

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

**Cicero Annex**

**FINAL**

July 2019

Prepared for:



Cook County  
Department of Homeland Security and Emergency Management  
69 W. Washington St., Suite 2600  
Chicago, Illinois 60602

Toni Preckwinkle  
President  
Cook County Board of Commissioners

William Barnes  
Executive Director  
Cook County Department of Homeland Security &  
Emergency Management

## Table of Contents

Hazard Mitigation Point of Contact .....	2
Jurisdiction Profile.....	3
Capability Assessment .....	5
Jurisdiction-Specific Natural Hazard Event .....	10
Hazard Risk Ranking.....	13
Mitigation Strategies and Actions.....	14
New Mitigation Actions .....	17
Ongoing Mitigation Actions .....	26
Completed Mitigation Actions .....	32
Future Needs to Better Understand Risk/Vulnerability .....	33
Additional Comments.....	34
HAZUS-MH Risk Assessment Results .....	35
Hazard Mapping.....	38

## Hazard Mitigation Point of Contact

Primary Point of Contact	Alternate Point of Contact
Dominick Buscemi, Fire Chief 5303 W. 25th Street, Cicero, IL 60804 Telephone: 708-359-0686 Email: <a href="mailto:dbuscemi@thetownofcicero.com">dbuscemi@thetownofcicero.com</a>	Eric Habercoss, Assistant Fire Chief 5303 W. 25th Street Cicero, IL 60804 Telephone: 630-379-8251 Email: <a href="mailto:ehabercoss@thetownofcicero.com">ehabercoss@thetownofcicero.com</a>

## Jurisdiction Profile

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

- **Date of Incorporation:** 1867
- **Current Population:** 81,597 as of the 2018 US Census estimate.
- **Population Growth:** According to Census records there was an increase in population from 1980-2000, however from 2000 to 2010 the population in the Town of Cicero decreased by 2% and continued to decrease by around 1 percent from 2010-2017. The town still maintains one of the highest population densities in the Chicago land area of 14,392 people per square mile.
- **Location and Description:** The Town of Cicero has a total area of 5.86 square miles (15.2 km<sup>2</sup>), all land. It is bordered by Chicago on the East side and half of the North side border. Oak Park borders the other half of the North side of Town. Berwyn borders on the West side of Town. On the South side of the Town border is Stickney. Cicero is a factory town. As of 1999, about a quarter of the city contained one of the greatest industrial concentrations in the world; there were more than 150 factories in 1.75 miles, producing communications and electronic equipment.
- **Brief History:** The Town of Cicero is one of the oldest and largest municipalities in the State of Illinois. It bears the name of the great Roman statesman of the First Century B.C., Marcus Tullius Cicero. Among the townships created by the County Board in 1849 was a 36 square mile tract bounded by what are today Western, North and Harlem Avenues and Pershing Road. On June 23, 1857, 14 electors met to organize a local government for the district, which they named “The Town of Cicero.” Railroads, immigration and the Civil War contributed to economic growth in the new township, which by 1867 numbered 3,000 residents. In that year the state legislature incorporated the Town of Cicero as a municipality with a special charter, which was revised in 1869. Township and municipal functions have subsequently been discharged by a single board of elected officials. Cicero is composed of eight neighborhoods, with their own district names and characteristics. Two neighborhoods were named for businesses-Grant Works after an 1890 locomotive factory and Hawthorne for an 1850s quarry, the first Cicero industry. Two neighborhoods bear the family names of local landowners, Warren Park and Drezel, while two more were christened by prominent residents, Clyde, recalling a river in Scotland and Morton Park honoring Julius Sterling Morton, a Nebraskan who served as Agriculture Secretary to President Cleveland. Morton also gave his name to the local high school and college, yet he never lived in the town. Boulevard Manor derives its name from Austin Boulevard.
- **Climate:** Cicero lies midway between the Continental Divide and the Atlantic Ocean, and is 900 miles north of the Gulf of Mexico. Cicero’s climate is typically continental with cold winters, warm summers, and frequent short fluctuations in temperature, humidity, cloudiness, and wind direction. Many consider the more moderate temperatures of spring and fall to be the most pleasant. Lake Michigan provides a moderating influence on temperature while boosting the amount of snowfall received in the town.
- **Governing Body Format:** The Town of Cicero is governed by a Town President, Town Clerk, Town Collector, Town Supervisor, Town Assessor, and four Town Trustees. This body of

Government will assume the responsibility for the adoption and implementation of this plan. The town consists of 20 departments, including a Building Department, EMS Division, Fire Department, Health Department, Public Works Department, Police Department, and Water Department, which report to the Town President and Board of Trustees.

