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

Hoffman Estates 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	3
Jurisdiction Profile	4
Capability Assessment	6
Jurisdiction-Specific Natural Hazard Event	9
Hazard Risk Ranking	11
Mitigation Strategies and Actions	12
New Mitigation Actions	16
Ongoing Mitigation Actions	23
Completed Mitigation Actions	32
Future Needs to Better Understand Risk/Vulnerability	33
Additional Comments	34
HAZUS-MH Risk Assessment Results	35
Hazard Mapping	37

Hazard Mitigation Point of Contact

Primary Point of Contact	Alternate Point of Contact
Alan Wednerski, Village Engineer	Joseph Nebel, Director of Public Works
1900 Hassell Rd	411 West Higgins Road
Hoffman Estates, IL 60169	Hoffman Estates, IL 60169
Telephone: 847-252-5802	Telephone: 847-781-2702 Email address:
Email address:	joseph.nebel@hoffmanestates.org
alan.wenderski@hoffmanestates.org	

Jurisdiction Profile

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

- Date of Incorporation: September 19, 1959
- Current Population: The population according to 2011-2015 Census Bureau American Community Survey is 52,271 and the 2018 US Census population estimate was 51,197.
- Population Growth: Based on the current data available, the Village of Hoffman Estates population had experienced population growth from 1960 to 2010, with the population decreasing slightly, by less than 1 percent, from 2010 to 2017.
- Location and Description: Hoffman Estates is in the northwest suburbs of Chicago, approximately 30 miles from downtown. Hoffman Estates is in Cook County and a very small portion of it is in Kane County. Hoffman Estates has 20.80 square miles of land and 0.18 square miles of water. Interstate 90 basically divides the village in half and there are exits at four (4) different intersections throughout the village. Hoffman Estates is surrounded by numerous communities such as South Barrington, Inverness, Schaumburg, Streamwood, Elgin, and East Dundee. The Cook County Forest Preserve has two (2) forest preserves within in the boundaries of Hoffman Estates: The Paul Douglas and Arthur L. Janura Forest Preserves. Hoffman Estates is home to Sears Holding Corporation, and Mori Seiki as well as the Sears Centre Arena. Hoffman Estates has 11 elementary schools, 1 junior high school, and 2 high schools.
- Brief History: In 1954 a local farmer sold his 160 acre farm to Sam and Jack Hoffman for a subdivision in Cook County. The first homeowners began to move into the subdivision in 1955. In 1958, the Northwest Tollway (I-90) opened making this area more attractive to Chicago commuters. On September 19, 1959, residents voted to incorporate as the Village of Hoffman Estates. The charter was issued on September 23, 1959. The population at this time was approximately 8,000 in an area just under 3 square miles. In 1961, land north of I-90 was annexed into the village. Some 2,000 acres were annexed by 1962 including areas that are now Winston Knolls, Westbury, and the Paul Douglas Forest Preserve. Various small office buildings were built by 1980, followed by major complexes such as Northwest Corporate Center, Barrington Pointe, Greenspointe, and Siemens. Hoffman Estates was once home to Poplar Creek Outdoor Theater which was one of the largest outdoor theaters in the Midwest in the 1980s and early 1990s.
- Climate: Hoffman Estates is typical for North Central Illinois. The average rainfall is 36 inches and the average snowfall is 33 inches. The average number of days with measurable precipitation is 126. On average there are 187 sunny day per year. The July high is usually around 86 degree and the January low is usually 12 degrees.
- Governing Body Format: The Village of Hoffman Estates is governed by Village Trustees who are elected, as are the Mayor and Village Clerk. The Village Manager, who is appointed by the village board, oversees the day to day operations of the municipality and the nine departments within it. This body of Government will assume the responsibility for the adoption and implementation of this plan. The village operates with 9 departments including: Department of General Government, Department of Development Services, Police Department, Fire Department, Department of Public Works, Department of Health and Human Services, Department of Information Systems, Finance Department, and the Department of Human Resources Management

