Des Plaines

Hazard Mitigation Plan Point of Contact

Primary Point of Contact	Alternate Point of	Alternate Point of
Primary Point of Contact	Contact	Contact
Becka Shipp - Asst.	Sam Foster-Deputy Fire	Matt Matzl, Fire Chief
Director of Engineering	Chief	847-789-6128
Public Works and	Fire Department	mmatzl@desplaines.org
Engineering	1420 Miner Street	
1420 Miner Street	847-812-7720	
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Jurisdiction Profile

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

Date of Incorporation: Des Plaines was incorporated in 1869

Current Population: The 2020 U.S. Census population was 60,673. The 2022 U.S. Census estimate indicated the population was 58,594.

Population Growth: The overall population has decreased 4.4 percent between 2020 and 2022.

Location and Description: The City of Des Plaines is located in Cook County, approximately 19 miles northwest of downtown Chicago. Neighboring communities include Mount Prospect, Park Ridge, Elk Grove Village, and Chicago, as well as unincorporated lands to the northeast in Maine Township and the southwest in Elk Grove Township. Des Plaines shares its southern border with O'Hare International Airport.

History: The Des Plaines area was occupied by Potawatomi, Ottawa, and Chippewa Indians until the Treaty of Chicago in 1833. It was then settled by farmers from New England, New York, and Germany. The settlers found a very flat area that had been leveled by several glaciers in eons past. The main topographical features were flat, wet, prairie and the Des Plaines River. Because of the flat terrain and water loving prairie grasses, much of the rain that fell on the area stayed there. The river was more of a wide grassy swale, not the deeper cut channel seen today. To farm and build houses, the land had to be drained artificially with manmade ditches.

The present site of Des Plaines was determined by early settler Socrates Rand who built a grist mill on the Des Plaines River. In the 1850's, the railroad came through, connecting Chicago to central Wisconsin. Trains would stop near the mill to take on water. The Chicago and North Western Railroad, named its station "Des Plaines."

In 1869, the Village of Des Plaines was incorporated. In 1870, the federal census noted that the Village had 800 residents. The town grew as a farming and railroad community until the mid 20th

Century when it became more and more tied to Chicago as a suburb. In 1925, a referendum passed to adopt the city form of government. In the 50 years from 1940 to 1990, the population increased from 9,000 to over 50,000. Industry and business grew, too, giving the City a diversified economy. While the railroad is still central to Des Plaines, the City is served by two Interstate highways and is adjacent to O'Hare International Airport.

Climate: The City of Des Plaines experiences a continental climate characterized by warm summers as well as cold and dry winters. Summer months have an average temperature of 72 degrees Fahrenheit, which tends to peak in July with average daily high temperatures of 84 degrees Fahrenheit. Winter months have an average temperature of 26 degrees Fahrenheit and typically drop significantly in January when daily low temperatures average 16.5 degrees Fahrenheit. The City receives an average of 37 inches of rain and 37 inches of snowfall per year. Spring and summer months (May through August) tend to experience the most accumulated rainfall.

Governing Body Format: The City of Des Plaines is a home-rule municipality with a managerial form of government. Flood and other natural hazard issues are addressed by the City's Incident Management Team (Mayor, City Manager, and all department heads) and the Emergency Management Coordinator. The City's Emergency Management Program is one of five Illinois Emergency Management Agency (IEMA)-accredited emergency management agencies in Cook County.

Development Trends: Des Plaines participates in the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program and the Community Rating System (CRS). The City regulates all development within the Special Flood Hazard Area (SFHA). The City is within the corporate limits of the Metropolitan Water Reclamation District of Greater Chicago (MWRD). The MWRD is responsible for wastewater treatment and also has the authority to regulate development that impacts stormwater within Cook County.

Retail and Commercial Activity: The City of Des Plaines has seen considerable housing and commercial redevelopment over the past 10 years. The City's major downtown redevelopment project, Metropolitan Square, was fully built and reached full tax valuation in 2008. This mixed-use redevelopment features 142 condominium/loft residences; 114,000 square feet of retail space; another 27,000 square feet of office space; a 471-car public parking garage, and civic streetscape improvements.

There are currently over \$650 million in projects going on in Des Plaines. These projects include the following; 113 luxury apartment developments adjacent to the Downtown Des Plaines Metra Station Platform, the southeast corner of Ellinwood Street and Graceland Avenue will experience a redevelopment renaissance with a brand-new, luxury mixed-use development, Lexington Homes is adding 58 new townhomes in downtown Des Plaines, and a 236-unit apartment community is currently under construction at the northwest corner of Golf Road and East River Road which is immediately west of I-294. Additionally, Wheels Inc., the world's largest vehicle fleet management company, announced a major renovation and expansion of their sprawling 18-acre campus that is abutting the Des Plaines River. The intersection of Mount Prospect Road and Algonquin Road will see a major transformation as Vetter Pharma purchased the 18-acre property that encompassed the Salvation Army. Also, the property that formerly housed Hart Schaffner Marx will now encompass a \$75,000,000 data center facility, and a new Fairfield Inn and Suites by Marriott will complement the existing Wyndham Hotel and Longhorn Steakhouse at the northwest corner of Touhy Ave and Mannheim Road.

Industrial Activity: The ongoing expansion of Chicago O'Hare International Airport and its siting of the new air cargo terminal adjacent to the City of Des Plaines have fostered a major air freight industry cluster within the industrial quadrant of the City of Des Plaines. Integrated freight forwarding companies, Forward Air, DB Schenker, and Nippon Express have completed terminals within the City of Des Plaines, and the City's TIF District No. 3 is 100% built out with the development of facilities for Hellman, Coasters, Caterpillar Logistics and Bombardier companies. An additional site for air freight development has been acquired and cleared by International Airport Centers.

The City Council supported the issuance of three Cook County 6B property tax classifications to attract new investments in its manufacturing sector. Two of the three businesses will substantially rehabilitate their newly acquired buildings and provide approximately 45 new jobs. Of note, Charles Equipment Energy Systems anticipates generating approximately \$10,000 to \$50,000 in sales tax annually. The third 6B applicant will construct a brand new \$6.83 million state-of-the-art LEED-certified structure in the center of 21 neighboring manufacturing buildings. Its location was heavily influenced based on its proximity to the forthcoming \$200 million Chicago O'Hare International Airport Northeast Cargo Center project.

