Summit

Hazard Mitigation Plan Point of Contact

Primary Point of Contact	Alternate Point of Contact
Anthony Anderson, Fire Chief/EMA Director	Stephanie Cole, EMS- Coordinator
7339 W. 59th Street	7339 W. 59th Street
Summit, IL 60501	Summit, IL 60501
Telephone: 708-594-3931	Telephone: 708 594-3948
Email Address: tanderson@summitfire.net	Email Address: scole@summitfire.net

Jurisdiction Profile

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

Date of Incorporation: 1890

Current Population: The 2020 U.S. Census population was 11,161. The 2022 U.S. Census estimate indicated the population was 10,732.

Population Growth: The overall population has decreased by 4.08% between 2018 and 2022.

Location and Description: The Village of Summit is a southwest suburb of Chicago in Cook County, located approximately 14.6 miles from the Chicago Loop. Suburbs adjacent to Summit include Lyons and Forest View to the north, Bedford Park and Bridgeview to the south, Garfield Ridge to the east, and McCook and Countryside to the west. The Stevenson Expressway (Interstate 55) runs through the northwest side of the Village. Chicago Midway International Airport is approximately three miles to the east. Argo Crossing Rail Junction (Indiana Harbor Belt Railroad/CSX and Canadian National Railway/Union Pacific Railroad) is located along the southwest boundary of the village. The majority of Summit is in the floodplain of the Des Plaines River.

Brief History: Aptly named, Summit sits on the gentle rise separating the Chicago River from the Des Plaines. Various Indian tribes traveled for centuries through a mass of trails and portages that crossed the swampy interfluve. A hint of the original landscape can be found in the Chicago Portage National Historic Site, on Harlem Avenue in Lyons, just north of Summit. From the start, Summit was marked by an extremely diverse ethnic mix. Native-born settlers, lured by frontier opportunities, were joined by Irish canal workers by the late 1830s. The Germans followed shortly thereafter. From the 1880s to the early 1900s, the flow of immigration became a flood as Poles, Croats, Slovaks, Russians, Italians, and the Dutch all arrived. A few African American and Mexican households were present at the turn of the century, and the first Greek family arrived in 1910. Incorporated in 1890, Summit's population was 547 in 1900 and eventually rose to 4,019 by 1920. After World War I, manufacturing and services diversified in Summit. The Des Plaines Valley News began in 1913, and in 2000 was one of the last independent suburban newspapers. Food processing companies, functionally related to the Argo plant, were established. The rail yards transferred meat products from the Chicago stockyards. In the 1950s, the canal was filled in at Summit, so the land could be used for the Stevenson Expressway.

Climate: The climate of Summit and the Chicago area is classified as humid continental, with all four seasons distinctly represented: wet springs; hot and humid summers; pleasant autumns; and cold winters. Annual precipitation is average and reaches its lowest points in the months of January and February, and peaks in the months of May and June. Winter proves quite variable. Seasonal snowfall in the Village has ranged from 9 – 90 inches. The daily average temperature in January at Midway Airport is 24.8 °F (-4.0°C), and temperatures often stay below freezing for several consecutive days or even weeks in January and February. Temperatures drop to or below 0 °F (-18 °C) on 5.5 nights annually at Midway and 8.2 nights at O'Hare. Spring in the Chicago area is perhaps the areas wettest and unpredictable season. Winter-like conditions can persist well into April and even occasionally into May. Thunderstorms are especially prevalent in the springtime as the area'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 100 °F high and subzero lows below -18 °C. Fall can bring heavy thunderstorms, many of which are capable of producing flooding. The average first accumulating snow occurs around November 19.

Governing Body Format: The Village of Summit operates with a Mayor/Village Board form of Government. The Mayor, Village Clerk, and six Trustees serve as the elected officials for the Village Government. This body will assume the responsibility for the implementation and adoption of this plan. Village services include Police, Fire, Community Development and water and sewer utilities.

Development Trends: The Village's strategic location, diverse ethnic background, and aggressive economic development plans create ideal opportunities for domestic and international business investment and growth within the community. Summit is directly connected to Interstate 55, with two interchanges flowing into and out of the Village. Summit borders Chicago on the eastern side of the Village, separated by Harlem Avenue, a major metropolitan roadway experiencing heavy traffic volume.

Summit's neighbor to the southeast is the village of Bridgeview, which boasts Toyota Park, which was built in 2006 and home to the Chicago Fire - Chicago's own Major League Soccer Club. Toyota Park also hosts concerts and numerous other events throughout the year. On Summit's southwest border lies the village of Bedford Park, a small population community with a large, thriving business park. Summit is situated four miles west of Chicago's Midway International Airport and Orange Line commuter rail. The Village also has an Amtrak stop allowing direct travel to and from Chicago's downtown district, as well as central Illinois and beyond. The Village of Summit has undertaken economic development projects through Tax Increment Financing (TIF) in various designated areas, including 63rd Street on the south side of the Village, less than one mile from Bridgeview's Toyota Park. The 63rd Street TIF uses local funds to improve infrastructure aimed to facilitate business development in these areas. Summit's opportunities for business investment and growth within the community have never been better. The Village is committed to promoting business investment, growth, and sustainability in the 21st century.

