

Northlake

Hazard Mitigation Plan Point of Contact

Primary Point of Contact	Alternate Point of Contact
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Jurisdiction Profile

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

Date of Incorporation: 1949

Current Population: The 2020 U.S. Census population was 12,840. The 2022 U.S. Census estimate indicated the population was 12,401.

Population Growth: The overall population has increased by 1.36% between 2018 and 2022.

Location and Description: The City of Northlake is a near western suburb of Chicago located just south of O'Hare International Airport. Northlake is situated on the western most border of Cook County with DuPage County (Elmhurst) being its western boundary. Northlake is bordered by Franklin Park to the north, Berkley to the south, Melrose Park to the east, and Elmhurst to the west. With several major highways converging in its jurisdiction the daytime traffic population can triple or quadruple. Illinois 290, State Tollway 294, US 64 and US 20 all are located within or boarding Northlake. Northlake also shares a major part of the Proviso Railroad Yards which is a shipping hub for many millions of pounds of cargo daily for Chicago and the greater Midwest. According to the US Census Bureau, the city has a total area of 3.17 square miles.

Brief History: The City of Northlake encompasses three square miles along Addison Creek in west central Cook County. When World War II brought a Buick defense factory to nearby Melrose Park, farmland in Northlake was converted to residential neighborhoods for plant workers. The City's name is derived from two major thoroughfares, North Avenue and Lake Street, which intersect at Northlake's western boundary. Reportedly, naming rights for the town were awarded in a contest hosted by an early land developer, Midland Development Company. In order to quickly and affordably settle war-time workers, Midland built housing shells in Northlake, advertised them as "semi-finished," and required plant employees who purchased the homes to finish the interiors, electrical work, and exterior painting. The City was incorporated in 1949, with an initial population of 3,000.

In the 1950s, construction of the Tri-State Tollway on Northlake's western border attracted industrial development. One of the City's largest employers was Automatic Electric, a telephone-switching equipment manufacturer that employed a workforce of 14,000 by the 1970s.

The 1960s, '70s, and '80s brought the completion of large infrastructure projects—street paving, curb and sewer installation, replacement of wooden bridges over Addison Creek with concrete spans, and the construction of the Doyle Retention Basin to alleviate recurring flood issues. Northlake residents voted to grant the city government “home rule” authority in 1994, as well as modifying the city-manager form of government by making the mayor a full-time position.

Climate: Northlake's weather is typical of the Midwest Great Lakes region of Northern Illinois. Northlake's typical summer temperatures could reach upper 90s with cold wet winters. It's common in the winter to experience sub-freezing temperatures and large snowfall. Average annual snowfall is over 32 inches. Annual average rainfall is over 36 inches. The average year-round temperature is 48.3 °F. Humidity averages between 73 percent. Prevailing winds average 16 mph.

Governing Body Format: The City of Northlake is governed by an 8 eight-member City Council and Mayor. This body of government will assume the responsibility for the adoption and implementation of this plan. The City consists of four departments: Finance, Public Works, Building and Police. The City has 6 Committees or Commissions, which report to the City Council and Mayor.

Development Trends: Anticipated development levels for Northlake are low to moderate, consisting primarily of industrial and retail redevelopment. The majority of recent development has been the reformatting and developing of industrial sites, one example being several new data centers. Residentially, there has been a focus on redeveloping or removal from the market debilitated properties. The City of Northlake adopted its Comprehensive Plan in May 2013. The Plan serves as a guide for elected and appointed officials, City staff, residents, business owners, and potential investors, allowing them to make informed decisions about land use, transportation, infrastructure, and capital improvements within Northlake. The Plan's highest priorities are as follows: strengthening the City's residential neighborhoods and its commercial and industrial businesses; enhancement of pedestrian amenities; and improving the appearance of Northlake's commercial districts.

The City of Northlake will continue to invest in its future with infrastructure upgrades in 2018. On October 16th, the City Council approved the 2018 capital program which will include the following projects:

- Resurfacing of Wolf Road from North Avenue to Winters Drive;
- Installation of new water main on Wolf Road from Fullerton to Diversey Avenue;
- Resurfacing of Maplewood, Morse Drive (east of Roberta) and South Caryl and Marilyn Avenues;
- Replacement of the Prater and Roy Avenue Bridge decks;
- Resurfacing of Midland Trail from Wolf Road to Palmer Avenue;
- Replacement of water main on Lake Street from Lind Avenue to Railroad Avenue;
- Replacement of water main on Maplewood Avenue;
- Resurfacing of Sandra Avenue south of Grand Avenue to include water main replacement;
- Water valve replacement on streets that are being re-surfaced.

- The City will be providing approximately \$6,292,125.00 for these infrastructure improvements, with another \$4,542,000 coming in from various federal/state grants for a total of \$10,834,125 being invested in the future of our community.

The City of Northlake is very fortunate to be in a financial position to undertake this program without borrowing any funds. A strong community is one that is always pushing ahead, focusing on the future. We must always be in a position to accommodate redevelopment, whether it is resident, commercial or industrial in order to keep our community vibrant and relevant.

Plans for 2019 include upgrading the City's main water pumping station, resurfacing Roy Avenue, Country Club Drive and Parkview and replacement of the remaining pocket of 4 inch water main and additional storm water management projects.

Changes in Community Priorities: There have been no significant changes in priority regarding the hazards that could potentially impact the community or changes in priority regarding resilience.

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 *Administrative and Technical Capability Table* below. Information on the community's National Flood Insurance Program (NFIP) compliance is presented in the *National Flood Insurance Program Compliance Table* below. Classifications under various community mitigation programs are presented in the *Community Classifications Table* below.

TABLE: LEGAL AND REGULATORY CAPABILITY					
	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements					
Building Code	Yes	No	No	Yes	Building Code 8-1A-1 adopted 2003
Zonings	Yes	No	No	Yes	Municipal Code 12-1-1 adopted: 2008
Subdivisions	Yes	No	No	No	Municipal Code 11-1-1 adopted: 1976
Stormwater Management	Yes	No	Yes	Yes	Municipal Code 12-2-1 adopted: 1990
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.

Growth Management	Yes	No	No	No	Municipal Code 9-1-1 adopted: 2013
Site Plan Review	Yes	No	No	No	Municipal Code 12-2-13 adopted: 1990
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health. Municipal Code 4-1-1 adopted: 1997
Environmental Protection	No	Yes	No	No	
Planning Documents					
General or Comprehensive Plan	Yes	No	No	No	Plan is completed. Municipal Code 9-1-1 adopted: 2013
<i>Is the plan equipped to provide integration to this mitigation plan?</i>					No
Floodplain or Basin Plan	No	No	Yes	No	MWRD
Stormwater Plan	No	No	MWRD	No	Regional stormwater impacts are managed by MWRD. The City lies within Lower Addison Creek Watershed planning area of MWRD's comprehensive Stormwater Master Planning Program
Capital Improvement Plan	Yes	No	No	No	
<i>What types of capital facilities does the plan address?</i>					Improvements using Green infrastructure solutions including property acquisitions, stream bank restorations/

					stabilization programs.
<i>How often is the plan revised/updated?</i>					5 year plan, reviewed and updated annually
Habitat Conservation Plan	Yes	No	No	No	None
Economic Development Plan	Yes	No	Yes	No	The Economic Development Commission is charged with reviewing all economic development related programs and incentives including tax incentives offered through the Cook County 6b program.
Shoreline Management Plan	Yes	No	No	No	Municipal Code 12-2-5 adopted: 1990
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	Yes	No	Cook County EMRS
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County EMRS Preparing THIRA
Terrorism Plan	No	No	Yes	No	Cook County EMRS
Post-Disaster Recovery Plan	No	No	Yes	No	Cook County EMRS
Continuity of Operations Plan	No	No	Yes	No	Cook County EMRS
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	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY		
Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Christopher Burke Engineering Rosemont Illinois
Engineers or professionals trained in building or infrastructure construction practices	Yes	Christopher Burke Engineering Rosemont Illinois
Planners or engineers with an understanding of natural hazards	Yes	Christopher Burke Engineering Rosemont Illinois
Staff with training in benefit/cost analysis	Yes	Christopher Burke Engineering Rosemont Illinois
Surveyors	Yes	Christopher Burke Engineering Rosemont Illinois
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium
Scientist familiar with natural hazards in local area	No	
Emergency manager	No	Northlake Police Department
Grant writers	Yes	Christopher Burke Engineering Rosemont Illinois

