
Ongoing	Multi-hazard	1, 2, 9, 13	City	High	CIP, General Revenue, FEMA Grants	Long-term
Action D4.7 —Improve sewer capacity for stormwater and snowmelt by separating the combined sewer system.						
Ongoing	Flood, Severe Weather, Severe Winter Weather	1, 2, 9, 13	City, MWRD	High	IEPA, Grants	Ongoing
Action D4.8 —Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.						
Ongoing	All	7, 13	City	High	FEMA Hazard Mitigation Grants, Local Contribution	Long-term (depending on funding)
Action D4.9 —Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	City	Low	General Fund	Short- and long-term
Action D4.10 —Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6	DHSEM, City	Low	General Fund	Short-term
Action D4.11 —Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.						
Ongoing	All	3, 4, 5, 6, 7, 9, 10, 11, 13	City	Low	General Fund	Long-term
Action D4.12 —Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.						

Ongoing	Flooding	4, 6, 9	City	Low	General Fund	Short- and long-term
Action D4.13 —Where feasible, implement a program to record high water marks following high-water events.						
Ongoing	Flooding, Severe Weather	3, 6, 9	City	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
Action D4.14 —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
Ongoing	All	3, 4, 6, 10, 13	Consultant Acting as Village Engineer	Low	General Fund	Short-term
Action D4.15 —Northeast storm water project, enclosed drainage system, detention pond, and green infrastructure.						
New	Flood, Hail, High Wind, Snow, Blizzard, Extreme Cold, Ice Storms, Tornado, Widespread Power Outage, Hazardous Materials Release	9, 13	Village of Dixmoor	\$3,000,000; High	MWRD/Cook County	2022
(a) Ongoing indicates continuation of an action that is already in place. Short-term indicates implementation within five years. Long-term indicates implementation after five years.						

TABLE: MITIGATION STRATEGY PRIORITY SCHEDULE

Action Number	Number of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Priority (a)
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1	2	High	Low	Yes	Yes	Yes	Medium	
2	4	High	High	Yes	Yes	No	High	
3	3	High	High	Yes	Yes	No	Medium	
4	3	High	High	Yes	Yes	No	Medium	
5	3	TBD	TBD	TBD	TBD	TBD	TBD	
6	4	High	High	Yes	Yes	No	High	
7	4	High	High	Yes	Yes	No	High	
8	2	High	High	Yes	Yes	No	Medium	
9	13	Medium	Low	Yes	No	Yes	High	
10	3	Medium	Low	Yes	Yes	Yes	High	
11	9	Medium	Low	Yes	No	Yes	Medium	
12	3	Medium	Low	Yes	No	Yes	High	
13	3	Medium	Medium	Yes	Yes	No	Medium	
14	5	Medium	Low	Yes	No	Yes	High	
15	2	Unknown	High	Unknown	Yes	No	High	

(a) See Chapter 1 for explanation of priorities.

New Mitigation Actions

The following are new mitigation actions created during the 2019 update.

Action D - 4.15

Mitigation Action	Northeast storm water project, enclosed drainage system, detention pond, and green infrastructure
Year Initiated	2019
Applicable Jurisdiction	Village of Dixmoor
Lead Agency/Organization	Village of Dixmoor
Supporting Agencies/Organizations	MWRD/ Cook County
Applicable Goal	<ul style="list-style-type: none"> • Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects. • Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards. • Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events and potential damage from such activities. • Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.
Applicable Objective	<ul style="list-style-type: none"> • Provide or improve flood protection on a watershed basis with flood control structures and drainage maintenance plans.. • Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.
Potential Funding Source	MWRD/ Cook County
Estimated Cost	3,000,000
Benefits (loss avoided)	Flooding mitigation
Projected Completion Date	2022
Priority and Level of Importance (Low, Medium, High)	High Priority
Benefit Analysis (Low, Medium, High)	Unknown
Cost Analysis (Low, Medium, High)	High
Actual Completion Date	Unknown

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	

Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	
2020		

2021		
2022		
2023		

Mitigated Hazards	
	All Hazards
	Dam/Levee Failure
	Drought
	Earthquake
X	Flood
	Extreme Heat
	Lightning
X	Hail
	Fog
X	High Wind
X	Snow
X	Blizzard
X	Extreme Cold
X	Ice Storms
X	Tornado
	Epidemic or pandemic
	Nuclear Power Plant Incident
X	Widespread Power Outage
	Coastal Erosion
	Secondary Impacts from Mass Influx of Evacuees
	Hazardous Materials Incident
X	Hazardous Materials Release

Ongoing Mitigation Actions

The following are ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Action D - 4.1