Entertainment: The 10th and final Illinois gaming license was issued based upon the City of Des Plaines' agreement with Midwest Gaming and Entertainment for a 1,200-seat casino, parking structure, hotel, and restaurant complex on a 20-plus acre site in the far southeast corner of the City. Since Rivers Casino opened in July 2011, it has had the highest adjusted gross receipts of any casino in the State (averaging over \$30,000,000 per month) since opening. The City has a tax revenue sharing agreement in place with Midwest Gaming in which \$10,000,000 of the gaming tax revenues generated from the Casino are sent to the State of Illinois and 40% of the remaining revenues are shared with 10 distressed communities named in the original agreement. Further redevelopment of adjacent commercial properties is anticipated as well. The Casino is one of the City's newest principal employers with nearly 1,400 positions. Additional community benefits include an October 2013 donation of \$150,000 to the Des Plaines Oakton Community College campus for scholarships.

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

TABLE: LEGAL AND REGULATORY CAPABILITY					
	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinance	es & Requirem	ents			
Building Code	Yes	No	No	Yes	Des Plaines Municipal Code adopted: 2015

					Des Plaines
Zonings	Yes	No	No	Yes	Municipal Code
Zoningo	103	140	110	100	adopted: 2015
					Des Plaines
Subdivisions	Yes	No	No	No	Municipal Code
Gasamoione		110	110		adopted: 2015
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA
Post Disaster Recovery	Yes	No	No	No	Adopted: 2017
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act
Growth Management	Yes	No	No	No	2019 Comprehensive Plan
Site Plan Review	Yes	No	No	No	Des Plaines Municipal Code adopted: 2015
Public Health and Safety	No	No	Yes	Yes	Cook County Board of Health
Environmental Protection	No	No	No	No	_
Planning Docume	ents				
General or Comprehensive Plan	Yes	No	No	No	Des Plaines Comprehensive Plan 2019
Is the plan equippe	ed to provide in	tegration to this m	nitigation plan?	T	Yes
Floodplain or Basin Plan	No	No	No	No	_
Stormwater Plan	Yes	No	Yes	No	Regional storm- water impacts are managed by MWRD. The City lies within Des Plaines River watershed planning area of MWRD's comprehensive Storm-water Master Planning Program

Capital Improvement Plan	Yes	No	No	No	January 2018
What types of capital facilities does the plan address?					Street, alley, sidewalk, curb & gutter, water system, drainage, sewer, and streetscape improvements
How often is the p	lan revised/up	dated?	1		Every 4 years
Habitat Conservation Plan	No	No	No	No	-
Economic Development Plan	Yes	No	Yes	Yes	Des Plaines Comprehensive Plan 2019
Shoreline Management Plan	No	No	No	No	_
Response/Recov	ery Planning				
Comprehensive Emergency Management Plan	Yes	No	No	Yes	Reviewing for June 2019 IEMA Accredited Emergency Management Program
Threat and Hazard Identification and Risk Assessment	Yes	No	No	Yes	Reviewing for June 2019 IEMA Accredited Emergency Management Program
Terrorism Plan	Yes	No	No	Yes	Reviewing for June 2019 IEMA Accredited Emergency Management Program
Post-Disaster Recovery Plan	Yes	No	No	Yes	Reviewing for June 2019 IEMA Accredited Emergency Management Program
Continuity of Operations Plan	Yes	No	Yes	Yes	Reviewing for June 2019 IEMA Accredited Emergency Management Program

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

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY			
Staff/Personnel Resources	Available?	Department/Agency/Position	
Planners or engineers with knowledge of land development and land management practices	Yes	Community and Economic Development/City of Des Plaines /Director Public Works/City of Des Plaines/Engineering Director	
Engineers or professionals trained in building or infrastructure construction practices	Yes	Community and Economic Development/City of Des Plaines/Community Development Staff Engineering/City of Des Plaines/Engineering Staff	
Planners or engineers with an understanding of natural hazards	Yes	Community and Economic Development/City of Des Plaines/Community Development Staff Engineering/City of Des Plaines/Engineering Staff	
Staff with training in benefit/cost analysis	Yes	Finance Department/City of Des Plaines/Director	
Surveyors	Yes	Vendor	
Personnel skilled or trained in GIS applications	Yes	Engineering/City of Des Plaines/Engineering Staff	
Scientist familiar with natural hazards in local area	No	NA	
Emergency manager	Yes	Public Safety/Emergency Management Agency (IEMA Accredited Emergency Management Program)/Executive Coordinator	
Grant writers	Yes	Engineering/City of Des Plaines/Engineering Staff	

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your	Engineering
jurisdiction?	Engineering

Who is your jurisdiction's floodplain administrator? (department/position)	Engineering/Assistant Director
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date of adoption of your flood damage prevention ordinance?	2015
When was the most recent Community Assistance Visit or Community Assistance Contact?	July 2014
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?	Yes

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 afterward 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.

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 of 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:

14-1-2: DEFINITIONS:

SUBSTANTIAL DAMAGE: Damage of any origin sustained by a structure whereby the cumulative percentage of damage incurred during a ten (10) year period measured from the date of the most recent damage, and dating back to no earlier than January 1, 2009 (the effective date of this title), equals or exceeds fifty percent (50%) of the market value of the structure before the damage occurred, regardless of actual value of the repair work performed. The value of volunteer labor, donated materials, and other in-kind contributions, must be included in the calculation of substantial damage. This term includes repetitive loss buildings. (See definition of Repetitive Loss.)

SUBSTANTIAL IMPROVEMENT: Any repair, reconstruction, rehabilitation, addition, or improvement of a structure taking place during a ten (10) year period measured from the date of the most recent damage, and dating back to no earlier than January 1, 2009 (the effective date of this title), in which the cumulative percentage of improvements equals or exceeds fifty percent (50%) of the market value of the structure before the improvement or repair is conducted or installed. The value of volunteer labor, donated materials, and other in-kind contributions, must be included in the calculation of substantial improvement.

- A. "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.
- B. "Substantial improvement" does not, however, include any project for improvement of a structure to comply with existing federal, state, or local health, sanitary, or safety code specifications that are solely necessary to assure safe living conditions.

