

## Elmwood Park

### Hazard Mitigation Plan Point of Contact

Primary Point of Contact	Alternate Point of Contact	Alternate Point of Contact
Mike Terzo, Fire Chief 7 Conti Parkway, Elmwood Park, IL. 60707 (708) 452-3933 mterzo@elmwoodpark.org	Kevin Flaherty, Deputy Fire Chief 7 Conti Parkway Elmwood Park, IL 60707 708 452-3934 kflaherty@elmwoodpark.org	Kim Parrilli, Assistant Village Manager 11 Conti Parkway, Elmwood Park, IL. 60707 (708) 452-3914 kparrilli@elmwoodpark.org

### Jurisdiction Profile

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

**Date of Incorporation:** 1914

**Current Population:** The 2020 U.S. Census population was 24,522. The 2022 U.S. Census estimate indicated the population was 23,604.

**Population Growth:** The overall population has decreased 2.72 percent between 2018 and 2022.

**Location and Description:** The Village of Elmwood Park is location in the western Chicago metropolitan area, approximately 9 miles northwest of the Chicago city center. The Village is bordered by the City of Chicago to the north and east, the Village of River Forest to the south and the Village of River Grove to the west. The Village is 6 miles southeast of O’Hare International airport, and centered between three major interstates: I-90 to the northeast, I-294 to the west, and I-290 to the south. The Village elevation is 643 ft. Population density is 13,046 people per square mile. The Village is home to a high school, middle school, two elementary schools, and an early childhood center.

**Brief History:** Historical maps of the area show Native American village sites located in area that is now the Elmwood Park/River Grove area. During the 1800s, this southeast corner of Leyden Township was called Ellsworth, and then Orson. The area was included in settlement area around Fort Dearborn and was used as farmland in the early 19th century. Several brooks crisscross the land, which during flooding in the spring would form a series of four “lakes.” Further development of the area came from land grants given to local chiefs who befriended European settlers and other settlers in the mid -19th century. Around 1870, railroad rights granted by local landowners created urbanization leading to the development of the Grand and Harlem Area. A real estate boom occurred at the turn of the 20th century in the area, leading to the purchase and development of the Westwood subdivision in 1926. Another rapid building expansion occurred after the end of World War II. The community has long maintained a large Italian-American population, with a more recent influx of Polish-American and Hispanic residents.

**Climate:** The nearest weather station for Elmwood Park is at O’Hare International Airport. Temperatures reach an average low of 22°F in January and an average high of 73°F in July. Average monthly rainfall is 3”, with a peak of 4.6” average monthly rainfall in August. Average yearly total rainfall is 36.27”. Weather is typical of the Ohio Valley weather region, with periods of drought and heavy rainfall. Prevailing winds are from the west at 12 mph from December through March, northeast at 11 mph April through June, southwest at 9 mph in July and August, and from the south at 10 mph September through November. Annually, average wind prevails from the west, with an average of 11 mph and a peak wind gust of 84 mph. The relative humidity typically ranges from 44% to 91% over the course of the year, rarely dropping below 25% and reaching as high as 100%. May is typically the month with the lowest humidity, and August is the most humid.

**Governing Body Format:** The Village of Elmwood Park is governed by a 6 member board of trustees, with an elected Village President and Clerk. Administration also includes a Village Attorney, Village Manager, Village Collector (Village Clerk may act as the Collector), Finance Director, and Assistant to the Village President/Personnel Administrator. This body will assume the responsibility for the adoption and implementation of this plan. There are also provisions for a Village Engineer, Village Cable Officer, and an Ethics Advisor. There are 10 departments: Code Administration, Finance Department, Fire Department, Health Services, Parks and Recreation, Police Department, Public Works, Senior Programs Village Hall Services, and Water Department. Special committees, commissions, and task forces include: Board of Local Improvements; Parks and Recreation Board; Senior Citizen Advisory Council; Ethics Commission; Emergency Telephone System Board; Board of Fire and Police Commissioners; Arts, Humanities and Special Events Commission; Economic Development Commission; Plan, Zoning, and Development Commission; and Youth Commission. A Traffic and Safety Commission has also been proposed.

**Development Trends:** Anticipated development levels for Elmwood Park are moderate, consisting of both residential and retail development. The majority of recent development has been infill. There has been a focus on attracting more retail to its corridors. The Village of Elmwood Park adopted a comprehensive plan in 2013. The plan focuses on issues of the greatest concern to the community. Village actions such as those relating to land use allocations, zoning, design review, redevelopment and capital improvements must be consistent with such a plan. Future growth and development in the Village will be managed as identified in the general plan. In 2018, approval was given to start 2 new residential developments and also to transform the old Sears Automotive site on Harlem Ave.

**Changes in Community Priorities:** Changes regarding the previous priorities mainly related to flood mitigation and overland flooding issues. As these have been addressed the priorities will now include items addressed by the updated mitigation actions.

## 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.

<b>TABLE: LEGAL AND REGULATORY CAPABILITY</b>					
	<b>Local Authority</b>	<b>State or Federal Prohibitions</b>	<b>Other Jurisdictional Authority</b>	<b>State Mandated</b>	<b>Comments</b>
<b>Codes, Ordinances &amp; Requirements</b>					
Building Code	Yes	No	No	Yes	Adopted the International Residential Code (latest edition)
Zonings	Yes	No	No	Yes	Village of Elmwood Park Zoning Ordinance last updated 7/18/11
Subdivisions	No	No	No	No	
Stormwater Management	No	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA.
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	Yes	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act. Chapter 41A of the Code of the Village of Elmwood Park June 2000
Growth Management	No	No	No	No	
Site Plan Review	No	No	No	No	
Public Health and Safety	Yes	No	No	No	Chapter 25 “Health & Sanitation” of the Code of the Village of Elmwood Park, May 2002
Environmental Protection	No	No	No	No	

<b>Planning Documents</b>					
General or Comprehensive Plan	Yes	No	No	No	Comp Plan adopted April 1, 2013
<i>Is the plan equipped to provide integration to this mitigation plan?</i>					Yes
Floodplain or Basin Plan	No	No	No	No	
Stormwater Plan	No	No	No	No	
Capital Improvement Plan	No	No	No	No	
<i>What types of capital facilities does the plan address?</i>					N/A
<i>How often is the plan revised/updated?</i>					N/A
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	No	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	
<b>Response/Recovery Planning</b>					
Comprehensive Emergency Management Plan	Yes	No	Yes	Yes	Elmwood Park Emergency Operations Plan
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County EMRS Preparing THIRA
Terrorism Plan	No	No	Yes	Yes	Cook County EMRS
Post-Disaster Recovery Plan	No	No	No	No	