• Development Trends: Hoffman Estates continually strives to facilitate new growth. Although the economy is still slow to recover, Hoffman Estates continues to experience improved growth. Large and small businesses choose to locate in Hoffman Estates or make improvements to existing property. Hotel occupancy and rates have increased from previous years, demonstrating an upswing in economic activity. Hoffman Estates continues to pursue and manage grant funding, receiving several grants for various projects to aid development. Recent plan design and specs for major road projects were performed in-house, significantly reserving funds for infrastructure improvements rather than contracted work. In recent years the Village has designated four TIF Districts in commercial areas of the Village to spur economic development and infrastructure improvements. The Village has also partnered with the surrounding communities to start up a business accelerator called Next Level Northwest. The accelerator is focused on helping stage two companies get to the next level by providing business help via experienced coaching and mentoring

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.

	Authority		Other Jurisdictional as Authority	State Mandated	Comments
Codes, Ordinances & Requi	rements				
Building Code	Yes	No	No	Yes	Municipal Code Ch. 11, 2009
Zonings	Yes	No	No	Yes	Municipal Code Ch. 9, 5-2- 11
Subdivisions	Yes	No	No	No	Municipal Code Ch. 10, 3-8-13
Stormwater Management	Yes	No	Yes	Yes	Municipal Code 10-8, 3-18- 2013
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	Yes	No	No	No	Municipal Code 10-2, 3-18- 2013
Public Health and Safety	Yes	No	Yes	Yes	Municipal Code Ch. 6 & 7, Date Unknown
Environmental Protection	Yes	No	No	No	Through Subdivision Code
Planning Documents					
General or Comprehensive Plan	Yes	No	No	No	Hoffman Estates Comprehensive Plan 2007
Is the plan equipped to provide linkage to this mitigation plan?					Yes - Land Use Yes - Redevelopment
Floodplain or Basin Plan	Yes	No	No	No	Municipal Code 10-8-1
Stormwater Plan	No	No	No	No	
Capital Improvement Plan	Yes	No	No	No	2014
What types of capital facilities does the plan address?					Building and vehicle
How often is the plan revise	d/updated?				Annually

Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	Yes	No	No	Yes	Comprehensive Plan
Shoreline Management Plan	No	No	No	No	N/A
Response/Recovery Plannin	g				
Comprehensive Emergency Management Plan	Yes	No	Yes	Yes	Cook County DHSEM
Threat and Hazard Identification and Risk Assessment	No	No	Yes		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	Yes	No	Yes	No	Cook County DHSEM
Public Health Plans	Yes	No	Yes	No	Cook County DHSEM

TABLE: FISCAL CAPABILITY			
Financial Resources	Accessible or Eligible to Use?		
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	No		
Withhold Public Expenditures in Hazard-Prone Areas	No		
State Sponsored Grant Programs	Yes		
Development Impact Fees for Homebuyers or Developers	Yes		

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	Development Services			
Engineers or professionals trained in building or infrastructure construction practices	Yes	Development Services			
Planners or engineers with an understanding of natural hazards	Yes	Development Services			
Staff with training in benefit/cost analysis	Yes	All Departments			

VOLUME 2: COOK COUNTY HAZARD MITIGATION PLAN – HOFFMAN ESTATES ANNEX

Surveyors	Yes	Contracted
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium
Scientist familiar with natural hazards in local area		Contracted if scientific assessment needed
Emergency manager	Yes	Cook County DHSEM
Grant writers	Yes	General Government

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE			
What department is responsible for floodplain management in your jurisdiction?	Development Services – Engineering Division		
Who is your jurisdiction's floodplain administrator? (department/position)	Development Services - Director of Engineering - CFM		
Are any certified floodplain managers on staff in your jurisdiction?	No		
What is the date of adoption of your flood damage prevention ordinance?	1990- most recent update in 2010		
When was the most recent Community Assistance Visit or Community Assistance Contact?	July 2013		
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No. In compliance with all requirements.		
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?	If beneficial training is available, the Village may be interested		
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?	Village participates and is a member of CRS program. No current interest in seeking improvement in classification		