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Building Department
Who is your jurisdiction's floodplain administrator? (department/position)	Building Department
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	June 6, 2005
When was the most recent Community Assistance Visit or Community Assistance Contact?	August 15, 2013
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, currently in application process.
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NFIP Participation Activities

Maintaining compliance under the NFIP is an important component of flood risk reduction. All planning partners that participate in the NFIP have identified actions to maintain their compliance and good standing. Cook County entered the NFIP on April 15, 1981. Structures permitted or built in the County before then are called “pre-FIRM” structures, and structures built afterwards are called “post-FIRM.” The insurance rate is different for the two types of structures. The effective date for the current countywide FIRM is August 19, 2008. This map is a DFIRM (digital flood insurance rate map). The communities in Cook County that participate in the NFIP are shown in **Table: NFIP Participating Communities in Cook County** in **Volume I** of the Cook County MJ-HMP.

The NFIP makes federally-backed flood insurance available to homeowners, renters, and business owners in participating communities. The communities in Cook County that participate in the NFIP and their "Policies in Force," "Total Coverage," and "Total Written Premiums" are shown in **Table: Cook County Flood Insurance Policies** in **Volume I** of the Cook County MJ-HMP.

The following are NFIP-related activities completed by our community:

- Our staff provide the following services: permit reviews, GIS, inspections, engineering capability.
- My community's Floodplain Administrator is a Certified Floodplain Manager (CFM).
- Our community enforces local floodplain regulations and monitors compliance.
- Our floodplain development regulations meet or exceed Federal Emergency Management Agency (FEMA) or State minimum requirements.

In November 2023, the City of Northlake met with Gabriel Jackson, a Floodplain Management Specialist from FEMA for a Community Assistance Contact meeting. During the meeting, damages from the federal disaster declaration for Illinois (DR-4728) and the City of Northlake's NFIP responsibilities were discussed.

Substantial Improvement Rule and the Substantial Damage Rule

The IDNR/OWR has developed a model ordinance for floodplain management, which has been adopted by most communities in Illinois. The ordinance includes the minimum requirements an NFIP participating jurisdiction must adopt and enforce, as well as additional higher regulatory requirements. The optional, higher regulatory standards include a minimum one foot of freeboard above the base flood elevation and cumulative tracking of damage repairs and improvements to establish substantial damage and substantial improvement compliance. Some jurisdictions have chosen to exceed the requirements of the model ordinance and have adopted more restrictive ordinances. This is most common in the communities in northeastern Illinois.

Existing Municipal Code:

Below is a link to the City's flood ordinance:

https://codelibrary.amlegal.com/codes/northlakeil/latest/northlake_il/0-0-0-9975

12-1-4 Definitions

SUBSTANTIAL DAMAGE: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damage condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred, regardless of the actual repair work performed. Volunteer labor and materials must be included in this determination. Damage of less than fifty percent (50%) of the fair market value will be applied to the repetitive loss calculations.

SUBSTANTIAL IMPROVEMENT:

A. Any reconstruction, rehabilitation, addition, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before the "start of construction" of the improvement.

B. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building.

C. The term does not, however, include either: 1) any project for improvement of a structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions, or 2) any alteration of a "historic structure" listed on the National Register of Historic Places or the Illinois Register of Historic Places, provided that the alteration will not preclude the structure's continued designation as a historic structure.

12-1-5 Duties of the Enforcement Official(s)

A. Duties Designated: The city shall be responsible for the general administration and enforcement of this chapter which shall include the following:

1. Determining The Floodplain Designation:

- a. Check all new development sites to determine whether they are in a special flood hazard area (SFHA).
- b. If they are in an SFHA, determine whether they are in a floodway, flood fringe or in a floodplain for which a detailed study has not been conducted and which drains more than one square mile.
- c. Check whether the development is potentially within an extended SFHA (with a drainage area less than 1 square mile), indicating that the development would have adverse impacts regarding storage, conveyance, or inundation which would be the basis for the applicant being required to delineate the floodplain and floodway and be subject to the remaining sections of this chapter.

2. Professional Engineer Review:

- a. If the development site is within a floodway or in a floodplain for which a detailed study has not been conducted and which drains more than one square mile, the permit shall be referred to a registered professional engineer under the employ or contract of the city for review to ensure that the development meets section 12-1-7-2 or 12-1-7-3 of this chapter.
- b. In the case of an appropriate use, the professional engineer shall state in writing that the development meets the requirements of section 12-1-7-2 of this chapter.

12. Damage Determinations: Make damage determinations of all damaged buildings in the SFHA after a flood to determine substantially damaged structures which must comply with subsection 12-1-8E1 of this chapter.

12-1-8 Permitting Requirements Applicable to all Floodplain Areas

In addition to the requirements found in sections 12-1-7-1, 12-1-7-2 and 12-1-7-3 of this chapter for development in flood fringes, designated floodways and SFHA or floodplains where no floodways have been identified (zones A, AO, AH, AE, A1-A30, A99, VO, V1-30, VE, V, M, E, or D), the following requirements shall be met:

E. Protecting Buildings:

1. All buildings located within a 100-year floodplain, also known as an SFHA, and all buildings located outside the 100-year floodplain but within the 500-year floodplain, shall be protected from flood damage below the flood protection elevation. This building protection criteria applies to the following situations:

- a. Construction or placement of a new building valued at more than one thousand dollars (\$1,000.00) or seventy (70) square feet.
- b. "Substantial improvement" to an existing building as defined in section 12-1-4 of this chapter, including an increase to the first floor area by more than twenty percent (20%). This alteration shall be figured cumulatively beginning with any alteration which has taken place subsequent to April 1, 1990.
- c. Installing a manufactured home on a new site or a new manufactured home on an existing site. This building protection requirement does not apply to returning a mobile home to the same site it lawfully occupied before it was removed to avoid flood damage.
- d. Installing a travel trailer on a site for more than one hundred eighty (180) days per year.
- e. "Substantial damage" to an existing building as defined in section 12-1-4 of this chapter. This alteration shall be figured cumulatively beginning with any alteration which has taken place subsequent to April 1, 1990.
- f. "Repetitive loss" to an existing building as defined in section 12-1-4 of this chapter.

2. This building protection requirement may be met by one of the following methods:

- b. A residential or nonresidential building may be elevated in accordance with the following:
 - (1) The building or improvements shall be elevated on crawl space, stilts, piles, walls or other foundation that is permanently open to floodwaters and not subject to damage by hydrostatic pressures of the base flood or 100-year frequency flood. The openings must have a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding below the base flood elevation.
 - (2) The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice and floating debris.
 - (3) All areas below the flood protection elevation shall be constructed of materials resistant to flood damage.
 - (A) The lowest floor (including basement) and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the flood protection elevation.

(B) Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the flood protection elevation.

(4) The areas below the flood protection elevation may only be used for the parking of vehicles, building access or storage in an area other than a basement and not later modified or occupied as habitable space.

