

Hickory Hills

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: 1951

Current Population: The 2020 U.S. Census population was 14,506. The 2022 U.S. Census estimate indicated the population was 14,007.

Population Growth: The overall population has 1.25 percent between 2018 and 2022.

Location and Description: Hickory Hills is located 15 miles southwest from the Chicago loop and borders Justice to the north, Palos Hills to the south, Oak Lawn to the east, and the Cook Count Forest Preserve to the west.

Brief History: Hickory Hills was originally known as North Palos. It had a substantial population of Native Americans before the arrival of European settlers. Growth was slow in the initial years because farming was difficult on the hills of the area. The area started developing after World War II when cheap dwelling units were built along the southern edges of Hickory Hills. It was officially incorporated in 1951, and achieved cityhood in 1966. The name Hickory Hills was chosen because of the rolling hills that dominate the area, along with stands of Hickory trees.

Climate: The climate of Hickory Hills and the Chicago area is classified as humid continental, with all four seasons distinctly represented: wet springs; hot and humid summers; pleasant autumns; and cold winters. Winter proves quite variable as seasonal snowfall in the city has ranged from 9 – 90 inches. The daily average temperature in January at Midway Airport is 24.8 °F (–4.0 °C), and temperatures often stay below freezing for several consecutive days or even weeks in January and February. Temperatures drop to or below 0 °F (–18 °C) on 5.5 nights annually at Midway and 8.2 nights at O'Hare, on average. Spring in the Chicago area is perhaps the city's wettest and unpredictable season. Winter-like conditions can persist well into April and even occasionally into May.

Thunderstorms are especially prevalent in the spring time as the city's lakeside location makes it a center of conflicts between large volumes of warmer and colder air, triggering many kinds of severe weather. Temperatures vary tremendously in the springtime; March is the month with the greatest span between the record highs and lows. On a typical summer day, humidity is usually moderately high and temperatures ordinarily reach anywhere between 78 and 92 °F (26 and 33 °C). The extreme heat that the Chicago area is capable of experiencing during the height of the summer season can persist into autumn. Temperatures have reached as high as 100 degrees lower than -18 °C. Fall can bring heavy thunderstorms, many of which are capable of producing flooding. On average, the first accumulating snow occurs around Nov 19.

Governing Body Format: Hickory Hills is run with a Strong Mayor form of government consisting of four wards and eight aldermen that form the city council. This body of Government will assume the responsibility for the adoption and implementation of this plan. The City operates 3 departments including the Building Department, Public Works Department, and Police Department. The Roberts Park Fire District serves as the City's Fire Department.

Development Trends: Development within the city consists of replacing old homes and businesses due to being landlocked on all sides. There are a few parcels of land available for development. The proximity of two expressways within the city has caused a heavy volume of traffic which is dealt with on a regular basis by improving roadways within the city limits and surrounding areas. The local school district continues improvement projects on an ongoing basis and is planning to construct a new Junior High School. The City of Hickory Hills has been defined as the highest point in Cook County and the Public works department has been continuing work on a continuing basis over the past several years through currently, to set up several detention areas throughout the city to help alleviate flooding issues in the Village. The village website encourages residents to support local businesses when buying items or looking for services.

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	No	In accordance with Public Act 096-0704, Illinois has adopted the IBC as its state Building Code, 01-2014
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code., 2011
Subdivisions	Yes	No	No	No	2011
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. 2008
Post Disaster Recovery	Yes	No	No	No	On file at city hall and director of the Emergency Management Agency, 11-2007
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	No	No	No	No	
Site Plan Review	Yes	No	No	No	1-2014
Public Health and Safety	No	No	Yes	Yes	Cook County Board of Health.
Environmental Protection	No	No	No	No	
Planning Documents					
General or Comprehensive Plan	No	No	No	No	