- **Development Trends:** The Town of Cicero is currently under a great economic growth period. Business has increased in Town, including both small and large businesses. Many of the new businesses include Walmart, Menards, Wirtz Beverage of Illinois, and Cloverhill Bakery. The Town of Cicero does not predict a down-turn at this time and adopted a Comprehensive Plan in 2017. Additionally, in 2019, Bridge Development Partners announced its arrival to Cicero. The company announced the acquisition of the former GE Hot Point site at 16th Street and 54th Avenue in March with the plans to build a 320,000 square-foot facility for industrial-related needs. Included in the project is a \$20 million investment, resulting in an increase in property tax revenue for the town from \$41,000 currently as a vacant lot to nearly \$200,000 after investments. The new center will create both temporary construction jobs and permanent jobs once the warehouse is ready to be leased to a tenant. Bridge Development joins dozens of national companies that have decided to relocate or to expand in the Town of Cicero, strengthening the tax base for residents and the community.

## 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.

<b>TABLE: LEGAL AND REGULATORY CAPABILITY</b>					
	<b>Local Authority</b>	<b>State or Federal Prohibitions</b>	<b>Other Jurisdictional Authority</b>	<b>State Mandated</b>	<b>Comments</b>
<b>Codes, Ordinances &amp; Requirements</b>					
Building Code	Yes	No	No	Yes	2009 International Building Codes With Amendments. Adopted 12/11/2012
Zonings	Yes	No	No	Yes	Code of Ordinances, Part II, Appendix A. Adopted 2/7/1977
Subdivisions	Yes	No	Yes	Yes	Code of Ordinances, Part II, Chapter 86. Adopted 1958, updated 4/25/1989
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA.

					Code of Ordinances, Part II, Chapter 38 Article IV. Adopted 5/24/2011
Post Disaster Recovery	Yes	No	No	No	Code of Ordinances, Part II, Chapter 34, Article II
Real Estate Disclosure	No	No	No	No	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	No	No	No	No	
Site Plan Review	Yes	No	No	No	Code of Ordinances, Part II, Chapter 44, Article II. Adopted 6/27/2000
Public Health and Safety	No	No	Yes	Yes	Cook County Board of Health.
Environmental Protection	Yes	No	No	No	Code of Ordinances, Part II, Chapter 38, Article VI. Adopted 7/13/2004
<b>Planning Documents</b>					
General or Comprehensive Plan	No	No	No	No	
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>					N/A
Floodplain or Basin Plan	No	No	No	No	Ordinances Only
Stormwater Plan	No	No	Yes	No	Ordinances Only
Capital Improvement Plan	No	No	No	No	
<i>What types of capital facilities does the plan address?</i>					N/A

<i>How often is the plan revised/updated?</i>					N/A
Habitat Conservation Plan	Yes	No	Yes	Yes	
Economic Development Plan	No	No	No	No	The Economic Development Commission is charged with reviewing all economic development related programs and incentives including tax incentives offered through the Cook County 6b program
Shoreline Management Plan	No	No	No	No	
<b>Response/Recovery Planning</b>					
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	
Continuity of Operations Plan	No	No	Yes	No	Cook County DHSEM
Public Health Plans	No	No	Yes	No	Cook County DPH

**TABLE: FISCAL CAPABILITY**

<b>Financial Resources</b>	<b>Accessible or Eligible to Use?</b>
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
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	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

<b>TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY</b>		
<b>Staff/Personnel Resources</b>	<b>Available?</b>	<b>Department/Agency/Position</b>
Planners or engineers with knowledge of land development and land management practices	Yes	Town Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer
Staff with training in benefit/cost analysis	Yes	Town Engineer
Surveyors	Yes	Town Engineer
Personnel skilled or trained in GIS applications	Yes	Cook County Grant Consortium
Scientist familiar with natural hazards in local area	Yes	Town Engineer
Emergency manager	Yes	Fire Chief
Grant writers	Yes	TOC Community Development Block Grant Department

<b>TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE</b>	
What department is responsible for floodplain management in your jurisdiction?	Building Department
Who is your jurisdiction’s floodplain administrator? (department/position)	Town Engineer by Ordinance
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	6/27/2000
When was the most recent Community Assistance Visit or Community Assistance Contact?	Have not had a Community Assistance Visit
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
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?	No
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

<b>TABLE: COMMUNITY CLASSIFICATIONS</b>			
	<b>Participating?</b>	<b>Classification</b>	<b>Date Classified</b>
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	Yes	Unknown	Unknown
Public Protection/ISO	Yes	ISO Class 2	2009
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: 0
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