14-1-4 Duties of Enforcement Officials

The director of engineering shall be responsible for the general administration and enforcement of this chapter, which shall include the following:

- A. Determining The Floodplain Designation: Check all new development sites to determine whether they are in a special flood hazard area (SFHA). If they are in an SFHA, determine whether they are in a floodway, flood fringe or in a floodplain on which a detailed study has not been conducted which drains more than one square mile.
 - 1. Check whether the development is potentially within an extended SFHA (with a drainage area of less than 1 square mile), indicating that the development would have adverse impacts regarding storage, conveyance, or inundation which would be the basis for the applicant being required to delineate the floodplain and floodway and be subject to the remaining sections of this chapter.
- B. Professional Engineer Review: If the development site is within a floodway or in a floodplain on which a detailed study has not been conducted which drains more than one square mile, then the permit shall be referred to a registered professional engineer (PE) under the employ or contract of the city for review to ensure that the development meets the requirements of

section <u>14-1-7</u> of this chapter. In the case of appropriate use, the PE shall state in writing that the developer's engineer will provide a detailed hydrologic and hydraulic analysis in conjunction with a detailed plan of the drainage basin and subbasins considered for any development site being submitted to the director of engineering for review.

14-1-9: PERMITTING REQUIREMENTS APPLICABLE TO ALL FLOODPLAIN AREAS AND PROTECTION OF BUILDINGS:

In addition to the requirements found in sections <u>14-1-6</u>, <u>14-1-7</u> and <u>14-1-8</u> of this chapter for development in flood fringes, designated floodways and SFHA or floodplains where no floodways have been identified (zones A, AO, AH, AE, A1-A30, A99, VO, V1-30, VE, V, M or E), the following requirements shall be met:

C. Protecting Buildings: All buildings located within a 100-year floodplain, also known as an SFHA, shall be protected from flood damage below the flood protection elevation. This building protection criteria applies to the following situations:

Improvements, structural alterations including replacements or reconstructions made to an existing building that increase the floor area by more than twenty percent (20%) or substantial improvements to existing structures. In these cases, the existing structure and the addition must meet the flood protection standards of this section, which includes, but is not limited to, elevating the finished floor at two feet (2') above the BFE;

Repairs made to a substantially damaged building. If a building is determined to be substantially damaged, the entire structure must meet the flood protection standards of this section, which includes, but is not limited to, elevating the finished floor two feet (2') above the BFE;

Installing a manufactured home on a new site or a new manufactured home on an existing site. This building protection requirement does not apply to returning a mobile home to the same site it lawfully occupied before it was removed to avoid flood damage;

Installing a travel trailer on a site for more than one hundred eighty (180) days; and

"Repetitive loss" to an existing building as defined in section <u>14-1-2</u> of this chapter. This building protection requirement may be met by one of the following methods:

5. Construction of new or substantially improved critical facilities shall be located outside the limits of the floodplain. Construction of new critical facilities shall be permissible within the floodplain if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor (including the basement) elevated or structurally dry floodproofed to the 500-year flood frequency elevation or three feet (3') above the level of the 100-year flood frequency elevation whichever is greater. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities.

TABLE: COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified

Community Rating System	Yes	5	2023
Building Code Effectiveness	Yes	Unknown	Unknown
Grading Schedule	168	Olikilowii	Ulkilowii
Public Protection/ISO	Yes	Unknown	Unknown
StormReady	Yes	StormReady	2010
Storrineauy	165	Community	2010
Tree City USA	Yes	Recognized	1986

Opportunities to Expand and Improve Capabilities

Opportunities to expand and improve capabilities include:

The city has a need for grant writers and additional training resources.

Plan Integration

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

- The goals and actions of the Hazard Mitigation Plan will be considered in the next capital improvement planning process.
- The hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the Comprehensive Plan.

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: 223 (195 Single Family, 7 Two-Four Family Residence, 6 Other Residential, 7 Other-Nonresidential, 8 Business-Nonresidential)
- Number of FEMA-Identified Severe Repetitive Loss Properties: 17 (12 Single Family, 1 Two-Four Family Residence, 1 Other Residential, 3 Other-Nonresidential)
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 28

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	Severe Storms, Heavy Rainfall, Flooding, Straight-line Winds
4/20/2013	
4/21/2013	
4/25/2013	
4/30/2013	
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	COVID-19
monthly)	
2/16/2021	Winter Storms
2/1/2022	Winter Storms
8/1/2022	Monkeypox
(reissued monthly through	
10/28/2022)	

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment/ Event Narrative
Flood	-	5/21/2018	-
Flood	-	10/14/2017	-
Rain and Flood	-	5/4/2017	-
Severe Weather	-	7/18/2015	-
Blizzard	-	2/2/2015	-
Severe Weather	-	9/5/2014	\$75,000 property in damage, 4 injured.
Rain and Flood	-	6/6/2013	-
Rain and Flood	DR-4116	4/19/2013	-
Thunderstorms and High Winds		7/26/2012	Two houses in Des Plaines sustained minor damage by falling trees.
Rain and Flood	-	7/21/2011	In Des Plaines, dozens of streets and basements were flooded. Some basements sustained as much as \$10,000 in damages. One woman had to be rescued from her stranded car on Elmhurst Road. Fairgrounds in downtown Des Plaines were damaged by flood water.
Severe storm, Flood	-	6/22/2011	Wind gusts were estimated to 60 mph in

Blizzard Flood Thunderstorms and High Winds Rain and Flood	DR-1960 - -	1/31/2011 6/25/2010 6/19/2010 5/24/2010	Des Plaines with multiple large tree limbs blown down near the intersection of Golf Road and Wolf Road
Hail		4/5/2010	Hail the size of baseballs was reported in Des Plaines.
Winter Weather		2/9/2010	An 82 year old man died shoveling snow in Des Plaines
Severe Storm Flood	DR-1935	7/19/2010 - 8/7/2010	-
Rain, Snow, and Flood	-	12/26/2009	-
Rain and Flood		6/19/2009	Rainfall amounts included 3.87 inches 3 miles east southeast of Des Plaines
Rain and Flood	-	3/23/2009	-
Rain and Flood	•	3/8/2009	-
Winter Weather		12/21/2008	Very cold air spread across northern Illinois, killing one in des Plaines
Rain and Flood (Urban and Riverine)	DR-1800	9/13/2008	Significant flooding was reported in Des Plaines including multiple vehicles submerged or abandoned. Officials in Des Plaines urged residents along the Des Plaines River to evacuate as waters rose to near record levels.
Rain and Flood	DR-1729	8/23/2007	In Des Plaines, flooding inundated the Methodist Campground. Many streets were affected by floodwaters and some homes on Big Bend Drive and Junior Terrace were surrounded by flood waters.
Rain and Flood	-	5/25/2004	-
Hail and Severe Weather		8/1/2003	A large tree was blown down on Madelyn Drive in Des Plaines.

