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

Lincolnwood Annex

FINAL

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Prepared for:



Cook County
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Hazard Mitigation Point of Contact

Primary Point of Contact	Alternate Point of Contact
Mike Hansen, Fire Chief	Ray White, Deputy Fire Chief
6900 Lincoln Avenue	6900 Lincoln Avenue
Lincolnwood, IL 60712	Lincolnwood, IL 60712
Telephone: 847-514-6436	Telephone: 847-673-1545
Email Address: mhansen@lwd.org	Email Address: rwhite@lwd.org

Jurisdiction Profile

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

• Date of Incorporation: 1912

• **Current Population:** 12,349 as of the 2018 US Census population estimate.

- **Population Growth:** Lincolnwood's population has remained relatively stable over the past 8 years, with a slight decrease.
- Location and Description: The Village of Lincolnwood is a suburb of Chicago in Cook County, located 14 miles north of the Chicago Loop. Lincolnwood borders Chicago to the south and east, Skokie to the north, and Niles to the west. According to the U.S. Census Bureau, Lincolnwood has a total land area of 2.69 square miles. Lincolnwood is divided or surrounded by 7 major streets and the Edens Expressway. While primarily a bedroom community, Lincolnwood does have a small industrial area, a number of small shopping districts along the main thoroughfares, and an enclosed mall of approximately 100 stores with two anchor stores.
- Brief History: Potawatomi originally settled the wooded area that made up what is now Lincolnwood, but vacated the land after the Indian Boundary Treaty of 1816. Rural development proceeded slowly on treacherous plank roads along present-day Milwaukee and Lincoln Avenues. Johann Tess, for whom the village was originally named, and his family came from Germany in 1856, purchasing 30 acres of barren land in the area. Population slowly increased, and the first commercial establishment, the Halfway House Saloon, was established in 1873. The agrarian population grew after the establishment of a Chicago & North Western Railway station in nearby Skokie in 1891 and the completion of the North Shore Channel in 1909, which made the easily flooded prairie land manageable. More saloons and taverns soon appeared, specifically along Crawford and Lincoln Avenues. Because only organized municipalities could grant liquor licenses, 359 residents incorporated in 1911 and named the village Tessville. Tessville annexed land throughout the 1920s, finally stretching to Central Avenue on the west and Kedzie Avenue on the east. During Prohibition, Tessville became a haven for speakeasies and gambling facilities. Tessville was long reputed for drinking and gambling until the 1931 election of its longest-serving mayor, Henry A. Proesel, a grandson of George Proesel, one of the original American settlers. In 1932, Lincoln Avenue, formerly a plank toll road, became a state highway. Proesel then worked with the federal government's Public Works Administration and hired the community's entire unemployed workforce to plant 10,000 elm trees on the village streets. Most important, the community passed a liquor license law (1934) that limited the number of licenses allowable within the city limits and became a model ordinance for other communities. Proesel finally changed Tessville's image when he renamed the village Lincolnwood in 1936. In 1997, Lincolnwood became a Home Ruled village.
- Climate: The climate of Lincolnwood and the Chicago area is classified as humid continental, with all four seasons distinctly represented: wet springs; hot and humid summers; pleasant autumns; and cold winters. Annual precipitation is average, and reaches its lowest points in the months of January and February, and peaks in the months of May and June. Winter proves quite variable. Seasonal snowfall in the Village has ranged from 9 90 inches. The daily average temperature in January at Midway Airport is 24.8 °F (-4.0 °C), and temperatures often stay

below freezing for several consecutive days or even weeks in January and February. Temperatures drop to or below 0 °F (–18 °C) on 5.5 nights annually at Midway and 8.2 nights at O'Hare. Spring in the Chicago area is perhaps the areas wettest and unpredictable season. Winter like conditions can persist well into April and even occasionally into May. Thunderstorms are especially prevalent in the spring time as the areas lakeside location makes it a center of conflicts between large volumes of warmer and colder air, triggering many kinds of severe weather. Temperatures vary tremendously in the springtime; March is the month with the greatest span between the record highs and lows. On a typical summer day, humidity is usually moderately high and temperatures ordinarily reach anywhere between 78 and 92 °F (26 and 33 °C). The extreme heat that the Chicago area is capable of experiencing during the height of the summer season can persist into the autumn season. Temperatures have reached 100 degrees high and subzero lows below –18 °C. Fall can bring heavy thunderstorms, many of which are capable of producing flooding. The average first accumulating snow occurs around Nov 19.