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.1	Educate property owners about flood mitigation techniques including using outreach activities to facilitate technical assistance program that address measures that citizens can take or facilitate funding for mitigation measures.	
Status Description: Yes	Will discuss with citizens in the future meetings.	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.2

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.2	Improve stormwater drainage capacity by increasing the capacity of the City’s storm sewer drainage system.	
Status Description: Yes	The village has received grant funding to improve Strom drain and this is an ongoing project	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.3

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.3	Assess vulnerability to severe wind using GIS to map areas that are at risk to the wind hazard associated with straight-line wind conditions.	
Status Description: No	No action taken	X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.4

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.4	Incorporate a GIS system/management plan for tracking permitting, land use patterns, tracking hazard data, and mapping risk for various hazards.	
Status Description: Yes	Working with Cook County Sheriffs Department to set up system for tracking.	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.5

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.5	Working with Cook County Sheriffs Department to set up system for tracking.	
Status Description: No		X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.6

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.6	Protect infrastructure and critical facilities from damage by engineering and/or retrofitting roads to withstand hazards.	
Status Description: No		X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.7

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.7	Improve sewer capacity for stormwater and snowmelt by separating the combined sewer system.	
Status Description: Yes	This action has been looked at in the village comprehensive plan	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.8

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.8	Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.	
Status Description: Action Taken?	Still reviewing this project	X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.9

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.9	Continue to support the countywide actions identified in this plan.	
Status Description: Action Taken?	Discussed in townhall meeting	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.10

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.10	Actively participate in the plan maintenance strategy identified in this plan.	
Status Description: Action Taken?	Reviewed in committee meetings.	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.11

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.11	Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.	
Status Description: Yes	We have meet with MWRD and Storm Ready twice	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.12

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.12	Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.	
Status Description: Yes	No Action Taken	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.13

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.13	Where feasible, implement a program to record high water marks following high-water events.	
Status Description: Yes	Village engineers have looked at this and posted to GIS at Cook County	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action D - 4.14

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# D—4.14	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.	
Status Description: Yes	Moving forward towards future meeting at a community level	O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Completed Mitigation Actions

The following section represents completed mitigation actions, and serves as an archive of identified and completed projects.

Dixmoor has no completed actions at this time.

Future Needs to Better Understand Risk/Vulnerability

No needs have been identified at this time.

Additional Comments

No additional comments at this time

HAZUS-MH Risk Assessment Results

DIXMOOR EXISTING CONDITIONS	
2010 Population	3,644
Total Assessed Value of Structures and Contents	\$2,305,42,047
Area in 100-Year Floodplain	137.54 acres
Area in 500-Year Floodplain	162.65 acres
Number of Critical Facilities	12

HAZARD EXPOSURE IN DIXMOOR						
	Number Exposed		Value Exposed to Hazard		Total	% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents		
Dam Failure						
Buffalo Creek	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	0	0	\$0	\$0	\$0	0.00%
Touhy	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	0	0	\$0	\$0	\$0	0.00%
Flood						
100-Year	1,329	409	\$240,455,447	\$199,255,837	\$439,711,284	19.07%

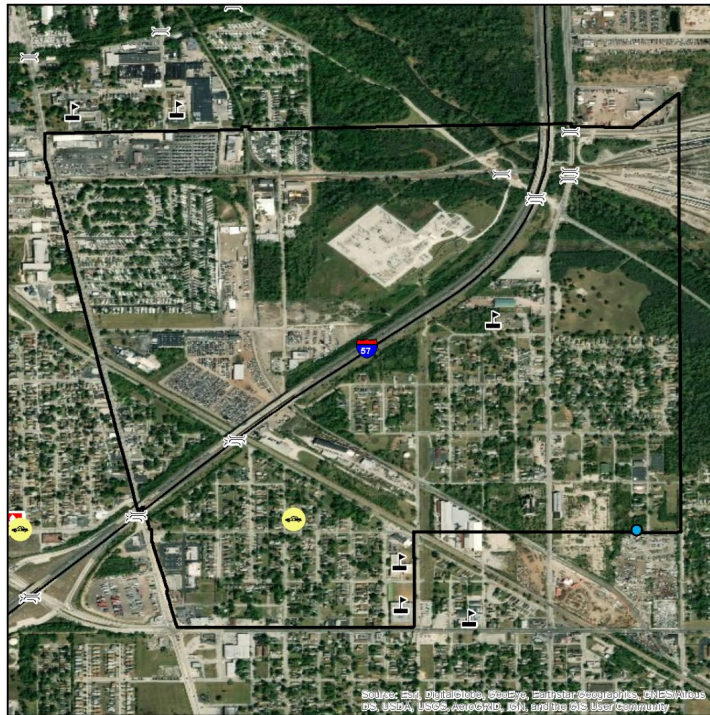
500-Year	1,557	479	\$480,964,666	\$450,264,437	\$931,229,103	40.39%
Tornado						
100-Year	—	—	\$517,809,451	\$530,473,224	\$1,048,282,675	45.47%
500-Year	—	—	\$839,382,658	\$778,160,010	\$1,617,542,668	70.16%