<i>Is the plan equipped to provide integration to this mitigation plan? N/A</i>					
Floodplain or Basin Plan	Yes	No	Yes	No	Ordinance 89-20 On file at city hall, Revised 1-2008
Stormwater Plan	Yes	No	Yes	No	Ordinance 89-20. On file at city hall, Revised 1-2008
Capital Improvement Plan	No	No	No	No	
<i>What types of capital facilities does the plan address? N/A</i>					
<i>How often is the plan revised/updated? N/A</i>					
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	
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	No	Yes	Yes	Hickory Hills Emergency Management Agency, 11-2007 Cook County EMRS
Threat and Hazard Identification	No	No	Yes	No	Cook County EMRS

and Risk Assessment					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	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	No
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
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	Robinson Engineering Public work
Engineers or professionals trained in building or infrastructure construction practices	Yes	Robinson Engineering Public Works, Building Department
Planners or engineers with an understanding of natural hazards	Yes	Robinson Engineering Public Works
Staff with training in benefit/cost analysis	Yes	Finance Department
Surveyors	Yes	Robinson Engineering
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium
Scientist familiar with natural hazards in local area	Yes	Robinson Engineering
Emergency manager	Yes	Cook County EMRS
Grant writers	Yes	Each department head is responsible for writing grants

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

What department is responsible for floodplain management in your jurisdiction?	Public Work
Who is your jurisdiction's floodplain administrator? (department/position)	Public Work

Are any certified floodplain managers on staff in your jurisdiction?	Robinson Engineering Public Works
What is the date of adoption of your flood damage prevention ordinance?	May 7, 1980
When was the most recent Community Assistance Visit or Community Assistance Contact?	4/16/2008
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 Further information would be needed to address the city counsel

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.

- Our staff provide the following services: permit reviews, GIS, inspections, engineering capability.
- 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.

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:***23.08 DRAINAGE AND FLOODPLAIN PROVISIONS**

(a) Every proposed subdivision shall make provision for surface drainage and flooding. The provisions shall be based upon a study prepared by the subdivider's engineer of the entire area tributary to streams, channels, or drainage ways in the subdivision. This study, upon which design of the storm sewer and drainage system will be based, shall consist of at least the following:

1. Analysis of area tributary to subdivision, including area, topography, drainage, rainfall intensity and frequency, run-off, and flooding;
2. A topographic map of the subdivision, indicating any areas subject to flooding and showing the surface run-off which will occur in the subdivision after extreme rainstorms;
3. A report of the basis of the design of the proposed sewers, open channels, and detention basins proposed for the subdivision.

(b) The proposed drainage system and outlet of the subdivision shall be designed so that it will not fail to function when the receiving stream or channel is in full flood. Streets shall be designed where possible to act as open channels, with positive drainage toward the major watercourse or channel in the area.

(c) Each river or stream which borders or traverses the proposed subdivision shall be provided with a storm water easement or right-of-way conforming substantially with the lines of the watercourse and of such further width as will be adequate to accommodate observed, computed, or anticipated flood flows and heights and will provide access along the channel for operation of channel operation and maintenance equipment.

(d) Each minor drainageway, channel, or watercourse which borders or traverses the proposed subdivision shall be maintained as open channels with a storm water easement or right-of-way of adequate width to accommodate observed, computed, or anticipated run-off and flood flows. Upon indication of adequacy of design, as evidenced by the studies of subsection (a) the upper reaches of such drainageways may be enclosed as a part of a storm sewer system.

(e) Where the drainage for a proposed subdivision requires rear or side lot drainage easements, such easements shall be centered on the lot lines and shall be a minimum of 10 feet in width. With the exception of utility poles, Commonwealth Edison and Bell Telephone transformers, no structures shall be placed in these drainage easements.

(f) The elevation of the finished surface of any street proposed in an area of a subdivision subject to flooding shall be not less than one foot above the observed, computed, or anticipated flood level.

(g) When a subdivision drainage plan proposes use of retention basins or ponds, which are to be dedicated for public use, provision shall be made that a public access be possible through extension of a street stub to connect the facility to a public street.

300.65 Substantial Damage

Damage of any origin sustained by a structure whereby the cumulative percentage of damage ("**subsequent to the adoption of this ordinance**") equals or exceeds 50 percent of the market value of the structure before the damage occurred **regardless of actual repair work**

performed. Volunteer labor and materials must be included in the determination. The term includes Repetitive Loss Buildings See 300.56 "Repetitive Loss".