- Governing Body Format: The Village of Lincolnwood operates under a form of government
 consisting of an elected Village President, Board of six Trustees, and a Village Clerk. The Village
 appoints a professional Village Manager to serve as the Chief Administrative Officer and oversee
 the day-to-day operations. The Village of Lincolnwood will assume the responsibility for the
 adoption and implementation of this plan. Lincolnwood operates seven departments:
 Administration, Police, Fire, Public Works, Parks and Recreation, Community Development and
 Finance.
- Development Trends: Lincolnwood is anxiously anticipating the development of the Purple
 Hotel site to bring in other commercial and residential developments. Tucker Development
 presented a plan for the Purple Hotel site in 2018 which included public space, a hotel,
 residential space, restaurants and commercial building space. There has been a moderate
 increase in residential as well as commercial developments already. The Economic Development
 Commission (EDC) was created in 1994 by Village Ordinance as an advisory body to the Village
 Board. In creating the Economic Development Commission, the Village Board established as its
 purpose the encouragement and facilitation of economic growth within the Village.

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 &	Requirement	s			
Building Code	Yes	No	No	Yes	Municipal Code adopted: 2009 IBC Code Set
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code. Chapter 15 – Village Zoning Ordinance adopted: 200
Subdivisions	Yes	No	No	No	Chapter 16 Subdivision Regulations adopted: 2002
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. MWRD Ordinance
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	Yes	No	Yes	Yes	(765 ILCS 77/) Residential Real

					Property Disclosure Act.
Growth Management	Yes	No	No	No	Municipal Code adopted: N/A
Site Plan Review	Yes	No	Yes	No	Illinois Department of Transportation Municipal Code adopted: 2008 IBC Code Set
Public Health and Safety	No	No	Yes	No	Cook County Board of Health for Restaurant Inspections
Environmental Protection	No	No	No	No	
Planning Documents					
General or Comprehensive Plan	No	No	No	No	Lincolnwood Comprehensive Plan – 11-1-2001
Is the plan equipped to provide linkage to this mitigation plan?					Yes-Land Use Yes-Natural Resources Yes- Redevelopment
Floodplain or Basin Plan	No	No	No	No	
Stormwater Plan	No	No	Yes	No	Regional storm water impacts are governed by MWRD. The Village lies within the North Branch of Chicago River watershed planning area of MWRD's comprehensive Stormwater Master Planning Program

Capital Improvement Plan	Yes	No	No	No	The Village CIP is reviewed annually but encompasses 5-7 years of anticipated purchases
	What	types of capital j	facilities does the p	olan address?	Roads, Public Buildings
		How oft	en is the plan revis	ed/updated?	Yearly
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	Yes	No	Yes	Yes	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	
Response/Recovery P	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	
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		
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	No		

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	Community Devolvement		
Engineers or professionals trained in building or infrastructure construction practices	Yes	Community Devolvement		
Planners or engineers with an understanding of natural hazards	Yes	Village Engineer		
Staff with training in benefit/cost analysis	Yes	Finance		
Surveyors	Yes	Contract		
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium/ Village Consortium		
Scientist familiar with natural hazards in local area	No			
Emergency manager	Yes	Cook County DHSEM, Fire Chief		

Grant writers	Yes	Fire, Police Public Works, Park & Recreation
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TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLI	ANCE
What department is responsible for floodplain management in your jurisdiction?	Community Development
Who is your jurisdiction's floodplain administrator? (department/position)	Village Engineer
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	Not participating in NFIP
When was the most recent Community Assistance Visit or Community Assistance Contact?	Has not received 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

TABLE: COMMUNITY CLASSIFICATIONS				
	Participating?	Classification	Date Classified	
Community Rating System	No	N/A	N/A	
Building Code Effectiveness Grading Schedule	No	N/A	N/A	
Public Protection/ISO	Unknown	Unknown	Unknown	
StormReady	Yes	Gold (Countywide)	2014	
Tree City USA	Yes		1997	

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: 2
- 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 # (if applicable)	Date	Preliminary Damage Assessment	
Heavy Rain	-	8/7/2018	-	
Hail	-	8/2/2015	-	
Winter Storms	-	12/2013 - 2/2014	None	
Flooding	DR-4116	4/26/2013	None	
Winter Storms	-	2/1/2011	\$45,959.57	
Severe Storms and Flooding	DR-1800	9/13/2008	\$19,978.00	

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: We have not recently experienced dam/levee failure.

Flood: The community is prone to flooding from rainfall (not river/lake flooding).

Extreme Heat: We have developed a group of cooling centers within the Village. In the case of extreme heat, we activate these centers when needed. While no recorded extreme heat events have occurred, temperatures in the summer have increasingly warmed and the Village has taken this preventative step to protect the community.

Lightning: We maintain exposure to seasonal storms. To mitigate the impacts of this hazard, we have lightning warnings in our pool and major park.

Hail: We have little damage from hail.

Fog: We face little to no risk from fog.