(5) Manufactured homes, and travel trailers to be installed on a site for more than one hundred eighty (180) days, shall be elevated to or above the flood protection elevation; and, shall be anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the rules and regulations for the Illinois mobile home tiedown act issued pursuant to 77 Illinois administrative code part 870. In addition, all manufactured homes shall meet the following elevation requirements:

(A) In the case of manufactured homes placed or substantially improved: 1) outside of a manufactured home park or subdivision, 2) in a new manufactured home park or subdivision, 3) in an expansion to an existing manufactured home park or subdivision, or 4) in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage from a flood, the top of the lowest floor shall be elevated to or above the flood protection elevation.

(B) In the case of manufactured homes placed or substantially improved in an existing manufactured home park or subdivision, the manufactured home shall be elevated so that either the top of the lowest floor is above the base flood elevation or the chassis is at least thirty six inches (36") in height above grade and supported by reinforced piers or other foundations of equivalent strength, whichever is less.

TABLE: COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System	No	In application stage	---
Building Code Effectiveness Grading Schedule	Yes	Unknown	---
Public Protection/ISO	Yes	4	Leyden 2011/Northlake 2013
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	No	---	---

Opportunities to Expand and Improve Capabilities

Opportunities to expand and improve capabilities include developing a strategy to identify and set aside municipal funds to assist with the 25% cost match for FEMA HMA mitigation grants. Due to the technical expertise needed to develop grant applications and benefit cost analyses for FEMA HMA grants, the municipality has a need for qualified grant writers to assist in the development and management of these grants.

Plan Integration

The capability assessment describes opportunities to "link" or integrate the mitigation plan into other planning mechanisms. The process and mechanism to identify opportunities to integrate the Cook County MJ-HMP into other planning mechanisms will occur during the Annual Update Process and be reflected in the Jurisdictional Annual Report each year. Specific plan integration opportunities will include:

- The goals and actions of the Hazard Mitigation Plan will be considered in the next capital improvement planning process.
- The hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the Comprehensive Plan.
- The hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the jurisdiction's land use plans, zoning, and subdivision codes.

Emergency Plan Integration:

Cook County EMRS is supporting communities to develop and update their respective Emergency Operations Plans, Continuity of Operations Plan/Continuity of Government Plan, and Recovery Plan in 2024. This is an ongoing countywide initiative and is being implemented in all municipalities.

Emergency Operations Plan (EOP)

An EOP template was created for all municipalities. The 2019 Cook County MJ-HMP and the hazards in the mitigation plan have been integrated into the Situation and Assumptions section of the EOP. Within that section, the natural hazards based on the 2019 MJ-HMP were added in the Initial Analysis and Assessment and Identification of Hazards section of the EOP. The hazards in the 2019 plan and the 2024 MJ-HMP did not change apart from adding wildfires for the Forest Preserve and unincorporated areas of the County. Future updates of the EOP will take into consideration any additional new natural hazards that are added to subsequent updates to the MJ-HMP.

Continuity of Operations Plan (COOP)

The Continuity of Operations Plan (COOP) for the municipality includes a Situation section that is based on the 2019 Cook County MJ-HMP jurisdictional annex, and specifically the hazards identified in the annex. The COOP-specific risk assessment is hazard-specific and based on likelihood of occurrence and severity of impact.

Recovery Plan

The goals of the Recovery Plan were developed to align with the 2019 Cook County MJ-HMP, and specifically prioritizes the responsibility of officials under this plan to save lives, protect property, relieve human suffering, sustain survivors, repair essential facilities, restore services, and protect the environment. The plan acknowledges that hazard mitigation is an important priority and consideration during the rebuilding process.

Jurisdiction-Specific Natural Hazard Event History

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: 38 (35 Single Family, 2 Two-Four Family Residence, 1 Other Residential)
- Number of FEMA-Identified Severe Repetitive Loss Properties: 5 (5 Single Family)
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

Federal Disasters Declared

Disaster Declaration Number	Date Declared	Event
DR-227	4/25/1967	Tornado
DR-351	9/4/1972	Flood
DR-373	4/26/1973	Flood
DR-509	6/18/1976	Severe Storm(s)
DR-643	6/30/1981	Severe Storm(s)
DR-776	10/7/1986	Flood
DR-798	8/21/1987	Flood
DR-997	7/9/1993	Flood
DR-1129	7/25/1996	Severe Storm(s)
DR-1188	9/17/1997	Severe Storm(s)
DR-1729	9/25/2007	Severe Storm(s)
DR-1800	10/3/2008	Severe Storm(s)
DR-1935	8/19/2010	Severe Storm(s)
DR-1960	3/17/2011	Snow
EM-3068	1/16/1979	Snow
EM-3134	1/8/1999	Snow
EM-3161	1/17/2001	Snow
EM-3230	9/7/2005	Hurricane – Katrina Evacuation
EM-3435	3/13/2020	Biological
DR-4116	5/10/2013	Flood
DR-4489	3/26/2020	Biological
DR-4728	8/15/2023	Severe Storm(s)
DR-4749	11/20/2023	Flood

State Disaster Declarations

Date Declared	Event
7/26/2010	Severe Storms, High Winds, Torrential Rain
1/31/2011	Winter Weather
4/25/2011 5/25/2011	High Wind, Tornadoes, Torrential Rain
4/18/2013 4/20/2013 4/21/2013 4/25/2013 4/30/2013	Severe Storms, Heavy Rainfall, Flooding, Straight-line Winds
1/6/2014	Heavy Snowfall, Frigid Temperatures

7/12/2017 7/14/2017	Thunderstorms, Heavy Rainfall, Flooding
1/29/2019	Winter Storm
2/6/2020	Severe Storms
3/12/2020 – present (reissued monthly)	COVID-19
2/16/2021	Winter Storms
2/1/2022	Winter Storms
8/1/2022 (reissued monthly through 10/28/2022)	Monkeypox

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment/ Event Narrative
Illinois Severe Storms, Straight-Line Winds and Flooding	DR-4116	4/26/2013	\$2,000,000 (estimate)
Illinois Severe Winter Storm and Snowstorm	DR-1960	1/31/2011	\$50,000 (estimate)
Illinois Severe Storms and Flooding	DR-1935	7/19/2010	\$2,000,000 (estimate)
Illinois Severe Storms and Flooding	DR-1800	9/13/2008	\$2,000,000 (estimate)
Illinois Severe Storms and Flooding	DR-1729	8/20/2007	\$2,000,000 (estimate)
Illinois Flooding	DR-1188	8/16/1997	\$2,000,000 (estimate)
Illinois Severe Winter Storm	EM-3161	12/11/2000	\$50,000 (estimate)
Illinois Winter Snow Storm	EM-3134	1/1/1999	\$50,000 (estimate)
Illinois Flooding	-	5/10/1990	\$100,000 (estimate)
Illinois Severe Storms and Flooding	DR-798	8/13/1987	\$100,000 (estimate)
Illinois Severe Storms and Flooding	DR-776	9/21/1986	\$1,000,000 (estimate)
Illinois Severe Storms and Flooding	-	8/7/1982	\$500,000 (estimate)
Illinois Severe Storms and Flooding	-	3/4/1979	\$500,000 (estimate)
Illinois Blizzards and Snowstorms	EM-3068	1/16/1979	\$5,000 (estimate)
Illinois Severe Storms, Tornadoes, Flooding	DR-509	6/18/1973	\$100,000 (estimate)
Illinois Severe Storms, Tornadoes, Flooding	DR-509	6/18/1973	\$100,000 (estimate)

Jurisdiction-Specific Hazards: Vulnerabilities and Impacts

Hazards that represent a county-wide risk are addressed in the Risk Assessment section of the 2024 Cook County Multi-Jurisdictional Hazard Mitigation Plan Update. This section only addresses the hazards and their associated impacts that are **relevant** and **unique** to the municipality.

Dam/Levee Failure: All roadways and schools near Addison Creek Retention Pond - "Northlake Reservoir" near West Leyden within the Village are vulnerable to dam/levee failure.