300.66 Substantial Improvement

Any reconstruction, rehabilitation, addition, or improvement of a structure taking place ("subsequent to the adoption of this ordinance") in which the cumulative percentage of improvements equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started.

300.66.1 (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. This term includes structures which have incurred repetitive loss or substantial damage, regardless of the actual work done.

300.66.2 The term does not, however, include either:

300.66.2.1 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

300.66.2.2 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.

TABLE: COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	Unknown	Unknown	Unknown
Public Protection/ISO	Unknown	Unknown	Unknown
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	Yes	Recognized	March 2013

Opportunities to Expand and Improve Capabilities

Opportunities to expand and improve capabilities include;

- GIS our storm atlas
- Improve building codes and ordinances
- Local matching funds for 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 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: 0
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- 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	High Wind, Tornadoes, Torrential Rain
5/25/2011	
4/18/2013	
4/20/2013	Severe Storms, Heavy Rainfall, Flooding, Straight-line Winds
4/21/2013	
4/25/2013	
4/30/2013	
1/6/2014	
1/6/2014	Heavy Snowfall, Frigid Temperatures
7/12/2017	Thunderstorms, Heavy Rainfall, Flooding
7/14/2017	
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 Winter Weather	-	2013-2014	Snow removal, broken water mains, and school closings
Sever Summer Storms	-	2013	Tree removal
Severe Winter Storms	DR-1960	2011	Snow removal, school closings. Extra manpower used
Severe Summer Storms	-	2006	Straight line winds, micro burst, substantial debris removal
Severe Summer Storms	-	1995	Flooding
Severe Summer Storms	-	1993	Flooding
Severe Summer Storms	-	1992	Flooding
Severe Summer Storms	-	1990	Wind damage; Debris removal required.
The City of Hickory Hills has a history of severe storms that goes back before 1990.			

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.

Severe Weather: We have an increasing population of seniors that are vulnerable in extreme heat and cold. Our tree canopy city wide is vulnerable to lightning strikes. Our power lines are vulnerable to high winds. During a severe weather event, the roof of a junior high school was blown off in Hickory Hills near the intersection of 97th Street and Roberts Road. The roof landed on a service van in a parking lot next to the school. Two occupants in the van were trapped and injured. Numerous trees, tree limbs and power lines were blown down. Several homes along 97th Street received damage from falling trees and tree limbs.

Flooding: Several miles of storm sewers in the city limits are in need of replacement due to age. The following locations are vulnerable to repeated flooding;

- The Blueridge subdivision repeatedly floods, resulting in basement flooding, ponding and basin overtops.
- Flamingo terrace complex and Great Oaks Condos has overbank flooding, structure flooding, ponding and bank erosion.
- Hill Creek shopping center detention basin is undersized resulting in residential flooding downstream.
- Roberts Rd storm sewers are undersized resulting in flooding and restricting highway access.
- 7700 block of 98th Street insufficient capacity resulting in structure flooding.
- 7700 block of 96th Place insufficient capacity resulting in structure flooding.

Drought: Hickory Hills continues to regulate days/hours that households are able to water outside during the summer months. Citywide, we are vulnerable to drought. It can impact our food sources, tree canopy, wild life, increase the likelihood of fires and cause deficiencies in surface water supplies.

Extreme Cold: Annual leak survey suggests precautions of water system in the case of infrastructure damage.

Earthquake: On 4/18/2008 at 09:36:59, a magnitude 5.4 (Depth: 8.9 mi) earthquake occurred 226.3 miles away from the city center. Our water supply reservoirs are vulnerable to a seismic activity. Structure damage could create a release of a 2.2 million gallon reservoir as well as 1.25 million gallon reservoir. Communication cell towers could be damaged.

Tornado: Critical facilities such as our Police Department, nursing home and senior apartment complex do not have wind resistant roofing.