<b>TABLE: NATURAL HAZARD EVENTS</b>			
<b>Type of Event</b>	<b>FEMA Disaster Number (if applicable)</b>	<b>Date</b>	<b>Preliminary Damage Assessment</b>
Lightning Strike (no fire)	-	8/28/2018	-
Lightning Strike (no fire)	-	8/28/2018	-
Wind Storm, Tornado/Hurricane Assessment	-	12/05/2017	-
Flood Assessment	-	10/15/2017	-
Flood Assessment	-	10/14/2017	-
Flood Assessment	-	10/14/2017	-
Lightning Strike (no fire)	-	8/28/2017	-
Wind Storm, Tornado/Hurricane Assessment	-	4/8/2017	-
Tornado	-	8/9/2016	-
Roof Debris	-	3/5/2016	-
Roof Debris	-	2/19/2016	-
Wind Damage	-	2/19/2016	-
Flooded Basement	-	8/18/2015	-

Flooded Basement	-	8/18/2015	-
Lightning Strike	-	8/25/2014	-
Lightning Strike	-	8/25/2014	-
Lightning Strike	-	8/25/2014	-
Winter Storm	-	12/2013 - 2/2014	-
Storm	-	8/30/2013	Building & Tree Damage
Storm	-	6/24/2013	Building & Tree Damage
Flood	-	8/26/2012	Flooded Buildings
Storm	-	7/23/2012	Building & Tree Damage
Storm	-	7/1/2012	Building & Tree Damage
Flood	-	7/23/2011	Flooded Buildings
Storm	-	6/21/2011	Building & Tree Damage
Flood	-	7/24/2010	Flooded Buildings
Flood	-	6/24/2010	Flooded Buildings
Storm	-	6/23/2010	Building & Tree Damage
Storm	-	6/18/2010	Building & Tree Damage
Flood	-	6/24/2009	Flooded Buildings
Storm	-	6/24/2009	Building & Tree Damage
Storm	-	8/4/2008	Building & Tree Damage
Storm	-	6/15/2008	Building & Tree Damage
Storm	-	6/6/2008	Building & Tree Damage
Storm	-	6/6/2008	Building & Tree Damage
Storm	-	12/23/2007	Building & Tree Damage
Storm	-	8/5/2007	Building & Tree Damage
Storm	-	6/14/2007	Building & Tree Damage
Flood	-	10/2/2006	Flooded Buildings
Storm	-	10/2/2006	Building & Tree Damage

Storm	-	8/2/2006	Building & Tree Damage
Storm	-	7/18/2006	Building & Tree Damage
Storm	-	7/17/2006	Building & Tree Damage
Storm	-	6/17/2006	Building & Tree Damage

### 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.

**Flood:** Due to the Town's old sewer system, the community experiences flooding following heavy rain events. Of concern, is the need to separate the sewer and the stormwater drainage system and prevent hazardous materials from impacting the water supply. In 2013, High standing water was reported on southbound Interstate 55 at Pulaski Road.

**Tornado:** In 2016, FAA contract observer for Midway Airport spotted a land spout tornado that formed on the lake breeze.

**Severe Weather:** In 2008, wind gusts were estimated at 65 mph.

## 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.

<b>TABLE: HAZARD RISK RANKING</b>		
<b>Rank</b>	<b>Hazard Type</b>	<b>Risk Rating Score (Probability x Impact)</b>
1	Flood	54
2	Severe Weather	51
3	Severe Winter Weather	51
4	Tornado	36
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)
<b>Action C6.1</b> —Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structural damage. Give priority to properties with exposure to repetitive losses.						
Ongoing	All	7, 13	Cicero	High	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
<b>Action C6.2</b> —Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	Cicero	Low	General Fund	Short- and long-term
<b>Action C6.3</b> —Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6	DHSEM Cicero	Low	General Fund	Short-term
<b>Action C6.4</b> —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	Cicero	Low	General Fund	Long-term