Hail	7/7/2003	Hail the size of baseballs was reported in Des Plaines.
Rain and Flood	8/30/2001	Flooding was reported at the intersection of River and Lee roads in Des Plaines

Jurisdiction-Specific Hazards: Vulnerabilities and Impacts

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

Dam and Levee Failure: Levee 50 is located along the east side of the Des Plaines River from Campground Rd and Miner St to I-294 and Golf Rd, including portions of Des Plaines, Park Ridge, and unincorporated Maine Township. The levee consists of clay embankments, I-Wall floodwalls, and swing gates. The protected area consists of a densely populated suburban area, including 6600 residents and over \$1 billion in residential, commercial, and infrastructure property.

Flood: All areas within the Des Plains River floodplain are vulnerable to flooding. The City of Des Plaines has experienced flooding in the following areas: Des Plaines River, Weller Creek, Big Bend & River/Oakton Area. We are currently participating in the FEMA Buy-Out program to mitigate the risk of flooding. Additionally, the Des Plaines River watershed runs through the City of Des Plaines, and the Des Plaines River is located on the eastern edge of the city, with tributaries cutting through the northern, central, and southern sides of the City (Feehan Ville Ditch, Weller Creek and Higgins Creek respectively). Approximately 27,000 buildings are subject to some level of damage, and there are over 2,600 structures in the floodplain. There are 16 areas within the City that have repetitive flooding events.

Extreme Cold: Senior citizens are particularly vulnerable to extreme cold.

Wind, Hail, and Thunderstorms: Cause significant property and tree damage. While no tornados have previously touched down, high wind and thunderstorm conditions are problematic for the area.

Earthquake: While no fault zones are in the County, Des Plaines Crater fault activity has been reported.

Severe Weather: The following Long-term Care Facilities are vulnerable to severe weather.

- 1750 S. Elmhurst
- 1665 E Oakton
- 800 S. River Rd.
- 1301 E. Lee Street
- 1227 E. Golf Rd.
- 100 N River Rd.
- 300 N. River Rd.

Tornado: The following mobile home parks are vulnerable to a tornado;

- 2993 Curtis
- 815 Oakton
- 1330 Rand Rd.

Severe Winter Weather: The following locations are vulnerable to severe winter weather;

Long-term Care Facilities;

- 1750 S. Elmhurst
- 1665 E Oakton
- 800 S. River Rd.
- 1301 E. Lee Street
- 1227 E. Golf Rd.
- 100 N River Rd.
- 300 N. River Rd.

Mobile home parks;

- 2993 Curtis
- 815 Oakton
- 1330 Rand Rd.

Indicator	Number	Percent
Families in poverty	1,658	7.2%
People with disabilities	9,813	11.1%
People over 65 years	15,848	17.7%
People under 5 years	5,480	6.1%
People of color	36,856	41.1%
Black	3,389	3.8%
Native American	767	0.9%
Hispanic	18,172	20.3%
Difficulty with English	7,103	8.4%
Households with no car	2,365	7.1%
Mobile homes	1,772	5.3%

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.

Hazard	Vulnerability
Current Vulnerability	
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 Wings)	Increased
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Increased
Tornado	Increased
Wildfire (Wildfire Smoke)	Remained the Same

Hazard	Vulnerability
Future Vulnerability	
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,	Increase
Fog, High Wings)	Increase
Severe Winter Weather (Ice Storms, Heavy Snow,	Increase
Blizzards, Extreme Cold)	IIICIease
Tornado	Increase
Wildfire (Wildfire Smoke)	Unknown

<u>Jurisdiction-Specific Changes (or Expected Changes) in Development Trends in Hazard-Prone Areas</u>

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

Hazard	Vulnerability
Future Vulnerability	
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,	Increase	
Fog, High Wings)	llictease	
Severe Winter Weather (Ice Storms, Heavy Snow,	Increase	
Blizzards, Extreme Cold)	Iliciease	
Tornado	Increase	
Wildfire (Wildfire Smoke)	No Change is Anticipated	

Major changes in development include population increases and additional high-density development.

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:

- Additional and older structures
- Roadways and transportation near rivers and tributaries.

Hazard Risk Ranking

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

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

New Mitigation Actions

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

Mitigation Action #28: Map	le-Oakton Drainage I	mprovement						
Lead	Supporting	Estimated	Potential	Estimated	Hazard(s) Mitigated:			
Agency/Department	Agencies/	Cost:	Funding	Projected	Flood (Riverine, Urban,			
Organization:	Organizations:	High	Source:	Completion	Coastal/Shoreline)			
City of Des Plaines Public	MWRD, IEMA		General	Date:				
Works			Fund	Long-term				
			Hazard					
			Mitigation					
			Grant					
			Program					
			(HMGP)					
Year Initiated		2024						
Applicable Jurisdiction		City of Des Pla	City of Des Plaines					
Applicable Goal	Applicable Goal		2,3					
Applicable Objective		1,2,9,13						
Cost Analysis (Low, Mediui	m, High)	High						
Priority and Level of Import	tance (Low,	Medium						
Medium, High)		Medium						
Benefits of the Mitigation P	roject (Loss	Medium						
Avoided or Issue Being Mitig	ated)							
Action/Implementation Pla	an and Project	Maple-Oakton Drainage Improvement						
Description:		inapie-Oakton Dramage improvement						
Actual Completion Date or Ongoing Indefinite								
Project Status & Changes in Priority								
Completion status legend:		N						
N = New; I = In Progress Tow	ard Completion;	IV						
O = Ongoing Indefinitely; C =	Project Completed;							

R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Ongoing Mitigation Actions

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

Mitigation Action #1: Monito	Mitigation Action #1: Monitor implementation of City of Des Plaines Hazard Mitigation Actions.					
Lead Agency/Department Organization: City of Des Plaines Mitigation Planning	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date:	Hazard(s) Mitigated: All Hazards	
Committee Year Initiated		2014		Ongoing		
Applicable Jurisdiction Applicable Goal		City of Des Plaines 2,3				
Applicable Objective		2,3 3, 4, 6 Low				
Cost Analysis (Low, Medium, High) Priority and Level of Importance (Low, Medium, High)		High				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	• `	Medium				
Action/Implementation Plan Description:	n and Project					
Actual Completion Date or C	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		0				