Severe Winter Weather: Citywide the streets could be obstructed, impeding emergency vehicles and residents needed food and medicine. Water main breaks could jeopardize the water supply. The senior population is vulnerable to extreme cold, pipes freezing and potential power outages.

Indicator	Number	Percent
Families in poverty	790	10.3%
People with disabilities	3,117	9.8%
People over 65 years	4,191	13.1%
People under 5 years	2,188	6.8%
People of color	10,952	34.3%
Black	4,023	12.6%
Native American	50	0.2%
Hispanic	5,038	15.8%
Difficulty with English	1,771	5.9%
Households with no car	687	5.8%
Mobile homes	791	6.7%

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	
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	
Wildfire (Wildfire Smoke)	

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	
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	
Wildfire (Wildfire Smoke)	

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	
Drought	
Earthquake	
Flood (Riverine, Urban, Shoreline)	
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	
Drought	
Earthquake	
Flood (Riverine, Urban, Shoreline)	
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	

Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	
Tornado	
Wildfire (Wildfire Smoke)	

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:

- Our senior population is on the increase and they are more at risk of hazardous events than others.
- Households living alone can be more vulnerable to hazards due to a lack of resources or support networks.
- Future structures and critical facilities have a greater likelihood to be affected to widespread hazard types such as flooding.

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

New Mitigation Actions

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

Action H5.19

Mitigation Action #H - 5.19: Increase capacity of detention pond					
Lead Agency/Department Organization: City of Hickory Hills Public Works	Supporting Agencies/ Organizations:	Estimated Cost: \$175,000	Potential Funding Source: General Fund BRIC, HMGP	Estimated Projected Completion Date: 2024	Hazard(s) Mitigated: Flooding
Year Initiated		2024			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1			
Applicable Objective		1			
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:					
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 H5.20

Mitigation Action #H - 5.20: Assess publicly-owned parking lots to determine feasibility and benefits of constructing permeable paver parking lots. Implement findings from this assessment for projects that demonstrate mitigation of flooding.					
Lead Agency/Department Organization: City of Hickory Hills Public Works	Supporting Agencies/ Organizations:	Estimated Cost: \$1,000,000	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flooding
Year Initiated		2024			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1			
Applicable Objective		3			
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		N			

Ongoing Mitigation Actions

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

Action H5.1

Mitigation Action #H - 5.1: Continue to service and upgrade the severe weather alert system that is currently in place within the city limits.					
Lead Agency/Department Organization: Emergency Management Agency (EMA)	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: EMA, SHSP	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Severe Weather
Year Initiated		2014			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1, 2, 3, 6			
Applicable Objective		5, 6			
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:		Upgrades were made to the computer system this year. Annual maintenance is performed.			
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 H5.2

Mitigation Action #H - 5.2: Review and change the Emergency Operations Guide to fit the city's needs.					
Lead Agency/Department Organization: EMA, Police, Fire Dept., Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: EMA, Staff Time, General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1, 3, 4			
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)		High			
Action/Implementation Plan and Project Description:		An updated plan was adopted this year by the City Council. The plan is now reviewed annually to make the necessary changes.			
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 H5.3

Mitigation Action #H - 5.3: Improve Stormwater management by increasing the size of the retention ponds within the city limits, which would also help surrounding communities.					
Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: IDNR, MWRD, FEMA, HMGP, BRIC	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flooding
Year Initiated		2014			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1, 3, 5			
Applicable Objective		3, 9			
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:		There has been ongoing improvements to the drainage system and it is constantly evaluated.			
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 H5.4

Mitigation Action #H - 5.4: Have all new subdivisions constructed in the area bury the service lines to the home to prevent loss of services during storms.					
Lead Agency/Department Organization: Building Department	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Severe Weather
Year Initiated		2014			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1, 3			
Applicable Objective		3, 10			
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:		A large parcel of land is in the early stages of being developed but the systems are all being buried.			
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 H5.5

Mitigation Action #H - 5.5: Consider participation in the Community Rating System (CRS).