TABLE: COMMUNITY CLASSIFICATIONS				
	Participating?	Classification	Date Classified	
Community Rating System	Yes	6	2018	
Building Code Effectiveness Grading Schedule	Yes	ISO Rating- 2/2X	2018	
Public Protection/ISO	Unknown	Unknown	Unknown	
StormReady	Yes	Gold (Countywide)	2014	
Tree City USA	Yes	N/A	1992	

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

TABLE: NATURAL HAZARD EVENTS				
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment	
Severe Weather	-	5/2/2018	-	
Flooding	-	10/14/2017	-	
Hail	-	7/23/2017	-	
Hail	-	4/10/2017	-	
Hail	-	7/17/2015	-	
Severe Weather	-	9/5/2014	\$75,000 in property damage.	
Hail	-	4/12/2014	-	
Severe Storms	DR-4116	2013	-	
Severe Winter Storms	DR-1960	2011	-	
Severe Storms/Flooding	DR-1935	2010	-	
Severe Storms/Flooding	DR-1800	2008	-	
Severe Storms/Flooding	DR-1729	2007	-	
Severe Winter Storm	EM-3161	2000	-	
Winter Snow Storm	EM-3134	1999	-	
Flooding	DR-1188	1997	-	
Flooding	DR-1129	1996	-	
Severe Storms/Flooding	DR-997	1993	-	
Severe Storms/Flooding	DR-798	1987	-	
Severe Storms/Flooding	DR-776	1986	-	

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/Severe Weather: Multiple areas are prone to flooding in the community.

Hail: This event occurs with relative frequency; however, little damage typically occurs due to hail. Since hail occurs during severe weather events, typically flooding, severe wind, or heavy snow causes more damage.

Tornado/High Winds: High winds have historically affected residential areas, causing downed trees and damage to property.

Snow: Senior citizens and individuals with functional and access needs in the community have historically had issues when there is a large amount of snow or severe winter weather.

Extreme Cold: Senior citizen complexes/housing, and those that reside in those facilities are especially vulnerable during extreme cold incidents.

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:	TABLE: HAZARD RISK RANKING					
Rank	Hazard Type	Risk Rating Score (Probability x Impact)				
1	Severe Weather	54				
2	Severe Winter Weather	54				
3	Earthquake	32				
4	Tornado	27				
5	Flood	18				
6	Drought	3				
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: HA	AZARD MITIGAT	ION ACTION PLA	AN MATRIX				
Status	Hazards Mitigated	Objectives Met	Lead Agencies		Sources of Funding	Timeline/Projected Completion Date (a)	
Action H9	.1—Raise public	awareness rega	rding severe we	ather such	as educational	programs.	
Ongoing	All	5, 6, 8	Emergency Management Agency (EMA)		General Revenue	Ongoing	
Action H9	.2—All severe w	eather incidents	will be manage	ed using the	e Incident Comn	nand System.	
Ongoing	All	1, 2, 5	EMA, Police	Medium	General Revenue	Ongoing	
	.3—The Emerge ather emergence	ncy Managemer cy plans.	nt Agency Coord	linator will	help with the d	evelopment of	
Ongoing	All	1, 2, 5, 6, 8	EMA	Low	General Revenue	Ongoing	
Action H9 EAS.	.4—Special pop	ulations and faci	lities will be wa	ned of sev	ere weather by	reverse 911 and	
Ongoing	All	1, 5	EMA, Police	Low	General Revenue	Ongoing	
Action H9	.5—Utilize GIS t	o identify utilitie	s and critical fai	lures.			
Ongoing	All	2, 3, 5, 6, 7, 9, 10, 12, 13	Public Works	Low	General Revenue	Ongoing	
Action H9	Action H9.6—Adoption of International Building Code.						
Ongoing	All	1, 2, 3, 10	Code Enforcement	Low	General Revenue	Completed	