High Winds: We hold moderate risk to high winds through seasonal storms.

Earthquake: We maintain a low risk to this hazard.

Drought: We maintain a low risk to this hazard.

Snow: We maintain a moderate risk to this hazard.

Blizzard: We maintain a moderate risk to this hazard. The <u>population</u> has a high percentage of foreign-born persons where English is not the primary language and the population tends to be on the older side (medium age of 46). The Village must prepare to protect all vulnerable communities and ensure the messaging is delivered in multiple languages.

Extreme Cold: We maintain a moderate risk to this hazard.

Ice Storms: We maintain a moderate risk to this hazard.

Tornado: We maintain a low risk to this hazard.

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 Winter Weather	51	
2	Severe Weather	51	
3	Earthquake	32	
4	Flood	24	
5	Tornado	18	
6	Drought	9	
7	Dam Failure	0	
Note: Scores assigned subjectively based on past experience			

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	Objectiv es Met	Lead Agencies	Estimated Cost	Sources of Funding	Timeline/Project ed Completion Date (a)	
Action L5.1	L—Update th	ne Villages E	Emergency Op	erations Plan with	Cook County		
Ongoing	All Hazards	1, 2, 5, 8	Fire Dept.	Medium	Village Funds	Short-term	
	2—Fortify ele & transfer sv		kup capabilitie	es of the Village sta	andpipe with a nev	v emergency	
Complete d	All	1, 2	Public Works	\$167,000; Medium	Tax Increment Financing Funds	Completed	
	3—Fortify ele & transfer sv		kup capabilitie	s of the Public Wo	orks Building with r	new emergency	
Complete d	All	1, 2	Public Works	\$167,000	Tax Increment Financing Funds	Completed	
	Action L5.4— Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
Ongoing	All Hazards	1, 2, 5, 8	Fire Dept.	Low	Village Funds	Short-term	

Action L5.5 —Complete Water Survey evaluating current water supply and make recommendations to enhance and bolster existing capabilities.						
Complete d	Drought	1, 12, 13	Public Works	\$15,000; Mediu m	Village Funds	Completed
Action L5.6	6—Replace a	ll fire hydra	ints & water n	nains along Crawfo	rd Ave Re-Constru	ction.
Complete d	All Hazards	1, 2, 5, 8	Public Works	\$302,119; Medium	General Fund	Completed
Action L5.7 weather.	7—Rebate pr	ogram for i	residents to in	nprove reoccurring	indoor flood cont	rol due to severe
Ongoing	Flooding	7, 11	Public Works	\$30,000; Medium	General Fund	May 2015
				itting, purchase, o . Give priority to p		octures in hazard- osure to repetitive
Ongoing	All	7, 13	Village of Lincolnwoo d	High	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
programs t adopted flo	hat meet or ood damage	exceed the prevention	minimum NFI ordinance, pa	National Flood Ins IP requirements. So articipating in flood loodplain requiren	uch programs inclu Iplain mapping up	ude enforcing an dates, and
Ongoing	Flooding	4, 6, 9	Village of Lincolnwoo d	Low	General Fund	Short-term and ongoing
Action L5.1	LO—Continu	e to suppor	t the countyw	ide actions identifi	ed in this plan.	
Ongoing	All	All	Village of Lincolnwoo d	Low	General Fund	Short- and long- term
Action L5.1	L1—Actively	participate	in the plan ma	aintenance strateg	y identified.	
Ongoing	All	3, 4, 6	DHSEM, Village of Lincolnwoo d	Low	General Fund	Short-term
Action L5.1	L2 —Updatie	the Village	s Building & F	ire Codes.		
New	All	10, 13	Lincolnwoo d Economic Developme	\$5,000.00; High	Local Funds	2020

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			nt Department				
emergency	Action L5.13—Generator Study – The Village will be undertaking a study in 2019 to determine the emergency power needs of the municipal campus, which includes the Village Hall, Police, and Fire Departments. The current generator does not provide power to all outlets.						
New	Extreme Heat, Snow, Extreme Cold, Ice Storms, Tornado, Widesprea d Power Outage	1, 12, 13	Lincolnwoo d Public Works	\$15,000; High	Local Funds	2019	
Action L5.	14—Install th	e North Sh	ore Outfall Se	wer for Flooding R	elief.		
New	Flood	1, 2, 4, 9, 12	Lincolnwoo d Public Works	\$3.4 Million; High	\$1.4 million funded by the MWRD; remaini ng is local funds	2019	
Action L5.	15 —Adjust P	iping at Pur	np House to A	llow Water to By-	Pass.		
New	All	1, 12	Lincolnwoo d Public Works	\$10.5 Million; High	Local Funding	2019	
Action L5.2	16—Impleme	ent 10-Year	Infrastructure	Improvement Pla	n.		
New	All	1, 2, 3, 7, 12	Lincolnwoo d Public Works	\$1 Million/ Year ; High	Local Funds	2030	
Action L5.2	17—Replace	Lead Servic	e Lines.				
New	All	1, 2, 3, 7, 12	Lincolnwoo d Public Works	High	Local Funds	2029	
Action L5.2	18—Impleme	ent Potable	Water Standp	ipe Rehabilitation			
New	All	1, 2, 3, 7, 12	Lincolnwoo d Public Works	\$860,000; High	Local Funds	2019	
Action L5.	19 —Improve	Street Stor	age of Rainfal	l.			