Continuity of Operations Plan	No	No	Yes	No	Cook County EMRS
Public Health Plans	Yes	No	Yes	No	Tripcom Pharmaceutical Distribution & Cook County DPH

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

<b>TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY</b>		
<b>Staff/Personnel Resources</b>	<b>Available?</b>	<b>Department/Agency/Position</b>
Planners or engineers with knowledge of land development and land management practices	Yes	Christopher B. Burke Engineering (CBBEL), Village Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Building Commissioner, Village of Elmwood Park
Planners or engineers with an understanding of natural hazards	Yes	CBBEL
Staff with training in benefit/cost analysis	Yes	Finance Director, Village of Elmwood Park
Surveyors	Yes	CBBEL
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Fire Chief
Grant writers	Yes	CBBEL

<b>TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE</b>	
What department is responsible for floodplain management in your jurisdiction?	Public Works
Who is your jurisdiction’s floodplain administrator? (department/position)	Director of Public Works - Village Engineer
Are any certified floodplain managers on staff in your jurisdiction?	Yes, through CBBEL

What is the date of adoption of your flood damage prevention ordinance?	
When was the most recent Community Assistance Visit or Community Assistance Contact?	02/13/1996
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; Undecided

**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 community's Floodplain Administrator is a Certified Floodplain Manager (CFM).

**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:*

10-6 Definitions

**STRUCTURE**

The results of a man-made change to the land constructed on or below the ground, including the construction, reconstruction or placement of a building or any addition to a building; installing a manufactured home on a site; preparing a site for a manufactured home or installing a travel trailer on a site for more than 180 days.

**SUBSTANTIAL IMPROVEMENT**

Any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure either: a) before the improvement or repair is started, or b) if the structure has been damaged, and is being restored, before the damage occurred. 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 structure. The term does not, however, include either: a) 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 b) any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.

Their ordinance did not include substantial improvement / substantial damage rule provisions; future updates will consider inclusion of these rules as applicable and as appropriate.

	<b>Participating?</b>	<b>Classification</b>	<b>Date Classified</b>
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	Yes	Unknown	Unknown
Public Protection/ISO	Yes	ISO 3	July 26, 2011
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	No	N/A	N/A

**Opportunities to Expand and Improve Capabilities**

Opportunities to expand and improve capabilities include having experienced and knowledgeable grant writers to research additional funding opportunities. In addition to specialized engineers to access and oversee plans for grade separation of road and rail traffic in town.

**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 hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the Comprehensive Plan.

*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: 15 (13 Single Family, 2 Two-Four Family Residence)
- Number of FEMA-Identified Severe Repetitive Loss Properties: 1 (1 Two-Four Family)
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties: 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

Severe Weather	-	9/25/2018	-
Severe Weather and Flooding		6/24/2014	1.18 inches of rain in 35 minutes
Severe Weather and Flooding		7/23/2011	In Elmwood Park, several feet of water covered Oak Leaf Avenue with numerous cars stranded in the flood waters. About eight cars were stalled out along 80th Avenue.
Severe Weather-Overland Flooding	DR-1960	1/2011	\$41,444.97
High Winds		6/18/2010	Trees and tree limbs blown down
Extreme Cold		1/16/2010	An 82 year old male died from cold exposure in Elmwood Park in Cook County on January 16th. Low temperatures were in the single digits.
Severe Weather-Overland Flooding	DR-1800	9/2008	\$52,161.28
Severe Weather-Overland Flooding	DR-1729	8/2007	\$113,684.00
Extreme Heat		1996	4 days of heat indices above 100 degrees with one heat related death in Elmwood Park

**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.

**Flood:** Previously, during heavy (100 yr.) rain events the community has experienced street flooding on 73rd Ave and Bloomingdale and various streets where sewers are covered with debris. In 2011, Thunderstorms produced torrential rainfall across central and southeast Cook County with rainfall rates between 2 and 4 inches per hour which caused widespread flash flooding. In Elmwood Park, several feet of water covered Oak Leaf Avenue with numerous cars stranded in the flood waters. About eight cars were stalled out along 80th Avenue. In 2014, An isolated thunderstorm dropped south across Cook County producing heavy rains that resulted in isolated flooding. A CoCoRaHS observer measured 1.18 inches in 35 minutes.

**Extreme Heat:** The Village's elderly population is susceptible to the impacts of extreme heat-induced power outages. In 1996, three days of heat indices above 100 degrees, contributed to a death in Elmwood Park.

**Earthquake:** Our jurisdiction has a unique and vulnerable grade level rail/road crossing that transits people and goods through the Midwest USA.

**Lightning:** Previously, the Village's power lines were affected by lightning strikes.

**Flooding:** Low lying land and roadways along Thatcher Ave. are prone to riverine/creek flooding during Des Plaines River flood level incidents.

**High Winds:** The Village of Elmwood Park has experienced loss of power as a result of downed trees and power lines from high winds. In 2018, a tree was blown down through a fence.

**Snow:** The community experiences difficulty maintaining the safety of the streets following heavy snow events.

**Blizzards:** The community struggles to remove snow following blizzards.

**Extreme Cold:** Previously, the Village has experienced frozen pipes during extreme cold events. In 2011, an 82 year old male died from cold exposure in Elmwood Park in Cook County on January 16th. Low temperatures were in the single digits.

**Ice Storms:** The community has experienced downed power lines and fallen tree limbs after ice storms.

**Wildfire Smoke:** Increased elderly and respiratory compromised population negatively impacted by poor air quality due to smoke from wildfire outbreaks.