VOLUME 2: COOK COUNTY HAZARD MITIGATION PLAN – HOFFMAN ESTATES ANNEX

Action H9	.7 —Maintain En	ergy Assurance	Plan to reduce r	isks in long	and short term	energy shortage.	
Ongoing	All	1, 8, 13	Planning	\$89,000; Low	DOE Grant	Ongoing	
Action H9	Action H9.8—Mitigate potential increases in run-off through development process.						
Ongoing	Flood, Severe Weather	1, 2, 3, 4, 9, 10	Public Works	Low	General Revenue	Ongoing	
Action H9 flooding.	.9—Maintain a s	storm water ma	nagement fee to	finance th	e reduction of i	mpacts of potential	
Ongoing	Flood, Severe Weather	1, 2, 3, 8, 9, 11	Public Works	Low	General Revenue	Ongoing	
hazard-pr	.10—Where appone areas to pre Give priority to p	vent future stru	cture			tructures in	
Removed	All	7, 13	Village of Hoffman Estates	High	Removed	Long-term (depending on funding)	
Action H9	.11—Continue t	o support the Co	ounty wide actio	ns identifi	ed in this plan.		
Ongoing	All	All	Village of Hoffman Estates	Low		Short- and long- term	
Action H9	Action H9.12—Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6	DHSEM, Village of Hoffman Estates	Low	General Fund	Short-term	
Action H9	.13—Maintain t	he Village's class	sification under	the Commi	unity Rating Syst	tem (CRS) program.	

Ongoing	Flood	3, 4, 5, 6, 7, 9, 10, 11, 13	Village of Hoffman Estates	Low	General Fund	Long-term
programs t adopted flo	14—Maintain go that meet or exce ood damage prevoublic assistance	eed the minimum	n NFIP requireme e, participating in	ents. Such p n floodplain	rograms include mapping update	enforcing an
Ongoing	Flooding	4, 6, 9	Village of Hoffman Estates	Low	General Fund	Short-term and ongoing
Action H9. events.	15 —Where feasi	ble, implement a	program to reco	ord high wa	ter marks follow	ing high water
	Flooding, Severe Weather	3, 6, 9	Village of Hoffman Estates		General Fund; FEMA Grant Funds (Public Assistance)	Long-term
	16—Integrate the duse or redevelopment		on plan into oth	er plans, pr	ograms, or resou	rces that
Ongoing	All		Development Services	Low	General Fund	Short-term
Action H9. communiti	17—Install a redies.	undancy in water	r system through	interconne	ection with neigh	boring
New	Flood	8, 12, 13	Public Works	\$500,000; Medium	Local Funds	2023
Action H9.	18 —Research, w	rite, and finalize	a south area sto	rmwater m	aster plan.	
New	Flood	1, 2, 3, 4, 13	Development Services	\$250,000; Medium	Local Funds	2021
Action H9.	19 —Provide ons	ite backup powe	r sources for all \	/illage lift st	tations.	
New	Widespread Power Outage	1, 2, 12	Public Works	\$500,000; High	Local Funds	2025
	(a) Ongoing indicates continuation of an action that is already in place. Short-term indicates mplementation within five years. Long-term indicates implementation after five years.					

TABLE: MI	ABLE: MITIGATION STRATEGY PRIORITY SCHEDULE						
Action Number	Number of Objectives Met	Benefits	Costs	Benefits	ls Project Grant- Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Priority (a)
1	3	High	Medium	Yes	No	Yes	Medium
2	3	Low	Medium	No	No	Yes	Low
3	5	High	Low	Yes	No	Yes	Medium
4	2	High	Low	Yes	No	Yes	High

VOLUME 2: COOK COUNTY HAZARD MITIGATION PLAN – HOFFMAN ESTATES ANNEX

5	9	Medium	Low	Yes	No	Yes	High
6	4	Medium	Low	Yes	No	No	High
7	3	Low	Low	Yes	Yes	Yes	Low
8	6	Medium	Low	Yes	Yes	Yes	Medium
9	6	Low	Low	Yes	No	Yes	High
10	2	High	High	Yes	Yes	No	Medium
11	13	Medium	Low	Yes	No	Yes	High
12	3	Medium	Low	Yes	Yes	Yes	High
13	9	Medium	Low	Yes	No	Yes	Medium
14	3	Medium	Low	Yes	No	Yes	High
15	3	Medium	Medium	Yes	Yes	No	Medium
16	5	Medium	Low	Yes	No	Yes	High
17	3	Medium	Medium	Yes	Yes	Yes	Medium
18	5	Medium	Medium	Yes	Yes	Yes	Medium
19	3	Medium	High	No	Yes	Yes	Low
(a) See Chapter 1 for explanation of priorities.							