Flood: Within the Village, all roadways near viaducts are prone to flooding. These are: US Rt 64, US Rt 20, I-294 (viaduct), US Rt 45 at US Rt 64, Grand Ave viaduct. Several structures within Northlake are located within the Addison Creek floodplain and are impacted by flooding; specifically structures East of Wolf Road and North of South Avenue (IL-64) have been impacted by severe floods. In addition, structures located near the intersection of Fullerton Avenue and Roberta Avenue are impacted by localized flooding.

Lightning: The Village does not have generators for power outages in the event of severe lightning.

High Winds: The Village requires a substantial tree removal program following high wind events. In 2007, powerful and damaging thunderstorms moved across northern Illinois producing widespread wind damage. The most intense wind damage occurred along a path which began in far western DuPage County near the intersection of Roosevelt Road and Washington Street in West Chicago and continued east through the northern portions Lombard and Glen Ellyn, into Northlake, then across the north side of Chicago to the Lake Michigan Shore near Montrose Harbor.

Earthquake: The Village would require bridge/roadway improvements following earthquakes.

Snow: In the event of snow events, the Village requires warming shelters support.

Blizzards: In the event of blizzards, the Village requires warming shelters support.

Extreme Cold: In the event of extreme cold events, the Village requires warming shelter support.

Tornado: The Village would benefit from cleaning support following tornadoes.

Indicator	Number	Percent
Families in poverty	703	10.9%
People with disabilities	3,129	11.9%
People over 65 years	3,823	14.4%
People under 5 years	1,556	5.9%
People of color	18,872	71%
Black	1,918	7.2%
Native American	191	0.7%
Hispanic	16,015	60.3%
Difficulty with English	3,180	12.7%
Households with no car	712	8%
Mobile homes	59	0.7%

Data are from the U.S. Census Bureau, American Community Survey. See methods for more information.

The community evaluated whether vulnerability, and subsequently the potential impacts, in hazard-prone areas had increased, decreased, or remained the same for each natural hazard identified in this Hazard Mitigation Plan. Climate change, infrastructure expansion, and economic shifts that can affect vulnerability were considered. For example, if planned development is in an identified hazard area or is not built to the updated building codes, it may increase the community's vulnerability to future hazards and disasters. On the other hand, if development occurred with mitigation practices in place, the vulnerability may have remained the same or decreased. Additionally, shifting demographics were taken into consideration when assessing development trends.

Jurisdiction-Specific Climate Change Vulnerability and Impacts

The table below outlines if climate change, as assessed by the local planning team, has increased or decreased the municipality's vulnerability/exposure, and thereby the potential impacts, to each natural hazard over the past five (5) years (**Current Vulnerability**), and the effect of climate change in the future probability of occurrence and impacts (**Future Vulnerability**) from each natural hazard.

Future studies are needed to better understand the impact of climate change on the community's assets.

Hazard	Vulnerability
Current Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	
Earthquake	
Flood (Riverine, Urban, Shoreline)	Increased
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	Increased
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Increased
Tornado	Increased
Wildfire (Wildfire Smoke)	Increased

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	
Earthquake	
Flood (Riverine, Urban, Shoreline)	Increase
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	Increase
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Increase
Tornado	Increase
Wildfire (Wildfire Smoke)	Increase

Jurisdiction-Specific Changes (or Expected Changes) in Development Trends in Hazard-Prone Areas

The table below outlines if development, as assessed by the local planning team, over the past five (5) years (**Current Vulnerability**) has increased or decreased the jurisdiction's vulnerability/exposure, and thereby the potential impacts, to these natural hazards, and the anticipated effects changes in development may have on the future probability of occurrence and impacts (**Future Vulnerability**) from these natural hazards.

Hazard	Vulnerability
Current Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	
Earthquake	

Flood (Riverine, Urban, Shoreline)	Increased
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	
Tornado	
Wildfire (Wildfire Smoke)	

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	
Earthquake	
Flood (Riverine, Urban, Shoreline)	Increase
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	
Tornado	
Wildfire (Wildfire Smoke)	

New assets now vulnerable to the natural hazards (flood, severe weather/winter weather, tornado) include new development (structures) within the City. Many new commercial/industrial structures have been constructed within the City in the last 5 years.

The City anticipates additional development of commercial / industrial structures in the future. In addition, the City will be constructing a new potable water pump station (critical facility) in the near future which would become exposed to the natural hazards (flood, severe weather/winter weather, tornado).

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
1	Flood
2	Severe Weather
3	Severe Winter Weather
4	Tornado
5	Earthquake
6	Dam Failure
7	Drought

New Mitigation Actions

The following are new mitigation actions created during the 2024 update.

Action N-5.26

Mitigation Action #26: Construction of additional green infrastructure projects (Permeable Pavement): Northlake Public Library Permeable Parking Lot Project					
Lead Agency/Department Organization: Northlake Public Library District	Supporting Agencies/ Organizations: Addison Creek River Conservancy District, Metropolitan Water Reclamation District (MWRD)	Estimated Cost: Medium	Potential Funding Source: Metropolitan Green infrastructure Partnership Program	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2025			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4			
Applicable Objective		2,8,9,13			
Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High			
Action/Implementation Plan and Project Description:		Construction of additional green infrastructure projects (Permeable Pavement): Northlake Public Library Permeable Parking Lot Project			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority		N			

Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	
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Action N-5.27

Mitigation Action #27: Construction of additional green infrastructure projects (Permeable Pavement): Grant Park Permeable Pavement Parking Lot Project					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/Organizations: Veterans Park District, Illinois Environmental Protection Agency (IEPA)	Estimated Cost: Medium	Potential Funding Source: Section 319 Grant	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated	2025				
Applicable Jurisdiction	City of Northlake				
Applicable Goal	1,2,3,4				
Applicable Objective	2,8,9,13				
Cost Analysis (Low, Medium, High)	Medium				
Priority and Level of Importance (Low, Medium, High)	Medium				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium				
Action/Implementation Plan and Project Description:	Construction of additional green infrastructure projects (Permeable Pavement): Grant Park Permeable Pavement Parking Lot Project				
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion;	N				

O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	
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Action N-5.28

Mitigation Action #28: Purchasing additional homes within the Addison Creek floodplain thru the MWRD Flood Prone Property Acquisition Program and turning them into open space					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/ Organizations: Metropolitan Water Reclamation District (MWRD)	Estimated Cost: Medium	Potential Funding Source: Flood Prone Property Acquisition Program	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2025			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,4, 6			
Applicable Objective		4,6,7,8,12,13			
Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		High			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High			
Action/Implementation Plan and Project Description:		Purchasing additional homes within the Addison Creek floodplain thru the MWRD Flood Prone Property Acquisition Program and turning them into open space			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.29

Mitigation Action #29: Install check valves for all homes within the city's jurisdiction that have basements, but do not already have overhead sewer lines installed.					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2024-2025			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4			
Applicable Objective		2,8,9,13			
Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High			
Action/Implementation Plan and Project Description:		Install check valves for all homes within the city's jurisdiction that have basements, but do not already have overhead sewer lines installed.			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.30

Mitigation Action #30: Purchase all homes on East Drive; evacuate area for wetlands/storm water management as per comprehensive plan.					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: MWRD Flood Prone Property Acquisition Program	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2025			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,4,6			
Applicable Objective		4,6,7,8,12,13			
Cost Analysis (Low, Medium, High)		High			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High			
Action/Implementation Plan and Project Description:		Purchase all homes on East Drive; evacuate area for wetlands/storm water management as per comprehensive plan.			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.31

Mitigation Action #31: Purchase and create additional wetland/storm water management area on ComEd property across from Creekside Apartments.					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: MWRD Flood Prone Property Acquisition Program	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2025-26			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,4,6			
Applicable Objective		4,6,7,8,12,13			
Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:		Purchase and create additional wetland/storm water management area on ComEd property across from Creekside Apartments.			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.32