Indicator	Number	Percent
Families in poverty	239	4%
People with disabilities	2,167	9%
People over 65 years	3,620	14.9%
People under 5 years	1,087	4.5%
People of color	10,229	42.1%
Black	533	2.2%
Native American	12	0%
Hispanic	8,291	34.2%
Difficulty with English	1,895	8.2%
Households with no car	684	7.4%
Mobile homes	0	0%

*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
<b>Current Vulnerability</b>	
Dam and Levee Failure	Remained the Same
Drought	Remained the Same

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

Hazard	Vulnerability
<b>Future Vulnerability</b>	
Dam and Levee Failure	No Change is Anticipated
Drought	No Change is Anticipated
Earthquake	No Change is Anticipated
Flood (Riverine, Urban, Shoreline)	Increase
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	No Change is Anticipated
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	No Change is Anticipated
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
<b>Current Vulnerability</b>	
Dam and Levee Failure	Remained the Same
Drought	Remained the Same
Earthquake	Remained the Same
Flood (Riverine, Urban, Shoreline)	Increased
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	Remained the Same
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Remained the Same
Tornado	Remained the Same
Wildfire (Wildfire Smoke)	Remained the Same

Hazard	Vulnerability
<b>Future Vulnerability</b>	
Dam and Levee Failure	No Change is Anticipated
Drought	No Change is Anticipated
Earthquake	No Change is Anticipated
Flood (Riverine, Urban, Shoreline)	Increase

Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	No Change is Anticipated
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	No Change is Anticipated
Tornado	No Change is Anticipated
Wildfire (Wildfire Smoke)	No Change is Anticipated

Our community anticipates that the following future major assets may be exposed or vulnerable to any of the natural hazards identified in this Hazard Mitigation Plan:

- A potential increase in elderly at risk population with addition of more senior residential housing structures. This population is at risk of exposure to extreme heat and poor air quality from wildfire smoke.

### Hazard Risk Ranking

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

<b>TABLE: HAZARD RISK RANKING</b>	
<b>Rank</b>	<b>Hazard Type</b>
1	Severe Weather
2	Severe Winter Weather
3	Tornado
4	Drought
5	Flood
6	Earthquake
7	Dam Failure

## New Mitigation Actions

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

### Action E-6.13

<b>Mitigation Action #13: Upgrading existing water delivery systems to eliminate breaks and leaks.</b>					
<b>Lead Agency/Department Organization:</b> Department of Capital Improvements - Dino Braglia, Superintendent	<b>Supporting Agencies/Organizations:</b> Public Works / Water Reclamation District of Greater Chicago	<b>Estimated Cost:</b> High	<b>Potential Funding Source:</b> General Fund State Special Funds Building Resilient Infrastructure and Communities (BRIC) Community Development Block Grant (CDBG) FEMA Public Assistance (PA)	<b>Estimated Projected Completion Date:</b> Ongoing	<b>Hazard(s) Mitigated:</b> Drought Earthquake
<b>Year Initiated</b>		2024			
<b>Applicable Jurisdiction</b>		Village of Elmwood Park			
<b>Applicable Goal</b>		1,2,3,4,5,6			
<b>Applicable Objective</b>		1,2,12,13			
<b>Cost Analysis (Low, Medium, High)</b>		High			
<b>Priority and Level of Importance (Low, Medium, High)</b>		High			
<b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>		High			

<p><b>Action/Implementation Plan and Project Description:</b></p>	<p>Upgrading existing water delivery systems to eliminate breaks and leaks. Replace vulnerable and leaking water supply system to decrease loss and negative environmental impact. Create water supply system infrastructure resilience.</p>
<p><b>Actual Completion Date or Ongoing Indefinite</b></p>	
<p><b>Project Status &amp; Changes in Priority</b>  <b>Completion status legend:</b>  <b>N</b> = New; <b>I</b> = In Progress Toward Completion;  <b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;  <b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed</p>	<p>N</p>

**Action E-6.14**

<p><b>Mitigation Action #14: Evaluate and install, if needed, air quality monitors locally to alert at risk populations of poor air quality conditions due to smoke from wildfires</b></p>					
<p><b>Lead Agency/Department Organization:</b>                      Elmwood Park Fire Department, Michael Terzo - Fire Chief</p>	<p><b>Supporting Agencies/Organizations:</b>                      Administration</p>	<p><b>Estimated Cost:</b>                      Low</p>	<p><b>Potential Funding Source:</b>                      General Fund                      Hazard Mitigation Grant Program (HMGP)                      Building Resilient Infrastructure and Communities (BRIC)                      Community Development Block Grant (CDBG)                      FEMA Public Assistance (PA)</p>	<p><b>Estimated Projected Completion Date:</b>                      Short-term</p>	<p><b>Hazard(s) Mitigated:</b>                      Wildfire (Wildfire Smoke)</p>

<b>Year Initiated</b>	2024
<b>Applicable Jurisdiction</b>	Village of Elmwood Park
<b>Applicable Goal</b>	1,2,4,5,6
<b>Applicable Objective</b>	2,5,8,12
<b>Cost Analysis (Low, Medium, High)</b>	Low
<b>Priority and Level of Importance (Low, Medium, High)</b>	Low
<b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>	High
<b>Action/Implementation Plan and Project Description:</b>	Evaluate and install, if needed, air quality monitors locally to alert at risk populations of poor air quality conditions due to smoke from wildfires
<b>Actual Completion Date or Ongoing Indefinite</b>	
<b>Project Status &amp; Changes in Priority</b> <b>Completion status legend:</b> <b>N</b> = New; <b>I</b> = In Progress Toward Completion; <b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed; <b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed	N

**Action E-6.15**

<b>Mitigation Action #15: Protect Critical Facilities and Infrastructure</b>					
<b>Lead Agency/Department Organization:</b> Village of Elmwood Park Administration - Skip Saviano - Village President	<b>Supporting Agencies/Organizations:</b> Cook County Department of Transportation and Highways (CCDOH), Illinois Department of Transportation (IDOT)	<b>Estimated Cost:</b> High	<b>Potential Funding Source:</b> General Fund Private/Non-Profit Funds State Special Funds Hazard Mitigation Grant Program (HMGP) Building Resilient Infrastructure	<b>Estimated Projected Completion Date:</b> Long-term	<b>Hazard(s) Mitigated:</b> All



			and Communities (BRIC) FEMA Public Assistance (PA)		
<b>Year Initiated</b>	2026				
<b>Applicable Jurisdiction</b>	Village of Elmwood Park				
<b>Applicable Goal</b>	1,2,3,4,5,6				
<b>Applicable Objective</b>	1,2,4,7,8,12,13				
<b>Cost Analysis (Low, Medium, High)</b>	High				
<b>Priority and Level of Importance (Low, Medium, High)</b>	High				
<b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)	High				
<b>Action/Implementation Plan and Project Description:</b>	Protect Critical Facilities and Infrastructure. Reduce potential damage to critical facilities and infrastructure from future seismic events through the evaluation and execution of a grade separation of the road/rail crossing at 7700 W. Grand Ave.				
<b>Actual Completion Date or Ongoing Indefinite</b>					
<b>Project Status &amp; Changes in Priority</b> <b>Completion status legend:</b> 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 E-6.16**