ESTIMATED PROPERTY DAMAGE VALUES IN DIXMOOR

	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	Total	
Dam Failure				
Buffalo Creek	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	\$0	\$0	\$0	0.00%
Touhy	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	\$0	\$0	\$0	0.00%
Earthquake				
1909 Historical Event	\$11,534,908	\$3,860,600	\$15,395,508	0.67%
Flood				
10-Year	\$27,139	\$54,279	\$81,418	0.00%
100-Year	\$8,153,622	\$6,549,451	\$14,703,073	0.64%
500-Year	\$73,242,144	\$134,005,882	\$207,248,026	8.99%

Tornado				
100-Year	\$51,780,945	\$53,047,322	\$104,828,268	4.55%
500-Year	\$122,549,868	\$113,611,362	\$236,161,230	10.24%

Hazard Mapping

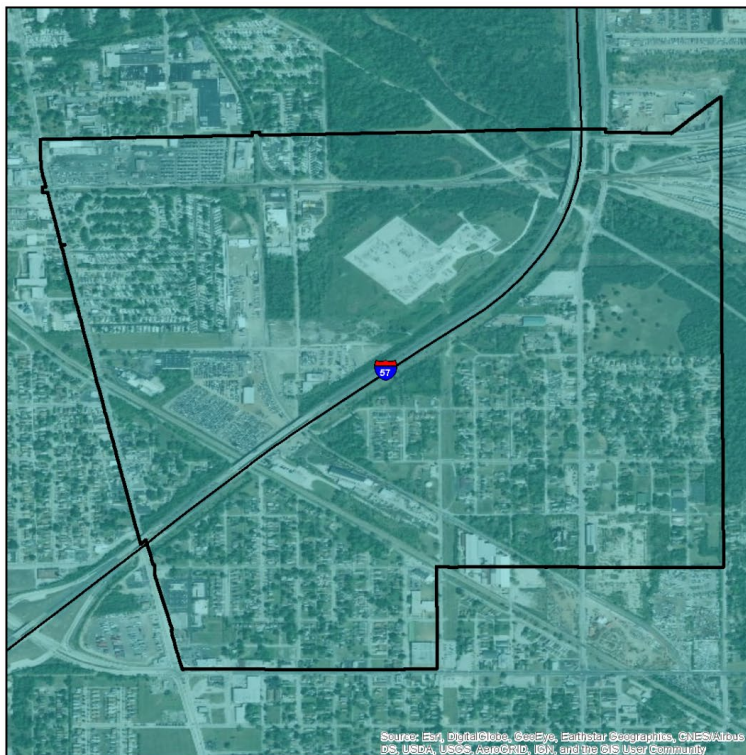


VILLAGE OF DIXMOOR

CRITICAL INFRASTRUCTURE

- Oil Facilities
- Transit Centers
- Military Facilities
- Police Stations
- Fire Stations
- Hazardous Waste
- Airports
- Hospitals
- Highway Bridges
- Warming Centers
- Cooling Centers
- Schools
- Railroad Stations