Mitigation Action #32: Underground storm water storage throughout the City, in particular the Fullerton/Roberta area.					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: Hazard Mitigation Grant Program (HMGP)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2026			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4			
Applicable Objective		2,8,9,13			
Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High			
Action/Implementation Plan and Project Description:		Underground storm water storage throughout the City, in particular the Fullerton/Roberta area.			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.33

Mitigation Action #33: Convert all publicly-owned parking lots to permeable paver lots.					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/Organizations:	Estimated Cost: Medium	Potential Funding Source: Hazard Mitigation Grant Program (HMGP)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2026			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4			
Applicable Objective		2,8,9,13			
Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:		Convert all publicly-owned parking lots to permeable paver lots.			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.34

Mitigation Action #34: Convert residential alleys to permeable pavers.					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/Organizations:	Estimated Cost: Medium	Potential Funding Source: Hazard Mitigation Grant Program (HMGP)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2025-26			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4			
Applicable Objective		2,8,9,13			
Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:		Convert residential alleys to permeable pavers.			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.35

Mitigation Action #35: Flood control measures at Golfview & Hillside area.					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/Organizations:	Estimated Cost: Medium	Potential Funding Source: Hazard Mitigation Grant Program (HMGP)	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2025-26			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4			
Applicable Objective		2,8,9,13			
Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:		Flood control measures at Golfview & Hillside area.			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.36

Mitigation Action #36: Implement flood control measures at Golfview, Robert, Melrose, Altgeld, and Medill streets (area).					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/Organizations:	Estimated Cost: Medium	Potential Funding Source: Hazard Mitigation Grant Program (HMGP)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2025-26			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4			
Applicable Objective		2,8,9,13			
Cost Analysis (Low, Medium, High)		Medium			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:		Implement flood control measures at Golfview, Robert, Melrose, Altgeld, and Medill streets (area).			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.37

Mitigation Action #37: Implement flood control measures at Edwards/Parkview area.					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: Hazard Mitigation Grant Program (HMGP)	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2025-26			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4			
Applicable Objective		2,8,9,13			
Cost Analysis (Low, Medium, High)		Low			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:		Implement flood control measures at Edwards/Parkview area.			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Action N-5.38

Mitigation Action #38: Add surge protection at all City-owned facilities.					
Lead Agency/Department Organization: Northlake Administration	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline) Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold)
Year Initiated		2025-26			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4			
Applicable Objective		2,8,9,13			
Cost Analysis (Low, Medium, High)		Low			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Low			
Action/Implementation Plan and Project Description:		Add surge protection at all City-owned facilities.			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		N			

Ongoing Mitigation Actions

During the 2024 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Action N-5.1

Mitigation Action #1: Consider participation in incentive-based programs such as the Community Rating System.					
Lead Agency/Department Organization: City Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,5,6			
Applicable Objective		3, 4, 5, 6, 7, 9, 10, 11, 13			
Cost Analysis (Low, Medium, High)		Low			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:					
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		I			

Action N-5.3

Mitigation Action #3: Support County/Statewide/Federal all hazard initiatives.					
Lead Agency/Department Organization: Police, Planning	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source:	Estimated Projected	Hazard(s) Mitigated: All

			General Fund	Completion Date: Long-term	
Year Initiated		2014			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,4,5,6			
Applicable Objective		1,8			
Cost Analysis (Low, Medium, High)		Low			
Priority and Level of Importance (Low, Medium, High)		High			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:					
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		I			

Action N-5.4

Mitigation Action #4: Where appropriate, support retrofitting, purchasing, or relocating structures in hazard-prone areas to prevent future damage. Give priority to properties with exposure to repetitive losses.					
Lead Agency/Department Organization: Building, Planning, PW	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: BRIC, FMA, HMGP	Estimated Projected Completion Date: Long-term (depending on funding)	Hazard(s) Mitigated: All
Year Initiated		2014			

Applicable Jurisdiction	City of Northlake
Applicable Goal	1,2,3
Applicable Objective	7,13
Cost Analysis (Low, Medium, High)	High
Priority and Level of Importance (Low, Medium, High)	Medium
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project Description:	
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O Three (3) properties purchased and removed from flood hazard areas.

Action N-5.6

Mitigation Action #6: Implement recommendations identified in the City of Northlake Comprehensive plan of 2013 and other comprehensive flood hazard management plans.					
Lead Agency/Department Organization: PW/Building	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: All
Year Initiated	2014				
Applicable Jurisdiction	City of Northlake				
Applicable Goal	1,2,3,5				
Applicable Objective	3, 4, 6, 10, 13				
Cost Analysis (Low, Medium, High)	High				

Priority and Level of Importance (Low, Medium, High)	High
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project Description:	
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	I

Action N-5.8

Mitigation Action #8: Install all Tornado warning system on northwestern boundaries of city.					
Lead Agency/Department Organization: City Administration	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: BRIC, HMGP	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Tornado
Year Initiated	2014				
Applicable Jurisdiction	City of Northlake				
Applicable Goal	1,2,3,4,5,6				
Applicable Objective	1,5				
Cost Analysis (Low, Medium, High)	Medium				
Priority and Level of Importance (Low, Medium, High)	Medium				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High				
Action/Implementation Plan and Project Description:					

Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	I

Action N-5.11

Mitigation Action #11: Identify and Replace/Retrofit vulnerable bridges and roadways within municipality					
Lead Agency/Department Organization: Police, Planning	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: BRIC, FMA, HMGP	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flooding
Year Initiated	2014				
Applicable Jurisdiction	City of Northlake				
Applicable Goal	1,2,3				
Applicable Objective	1,2				
Cost Analysis (Low, Medium, High)	High				
Priority and Level of Importance (Low, Medium, High)	Medium				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High				
Action/Implementation Plan and Project Description:					
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	I 2021-Complete upgrade of Roy Ave. bridge. Parkview Bridge in progress				

Action N-5.13

Mitigation Action #13: Develop department continuity of operations plans for all city departments.					
Lead Agency/Department Organization: Public Works	Supporting Agencies/Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3,5			
Applicable Objective		1,8			
Cost Analysis (Low, Medium, High)		Low			
Priority and Level of Importance (Low, Medium, High)		High			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:					
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		O			

Action N-5.14

Mitigation Action #14: Seek land acquisition opportunities for open space use and preservation in areas of high vulnerability due to multiple risk exposure.

Lead Agency/Department Organization: Planning	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: BRIC, HMGP	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		City of Northlake			
Applicable Goal		1,2,3			
Applicable Objective		1, 7, 13			
Cost Analysis (Low, Medium, High)		High			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High			
Action/Implementation Plan and Project Description:					
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		I Three (3) properties purchased and removed from flood hazard areas.			

Action N-5.16

Mitigation Action #16: Continue to support the countywide actions identified in this plan.					
Lead Agency/Department Organization: City Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short- and Long-term	Hazard(s) Mitigated: All
Year Initiated		2014			

Applicable Jurisdiction	City of Northlake
Applicable Goal	1,5
Applicable Objective	All
Cost Analysis (Low, Medium, High)	Low
Priority and Level of Importance (Low, Medium, High)	High
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium
Action/Implementation Plan and Project Description:	
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O

Action N-5.17

Mitigation Action #17: Actively participate in the plan maintenance strategy identified in this plan.					
Lead Agency/Department Organization: EMRS, City Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: All
Year Initiated	2014				
Applicable Jurisdiction	City of Northlake				
Applicable Goal	1,5				
Applicable Objective	3,4,6				
Cost Analysis (Low, Medium, High)	Low				
Priority and Level of Importance (Low, Medium, High)	High				

Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium
Action/Implementation Plan and Project Description:	
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O

Action N-5.18

Mitigation Action #18: Decrease flooding at railroad viaducts in Northlake.					
Lead Agency/Department Organization: City Administration	Supporting Agencies/ Organizations: IDOT and Union Pacific Railroad	Estimated Cost: High	Potential Funding Source: BRIC, FMA, HMGP	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flooding
Year Initiated	2019				
Applicable Jurisdiction	City of Northlake, IDOT and Union Pacific Railroad				
Applicable Goal	1,2,3,4,5,6				
Applicable Objective	2,3,13				
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).				
Priority and Level of Importance (Low, Medium, High)	High				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	The City of Northlake has several roadways that have railroad viaducts that have been closed due to standing water runoff after sudden intense rainfalls. This has lasted for over 24 hours. During large rain events the entire city is closed to any egress				

	High—Project will provide an immediate reduction of risk exposure for life and property.
Action/Implementation Plan and Project Description:	Although the noted roadways are located within the boundaries of the City of Northlake IDOT has almost 100% control of the project scope. Northlake could work with State and County traffic planners do develop raised roadways and better water management coming from the railroads above the viaducts. Temporary detour planning should also be considered.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	I 2021-New tollway and county project taking place.