<b>Mitigation Action #16: Reduce Urban Heat Island Effect</b>					
<b>Lead Agency/Department Organization:</b>	<b>Supporting Agencies/Organizations:</b>	<b>Estimated Cost:</b>	<b>Potential Funding Source:</b>	<b>Estimated Projected</b>	<b>Hazard(s) Mitigated:</b>
		Medium			

Public Works Department, Peter Gunther - Director			General Fund Private/Non- Profit Funds State Special Funds Hazard Mitigation Grant Program (HMGP) Community Development Block Grant (CDBG) FEMA Public Assistance (PA)	<b>Completion Date:</b> Ongoing	Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)
<b>Year Initiated</b>	2024				
<b>Applicable Jurisdiction</b>	Village of Elmwood Park				
<b>Applicable Goal</b>	1,2,4,5,6				
<b>Applicable Objective</b>	3,4,6,8,12,13				
<b>Cost Analysis (Low, Medium, High)</b>	Medium				
<b>Priority and Level of Importance (Low, Medium, High)</b>	Low				
<b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)	Medium				
<b>Action/Implementation Plan and Project Description:</b>	Reduce Urban Heat Island Effect by increasing tree plantings around buildings to shade parking lots and along public rights-of-way				
<b>Actual Completion Date or Ongoing Indefinite</b>					
<b>Project Status &amp; Changes in Priority</b> <b>Completion status legend:</b> <b>N</b> = New; <b>I</b> = In Progress Toward Completion; <b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed; <b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed	N				

Action E-6.17

<b>Mitigation Action #17: Reduce Impacts to Roadways by planning for and maintaining adequate road and debris clearing capabilities.</b>					
<b>Lead Agency/Department Organization:</b> Public Works Department - Peter Gunther Director	<b>Supporting Agencies/Organizations:</b>	<b>Estimated Cost:</b> Medium	<b>Potential Funding Source:</b> General Fund Hazard Mitigation Grant Program (HMGP) Building Resilient Infrastructure and Communities (BRIC) Community Development Block Grant (CDBG) FEMA Public Assistance (PA)	<b>Estimated Projected Completion Date:</b> Ongoing	<b>Hazard(s) Mitigated:</b> Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds) Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold) Tornado
<b>Year Initiated</b>		2024			
<b>Applicable Jurisdiction</b>		Village of Elmwood Park			
<b>Applicable Goal</b>		1,2,3,5			
<b>Applicable Objective</b>		1,2,5,6,12			
<b>Cost Analysis (Low, Medium, High)</b>		Medium			
<b>Priority and Level of Importance (Low, Medium, High)</b>		Medium			
<b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>		High			
<b>Action/Implementation Plan and Project Description:</b>		Reduce Impacts to Roadways by planning for and maintaining adequate road and debris clearing capabilities. Procure vehicles and specialized			

	attachments to clear critical roadways of snow accumulation and storm related debris
<b>Actual Completion Date or Ongoing Indefinite</b>	
<b>Project Status &amp; Changes in Priority</b> <b>Completion status legend:</b> <b>N</b> = New; <b>I</b> = In Progress Toward Completion; <b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed; <b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed	N

**Action E-6.18**

<b>Mitigation Action #18: Eliminate lead containing water distribution system components by direct replacement with lead free connections.</b>					
<b>Lead Agency/Department Organization:</b> Capital Improvements Department - Dino Braglia Superintendent	<b>Supporting Agencies/Organizations:</b> Public Works - Peter Gunther Director	<b>Estimated Cost:</b> High	<b>Potential Funding Source:</b> General Fund State Special Funds Hazard Mitigation Grant Program (HMGP) Building Resilient Infrastructure and Communities (BRIC) Community Development Block Grant (CDBG) FEMA Public Assistance (PA)	<b>Estimated Projected Completion Date:</b> Long-term	<b>Hazard(s) Mitigated:</b> Drought Earthquake

<b>Year Initiated</b>	2024
<b>Applicable Jurisdiction</b>	Village of Elmwood Park
<b>Applicable Goal</b>	1,2,3,5,6
<b>Applicable Objective</b>	2,6,7,12,13
<b>Cost Analysis (Low, Medium, High)</b>	High
<b>Priority and Level of Importance (Low, Medium, High)</b>	High
<b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>	High
<b>Action/Implementation Plan and Project Description:</b>	Eliminate lead containing water distribution system components by direct replacement with lead free connections. Reduce toxic exposure to population and increase water system infrastructure resilience.
<b>Actual Completion Date or Ongoing Indefinite</b>	
<b>Project Status &amp; Changes in Priority</b> <b>Completion status legend:</b> 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 E-6.5

<b>Mitigation Action #5: Continue to support the countywide actions identified in this plan.</b>					
<b>Lead Agency/Department Organization:</b> Village Administration	<b>Supporting Agencies/Organizations:</b>	<b>Estimated Cost:</b> Low	<b>Potential Funding Source:</b> General Fund	<b>Estimated Projected Completion Date:</b> Short- and Long-term	<b>Hazard(s) Mitigated:</b> All

<b>Year Initiated</b>	2014
<b>Applicable Jurisdiction</b>	Village of Elmwood Park
<b>Applicable Goal</b>	1,2,5
<b>Applicable Objective</b>	All
<b>Cost Analysis (Low, Medium, High)</b>	Low
<b>Priority and Level of Importance (Low, Medium, High)</b>	High
<b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>	Medium
<b>Action/Implementation Plan and Project Description:</b>	
<b>Actual Completion Date or Ongoing Indefinite</b>	
<b>Project Status &amp; Changes in Priority</b> <b>Completion status legend:</b> <b>N</b> = New; <b>I</b> = In Progress Toward Completion; <b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed; <b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed	O

**Action E-6.7**

<b>Mitigation Action #7: Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.</b>					
<b>Lead Agency/Department Organization:</b> Village Administration	<b>Supporting Agencies/Organizations:</b>	<b>Estimated Cost:</b> Low	<b>Potential Funding Source:</b> General Fund	<b>Estimated Projected Completion Date:</b> Long-term	<b>Hazard(s) Mitigated:</b> All
<b>Year Initiated</b>	2014				
<b>Applicable Jurisdiction</b>	Village of Elmwood Park				
<b>Applicable Goal</b>	1,2,5				
<b>Applicable Objective</b>	3,4,5,6,7,9,10,11,13				
<b>Cost Analysis (Low, Medium, High)</b>	Low				