Lead Agency/Department Organization: Public Works, Building Department	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flooding
Year Initiated		2014			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		All			
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		O/X			

Action H5.6

Mitigation Action #H - 5.6: 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 Department, Public Works	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: General Fund, BRIC, HMGP	Estimated Projected Completion Date:	Hazard(s) Mitigated: All

				Long-term (depending on funding)	
Year Initiated		2014			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1, 3			
Applicable Objective		3, 7			
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:		Over the past few years the City has been able to take care of the need for this and evaluates as needed.			
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 H5.7

Mitigation Action #H - 5.7: Continue with partnerships among all local government levels, the private sector, and/or nongovernmental organizations to improve and implement methods to protect people and property.					
Lead Agency/Department Organization: City of Hickory Hills Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		City of Hickory Hills			

Applicable Goal	1, 3, 4
Applicable Objective	8, 13
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)	High
Action/Implementation Plan and Project Description:	The City is always looking for ways to protect the people and property of the City.
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 H5.8

Mitigation Action #H - 5.8: Continue to regulate the days/hours households can water outside during the summer months.					
Lead Agency/Department Organization: Public Works, Fire Department	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Drought
Year Initiated	2014				
Applicable Jurisdiction	City of Hickory Hills				
Applicable Goal	1, 6				
Applicable Objective	3, 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:	The City enforces outside watering every year and post this information in locations around the City.
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 H5.9

Mitigation Action #H - 5.9: Continue to support the countywide actions identified in this plan.					
Lead Agency/Department Organization: City of Hickory Hills 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 Hickory Hills				
Applicable Goal	All				
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
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Action H5.10

Mitigation Action #H - 5.10: Actively participate in the plan maintenance strategy identified in this plan.					
Lead Agency/Department Organization: EMRS, City of Hickory Hills	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 Hickory Hills				
Applicable Goal	1, 6				
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 H5.14

Mitigation Action #H - 5.14: Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.					
Lead Agency/Department Organization: Robinson Engineering, Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Funds	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1, 5			
Applicable Objective		3, 4, 6, 10, 13			
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:		Utilizing the plan for flood and drainage as to the new development in the City.			
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 H5.15

Mitigation Action #H - 5.15: Consider developing and implementing a Capital Improvements Program (CIP) to increase the Village's regulatory, financial, and technical capability to implement mitigation actions.
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Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: CIP component of the general fund (if implemented)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1, 2, 3			
Applicable Objective		1, 2, 7			
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/X			

Action H5.16

Mitigation Action #H - 5.16: Storm Sewer Replacement.					
Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: \$850,000; Medium	Potential Funding Source: BRIC, HMGP	Estimated Projected Completion Date: 2025	Hazard(s) Mitigated: Flooding
Year Initiated		2019			

Applicable Jurisdiction	City of Hickory Hills
Applicable Goal	2, 3, 5
Applicable Objective	1, 2, 7, 12, 13
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)	High Priority
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Provide better drainage of rain water, Project will provide an immediate reduction of risk exposure for life and property.
Action/Implementation Plan and Project Description:	Several miles of storm sewer in the city limits will be replaced due to age. This project will allow for rain water to drain more effectively as the size of the pipe is being increased
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 H5.17

Mitigation Action #H - 5.17: Catch Basin Cleaning.					
Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: HMGP, BRIC	Estimated Projected Completion Date: 2024	Hazard(s) Mitigated: Flooding, Severe Winter Weather
Year Initiated	2019				
Applicable Jurisdiction	City of Hickory Hills				
Applicable Goal	1, 2, 3, 4, 5				
Applicable Objective	12, 13				

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 Priority
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Removing debris from basin will allow for better drainage of the storm sewer drains, 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 has started a 5 year plan to clean all of the catch basin located within the city limits; 20% of the basins will be cleaned each year and this will take 5 years to complete.
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 H5.18

Mitigation Action #H - 5.18: Annual Leak Survey of the water system.					
Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing Annually	Hazard(s) Mitigated: Earthquake, Extreme Cold
Year Initiated		2015/2019			
Applicable Jurisdiction		City of Hickory Hills			
Applicable Goal		1, 2, 3, 4, 5			
Applicable Objective		13			

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 Priority
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Checking the integrity of the water system will ensure that the system is in good working order and if an issue is detected it can be fixed right away. This will help with down time of the system and costly repairs in the future, 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 does an annual leak survey which is preformed by a 3rd party. Every mile of the water system is checked to make sure that the system is able to preform with little to no interruption. Also the city has purchased acoustical sounding equipment to check smaller areas if a problem is detected during daily flow monitoring
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

Completed Actions

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

Completed Action Items
No completed items at this time.