<b>Action C6.5</b> —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	Cicero	Low	General Fund	Short-term and ongoing
<b>Action C6.6</b> —Where feasible, implement a program to record high water marks following high-water events.						
Ongoing	Flooding, Severe Weather	3, 6, 9	Cicero	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
<b>Action C6.7</b> —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
Ongoing	All	3, 4, 6, 10, 13	Town Engineer	Low	General Fund	Short-term
<b>Alternate C6.8</b> —Separate the combined stormwater/sewer system.						
Ongoing	Flooding	2, 9	Cicero	High	Grants	Long-term
<b>Alternate C6.9</b> —Improve the Building Code Effectiveness Grading Schedule classification program.						
Ongoing	All	2, 10	Building Department	Low	General Fund	Short-term and ongoing
<b>Alternate C6.10</b> —Consider the development and implementation of a Capital Improvements Program (CIP) to increase the Village’s regulatory, financial and technical capability to implement mitigation actions.						
Ongoing	All	1, 2, 7	Public Works	High	CIP component of general fund (if implemented)	Long-term
<b>Action C6.11</b> —Create and implement a public awareness and education program aimed at the large homeless population to increase their knowledge of when and how to seek shelter from a disaster.						
New	All	6, 12	Cicero Fire Department	\$5000; Low	Local Funds/Grants	2020
<b>Action C6.12</b> —Create and implement an education program for the Residents of Cicero on Smoke and Carbon Monoxide detectors.						
New	Hazardous Materials Incident	6	Cicero Fire Department	\$5000; Low	Local Funds/Grants	2020

**Action C6.13—Implement Cicero Green Infrastructure Project**

New	Flood	13	MWRD	Unknown	Unknown	Unknown
-----	-------	----	------	---------	---------	---------

(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)
1	2	High	High	Yes	Yes	No	Medium
2	13	Medium	Low	Yes	No	Yes	Medium
3	3	Medium	Low	Yes	Yes	Yes	Medium
4	9	Medium	Low	Yes	No	Yes	Medium
5	3	Medium	Low	Yes	No	Yes	Medium
6	3	Medium	Medium	Yes	Yes	No	Medium
7	5	Medium	Low	Yes	No	Yes	Medium
8	2	High	High	Yes	Yes	No	Medium
9	2	Medium	Low	Yes	No	Yes	High
10	3	High	High	Yes	No	No	Medium
11	2	High	Low	Yes	Yes	No	High
12	1	High	Low	Yes	Yes	Yes	High
13	1	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

(a) See Chapter 1 for explanation of priorities.

## New Mitigation Actions

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

## Action C6.11

<b>Mitigation Action</b>	Create and implement a public awareness and education program aimed at the large homeless population to increase their knowledge of when and how to seek shelter from a disaster.
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	Town of Cicero
<b>Lead Agency/Organization</b>	Cicero Fire Department
<b>Supporting Agencies/Organizations</b>	Cicero Police and Department of Health and Human Services
<b>Applicable Goal</b>	<ul style="list-style-type: none"> <li>• Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects.</li> <li>• Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards.</li> <li>• Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events.</li> <li>• Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.</li> <li>• Develop, promote, and integrate mitigation action plans.</li> <li>• Promote public understanding of and support for hazard mitigation.</li> </ul>
<b>Applicable Objective</b>	<ul style="list-style-type: none"> <li>• Use the best available data, science and technologies to educate the public and to improve understanding of the location and potential impacts of natural hazards, the vulnerability of building types and community development patterns, and the measures needed to protect life safety.</li> <li>• Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.</li> </ul>
<b>Potential Funding Source</b>	Local Funds and/or Grants
<b>Estimated Cost</b>	\$5000.00
<b>Benefits (loss avoided)</b>	Protection of life and/or harm of the homeless population
<b>Projected Completion Date</b>	2020
<b>Priority and Level of Importance (Low, Medium, High)</b>	High Priority

<b>Benefit Analysis (Low, Medium, High)</b>	High—Project will provide an immediate reduction of risk exposure for life and property.
<b>Cost Analysis (Low, Medium, High)</b>	Low—The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.
<b>Actual Completion Date</b>	

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

<b>Action/Implementation Plan and Project Description:</b>	The Town of Cicero has a large homeless population that if a natural disaster should occur is unaware where they could or should go in the case of extreme cold, heat, rain, snow and or severe weather conditions. In the town of Cicero there is a large population of homeless people living in tents, makeshift shacks, boxes or open-air living near the railroad tracks from Cermak Road to 31st Street. The Cicero Fire Department would create an action plan to notify both verbally and in writing of where they should and/or could go in the case of extreme weather conditions. Areas of shelter available in the town, community centers, public gyms, and police and fire stations would be staffed during extreme weather conditions. The Fire Department and/or other Town departments would verbally and in writing educate this population of where to go in extreme weather conditions and/or natural disaster. The education would be verbal and in writing in multiple languages. The written material would be laminated to protect it from the elements.
--	--

**Mitigation Action and Project Maintenance**

Year	Status	Comments
2019	New	
2020		
2021		
2022		
2023		

**Mitigated Hazards**

X	All Hazards
	Dam/Levee Failure
X	Drought
X	Earthquake
X	Flood
X	Extreme Heat
X	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
	Widespread Power Outage
	Coastal Erosion
	Secondary Impacts from Mass Influx of Evacuees
X	Hazardous Materials Incident