<b>Priority and Level of Importance (Low, Medium, High)</b>	Medium
<b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)	Medium
<b>Action/Implementation Plan and Project Description:</b>	
<b>Actual Completion Date or Ongoing Indefinite</b>	
<b>Project Status &amp; Changes in Priority</b> <b>Completion status legend:</b> 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 E-6.9**

<b>Mitigation Action #9: Where feasible, implement a program to record high water marks following high water events.</b>					
<b>Lead Agency/Department Organization:</b> Village Administration	<b>Supporting Agencies/Organizations:</b>	<b>Estimated Cost:</b> Medium	<b>Potential Funding Source:</b> General Fund; FEMA Public Assistance (PA)	<b>Estimated Projected Completion Date:</b> Long-term	<b>Hazard(s) Mitigated:</b> Flooding, Severe Weather
<b>Year Initiated</b>	2014				
<b>Applicable Jurisdiction</b>	Village of Elmwood Park				
<b>Applicable Goal</b>	1,2,3,				
<b>Applicable Objective</b>	3,6,9				
<b>Cost Analysis (Low, Medium, High)</b>	Medium				
<b>Priority and Level of Importance (Low, Medium, High)</b>	Medium				
<b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)	Medium				

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

**Action E-6.11**

<b>Mitigation Action #11: Consider developing and implementing a Capital Improvements Program (CIP) to increase the Village’s regulatory, financial, and technical capability to implement mitigation actions.</b>					
<b>Lead Agency/Department Organization:</b> Public Works	<b>Supporting Agencies/Organizations:</b>	<b>Estimated Cost:</b> High	<b>Potential Funding Source:</b> CIP component of General Fund (if implemented)	<b>Estimated Projected Completion Date:</b> Long-term	<b>Hazard(s) Mitigated:</b> All
<b>Year Initiated</b>		2014			
<b>Applicable Jurisdiction</b>		Village of Elmwood Park			
<b>Applicable Goal</b>		1,2,3,5			
<b>Applicable Objective</b>		1,2,7			
<b>Cost Analysis (Low, Medium, High)</b>		High			
<b>Priority and Level of Importance (Low, Medium, High)</b>		Medium			
<b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>		High			
<b>Action/Implementation Plan and Project Description:</b>					
<b>Actual Completion Date or Ongoing Indefinite</b>					
<b>Project Status &amp; Changes in Priority</b> <b>Completion status legend:</b> <b>N</b> = New; <b>I</b> = In Progress Toward Completion;		O			



<p><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;  <b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed</p>	
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**Completed Actions**

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

<b>Completed Action Items</b>
Flood Mitigation Project to reduce sewer backups
Perform community outreach/public education through the use of Blackboard Connect ( mass notification system).
Assist residents in flood prone areas with financial assistance for retro-fitting homes with approved home flood control systems.
Update existing outdoor warning sirens.
Actively participate in the plan maintenance strategy identified in this plan.
Maintain good standing under the National Flood Insurance Program.
Integrate the hazard mitigation plan into other plans, programs or resources that dictate land use or redevelopment.
Purchase property on the SW corner of 73rd Ave and Bloomingdale. It's the only property that is affected by a significant amount of rainfall at one time and is the most cost efficient measure to reduce property loss.

**Future Needs to Better Understand Risk/Vulnerability**

No needs have been identified at this time.