New	Flood	1, 2, 3, 7, 12, 13	Lincolnwoo d Public Works	\$230,000; High	Local Funds	2022
Action L5.2	20—Review a	and update	the Village's E	mergency Operati	ons Plan.	
New	All	1, 5	Lincolnwoo d Fire Department	\$5,000; Low	Local Funds	2020
Action L5.20—Begin construction of New Storm Sewers and Outfall along North Shore Avenue.						
New	Flood	1, 2, 3, 7, 12	MWRD	\$3,600,000	MWRD	TBD

⁽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	# 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	4	Medium	Low	Yes	No	Yes	Medium
2	2	High	High	Yes	No	Yes	High
3	2	High	High	Yes	No	Yes	High
4	4	Medium	Low	Yes	No	Yes	Medium
5	3	Low	Low	Yes	No	Yes	Low
6	4	Medium	High	Yes	No	Yes	High
7	2	Medium	Low	Yes	No	Yes	Low
8	2	High	High	Yes	Yes	No	Medium
9	3	Medium	Low	Yes	No	Yes	High
10	13	Medium	Low	Yes	No	Yes	High
11	3	Low	Low	Yes	Yes	Yes	High
12	3	High	High	Yes	Yes	Unknown	High
13	2	Medium	High	No	Yes	Unknown	High
14	5	High	High	Yes	Yes	Unknown	High

15	2	High	High	Yes	Yes	Unknown	High
16	5	High	High	Yes	Yes	Unknown	High
17	5	High	High	Yes	Yes	Unknown	High
18	5	High	High	Yes	Yes	Unknown	High
19	6	High	High	Yes	Yes	Unknown	High
20	2	High	Low	Yes	Yes	Unknown	High
21	5	High	High	Yes	Yes	Yes	High

⁽a) See Chapter 1 for explanation of priorities.

New Mitigation Actions

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

Mitigation Action	Update the Village's Building & Fire Codes.			
Year Initiated	2018			
Applicable Jurisdiction	Village of Lincolnwood			
Lead Agency/Organization	Lincolnwood Economic Development Department			
Supporting Agencies/Organizations	Lincolnwood Fire Department			
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. Promote public understanding of and support for hazard mitigation. 			
Applicable Objective	 Strengthen codes and land use planning and their enforcement, so that new construction or redevelopment can avoid or withstand the impacts of natural hazards. 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	\$5,000.00			
Benefits (loss avoided)	By updating the Village's building and fire codes will protect the Village from hazards and better prepare staff to respond to these emergencies.			
Projected Completion Date	2020			
Priority and Level of Importance (Low, Medium, High)	High Priority			
Benefit Analysis (Low, Medium, High)	High—Project will provide an immediate reduction of risk exposure for life and property.			
Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).			
Actual Completion Date				

Recommended Mitigation Action/Implementation Plan and Project Description

Plan and Project Description:

Action/Implementation Updating the Village's Building and Fire Codes will ensure that our buildings and additions to these buildings will better protect our citizen's lives, health and safety from the impacts of natural hazard events or disasters.

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

	Mitigated Hazards			
Х	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			
	Hazardous Materials Incident			

Mitigation Action	Generator Study – The Village will be undertaking a study in 2019 to determine the emergency power needs of the municipal campus, which includes the Village Hall, Police, and Fire Departments. The current generator does not provide power to all outlets.		
Year Initiated	2019		
Applicable Jurisdiction	Village of Lincolnwood		
Lead Agency/Organization	Lincolnwood Public Works		
Supporting Agencies/Organizations	Lincolnwood Fire Department		
Applicable Goal	 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. 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	\$15,000		
Benefits (loss avoided)	The study will determine what size generator is needed to fully power each building.		
Projected Completion Date	2019		
Priority and Level of Importance (Low, Medium, High)	High 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)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).		
Actual Completion Date			

Recommended Mitigation Action/Implementation Plan and Project Description

Action/Implementation Plan and Project Description:

Generator Study – The Village will be undertaking a study in 2019 to determine the emergency power needs of the municipal campus, which includes the Village Hall, Police, and Fire Departments. The current generator does not provide power to all outlets. As the Village plans to replace the unit in the coming years, the study will determine what size generator is needed to fully power each building.