Lead Agency/Department Organization: City of Des Plaines Public Works and Engineering Departments	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short- and long-term	Hazard(s) Mitigated: Flooding, Severe Weather	
Year Initiated		2014				
Applicable Jurisdiction		City of Des Plaines				
Applicable Goal		3				
Applicable Objective		3, 4, 6				
Cost Analysis (Low, Medium, High)		Low				
Priority and Level of Importa Medium, High)	nce (Low,	High				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	• `	Medium				
Action/Implementation Plan	•					
Description:	•					
Actual Completion Date or C	Ingoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed;		0				
R = Want Removed from Annex; X = No Action Taken/Delayed						

Mitigation Action #4: Maintain full compliance with NFIP and state regulatory requirements. Implement programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.							
Lead Agency/Department Organization: City of Des Plaines Community and Economic Development Department	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term and ongoing	Hazard(s) Mitigated: Flooding, Severe Weather		
Year Initiated		2014					
Applicable Jurisdiction		City of Des Plaines					
Applicable Goal	Applicable Goal		2,3,4				
Applicable Objective		4, 6, 9					
Cost Analysis (Low, Medium	, High)	Low					
Priority and Level of Importa Medium, High)	nce (Low,	High					
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	•	High					
Action/Implementation Plan	and Project						
Description:							
Actual Completion Date or C	ngoing Indefinite						
Project Status & Changes in Completion status legend:	Project Status & Changes in Priority						
N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		О					

Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding Source:	Projected	Mitigated:	
City of Des Plaines Public Works and Engineering	Organizations:		General	Completion Date:	Flooding, Severe	
Departments			Fund	Short-term and ongoing	Weather	
Year Initiated		2014			1	
Applicable Jurisdiction		City of Des Plaines				
Applicable Goal		2,3,4				
Applicable Objective		1, 3, 4, 8				
Cost Analysis (Low, Medium	, High)	Low				
Priority and Level of Importance (Low, Medium, High)		High				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	•	Medium				
Action/Implementation Plan						
Description:	•					
Actual Completion Date or C	Ingoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:						
N = New; I = In Progress Toward Completion;		0				
O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed						

Lead Agency/Department Organization: City of Des Plaines Public Works and Engineering Departments	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term and	Hazard(s) Mitigated: Flooding, Severe Weather	
				ongoing		
Year Initiated		2014				
Applicable Jurisdiction		City of Des Plaines				
Applicable Goal		2				
Applicable Objective		2, 11, 13				
Cost Analysis (Low, Medium, High)		Low				
Priority and Level of Importance (Low,		Lligh				
Medium, High)		High				
Benefits of the Mitigation Pro	oject (Loss	Medium				
Avoided or Issue Being Mitigat	ced)					
Action/Implementation Plan	and Project					
Description:						
Actual Completion Date or C	Ongoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:						
N = New; I = In Progress Toward Completion;		0				
O = Ongoing Indefinitely; C = Project Completed;						
R = Want Removed from Annex; X = No Action						
Taken/Delayed						

Mitigation Action #7: Continue and expand rebate program for low cost retrofitting projects that protect properties from natural hazards; current program funds surface flooding, drainage, and sewer backup protection measures. Explore expanding program to include other protective measures such as tornado safe rooms, lightning rods, and earthquake protection like strapping water heaters and cabinets to the wall.							
Lead Agency/Department Organization: City of Des Plaines Public Works and Engineering Departments	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term and ongoing	Hazard(s) Mitigated: All Hazards		
Year Initiated		2014			1		
Applicable Jurisdiction		City of Des Plaines					
Applicable Goal		1,2,3					
Applicable Objective		2, 11, 13					
Cost Analysis (Low, Medium	, High)	Low					
Priority and Level of Importance (Low, Medium, High)		High					
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	•	Medium					
Action/Implementation Plan							
Description:							
Actual Completion Date or C	Ingoing 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		0					

Mitigation Action #8: Comple	ete planned flood co	ntrol projects on the D	es Plaines River a	and Farmers Creek.				
Lead Agency/Department Organization: City of Des Plaines Public Works and Engineering Departments	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: General Fund; BRIC, HMGP	Estimated Projected Completion Date: Short- and long-term	Hazard(s) Mitigated: Flooding, Severe Weather			
Year Initiated		2014						
Applicable Jurisdiction		City of Des Plaines						
Applicable Goal		2,3						
Applicable Objective	Applicable Objective		2,9					
Cost Analysis (Low, Medium, High)		High						
Priority and Level of Importa Medium, High)	Priority and Level of Importance (Low, Medium, High)							
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	• `	High						
Action/Implementation Plan	,							
Description:								
Actual Completion Date or C	Ingoing 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 		О						

Action D3.9

Mitigation Action #9: Continue drainage system maintenance.

Lead Agency/Department Organization: City of Des Plaines Public Works and Engineering Departments	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short- and long-term	Hazard(s) Mitigated: Flooding, Severe Weather			
Year Initiated		2014	1	1				
Applicable Jurisdiction		City of Des Plaines						
Applicable Goal		2,3						
Applicable Objective		2,9						
Cost Analysis (Low, Medium	Cost Analysis (Low, Medium, High)		High					
Priority and Level of Importa Medium, High)	Priority and Level of Importance (Low, Medium, High)		High					
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	- '	Medium						
Action/Implementation Plan	and Project							
Description:								
Actual Completion Date or C	Ingoing 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		0						

Mitigation Action #10: Review public information projects					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)
Organization:	Agencies/	Low	Funding	Projected	Mitigated:
City of Des Plaines Public	Organizations:		Source:	Completion	All
Information Office			General	Date:	
			Fund		

	Short- and long- term			
Year Initiated	2014			
Applicable Jurisdiction	City of Des Plaines			
Applicable Goal	2,3			
Applicable Objective	2,5			
Cost Analysis (Low, Medium, High)	Low			
Priority and Level of Importance (Low,	High			
Medium, High)	Tiigii			
Benefits of the Mitigation Project (Loss	Medium			
Avoided or Issue Being Mitigated)	Mediam			
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;	0			
O = Ongoing Indefinitely; C = Project Completed;				
R = Want Removed from Annex; X = No Action				
Taken/Delayed				