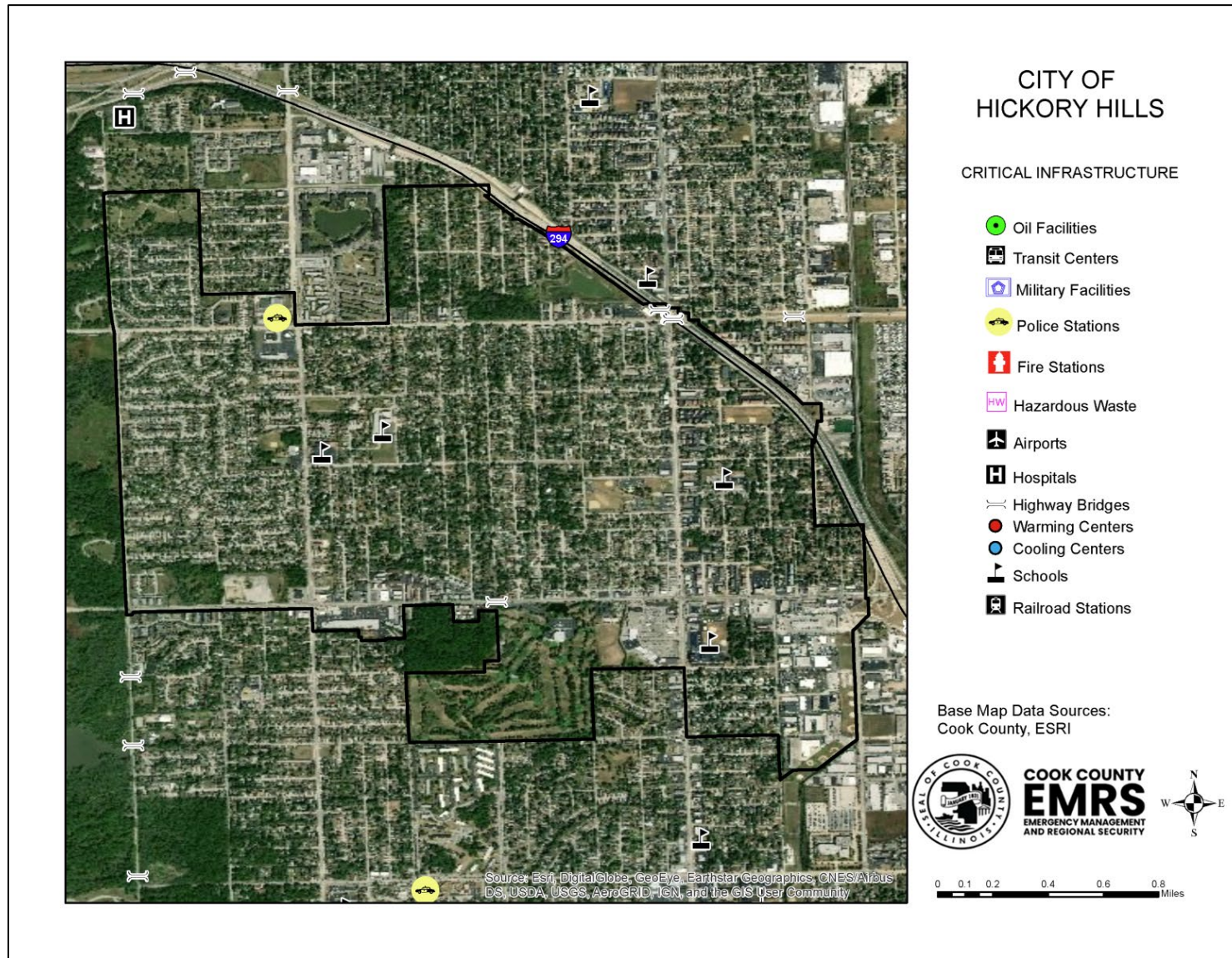
Future Needs to Better Understand Risk/Vulnerability