New Mitigation Actions

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

Mitigation Action	Install a redundancy in water system through interconnection with
	neighboring communities.
Year Initiated	2019
Applicable Jurisdiction	Hoffman Estates
Lead	Public Works
Agency/Organization	
Supporting	
Agencies/Organizations	
Applicable Goal	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. Involve stakeholders to enhance the local capacity to mitigate, prepare for,
	and respond to the impacts of natural hazards. Establish partnerships among all levels of local government, the private sector, and/or nongovernmental organizations to improve and implement methods to protect people and property. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area. Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.
Potential Funding Source	Local Funds
Estimated Cost	\$500,000
	Redundancy in water supply in case of loss of service to certain zones within Hoffman Estates
Projected Completion Date	2023
Priority and Level of Importance (Low, Medium, High)	Medium Priority
	Medium—Project will have a long-term impact on the reduction of risk
Medium, High)	exposure for life and property, or project will
	provide an immediate reduction in the risk exposure for property.
• • •	Medium—The project could be implemented with existing funding but
	would require a re-apportionment of the budget
	or a budget amendment, or the cost of the project would have to be
	spread over multiple years.
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description

Action/Implementation Provide a water main connection from neighboring Palatine and

Plan and Project Schaumburg to Hoffman Estates water main. Connection would allow for

Description: 2-way sharing but would only be utilized in time of emergency.

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

Miti	gated 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

Mitigation Action	Research, write, and finalize a south area stormwater master plan
Year Initiated	2019
Applicable Jurisdiction	Hoffman Estates
Lead	Development Services
Agency/Organization	
Supporting	
Agencies/Organizations	
Applicable Goal	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.
	Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards. Develop, promote, and integrate mitigation action plans.
Applicable Objective	Eliminate or minimize disruption of local government operations caused by natural hazards through all phases of emergency management. Increase the resilience of (or protect and maintain) infrastructure and critical facilities. Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change. Integrate hazard mitigation policies into land use plans in the planning area.
	Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.
Potential Funding Source	Local Funds
Estimated Cost	\$250,000
Benefits (loss avoided)	Ensure that future projects are more "future-proofed" in providing flooding mitigation
Projected Completion Date	2021
Priority and Level of Importance (Low, Medium, High)	Medium Priority
Benefit Analysis (Low, Medium, High)	Medium—Project will have a long-term impact on the reduction of risk exposure for life and property, or project will provide an immediate reduction in the risk exposure for property.
Cost Analysis (Low, Medium, High)	Medium—The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
Actual Completion Date	

Action/Implementation Study the south area of Village that has the oldest stromwater infrastructure. Plan for future storm sewer replacement projects to identify changes in pipe sizing or areas where additional detention can be created to meet standards of most current floodplain mapping and rainfall design data.

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

Miti	gated 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

Mitigation Action	Provide onsite backup power sources for all Village lift stations
Year Initiated	2019
Applicable Jurisdiction	Hoffman Estates
Lead	Public Works
Agency/Organization	
Supporting	
Agencies/Organizations	
Applicable Goal	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.
Applicable Objective	Eliminate or minimize disruption of local government operations caused by natural hazards through all phases of emergency management. Increase the resilience of (or protect and maintain) infrastructure and critical facilities. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.
Potential Funding Source	Local Funds
Estimated Cost	\$500,000
Benefits (loss avoided)	Allow for continued use of sanitary sewer system through long term power outages.
Projected Completion Date	2025
Priority and Level of Importance (Low, Medium, High)	Low Priority
Benefit Analysis (Low,	Medium—Project will have a long-term impact on the reduction of risk
Medium, High)	exposure for life and property, or project will
	provide an immediate reduction in the risk exposure for property.
Cost Analysis (Low,	High—Existing funding will not cover the cost of the project;
Medium, High)	implementation would require new revenue through an
	alternative source (for example, bonds, grants, and fee increases)
Actual Completion Date	

Recommended Mitigati	Recommended Mitigation Action/Implementation Plan and Project Description				
Action/Implementation	Allow for continued use of sanitary sewer system lift stations through long				
Plan and Project	term power outages without utilizing existing mobile backup power				
Description:	sources that may be needed to keep other Village facilities functioning.				