Mitigation Action #11: Continue updating and communicating public information messages related to hazards.					
Lead Agency/Department Organization: City of Des Plaines Public Information Office	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term and ongoing	Hazard(s) Mitigated: All Hazards
Year Initiated		2014			
Applicable Jurisdiction		City of Des Plaines			

Applicable Goal	2
Applicable Objective	2,5
Cost Analysis (Low, Medium, High)	Low
Priority and Level of Importance (Low,	High
Medium, High)	Підії
Benefits of the Mitigation Project (Loss	Medium
Avoided or Issue Being Mitigated)	Mediani
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;	0
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #12: Contin	nue to support the co	ountywide actions ide	ntified in this plai	1.		
Lead Agency/Department Organization: City of Des Plaines Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short- and long-	Hazard(s) Mitigated: All Hazards	
Year Initiated		2014		term		
Applicable Jurisdiction		City of Des Plaines				
Applicable Goal		1,2,3,4,5,6				
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;	0
O = Ongoing Indefinitely; C = Project Completed;	O .
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #13: Active	Mitigation Action #13: Actively participate in the plan maintenance strategy identified in this plan.					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding	Projected	Mitigated:	
EMRS	Organizations:		Source:	Completion	All Hazards	
City of Des Plaines Public			General	Date:		
Works			Fund	Short-term		
Year Initiated		2014				
Applicable Jurisdiction		City of Des Plaines				
Applicable Goal		2				
Applicable Objective		3, 4, 6				
Cost Analysis (Low, Medium,	, High)	Low				
Priority and Level of Importa	nce (Low,					
Medium, High)		High				
Benefits of the Mitigation Pro	ject (Loss	Medium				
Avoided or Issue Being Mitigated)		Medium				
Action/Implementation Plan and Project						
Description:						
Actual Completion Date or Ongoing Indefinite						
Project Status & Changes in	Priority	0				

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

Mitigation Action #14: Where appropriate, support purchase or relocation of structures in hazard-prone areas to prevent					to prevent	
future structure damage. Giv	e priority to propert	ies with exposure to re	petitive losses.			
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	High	Funding	Projected	Mitigated:	
City of Des Plaines Public	Organizations:		Source:	Completion	All Hazards	
Works			BRIC, HMGP	Date:		
				Long-term		
				(depending on		
				funding)		
Year Initiated		2014				
Applicable Jurisdiction		City of Des Plaines				
Applicable Goal		2,3				
Applicable Objective		7, 13				
Cost Analysis (Low, Medium,	High)	High				
Priority and Level of Importar	nce (Low,	Medium				
Medium, High)		Mediam				
Benefits of the Mitigation Pro	ject (Loss	High				
Avoided or Issue Being Mitigate	ed)	111811				
Action/Implementation Plan	and Project					
Description:						
Actual Completion Date or Ongoing Indefinite						
Project Status & Changes in Priority						
Completion status legend:		0				
N = New; I = In Progress Toward	d Completion;					
O = Ongoing Indefinitely; C = P	roject Completed;					

R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #15: Initiate a study to determine if implementing a program to record high water marks following high water events is feasible.							
Lead Agency/Department Organization: City of Des Plaines Administration	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund; FEMA Public Assistance (PA)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flooding, Severe Weather		
Year Initiated		2014					
Applicable Jurisdiction		City of Des Plaines					
Applicable Goal		2,3					
Applicable Objective	Applicable Objective		3, 6, 9				
Cost Analysis (Low, Medium	, High)	Medium					
Priority and Level of Importa Medium, High)	nce (Low,	Medium					
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	- '	Medium					
Action/Implementation Plan	and Project						
Description:							
Actual Completion Date or C	Ingoing Indefinite						
Project Status & Changes in	Project Status & Changes in Priority						
Completion status legend: N = New; I = In Progress Towa O = Ongoing Indefinitely; C = F R = Want Removed from Anne Taken/Delayed	Project Completed;	0					

Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding	Projected	Mitigated:	
Des Plaines Engineering	Organizations:		Source:	Completion	All Hazards	
Department			General	Date:		
			Fund	Ongoing		
Year Initiated		2014				
Applicable Jurisdiction		City of Des Plaines				
Applicable Goal		2,3				
Applicable Objective		3, 4, 6, 10, 13				
Cost Analysis (Low, Mediun	n, High)	Low				
Priority and Level of Importance (Low,		High				
Medium, High)	·-:					
Benefits of the Mitigation Pr	- '	Medium				
Avoided or Issue Being Mitiga	•					
Action/Implementation Pla	n and Project					
Description:	0					
Actual Completion Date or						
Project Status & Changes in	Priority					
Completion status legend:						
N = New; I = In Progress Toward Completion;		0				
O = Ongoing Indefinitely; C = Project Completed;						
R = Want Removed from Anno	ex; X = No Action					
Taken/Delayed						

Mitigation Action #17: Continue implementation of the City's Capital Improvements Program (CIP).						
Lead Agency/Department Supporting Estimated Potential Estimated Hazard(s)						
Organization:	Organization: Agencies/ Cost: Funding Source: Projected Mitigated:					
Organizations: High All Hazards						

Des Plaines Engineering		CIP component of	Completion	
Department		general fund (if	Date:	
		implemented)	Ongoing	
Year Initiated	2014			
Applicable Jurisdiction	City of Des Plaines			
Applicable Goal	2,3			
Applicable Objective	1, 2, 7			
Cost Analysis (Low, Medium, High)	High			
Priority and Level of Importance (Low,	Medium			
Medium, High)	Mediaiii			
Benefits of the Mitigation Project (Loss	High			
Avoided or Issue Being Mitigated)	i iigii			
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;	0			
O = Ongoing Indefinitely; C = Project Completed;				
R = Want Removed from Annex; X = No Action				
Taken/Delayed				

Mitigation Action #19: Imple	ment Flood Control	Project on Farmers and	Prairie Creeks.		
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)
Organization:	Agencies/	\$15,000,000; High	Funding	Projected	Mitigated:
MWRD	Organizations:		Source:	Completion	Flood
	City of Des		General	Date:	
	Plaines		Fund, BRIC,	Long-term	
	Administration		HMGP		
Year Initiated		2019	•		
Applicable Jurisdiction		City of Des Plaines			
Applicable Goal		1			