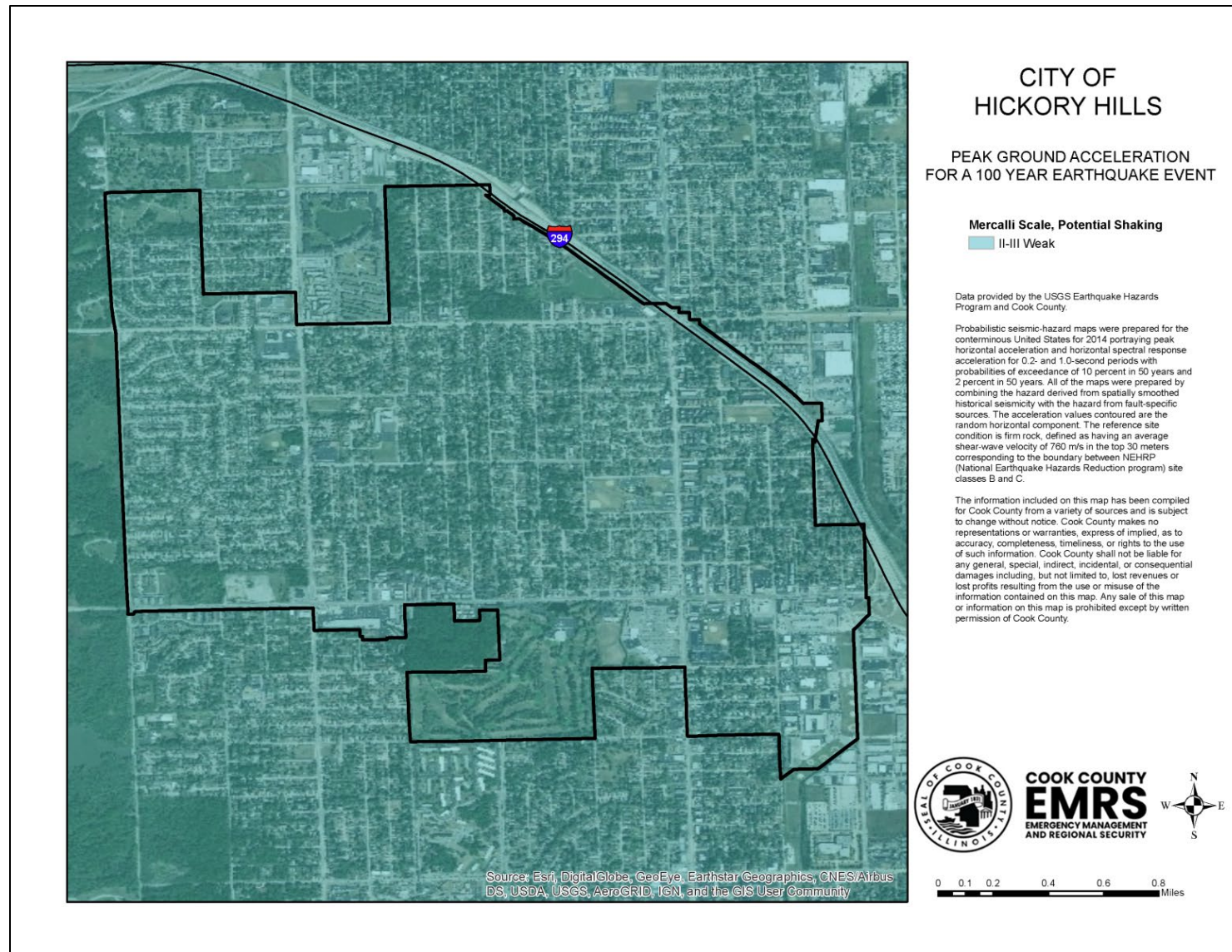
No needs have been identified at this time.