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

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

Mitigation Action	Install the North Shore Outfall Sewer for Flooding Relief.
Year Initiated	2018
Applicable Jurisdiction	Village of Lincolnwood
Lead Agency/Organization	Lincolnwood Public Works
Supporting Agencies/Organizations	Lincolnwood Fire Department
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.
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. Integrate hazard mitigation policies into land use plans in the planning area. Provide or improve flood protection on a watershed basis with flood control structures and drainage maintenance plans. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.
Potential Funding Source	Approx. \$3.4 Million (\$1.4 million funded by the MWRD – remaining is local funds)
Estimated Cost	\$3.4 Million
Benefits (loss avoided)	Village is installing a dedicated stormwater sewer in the lowest geographical point in town to help alleviate flooding and residential basement backups.

Projected Completion Date	2019
Priority and Level of Importance (Low, Medium, High)	High Priority
Benefit Analysis (Low, Medium, High)	High—Project will provide an immediate reduction of risk exposure for life and property.
Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description

Plan and Project Description:

North Shore Outfall Sewer – the Village is installing a dedicated storm water Action/Implementation sewer in the lowest geographical point in town to help alleviate flooding and residential basement backups. The project includes the installation of a 60" dedicated storm sewer from Drake Avenue that outfalls into the North Shore Channel, along with smaller tributary storm sewers on adjacent streets.

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

	Mitigated Hazards		
	All Hazards		
	Dam/Levee Failure		
	Drought		
	Earthquake		
Х	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	Adjust Piping at Pump House to Allow Water to By-Pass.	
Year Initiated	2018	
Applicable Jurisdiction	Village of Lincolnwood	
Lead Agency/Organization	Lincolnwood Public Works	
Supporting Agencies/Organizations	Lincolnwood Fire Department	
Applicable Goal	 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. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area. 	
Potential Funding Source	Local Funding	
Estimated Cost	\$10.5 Million	
Benefits (loss avoided)	If the Village experienced a failure of the pumps in the Pump House, there would not be a way to provide the Village with water other than through the emergency connection with Skokie.	
Projected Completion Date	2019	
Priority and Level of Importance (Low, Medium, High)	High Priority	
Benefit Analysis (Low, Medium, High)	High—Project will provide an immediate reduction of risk exposure for life and property.	
Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).	
Actual Completion Date		

Recommended Mitigation Action/Implementation Plan and Project Description

Action/Implementation Plan and Project Description:

If the Village experienced a failure of the pumps in the Pump House, there would not be a way to provide the Village with water other than through the emergency connection with Skokie. As the Village switches water suppliers to Evanston, the transmission main project will include adjusting piping at the

pump house to include a valve that will allow water to bypass the pump house and continue supplying the community with potable water.

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

Mitigated Hazards		
Х	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	
	Hazardous Materials Incident	

Mitigation Action	Implement 10-Year Infrastructure Improvement Plan.	
Year Initiated	2020	
Applicable Jurisdiction	Village of Lincolnwood	
Lead Agency/Organization	Lincolnwood Public Works	
Supporting Agencies/Organizations	Lincolnwood Fire Department	
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. Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change. Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area. 	
Potential Funding Source	Local Funds	
Estimated Cost	\$1 Million/ Year	
Benefits (loss avoided)	Ensure adequate potable water for drinking and fire protection	
Projected Completion Date	2030	
Priority and Level of Importance (Low, Medium, High)	High Priority	
Benefit Analysis (Low, Medium, High)	High—Project will provide an immediate reduction of risk exposure for life and property.	

Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description

Action/Implementation Plan and Project Description:

The Village Board has adopted an Infrastructure Improvement Plan that includes resurfacing all roadways over the next ten years and replacing all of the water mains identified as being in "poor" condition and 15% of the mains listed in "fair" condition.

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

	Mitigated Hazards		
Х	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
Hazardous Materials Incident

Mitigation Action	Replace Lead Service Lines.	
Year Initiated	2019	
Applicable Jurisdiction	Village of Lincolnwood	
Lincolnwood Public Works		
Supporting Agencies/Organizations	Lincolnwood Fire Department	
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. 	
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. Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area. 	
Potential Funding Source	Local Funds	
Estimated Cost	No Village Cost, Residents will pay the contractor at bid pricing	
Benefits (loss avoided) Ensure Quality of Potable Water suppli		
Projected Completion Date	2029	
Priority and Level of Importance (Low, Medium, High)	High Priority	
Benefit Analysis (Low, Medium, High)	High—Project will provide an immediate reduction of risk exposure for life and property.	
Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).	