Applicable Objective	9
Cost Analysis (Low, Medium, High)	High
Priority and Level of Importance (Low, Medium, High)	High
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project Description:	ID: FRCR-12 Contract: 12-056-3F, Watershed: Lower Des Plaines Location: Park Ridge, Des Plaines, and Maine Township, IL Provides flood storage and conveyance improvements along Farmers and Prairie Creeks, including channel modifications, detention expansion, diversion sewer construction, and streambank stabilization.
Actual Completion Date or Ongoing Indefinite	TBD
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	0

Mitigation Action #25: Imple	ment Des Plaines Fl	ood-Prone Property Aco	quisitions (Phase	V)	
Lead Agency/Department Organization: MWRD	Supporting Agencies/ Organizations: IDNR	Estimated Cost: \$12,500,000; High	Potential Funding Source: General Fund	Estimated Projected Completion Date: 2025	Hazard(s) Mitigated: Flood
Year Initiated		2022			
Applicable Jurisdiction		City of Des Plaines			
Applicable Goal		1,2			
Applicable Objective		1			

Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
Priority and Level of Importance (Low, Medium, High)	High
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High—Project will provide an immediate reduction of risk exposure for life and property.
Action/Implementation Plan and Project Description:	Acquistion and Removal of homes in the flood plain.
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	0

Mitigation Action #26: Mainta	ain CRS Class 5 status (See Action D3.2)					
Lead Agency/Department	Supporting	Estimated	Potential	Estimated	Hazard(s)		
Organization:	Agencies/	Cost:	Funding	Projected	Mitigated:		
City of Des Plaines Public	Organizations:	Low	Source:	Completion	Flooding,		
Works and Engineering			General	Date:	Severe		
Departments			Fund	Ongoing	Weather		
Year Initiated		2023					
Applicable Jurisdiction		City of Des Plaines					
Applicable Goal		2	2				
Applicable Objective		1					
Cost Analysis (Low, Medium	, High)	Low					
Priority and Level of Importa High)	nce (Low, Medium,	Low					
Benefits of the Mitigation Project (Loss Avoided or		Low—Long-term benefits of the project are difficult to quantify in the short					
Issue Being Mitigated)		term.					

Action/Implementation Plan and Project Description:	On September 8, 2023, the City of Des Plaines earned a Class 5 designation in the National Flood Insurance Program (NFIP). This allows for a 25% discount on flood insurance premiums. Our ongoing flood mitigation activities include construction certificate management, map information service, public outreach, hazard disclosure, flood protection information, flood protection assistance, flood insurance promotion, floodplain mapping, open space preservation, increasing regulatory standards, flood data maintenance, stormwater management, repetitive loss analysis, floodplain management planning, property acquisition, flood protection, drainage system maintenance and county growth adjustment.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project Completed; R =	
Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #27: Craig I	Manor Stormwater Imp	provements			
Lead Agency/Department Organization: City of Des Plaines Public Works and Engineering Departments	Supporting Agencies/ Organizations:	Estimated Cost: \$4,100,000; Low	Potential Funding Source: General Fund, BRIC,	Estimated Projected Completion Date: 2025	Hazard(s) Mitigated: Flooding
Year Initiated		2023	HMGP		
Applicable Jurisdiction			City of Des Plaines		
Applicable Goal		2,5	2,5		
Applicable Objective		1			
Cost Analysis (Low, Medium, High)			ct could be funded it part of an ongoing	under the existing buexisting puexisting program.	idget. The project is

Priority and Level of Importance (Low, Medium, High)	Medium		
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium—Project will have a long-term impact on the reduction of risk exposure for life and property, or project will provide an immediate reduction in the risk exposure for property.		
Action/Implementation Plan and Project Description:	The Craig Manor Stormwater Improvement project includes construction of an underground stormwater storage facility to serve as drainage overflow for the Craig Manor neighborhood. The facility is located in Craig Manor Park (Des Plaines Park District) and connects to the existing storm system.		
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	1		

Completed Actions

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

Completed Action Items
Maintain CRS Class 7 status
Implement Des Plaines Flood-Prone Property Acquisitions (Phase I)
Implement Des Plaines Flood-Prone Property Acquisitions (Phase II)
Implement Des Plaines Flood-Prone Property Acquisition Phase III
Implement Green Infrastructure Project

Implement Des Plaines Flood-Prone Property Acquisitions (Phase IV)

Implement Green Infrastructure Project

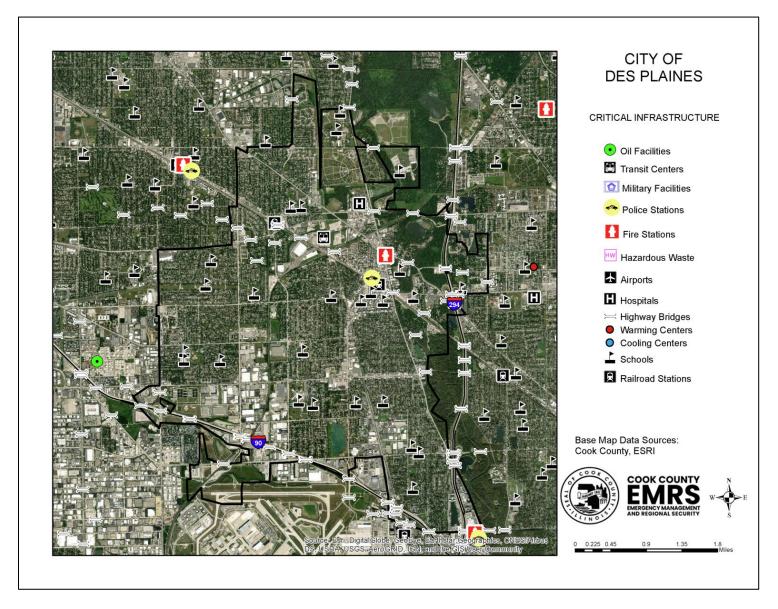
Future Needs to Better Understand Risk/Vulnerability

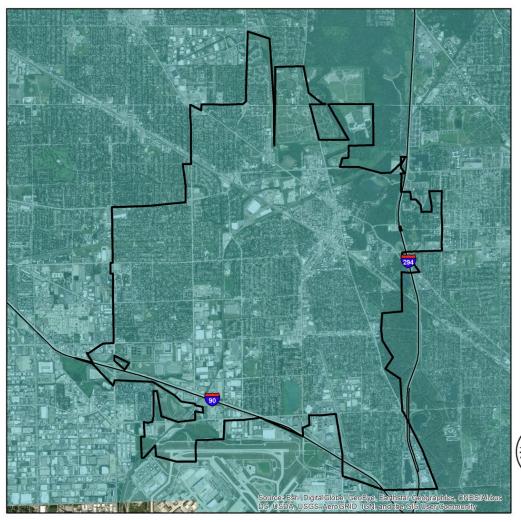
No needs have been identified at this time.