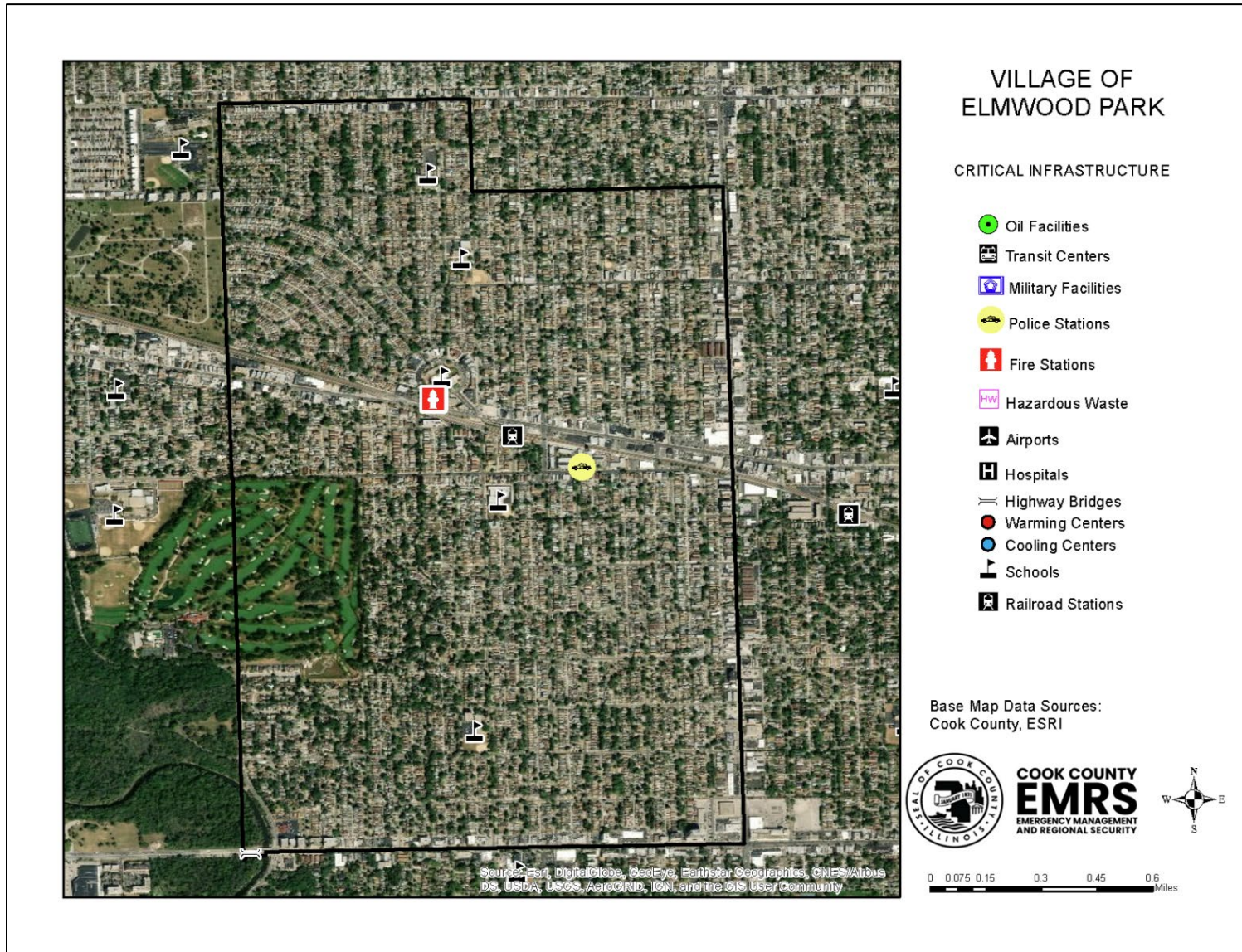
## Additional Comments

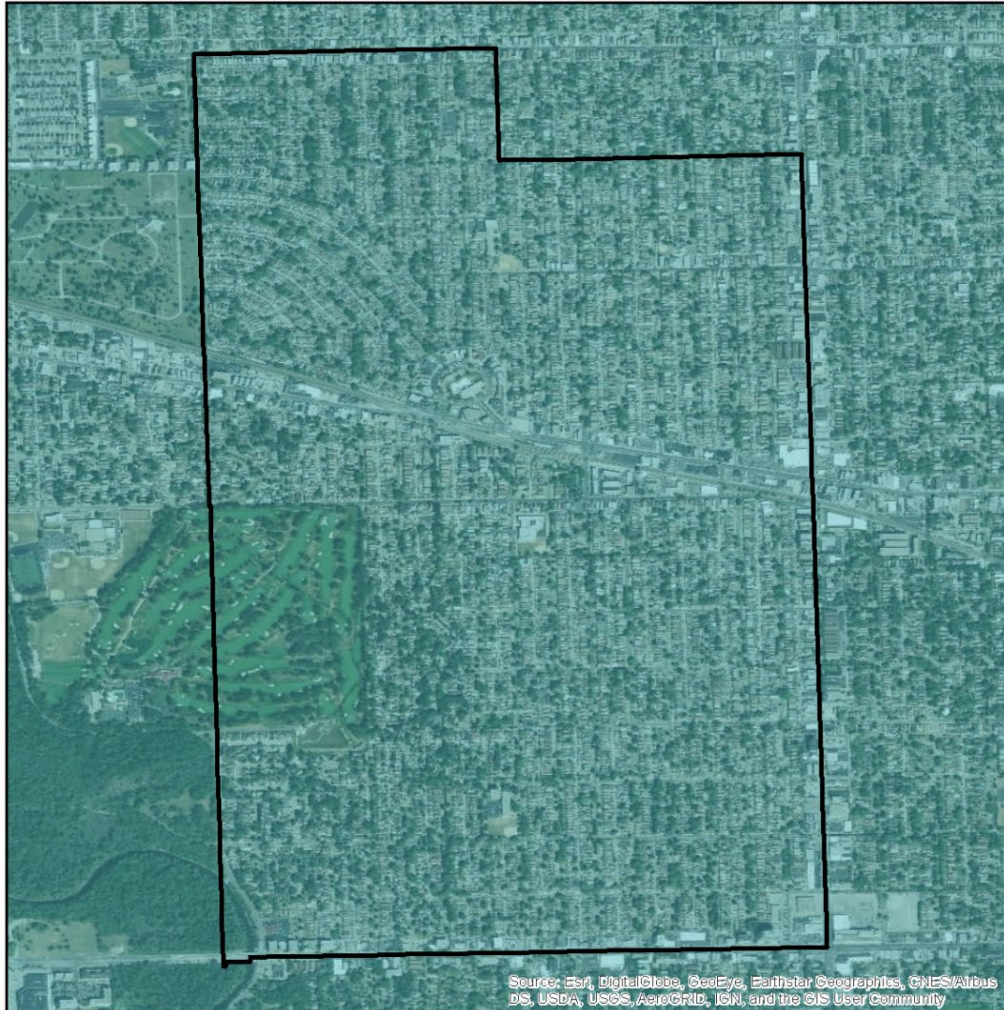
The Village will complete a flood mitigation project this fall. It is anticipated that this should significantly reduce sewer backup issues in the future.

2024 Update:

- The Village will continue a project to upgrade the water delivery system in order to increase resilience and eliminate lead contamination potential.
- The Village continues efforts to replace trees lost to infestation and storm damage. This will reduce the potential of becoming a "heat island" and help reduce ambient temperatures during severe weather situations.
- The Village continues to pursue a grade separation of road and rail at 7700 W. Grand Ave. The intersection is dangerous and created a potential life safety hazard, as well as critical service disruption for the midwest in the event of a natural disaster

## Hazard Mapping





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

## VILLAGE OF ELMWOOD PARK

### 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.

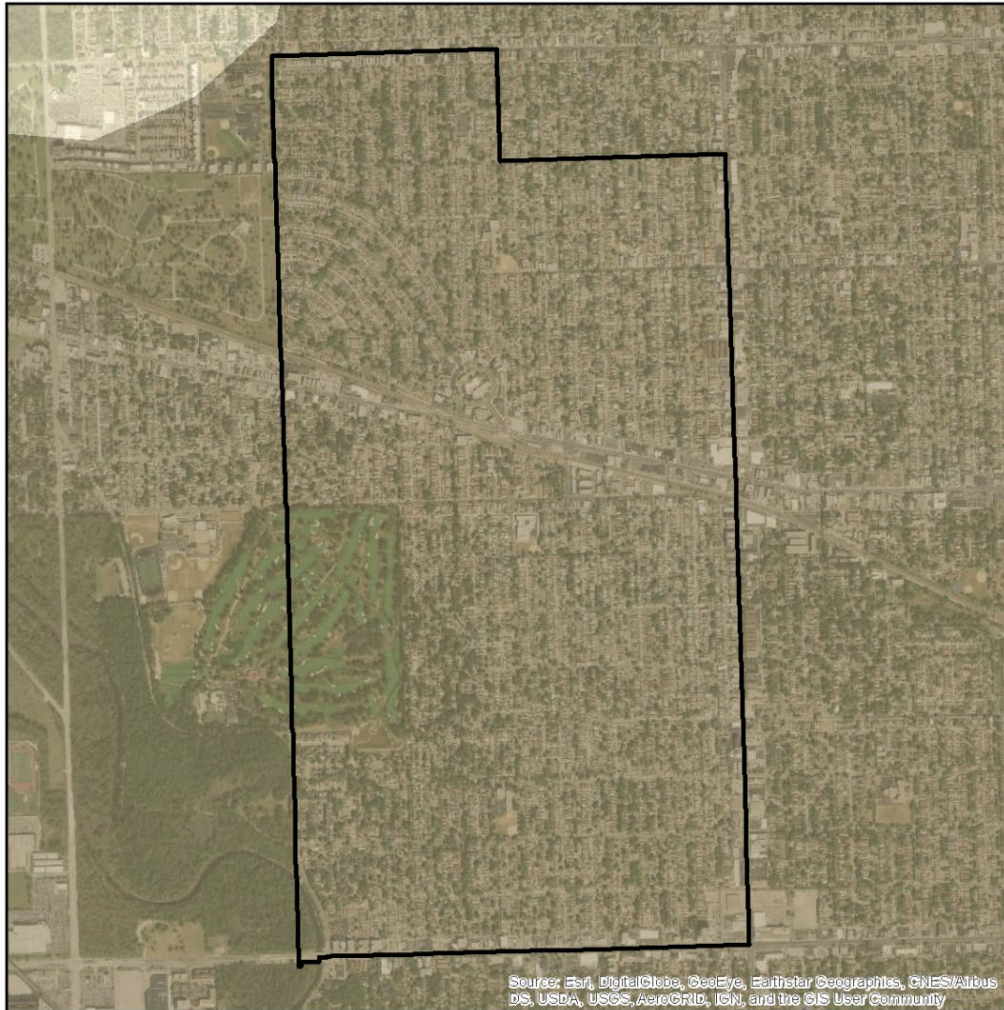
Probabilistic seismic-haz maps were prepared for the conterminous United States for 2014 portraying peak horizontal acceleration and horizontal spectral response acceleration for 0.2- and 1.0-second periods with probabilities of exceedance of 10 percent in 50 years and 2 percent in 50 years. All of the 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 760 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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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