## Action C6.12

<b>Mitigation Action</b>	Create and implement an education program for the Residents of Cicero on Smoke and Carbon Monoxide detectors.
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	Town of Cicero
<b>Lead Agency/Organization</b>	Cicero Fire Department
<b>Supporting Agencies/Organizations</b>	Department of Health and Human Services
<b>Applicable Goal</b>	<ul style="list-style-type: none"> <li>• Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects.</li> <li>• Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards.</li> <li>• Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events.</li> <li>• Develop, promote, and integrate mitigation action plans.</li> <li>• Promote public understanding of and support for hazard mitigation.</li> </ul>
<b>Applicable Objective</b>	<ul style="list-style-type: none"> <li>• Use the best available data, science and technologies to educate the public and to improve understanding of the location and potential impacts of natural hazards, the vulnerability of building types and community development patterns, and the measures needed to protect life safety.</li> </ul>
<b>Potential Funding Source</b>	Local Funds and Grants
<b>Estimated Cost</b>	\$5000.00
<b>Benefits (loss avoided)</b>	Protection of the life and property of the residents of Cicero
<b>Projected Completion Date</b>	2020
<b>Priority and Level of Importance (Low, Medium, High)</b>	High Priority
<b>Benefit Analysis (Low, Medium, High)</b>	High—Project will provide an immediate reduction of risk exposure for life and property.
<b>Cost Analysis (Low, Medium, High)</b>	Low—The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.
<b>Actual Completion Date</b>	

## Recommended Mitigation Action/Implementation Plan and Project Description

<b>Action/Implementation Plan and Project Description:</b>	<p>The Cicero Fire Department will educate the residents of Cicero the necessity verbally, in writing, television and via social media. Fire Prevention, with the assistance of all fire companies, will prepare a presentation for the public that teaches the residents how important smoke and carbon monoxide detectors are to save lives and property. This presentation will be given as often as possible to community groups, schools, churches, and political organizations. The presentation will also be video recorded and broadcast on the Town of Cicero's television channel. A written informational booklet will also be created and be made available to all the above groups, at Town Hall, the Police Department, and the Fire Department. This information and presentation will also be made available on the Town of Cicero's website with links prominently displayed. Also, after every house fire the department will go door to door in the general vicinity and explain the importance of smoke and carbon monoxide detectors and provide them to the residents if they do not have one. The Fire Department gives residents free smoke detectors this fact will be reiterated in all forms of communications discussed above.</p>
--	--

Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	
2020		
2021		
2022		
2023		

Mitigated Hazards	
	All Hazards
	Dam/Levee Failure
	Drought
	Earthquake
	Flood
	Extreme Heat
	Lightning
	Hail
	Fog
	High Wind
	Snow
	Blizzard
	Extreme Cold
	Ice Storms
	Tornado

	Epidemic or pandemic
	Nuclear Power Plant Incident
	Widespread Power Outage
	Coastal Erosion
	Secondary Impacts from Mass Influx of Evacuees
X	Hazardous Materials Incident

**Action C6.13**

<b>Mitigation Action</b>	Implement Cicero Green Infrastructure Project
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	City of Chicago
<b>Lead Agency/Organization</b>	MWRD
<b>Supporting Agencies/Organizations</b>	City of Chicago
<b>Applicable Goal</b>	<ul style="list-style-type: none"> <li>Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects.</li> </ul>
<b>Applicable Objective</b>	<ul style="list-style-type: none"> <li>Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes</li> </ul>
<b>Potential Funding Source</b>	Unknown
<b>Estimated Cost</b>	Unknown
<b>Benefits (loss avoided)</b>	Unknown
<b>Projected Completion Date</b>	Unknown
<b>Priority and Level of Importance (Low, Medium, High)</b>	Unknown
<b>Benefit Analysis (Low, Medium, High)</b>	Unknown
<b>Cost Analysis (Low, Medium, High)</b>	Unknown
<b>Actual Completion Date</b>	Unknown

Recommended Mitigation Action/Implementation Plan and Project Description	
<b>Action/Implementation Plan and Project Description:</b>	Project Title: Cicero Town of Cicero 2019 GI Alley Paving Improvements

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
	Hail
	Fog
	High Wind
	Snow
	Blizzard
	Extreme Cold
	Ice Storms
	Tornado
	Epidemic or pandemic
	Nuclear Power Plant Incident
	Widespread Power Outage
	Coastal Erosion
	Secondary Impacts from Mass Influx of Evacuees
	Hazardous Materials Incident