Action N-5.19

Mitigation Action #19: #1 - Roadway flash flooding at viaducts (runoff from train tracks) #2 - Green infrastructures were needed along railroad tracks or other project areas - Green Alley Program.					
Lead Agency/Department Organization: Clooney/MWRDGC/IDOT/Railroad	Supporting Agencies/Organizations: Clooney/MWRDGC/IDOT/Railroad	Estimated Cost: High	Potential Funding Source: MWRDGC/IDOT/Railroad/BRI C/HMGP	Estimated Project Completion Date: Short-term	Hazard(s) Mitigated: Flooding, Hazardous Materials Incident
Year Initiated	2019				
Applicable Jurisdiction	City of Northlake, IDOT and Union Pacific Railroad				
Applicable Goal	1,2,3,4,5,6				
Applicable Objective	2,3,13				

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).
Priority and Level of Importance (Low, Medium, High)	High
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Traffic flow High—Project will provide an immediate reduction of risk exposure for life and property.
Action/Implementation Plan and Project Description:	
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	I 2021-New tollway and county project taking place.

Action N5.25

Mitigation Action #25: The city installed a Bioswale to mitigate storm runoff into Addison Creek.					
Lead Agency/Department Organization: City Administration	Supporting Agencies/ Organizations:	Estimated Cost: \$50,000	Potential Funding Source: BRIC, FMA, HMGP	Estimated Projected Completion Date: June 2021	Hazard(s) Mitigated: Flooding
Year Initiated	2021				
Applicable Jurisdiction	City of Northlake				
Applicable Goal	1,2,3,5,6				
Applicable Objective					
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.				

Priority and Level of Importance (Low, Medium, High)	Medium
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	The city installed a Bioswale to mitigate storm runoff into Addison Creek. 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.
Action/Implementation Plan and Project Description:	The city received private grant funding for the installation of a Bioswale to mitigate storm runoff from a large city owned parking lot into Addison Creek.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	I

Completed Actions

Completed Mitigation Actions - An archive of all identified and completed projects, including completed actions since 2014.

Completed Action Items
Remove Addison Creek dam at Grant Park.
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.
Inform and educate the public on hazard mitigation preparedness via local newspapers and envelope stuffers.
Continue to participate in general mutual-aid agreements with adjoining jurisdictions for cooperative response to all hazard and disasters.

Replace existing failed drainage systems with adequately sized drainage systems
Where appropriate, provide soil stabilizations for existing wetlands or flood prone properties
Develop program of overhead check valve/overhead sewer system to mediate basement flooding.
Addison Creek Wetland Restoration Project
Northlake Flood-Prone Property Acquisition
Implement the Streambank Stabilization along Addison Creek - Phase I
Implement the Addison Creek Channel Improvements
Covid-19 Vaccine Distribution Site

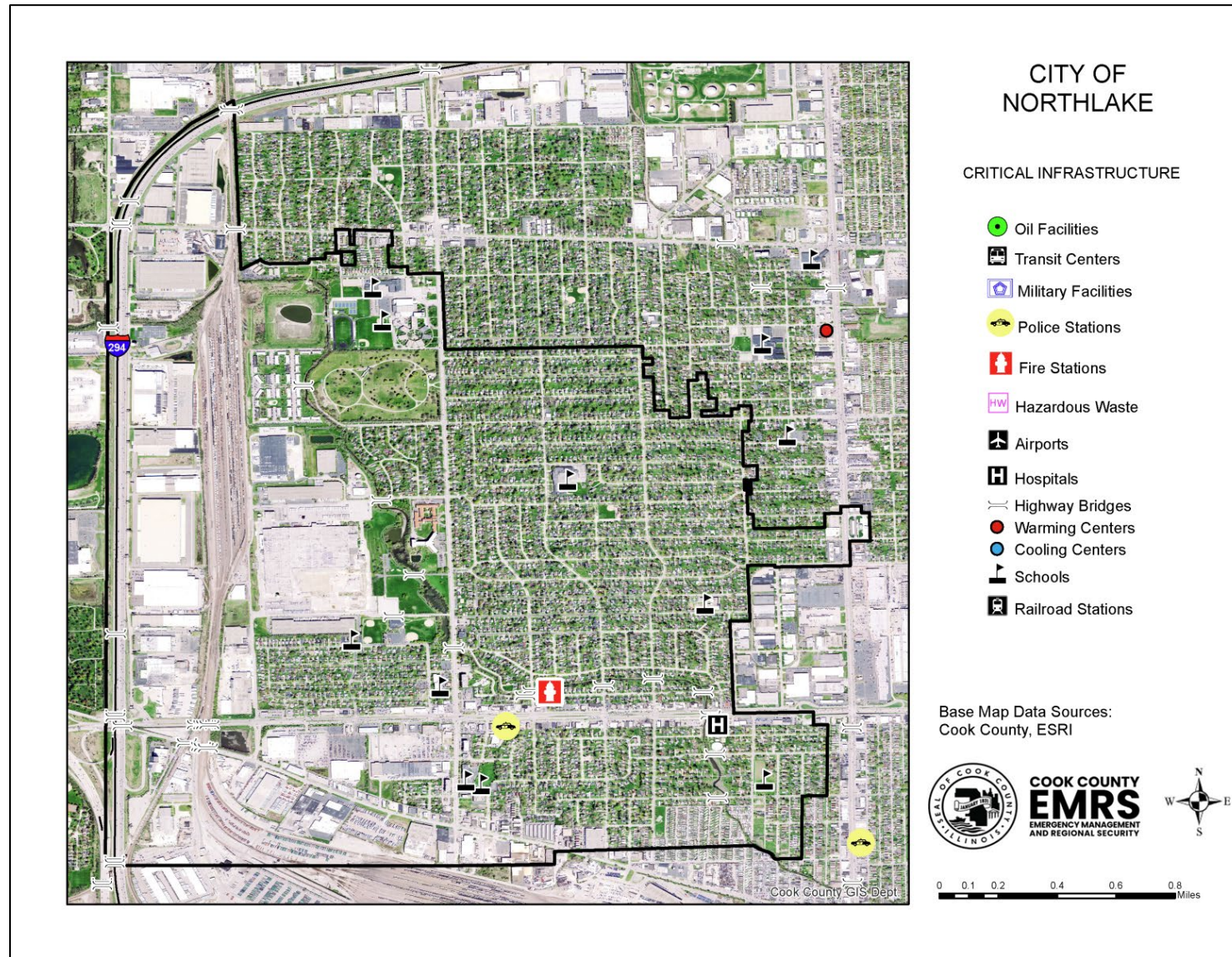
Future Needs to Better Understand Risk/Vulnerability