## VILLAGE OF ELMWOOD PARK

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

#### TYPE

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

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

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase II work. The USGS Geologic Investigation Series I-2789 Map of Surficial Deposits and Materials in the Eastern and Central United State (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.

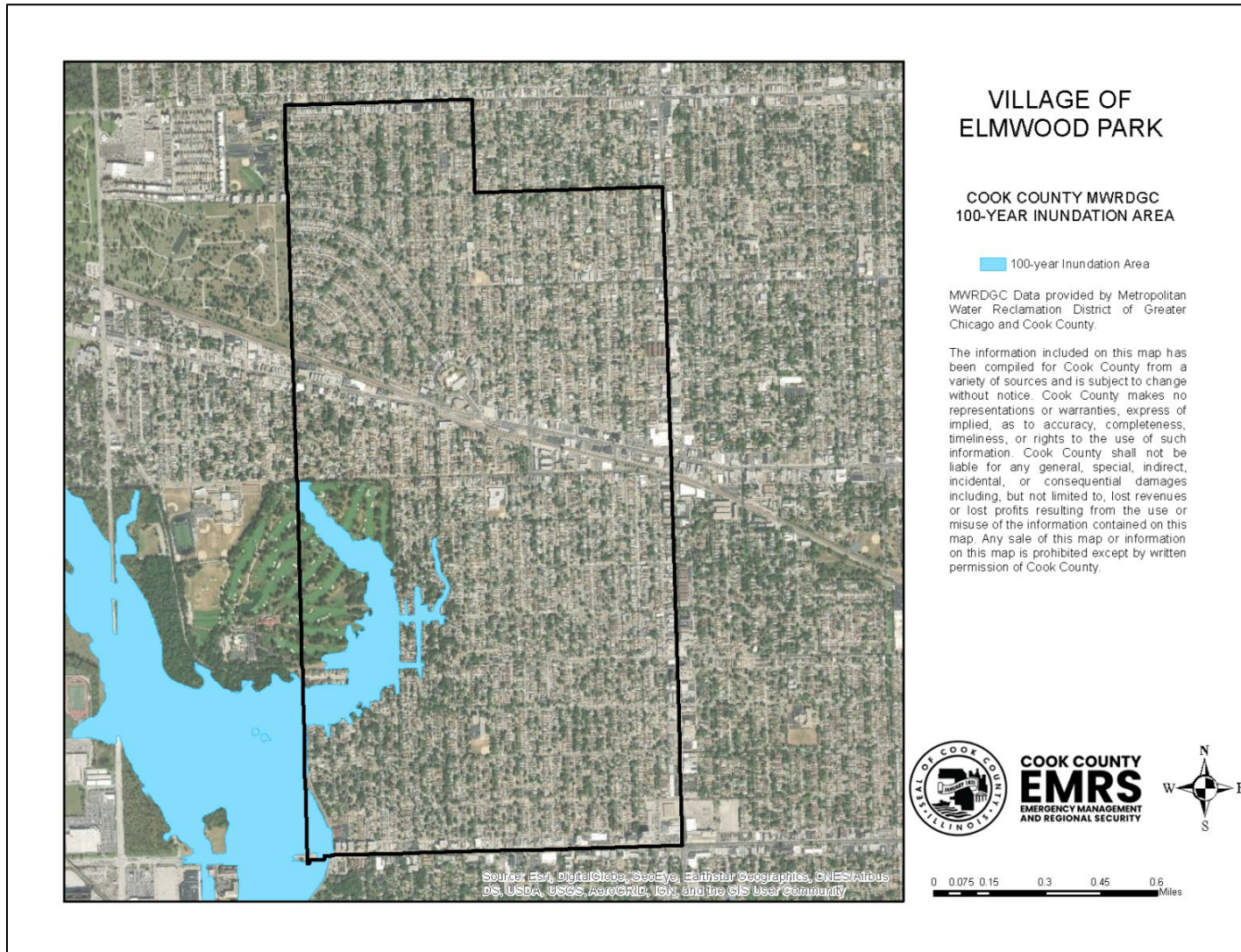
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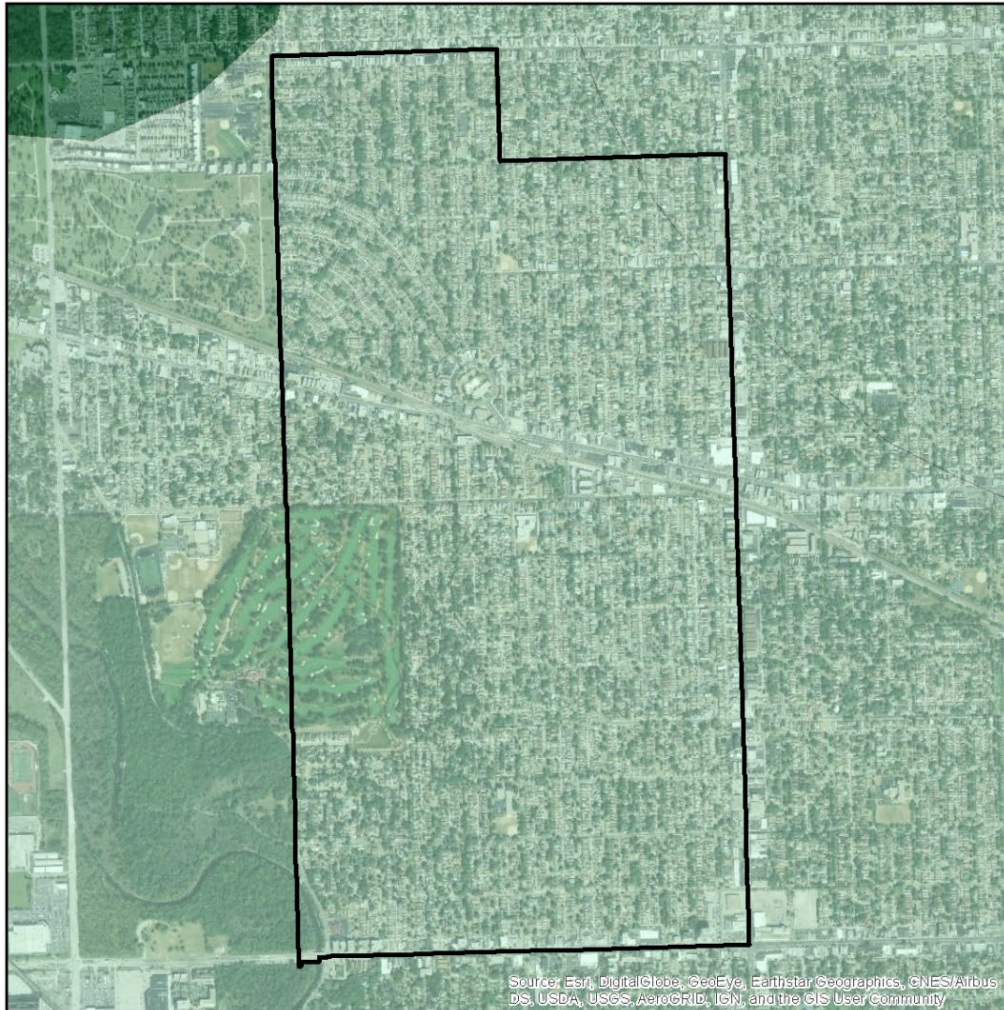