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

Miti	gated 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
X	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.

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	'	Status (X, O, C, R, N)
# H-9.1	Raise public awareness regarding severe weather such as education programs	
Status Description: Yes	Village conducted severe weather spotter training classes for the public and employees of the Village during this reporting period as well as posted notices and warning on Village media.	0
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

TABLE: ACTION PLAN MATRIX			
Action Number Action Taken Y/N	·	Status (X, O, C, R, N)	
	All Severe weather incidents will be managed using the incident command system		
Description: Yes	Although no severe weather incidents occurred during this reporting period the Village conducted a severe weather table top exercise which included EOC and ICS operations per our plan. The ICS system is also used for standard snow command operations annually.	0	
Completion status legend:			
N = New	N = New O = Action Ongoing toward Completion		
C = Project Completed R = Want Removed from Annex X = No Action Taken			

TABLE: ACTION PLAN MATRIX		
Action Numbe Action Taken Y/N	· ·	Status (X, O, C, R, N)
# H-9.3	The Emergency Management Agency Coordinator will help with the development of severe weather emergency plans	
Status Description: Yes	The EMA Coordinator continues to help in the development of the severe weather emergency plans including the severe weather emergency plan conducted for the Northwest Forth fest and monitoring and notification of weather events during this reporting period.	0
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# H-9.4	Special populations and facilities will be warned of severe weather by reverse 911 and EAS	
Description:	Although no severe weather incidents occurred during this reporting period testing of the reverse 911 and EAS system occur regularly to ensure we are prepared.	0
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

TABLE: ACTION PLAN MATRIX			
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)	
# H-9.5	Utilize GIS to identify utilities and critical failures		
Status Description: Yes	GIS maps are continually updated.	0	
Completion status legend:			
 N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken 			

TABLE: ACTION PLAN MATRIX			
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)	
# H-9.6	Adoption of International Building code.		
	Completed, On May 15, 2017, the Village adopted the 2015 ICC Family of Codes and the 2017 National Electrical Code (NEC).	С	
Completion status legend:			
N = New C = Project Com	 N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken 		

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	'	Status (X, O, C, R, N)
	Maintain Energy Assurance Plan to reduce risks in long and short term energy shortage.	
Status Description: Yes	This plan is maintained continually.	0
Completion status legend:		
 N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken 		

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	· ·	Status (X, O, C, R, N)
# H-9.8	Mitigate Potential increases in run off through development process.	
Status Description: Yes	The Village engineering Department continues mitigation through the development process including requirements to meet MWRD storm water requirements. Engineering Department further works with Public Work to mitigate identified flooding areas in the village.	0
Completion status legend:		
N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	'	Status (X, O, C, R, N)
# H-9.9	Maintain a storm water management fee to finance the reduction of impacts of potential flooding.	
Status Description: Yes	The fees are collected and continue to be used for ongoing storm water infrastructure improvements.	0
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# H-9.11	Continue to support the County wide actions identified in this plan	
	The Village continues to participate in training, planning, drills, and meetings to support the County wide plan.	0
Completion status legend:		
 N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken 		

TABLE: ACTION PLAN MATRIX				
Action Number Action Taken Y/N	,	Status (X, O, C, R, N)		
# H-9.12	Actively participate in the plan maintenance strategy identified in this plan			
Status Description: Yes	Village departments actively participate in the maintenance of the plan.	0		
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken				