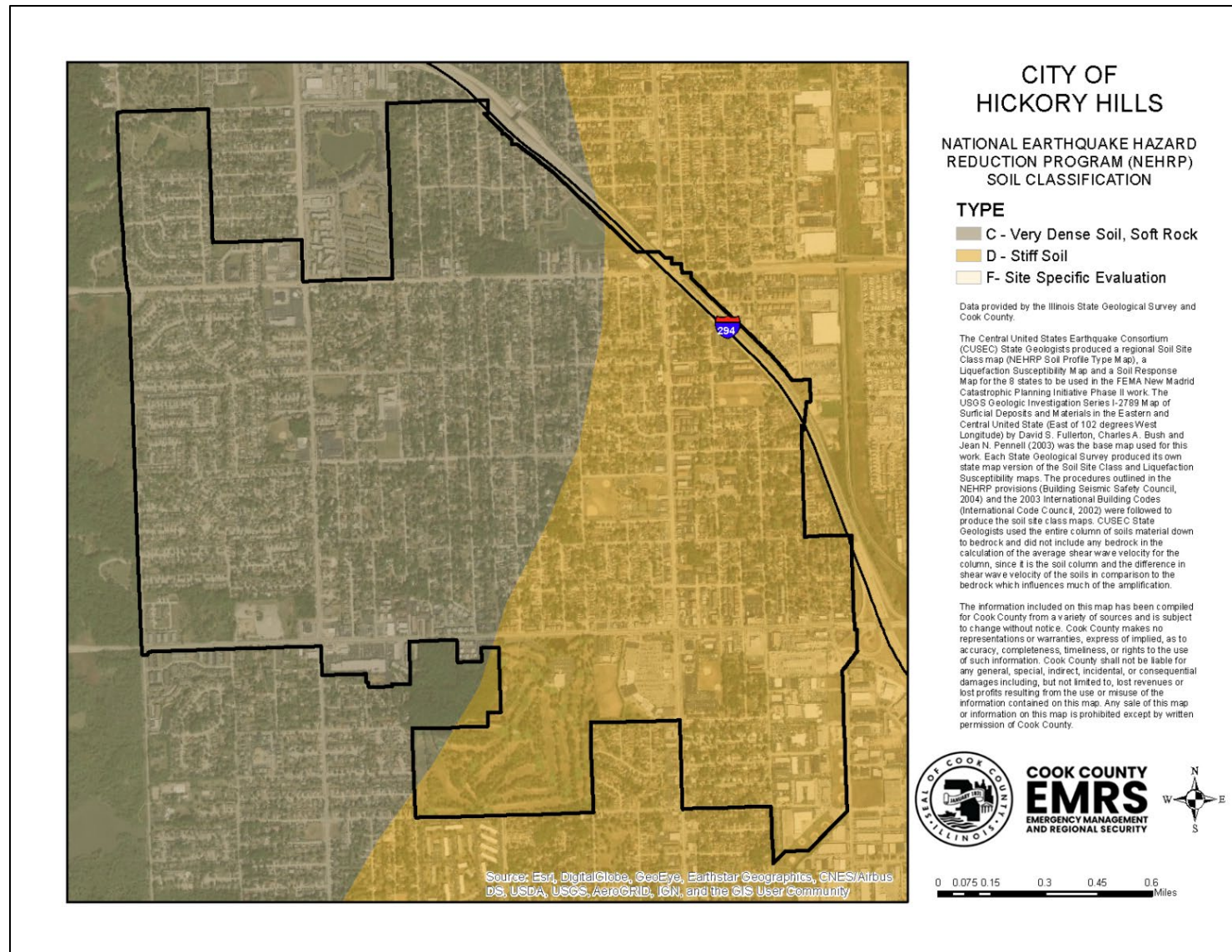
Additional Comments

No additional comments at this time.

Hazard Mapping







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](http://www.fema.gov).