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DISCLAIMER: The Cook County MWRDGC 100-year Inundation Map is provided to show general flood risk information regarding floodplains and inundation areas. This map is not regulatory. Official FEMA Flood Insurance Study information and regulatory maps 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

## VILLAGE OF ELMWOOD PARK

### LIQUEFACTION SUSCEPTIBILITY

#### LIQUEFACTION SUSCEPTIBILITY

- high
- low
- very low

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

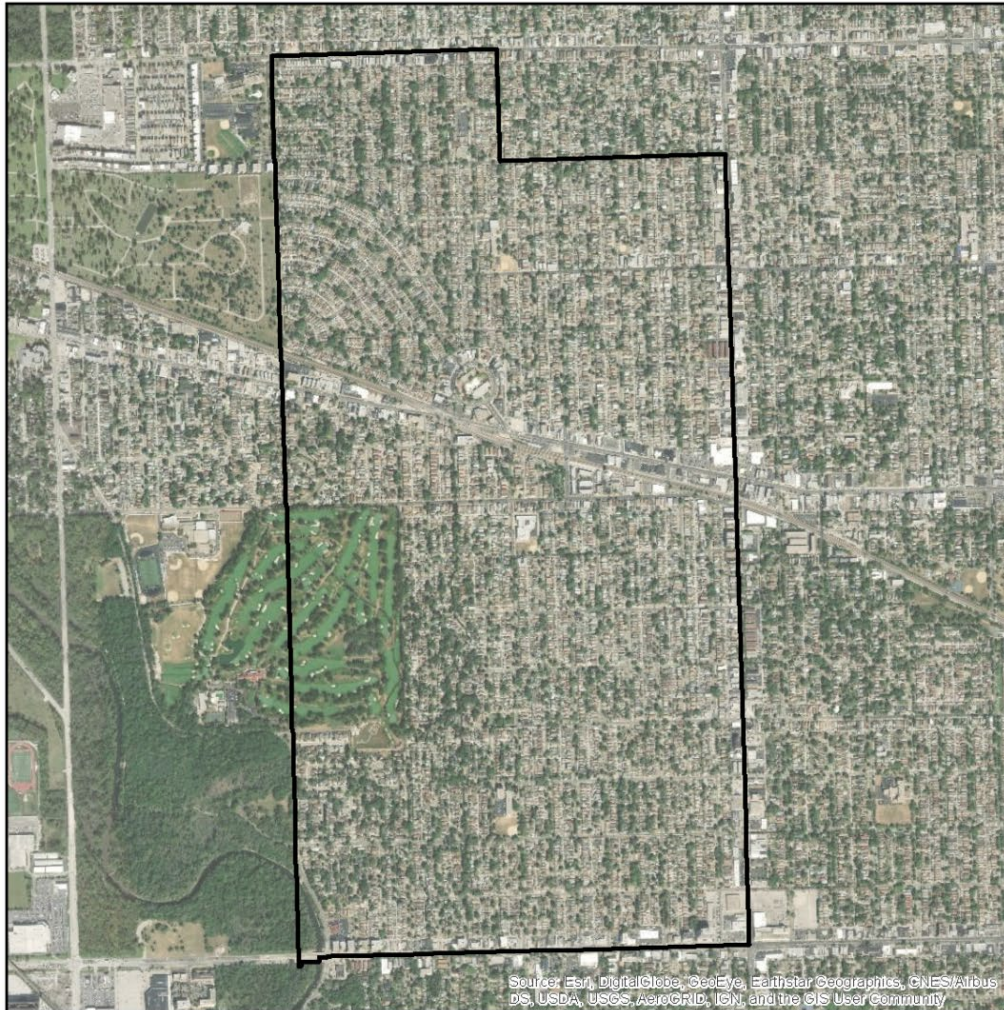
The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase II work. The USGS Geologic Investigation Series I-2789 Map of Surficial Deposits and Materials in the Eastern and Central United State (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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### VILLAGE OF ELMWOOD PARK

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.

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



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