### 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 C-6.1**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.1	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: No		X
<p align="center"><b>Completion status legend:</b>                      N = New    O = Action Ongoing toward Completion                      C = Project Completed    R = Want Removed from Annex    X = No Action Taken</p>		

**Action C-6.2**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.2	Continue to support the countywide actions identified in this plan.	
Status Description: Yes		O
<p align="center"><b>Completion status legend:</b>                      N = New    O = Action Ongoing toward Completion                      C = Project Completed    R = Want Removed from Annex    X = No Action Taken</p>		

**Action C-6.3**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.3	Actively participate in the plan maintenance strategy identified in this plan.	
Status Description: Yes		O
<p align="center"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action C-6.4**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.4	Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.	
Status Description: No		X
<p align="center"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action C-6.5**

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.5	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		O
<p align="center"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action C-6.6**

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.6	Where feasible, implement a program to record high water marks following high-water events	
Status Description: Yes		O
<p align="center"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action C-6.7**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.7	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.	
Status Description: Yes		O
<p style="text-align: center;"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action C-6.8**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.8	Separate the combined stormwater/sewer system.	
Status Description: Yes		O
<p style="text-align: center;"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action C-6.9**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.9	Improve the Building Code Effectiveness Grading Schedule classification program	
Status Description: No		X
<p align="center"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action C-6.10**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# C-6.10	Consider the development and implementation of a Capital Improvements Program (CIP) to increase the Villages regulatory, financial and technical capability to implement mitigation actions.	
Status Description: No		X
<p align="center"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

### Completed Mitigation Actions

Cicero 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

CICERO EXISTING CONDITIONS	
2010 Population	83,891
Total Assessed Value of Structures and Contents	\$16,633,242,134
Area in 100-Year Floodplain	0.00 acres
Area in 500-Year Floodplain	0.00 acres
Number of Critical Facilities	91

HAZARD EXPOSURE IN CICERO						
	Number Exposed		Value Exposed to Hazard		Total	% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents		
<b>Dam Failure</b>						
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%
<b>Flood</b>						
100-Year	0	0	\$0	\$0	\$0	0.0%

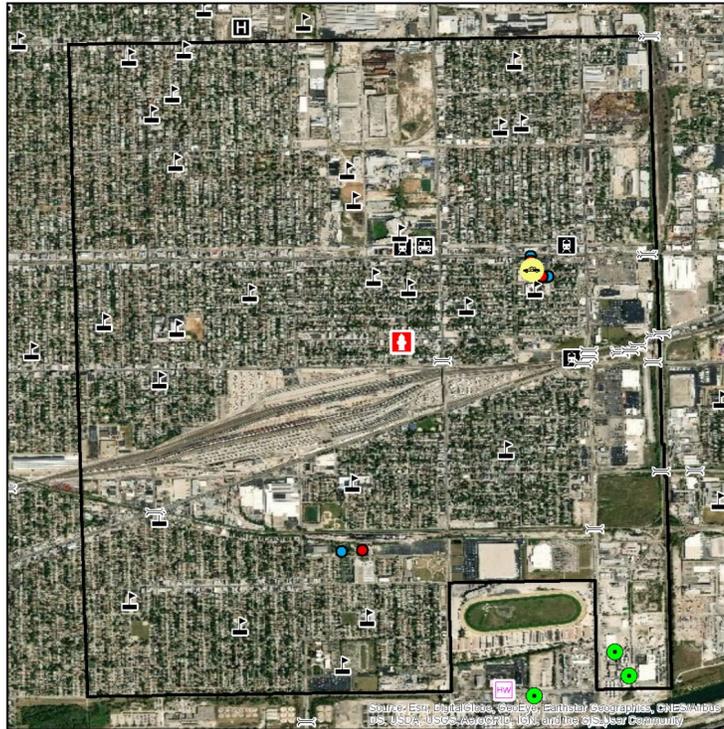
500-Year	0	0	\$0	\$0	\$0	0.0%
<b>Tornado</b>						
100-Year	—	—	\$999,552,821	\$657,313,059	\$1,656,865,880	9.96%
500-Year	—	—	\$3,094,641,558	\$2,641,070,643	\$5,735,712,201	34.48%

**ESTIMATED PROPERTY DAMAGE VALUES IN CICERO**

	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	Total	
<b>Dam Failure</b>				
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%
<b>Earthquake</b>				
1909 Historical Event	\$123,927,491	\$36,567,989	\$160,495,48	0.96%
<b>Flood</b>				
10-Year	\$0	\$0	\$0	0.00%
100-Year	\$0	\$0	\$0	0.00%
500-Year	\$0	\$0	\$0	0.00%