Base Map Data Sources:
Cook County, ESRI



VILLAGE OF DIXMOOR

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

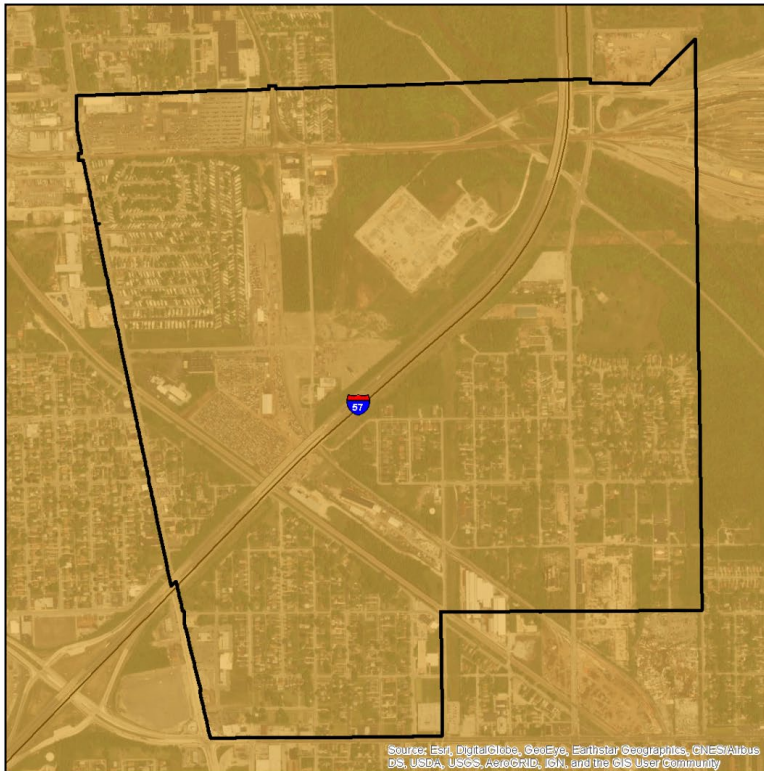
Mercalli Scale, Potential Shaking
II-III Weak

Data provided by the USGS Earthquake Hazards Program and Cook County.

Probabilistic seismic-hazard maps were prepared for the conterminous United States for 2014 portraying peak horizontal acceleration and horizontal spectral response acceleration for 0.2- and 1.0-second periods with probabilities of exceedance of 10 percent in 50 years and 2 percent in 50 years. All of the maps were prepared by combining the hazard derived from spatially smoothed historical seismicity with the hazard from fault-specific sources. The acceleration values contoured are the random horizontal component. The reference site condition is firm rock, defined as having an average shear-wave velocity of 750 m/s in the top 30 meters corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction program) site classes B and C.

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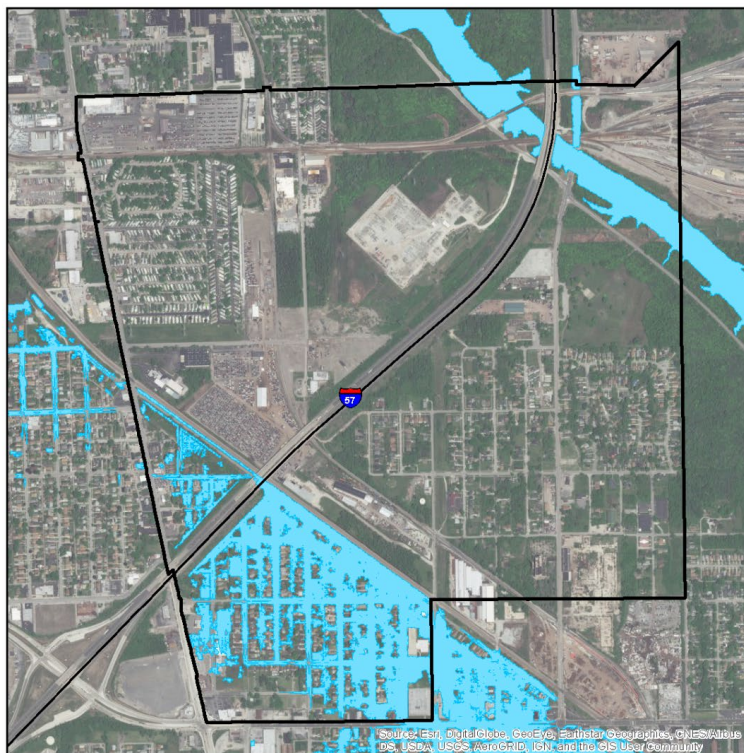
**VILLAGE OF
DIXMOOR**
NATIONAL EARTHQUAKE HAZARD
REDUCTION PROGRAM (NEHRP)
SOIL CLASSIFICATION

- TYPE**
- C - Very Dense Soil, Soft Rock
 - D - Stiff Soil
 - F - Site Specific Evaluation

Data provided by the Illinois State Geological Survey and Cook County.