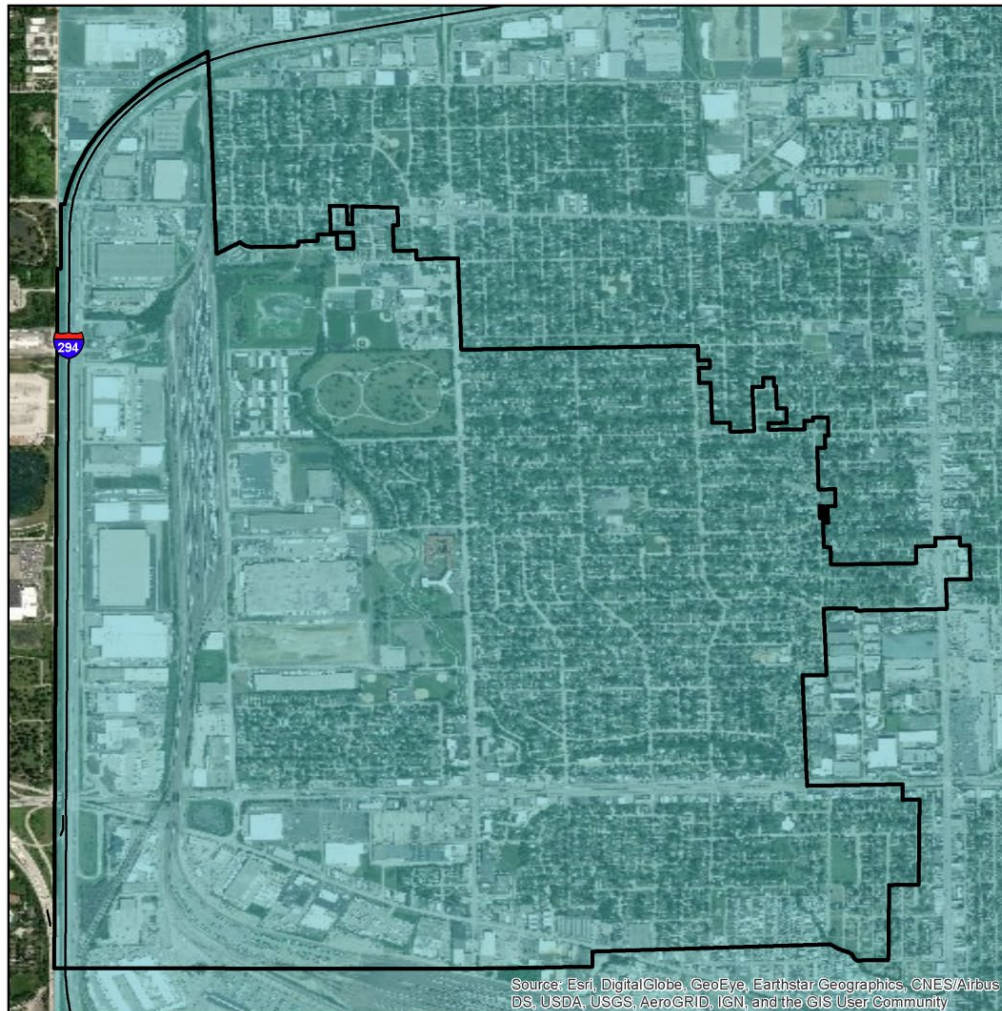
None at this time

Additional Comments

Within the municipal boundaries of the City of Northlake is the “Northlake Reservoir” (STR. 86) This structure is owned and managed by the Metropolitan Water Reclamation District of Greater Chicago (MWRD). The Northlake Reservoir feeds into Addison Creek which is a source of localized flooding. This is an earthen supported structure that when at capacity holds 415 acre-feet of flood water. Parts of the structure are about 6 feet higher than adjacent properties. The City of Northlake considers this a low risk hazard (Dam Failure) should it breach.

Hazard Mapping





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

CITY OF NORTHLAKE

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

Mercalli Scale, Potential Shaking

II-III Weak

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

Probabilistic seismic-hazard maps were prepared for the conterminous United States for 2014 portraying peak horizontal acceleration and horizontal spectral response acceleration for 0.2- and 1.0-second periods with probabilities of exceedance of 10 percent in 50 years and 2 percent in 50 years. All of the maps were prepared by combining the hazard derived from spatially smoothed historical seismicity with the hazard from fault-specific sources. The acceleration values contoured are the random horizontal component. The reference site condition is firm rock, defined as having an average shear-wave velocity of 780 m/s in the top 30 meters corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction program) site classes B and C.

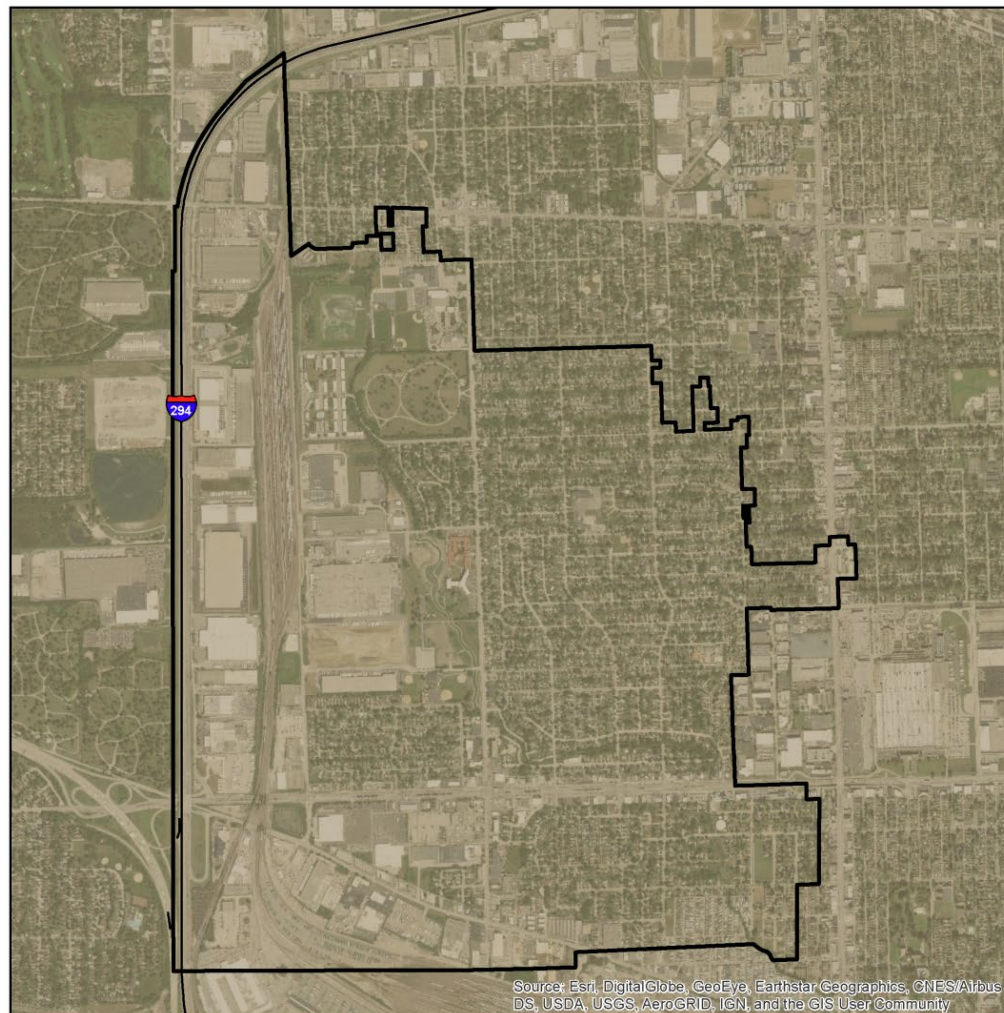
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AND REGIONAL SECURITY