Actual Completion Date	
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Recommended Mitigation Action/Implementation Plan and Project Description

Plan and Project Description:

While the Village begins constructing the new Transmission main to bring Action/Implementation water from Evanston to Lincolnwood, residents will have the opportunity to utilize the Village's contractor to replace lead water services at a reduced cost. The same option will be available as the water main replacements occur as part of the Project listed above

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

Mitigated Hazards		
Χ	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	
Х	Hazardous Materials Incident	

Mitigation Action	Implement Potable Water Standpipe Rehabilitation.
Year Initiated	2018
Applicable Jurisdiction	Village of Lincolnwood
Lead Agency/Organization	Lincolnwood Public Works
Supporting Agencies/Organizations	Lincolnwood Fire Department
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. Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change. Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.
Potential Funding Source	Local Funds
Estimated Cost	\$860,000
Benefits (loss avoided)	Ensure Quality and Availability Potable Water
Projected Completion Date	2019
Priority and Level of Importance (Low, Medium, High)	High Priority
Benefit Analysis (Low, Medium, High)	High—Project will provide an immediate reduction of risk exposure for life and property.

Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description

Action/Implementation Plan and Project Description:

The Village is currently rehabilitating the 1.5 million gallon standpipe to ensure its continued operation. In addition to storing water, the standpipe pressurizes the distribution system. The rehabilitation work includes spot welding repairs and recoating of the interior and exterior.

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

Mitigated Hazards		
Х	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
Hazardous Materials Incident

Mitigation Action	Improve Street Storage of Rainfall.
Year Initiated	2017
Applicable Jurisdiction	Village of Lincolnwood
Lead Agency/Organization	Lincolnwood Public Works
Supporting Agencies/Organizations	Lincolnwood Fire Department
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. Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change. Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged. 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	\$230,000
Benefits (loss avoided)	Reduce flooding of resident homes
Projected Completion Date	2022
Priority and Level of Importance (Low, Medium, High)	High Priority

IKANATIT /\nalvele il \nw \warphi \landiim High!	High—Project will provide an immediate reduction of risk exposure for life and property.
Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description

Plan and Project Description:

In order to reduce the flow of storm water into the combined sewer system, Action/Implementation the Village has been installing in-ground restrictors that limit the opening of catch basins and inlets that feed into the mainline sewer. The goal is to keep the water in the public right of way, rather than letting it surcharge the system and backup into resident's homes

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

	Mitigated Hazards		
	All Hazards		
	Dam/Levee Failure		
	Drought		
	Earthquake		
Χ	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	Review and update the Village's Emergency Operations Plan.
Year Initiated	2019
Applicable Jurisdiction	Village of Lincolnwood
Lead Agency/Organization	Lincolnwood Fire Department
Supporting Agencies/Organizations	Lincolnwood Fire Department
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. Promote public understanding of and support for hazard mitigation.
Applicable Objective	 Eliminate or minimize disruption of local government operations caused by natural hazards through all phases of emergency management. Develop, improve, and protect systems that provide early warnings, emergency response communications, and evacuation procedures.
Potential Funding Source	Local Funds
Estimated Cost	\$5,000
Benefits (loss avoided)	This EOP is the essential document that the Villages uses during a Village emergency. Updating it will enhance our capabilities in responding to an emergency event within the Village.
Projected Completion Date	2020
Priority and Level of Importance (Low, Medium, High)	High Priority

IKANATIT ANGIVEIS II AW MAAIIIM HIGHI	High—Project will provide an immediate reduction of risk exposure for life and property.
Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
Actual Completion Date	

Action/Implementation Plan and Project Description Action/Implementation Plan and Project Plan and Project Description: The Village's Emergency Operations Plan needs some review and updating including the Mitigation Section with Cook County.

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

Mitigated Hazards		
Х	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	
9	Secondary Impacts from Mass Influx of Evacuees	
Hazardous Materials Incident		

Mitigation Action	Begin construction of New Storm Sewers and Outfall along North Shore Avenue.
Year Initiated	2019
Applicable Jurisdiction	City of Chicago
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	City of Chicago
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. Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change. Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.
Potential Funding Source	MWRD (\$1,392,000)
Estimated Cost	\$3,600,000
Benefits (loss avoided)	TBD
Projected Completion Date	TBD
Priority and Level of Importance (Low, Medium, High)	High
Benefit Analysis (Low, Medium, High)	High
Cost Analysis (Low, Medium, High)	High
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description			
Action/Implementation	Contract: 18-IGA-22		
Plan and Project	Watershed: North Branch		
Description:	escription: Location: Lincolnwood, IL		

Description: New storm sewer system will protect residential homes from
basement backups and drain into a new outfall along North Shore Avenue.