TABLE: ACTION PLAN MATRIX				
Action Number Action Taken	Status (X, O, C, R, N)			
Y/N				
# H-9.13	Maintain the Village's classification under the Community Rating System (CRS) program.			
	The Village has maintained its classification rating. Classification improved from 7 to 6 in 2018	0		
Completion status legend:				
N = New O = Action Ongoing toward Completion				
C = Project Completed R = Want Removed from Annex X = No Action Taken				

TABLE: ACTION PLAN MATRIX						
Action Number Action Taken Y/N						
# H-9.14	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	The Village maintains good standing under NFIP and works to assist and informing the public on floodplain requirements and impact.	0				
Completion status legend:						
N = New O = Action Ongoing toward Completion						
C = Project Completed R = Want Removed from Annex X = No Action Taken						

TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)			
# H-9.15	Where feasible, implement a program to record high water marks following high water events.				
Status Description: Yes	Public works tracks and records high water marks on a continual basis.	0			
Completion sta	itus legend:				
N = New C = Project Con	\mathbf{O} = Action Ongoing toward Completion upleted \mathbf{R} = Want Removed from Annex \mathbf{X} = No Action Taken				

TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N	•	Status (X, O, C, R, N)			
# H-9.16	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.				
Description:	The planning zoning and engineering department integrate the hazard mitigation plan into programs that dictate land use and redevelopment before approval.	0			
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

Hoffman Estates has no new mitigation 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

HOFFMAN ESTATES EXISTING CONDITIONS				
2010 Population	51,895			
Total Assessed Value of Structures and Contents	\$7,574,862,846			
Area in 100-Year Floodplain	822.57 acres			
Area in 500-Year Floodplain	1,132.93 acres			
Number of Critical Facilities	61			

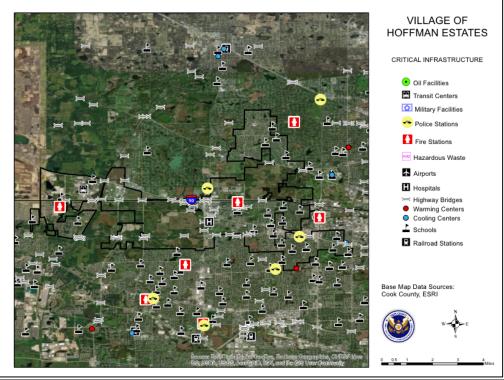
HAZARD EXPOSURE IN HOFFMAN ESTATES						
	Number Exp	osed	Value Exposed to Hazard			% of Total Assessed
	Population	Buildings	Structure	Contents	Total	Value Exposed
Dam Failure						
Buffalo Creek	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	0	0	\$0	\$0	\$0	0.00%
Touhy	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	0	0	\$0	\$0	\$0	0.00%
Flood						
100-Year	104	32	\$11,294,396	\$7,551,898	\$18,846,294	0.25%
500-Year	361	111	\$40,562,862	\$22,186,131	\$62,748,993	0.83%
Tornado						
100-Year	_	_	\$399,622,116	\$211,325,185	\$610,947,302	8.07%
500-Year	_	_	\$763,810,149	\$393,836,613	\$1,157,646,762	15.28%

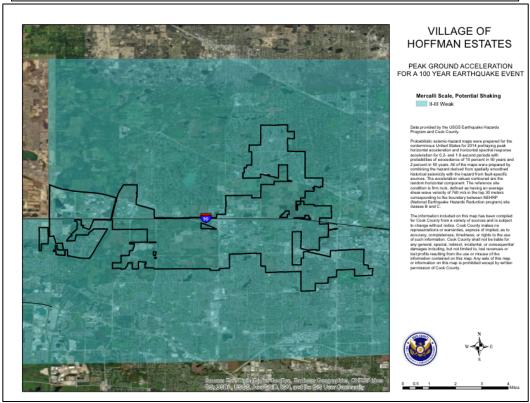
ESTIMATED PROPERTY DAMAGE VALUES IN HOFFMAN ESTATES						
	Estimated Dan	nage Associated with	% of Total Assessed			
	Building	Contents	Total	Value Damaged		
Dam Failure	Dam Failure					
Buffalo Creek	\$0	\$0	\$0	0.00%		
U. Salt Cr. #2	\$0	\$0	\$0	0.00%		
Touhy	\$0	\$0	\$0	0.00%		
U. Salt Cr. #3	\$0	\$0	\$0	0.00%		
U. Salt Cr. #4	\$0	\$0	\$0	0.00%		
Earthquake						