<b>Tornado</b>				
100-Year	\$99,955,282	\$65,731,306	<b>\$165,686,588</b>	1.00%
500-Year	\$451,817,667	\$385,596,314	<b>\$837,413,981</b>	5.03%

# Hazard Mapping

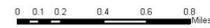


## CITY OF CICERO

### 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



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



## CITY OF CICERO

### PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

- Mercalli Scale, Potential Shaking**
- II-III Weak

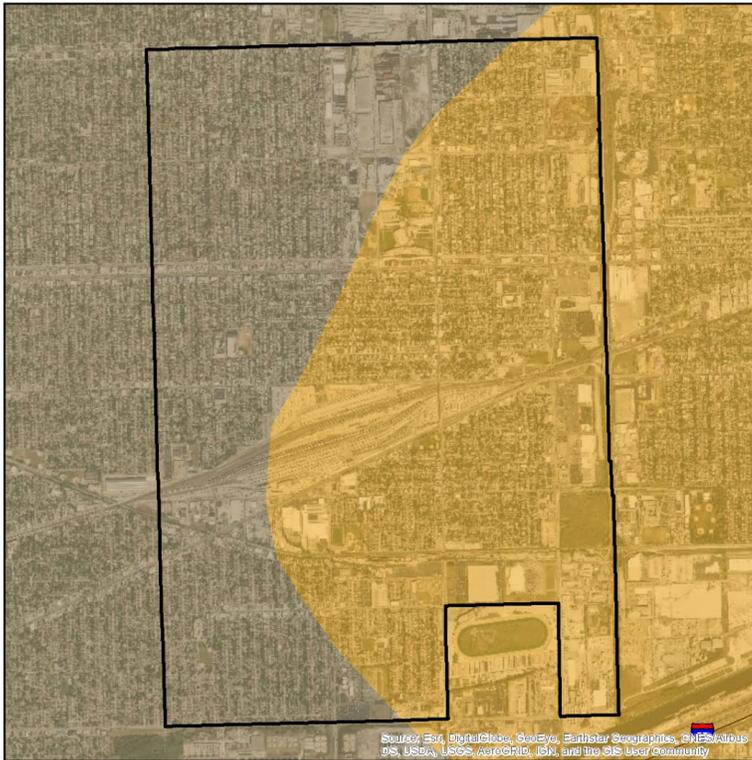
Data provided by the USGS Earthquake Hazards Program and Cook County.

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 combined are the random horizontal component. The reference site condition is firm rock, defined as having an average shear-wave velocity of 760 m/s in the top 30 meters corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction Program) site classes B and C.

The information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. Cook County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of Cook County.



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



**CITY OF CICERO**

**NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP) SOIL CLASSIFICATION**

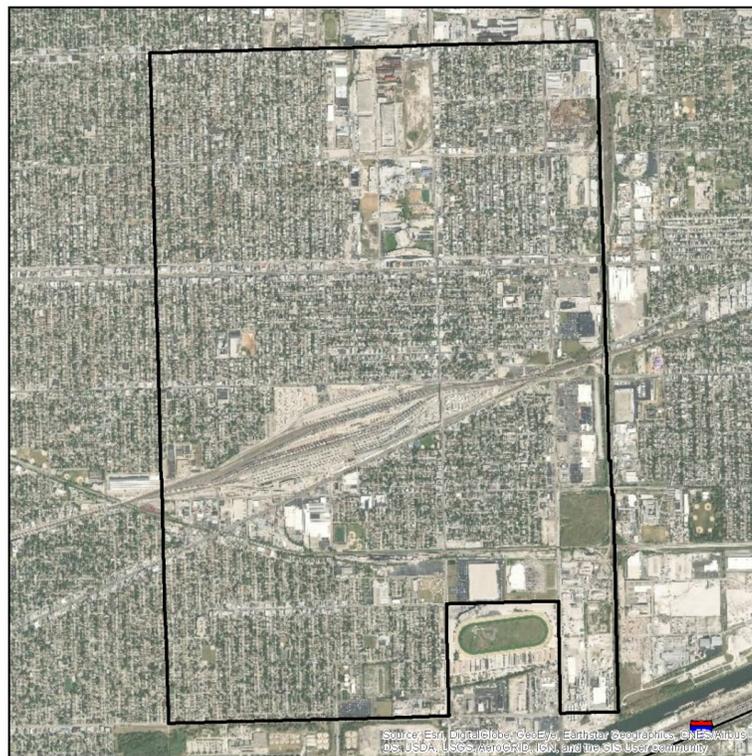
**TYPE**

- 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 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 Juan N. Pennell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil 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 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.