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase II work. The USGS Geologic Investigation Series I-2789 Map of Surficial Deposits and Materials in the Eastern and Central United States (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean M. Pennell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes International Code Council, 2003) were followed to produce the soil site class maps. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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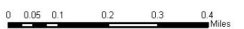
**VILLAGE OF
DIXMOOR**
COOK COUNTY MWRDGC
100-YEAR INUNDATION AREA

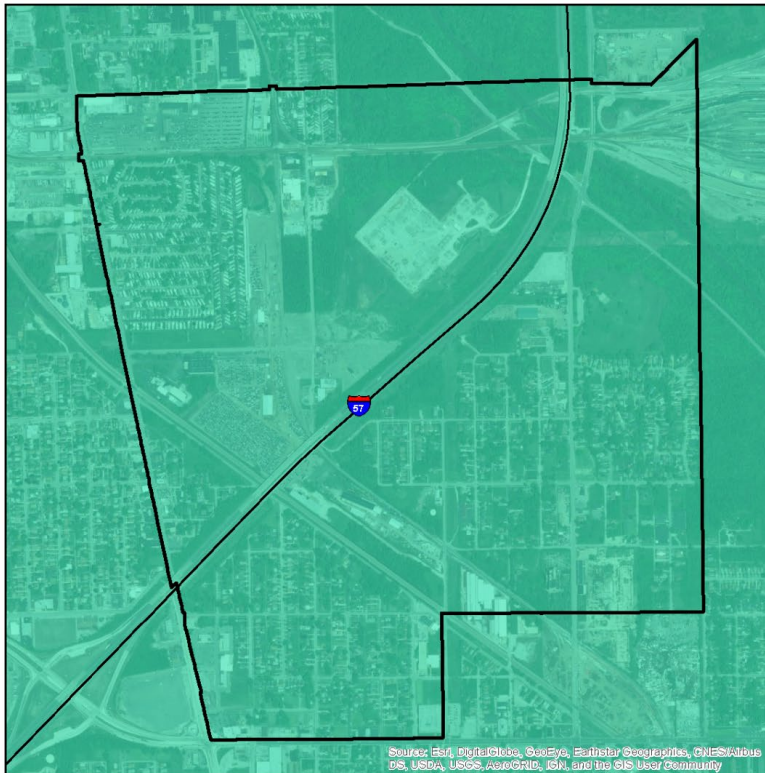
- 100-year Inundation Area

MWRDGC Data provided by Metropolitan Water Reclamation District of Greater Chicago and Cook County.

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DISCLAIMER: The Cook County MWRDGC 100-year Inundation Map is provided to show general flood risk information regarding floodplains and inundation areas. This map is not regulatory. Official FEMA Flood Insurance Study information and regulatory maps can be obtained from <http://www.fema.gov>.





VILLAGE OF DIXMOOR

LIQUEFACTION SUSCEPTIBILITY



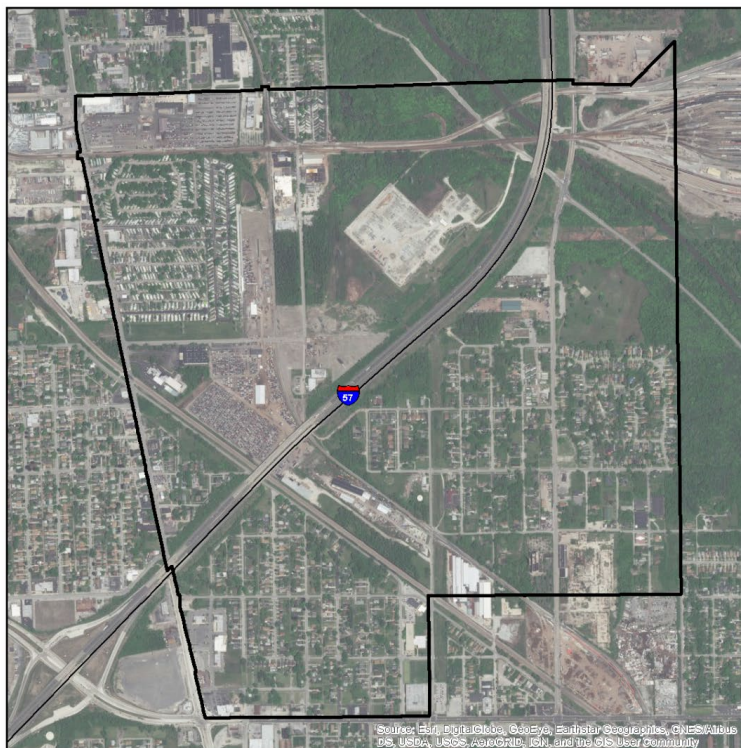
Data provided by the Illinois State Geological Survey and Cook County.

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type M map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase II work. The USGS Geologic Investigation Series (750 Map of Surficial Deposits and Materials in the Eastern and Central United States (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean N. Pennell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes International Code Council, 2002) were followed to produce the soil site class maps. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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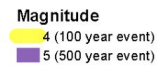


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



VILLAGE OF DIXMOOR

100- AND 500- YEAR TORNADO EVENTS



Historic tornado data provided by NOAA/NWS showing the initial points and paths of all F4 and F5 events observed from 1950 to 2017.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community