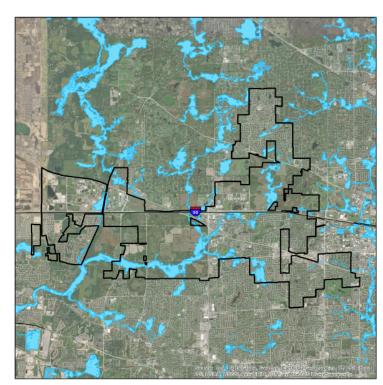
VOLUME 2: COOK COUNTY HAZARD MITIGATION PLAN – HOFFMAN ESTATES ANNEX

1909 Historical Event	\$19,251,924	\$4,694,533	\$23,946,457	0.32%
Flood				•
10-Year	\$1,028	\$55,841	\$56,869	0.00%
100-Year	\$240,818	\$687,955	\$928,773	0.01%
500-Year	\$1,267,113	\$1,640,232	\$2,907,345	0.04%
Tornado				•
100-Year	\$39,962,212	\$21,132,519	\$61,094,730	0.81%
500-Year	\$111,516,282	\$57,500,145	\$169,016,427	2.23%

Hazard Mapping







VILLAGE OF HOFFMAN ESTATES

COOK COUNTY MWRDGC 100-YEAR INUNDATION AREA



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

Chicago and Cook County.

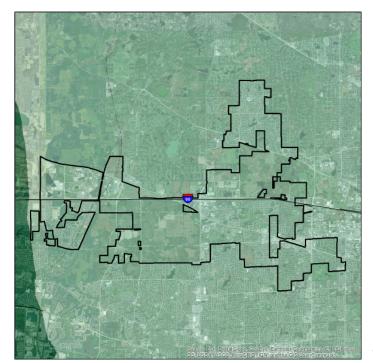
The information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warranties, express of implied, as to accuracy, completeness, infigured, as to accuracy, completeness, information. Cook County shall not be lable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lex revenues or lost profits resulting from the use or insusse 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 hundation 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 HOFFMAN ESTATES

LIQUEFACTION SUSCEPTIBILITY

LIQUEFACTION SUSCEPTIBILITY

low very low

Data provided by the Illinois State Geological Survey and

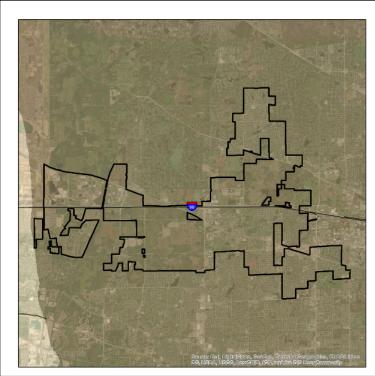
The Cornel United States Earthquise Commortum (CUISC) States (Longitude Control College Colleg

into imministration includes the less than the state includes the companion of the companio





0 0.35 0.7 1.4 2.1 2.8



VILLAGE OF HOFFMAN ESTATES

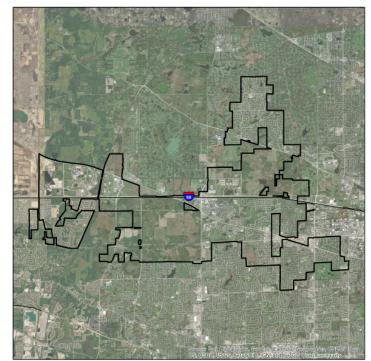
NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP) SOIL CLASSIFICATION

TYPE

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







VILLAGE OF HOFFMAN ESTATES

100- AND 500- YEAR TORNADO EVENTS

Magnitude

4 (100 year event) 5 (500 year event)