Mitigation Action and Project Maintenance			
Year	Status	Comments	
2019	New	Drafting intergovernmental agreement.	
2020			
2021			
2022			
2023			

	Mitigated Hazards	
	All Hazards	
	Dam/Levee Failure	
	Drought	
	Earthquake	
Х	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.

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# L-5.1	Update the Villages Emergency Operations Plan with Cook County	
Status Description: Yes	The Village will plan on updating the Village' Emergency Operations Plan with Cook County in FY 2019/2020.	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)	
# L-5.4	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.		
Status Description: Yes	We will meet with Community Development to discuss land use and development.	0	
C = Pr	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)	
# L-5.7	Rebate program for residents to improve reoccurring indoor flooding control due to severe weather.		
Status Description: Yes	This Project was implemented and is currently funded.	0	
C = Pr	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)
# L-5.8	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: No	We have never had any repetitive losses from flooding. Lincolnwood has a combined sewer for waste and storm water and when a project allows the opportunity to separate the piping, we will attempt to do so.	Х
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)	
# L-5.9	Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed NFIP requirements. Such programs include enforcing as adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.		
Status Description: No	Really doesn't apply to Lincolnwood	х	
C =	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)
# L-5.10	Continue to support the countywide actions identified in this plan.	
Status Description: Yes	We will make every attempt to support Cook County in regards to this 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	Action Item Description	Status (X, O, C, R, N)	
# L-5.11	Actively participate in the plan maintenance strategy identified.		
Status Description: Yes		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

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

	TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)	
# L-5.2	Fortify electrical backup capabilities of the Village standpipe with a new emergency generator & Transfer Switch		
Status Description: Yes	This Project is completed.	С	
C = Pr	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				
# L-5.3	Fortify electrical backup capabilities of the Public Works Building with a new generator and Transfer Switch.				
Status Description: Yes	Description: This Project is completed				
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				
# L-5.5	Complete Water Survey evaluating current water supply and make recommendations to enhance and bolster existing capabilities.				
Status Description: Yes	otion: This Project was completed.				
C = P	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)			
# L-5.6	Replace all fire hydrants & water mains along Crawford Ave Re- Construction				
Status Description: Yes	This Project was completed.	С			
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken					

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

LINCOLNWOOD EXISTING CONDITIONS					
2010 Population	12,590				
Total Assessed Value of Structures and Contents	\$5,027,101,362				
Area in 100-Year Floodplain	17.02 acres				
Area in 500-Year Floodplain	17.02 acres				
Number of Critical Facilities	36				

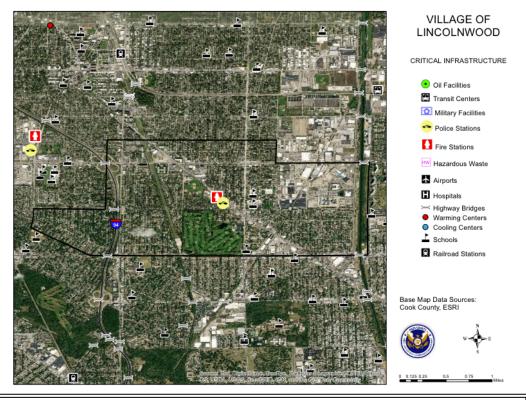
HAZARD EXPOSURE IN LINCOLNWOOD								
	Number	Exposed	Value Exposed to Hazard			% of Total		
	Population	Buildings	Structure	Contents	Total	Assessed Value Exposed		
Dam Failure	Dam Failure							
Buffalo Creek	0	0	\$0	\$0	\$0	0.00%		
U. Salt Cr. #2	0	0	\$0	\$0	\$0	0.00%		
Touhy	0	0	\$0	\$0	\$0	0.00%		
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	0	0	\$0	\$0	\$0	0.00%		

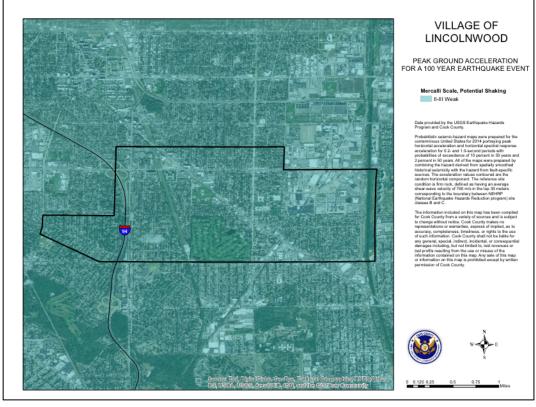
500-Year	0	0	\$0	\$0	\$0	0.00%
Tornado						
100-Year	_	_	\$625,389,879	\$436,832,917	\$1,062,222,796	21.13%
500-Year	_	ı	\$1,233,710,582	\$819,718,192	\$2,053,428,774	40.85%