The information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. Cook County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of Cook County.



**CITY OF CICERO**

**COOK COUNTY MWRDGC 100-YEAR INUNDATION AREA**

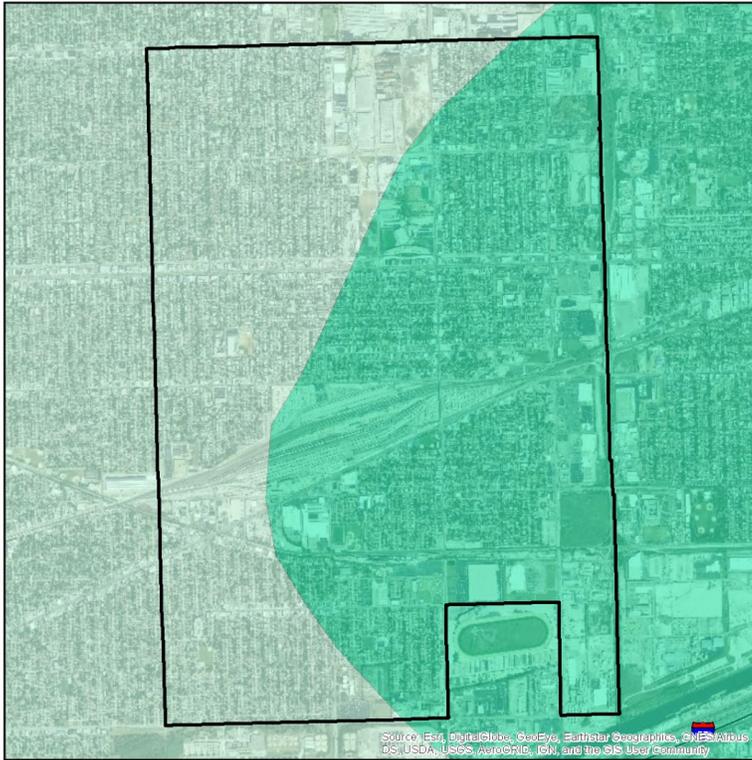
100-year Inundation Area

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

The information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. Cook County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of Cook County.

**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>.





**CITY OF CICERO**

**LIQUEFACTION SUSCEPTIBILITY**



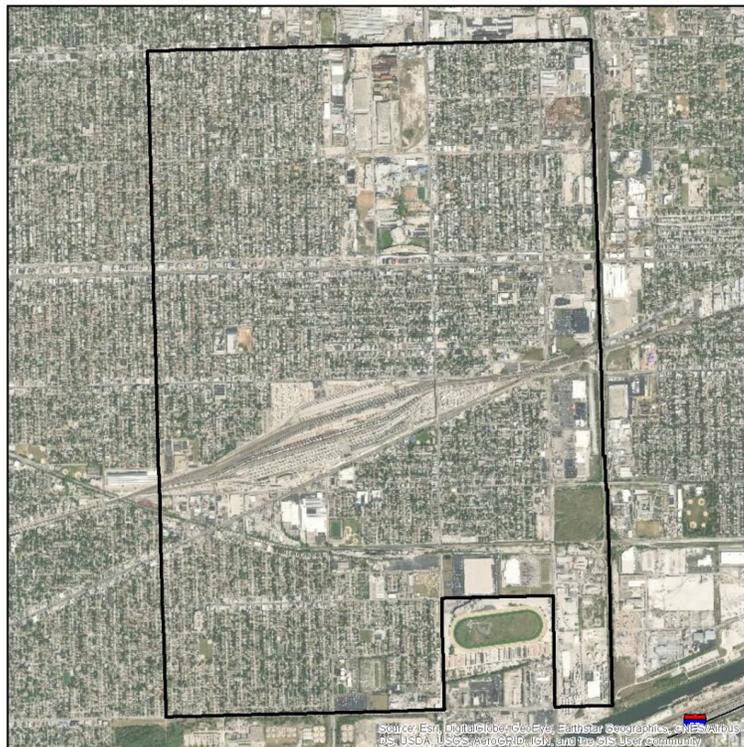
Data provided by the Illinois State Geological Survey and Cook County.

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type 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 I work. The USGS Geologic Investigation Series I-2788 Map of Surficial Deposits and Materials in the Eastern and Central United States (East of 112 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, 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.

The information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. Cook County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of Cook County.

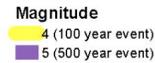


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**CITY OF CICERO**

**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