Additional Comments

No additional comments at this time.

Hazard Mapping





CITY OF **DES PLAINES**

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

Mercalli Scale, Potential Shaking

II-III Weak

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

Probabilistic seismic-hazard maps were prepared for the conterminous United States for 2014 portraying peak horizontal acceleration and horizontal spectral response acceleration for 0.2- and 1.0-second periods with 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 cost, 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.

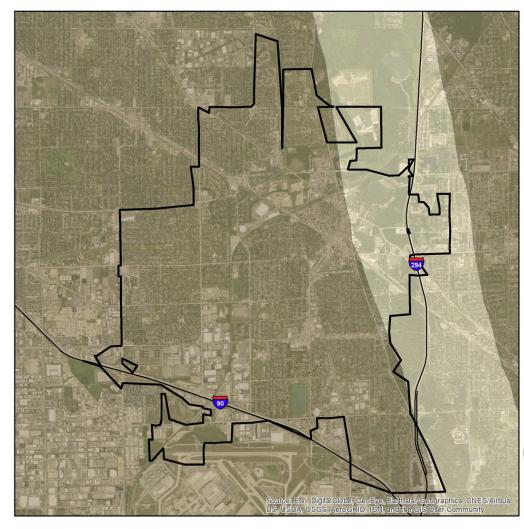
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COOK COUNTY



0 0.225 0.45 0.9



CITY OF DES PLAINES

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.

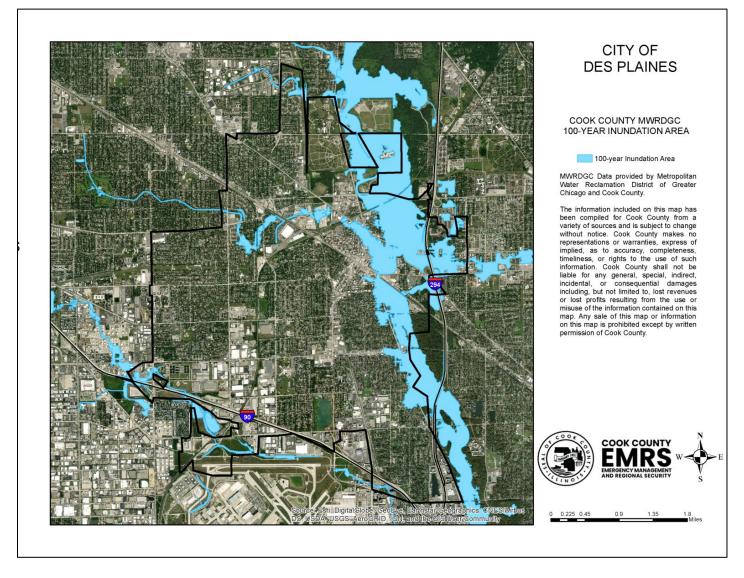
The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Ste Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase II work the 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 Fullerion. 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 for the soils in comparison to the bedrock which influences much of the ampfication.

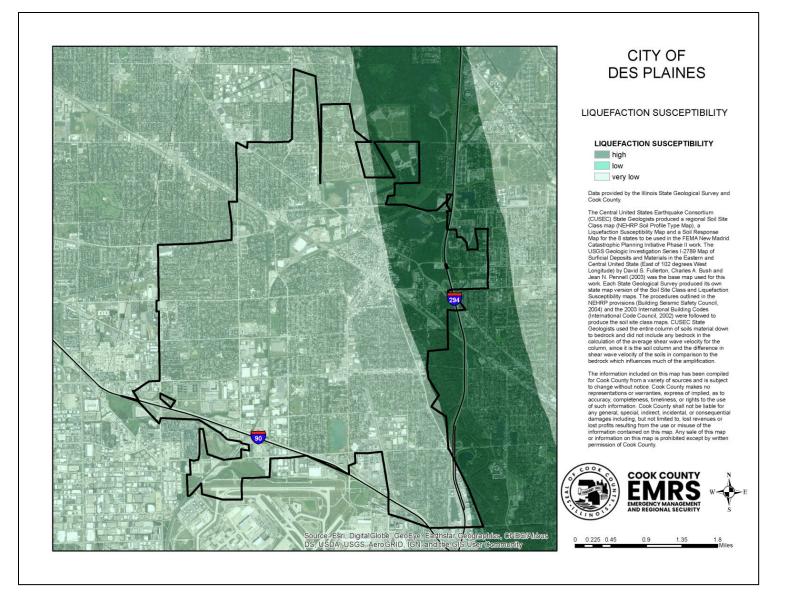
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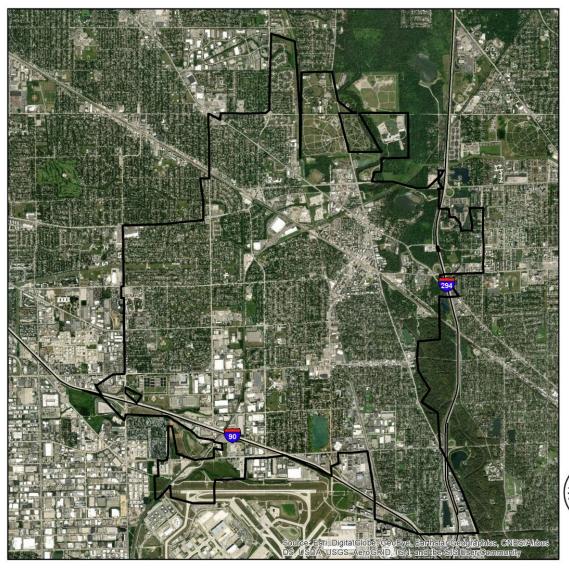


0 0.225 0.45 0.9 1.35 1.8 Miles

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.







CITY OF DES PLAINES

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.