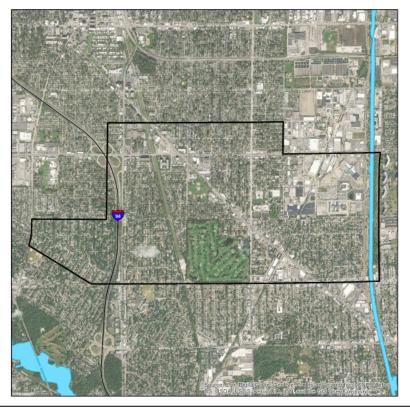
ESTIMATED PROPERTY DAMAGE VALUES IN LINCOLNWOOD						
	Estima	% of Total Assessed				
	Building	Contents	Total	Value Damaged		
Dam Failure						
Buffalo Creek	\$0	\$0	\$0	0.00%		
U. Salt Cr. #2	\$0	\$0	\$0	0.00%		
Touhy	\$0	\$0	\$0	0.00%		
U. Salt Cr. #3	\$0	\$0	\$0	0.00%		
U. Salt Cr. #4	\$0	\$0	\$0	0.00%		
Earthquake						
1909 Historical Event	\$18,425,988	\$3,762,886	\$22,188,874	0.44%		
Flood						
10-Year	\$0	\$0	\$0	0.00%		
100-Year	\$0	\$0	\$0	0.00%		
500-Year	\$0	\$0	\$0	0.00%		

Tornado				
100-Year	\$62,538,988	\$43,683,292	\$106,222,280	2.11%
500-Year	\$180,121,745	\$119,678,856	\$299,800,601	5.96%

Hazard Mapping







VILLAGE OF LINCOLNWOOD

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.

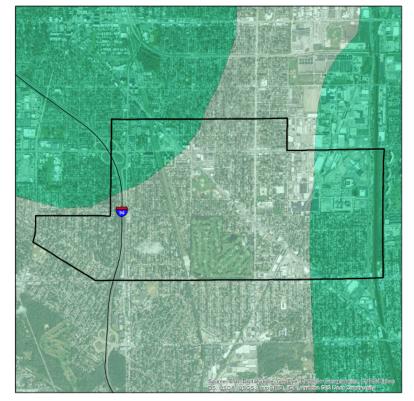
Chicago and Cook County.

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, 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 apps can be obtained from http://www.fema.gov.







VILLAGE OF LINCOLNWOOD

LIQUEFACTION SUSCEPTIBILITY

LIQUEFACTION SUSCEPTIBILITY

high low

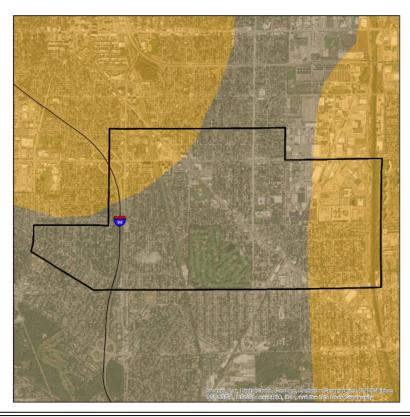
Data provided by the Illinois State Geological Survey and Cook County.

Data provided by the littinos State Georgical Survey and Count County.

The Central United States Earthquies Consortium (CUISEC) State Geological produced a regional Soil State Geological produced a regional Soil State Geological State Geologic







VILLAGE OF LINCOLNWOOD

NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP) SOIL CLASSIFICATION

TYPE

C - Very Dense Soil, Soft Rock

D - Stiff Soil

F- Site Specific Evaluation

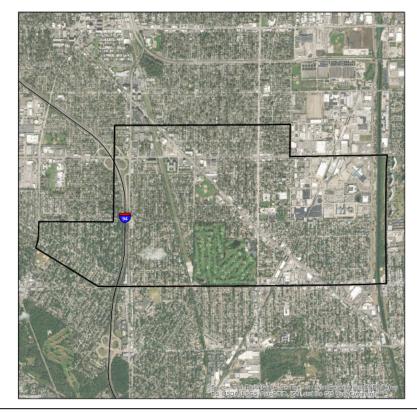
Data provided by the Illinois State Geological Survey and Cook County.

Data provided by the Bleinos State Geological Survey and Cook Courty.

The Central United States Earthquiek Consortium (CUIEC) State Geological produced a regional Soil State Geological produced a regional Soil State Geological produced a regional Soil State Geological State State







VILLAGE OF LINCOLNWOOD

100- AND 500- YEAR TORNADO EVENTS

Magnitude

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

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