0 0.1 0.2 0.4 0.6 0.8 Miles



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

CITY OF NORTHLAKE

NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP) SOIL CLASSIFICATION

TYPE

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

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

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase II work. The USGS Geologic Investigation Series I-2769 Map of Surficial Deposits and Materials in the Eastern and Central United States (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean N. Pennell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes (International Code Council, 2002) were followed to produce the soil site class maps. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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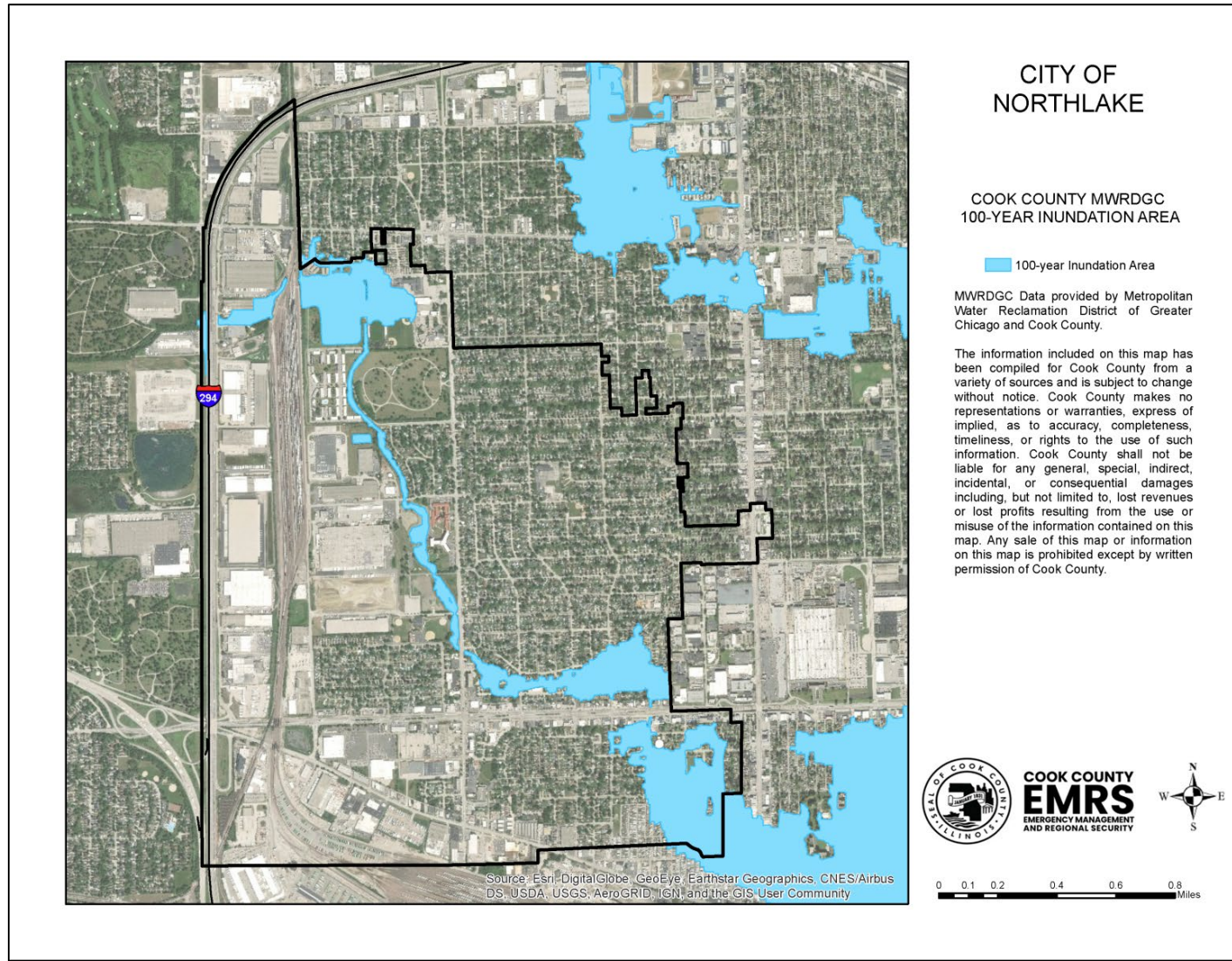


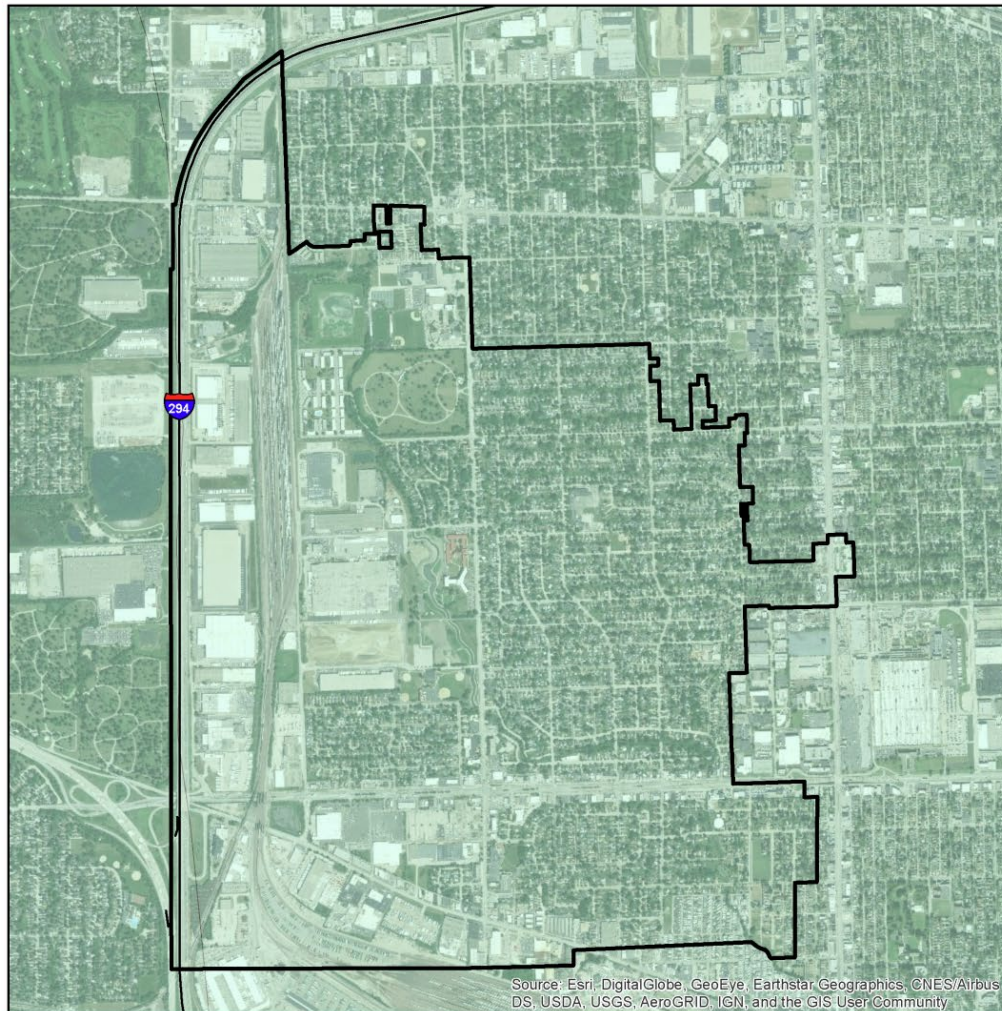
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DISCLAIMER: The Cook County MWRDGC 100-year Inundation Map is provided to show general flood risk information regarding floodplains and inundation areas. This map is not regulatory. Official FEMA Flood Insurance Study information and regulatory maps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





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

CITY OF NORTHLAKE

LIQUEFACTION SUSCEPTIBILITY

LIQUEFACTION SUSCEPTIBILITY

- high
- low
- very low

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