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, Ordinances &	Requiremen	ts			
Building Code	Yes	No	No	Yes	10-0-10 (5- 17-2010)
Zonings	Yes	No	No	Yes	11-1-1 (1965 Code)
Subdivisions	Yes	No	No	No	00-O-13 (11- 20-2000)
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. 00-O-13 (11- 20-2000
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	Yes	No	No	No	CMAP in progress
Site Plan Review	Yes	No	No	No	00-O-13 (11- 20-2000)
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health

					05-14-12 (1965 Code)
Environmental Protection	Yes	No	No	No	
Planning Documents	5				
General or Comprehensive Plan	No	No	No	No	
ls	the plan equip	ped to provide int	egration to this mit	tigation plan?	N/A
Floodplain or Basin Plan	No	No	Yes	No	08-O-03 (4-7- 2008)
Stormwater Plan	No	No	MWRD	No	
Capital Improvement Plan	Yes	No	No	No	
	What	t types of capital f	acilities does the p	lan address?	Unknown
		How oft	en is the plan revis	ed/updated?	Unknown
Habitat	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.
Snoreline Management Plan	No	No	No	No	
Response/Recoverv	Planning		1		
Comprehensive Emergency Management Plan	Yes	No	Yes	Yes	Cook County EMRS
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County EMRS Preparing THIRA
Terrorism Plan	No	No	Yes	Yes	Cook County EMRS
Post-Disaster Recovery Plan	No	No	No	No	
Continuity of Operations Plan	No	No	Yes	No	Cook County EMRS

Public Health	No	No	Voc	No	Cook County
Plans	INU	INU	165	NU	DPH

TABLE: FISCAL CAPABILITY	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY			
Staff/Personnel Resources	Available?	Department/Agency/Position	
Planners or engineers with			
knowledge of land development	Yes	Engineering Department	
and land management practices			
Engineers or professionals trained			
in building or infrastructure	Yes	Engineering Department	
construction practices			
Planners or engineers with an	Ves	Engineering Department	
understanding of natural hazards	103	Engineering Department	
Staff with training in benefit/cost	Ves	Engineering Department	
analysis	103		
Surveyors	Yes	Engineering Department	
Personnel skilled or trained in GIS	Vec	Cook County GIS Consortium	
applications	163	Cook County OIS Consortium	
Scientist familiar with natural	Voc	Engineering Department	
hazards in local area	165		
Emergency manager	Yes	EMA Director/ Engineering Department	
Grant writers	Yes	Engineering Department	

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Building Department
Who is your jurisdiction's floodplain administrator? (department/position)	Building Commission
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	June 2008
When we the most recent Community Acciptance Visit or Community	Have not had a
Assistance Contract?	Community
Assistance contact?	Assistance Visit
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No

Do your flood hazard maps adequately address the flood risk within your	Yes
jurisdiction? (If no, please state why)	100
Does your floodplain management staff need any assistance or training to	
support its floodplain management program? If so, what type of	No
assistance/training is needed?	
Does your jurisdiction participate in the Community Rating System (CRS)? If	
so, is your jurisdiction seeking to improve its CRS Classification? If not, is	No and Yes
your jurisdiction interested in joining the CRS program?	

NFIP Participation Activities

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

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

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

- Our staff provide the following services: permit reviews, GIS, inspections, engineering capability.
- Our community's Floodplain Administrator is a Certified Floodplain Manager (CFM).
- Our community teaches property owners or other stakeholders about the importance of flood insurance through public outreach events, workshops, and/or seminars.
- 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:

7-6-2 Definitions

SUBSTANTIAL DAMAGE: Damage of any origin sustained by a structure whereby the cumulative percentage of damage during the life of the building equals or exceeds fifty percent (50%) 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 this determination. This term includes repetitive loss buildings. See definition of Repetitive Loss.

SUBSTANTIAL IMPROVEMENT: Any reconstruction, rehabilitation, addition, or improvement of a structure taking place during the life of the building 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 started

"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.

This term does not, however, include either:

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

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.

7-6-4 Duties of Superintendent of Public Works

A. Determining The Floodplain Designation:

- 1. Check all new development sites to determine whether they are in a special flood hazard area (SFHA).
- 2. If they are in an SFHA, determine whether they are in a floodway, flood fringe or in a floodplain for which a detailed study has not been conducted and which drains more than one square mile.
- 3. Check whether the development is potentially within an extended SFHA (with a drainage area less than 1 square mile), indicating that the development would have adverse impacts regarding storage, conveyance, or inundation which would be the basis for the applicant being required to delineate the floodplain and floodway and be subject to the remaining sections of this chapter.
- B. Professional Engineer Review:
 - 1. If the development site is within a floodway or in a floodplain for which a detailed study has not been conducted and which drains more than one square mile, the permit shall be referred to a licensed professional engineer under the employ or contract of the village for review to ensure that the development meets section 7-6-7 or 7-6-8 of this chapter.
 - 2. In the case of an appropriate use, the PE shall state in writing that the development meets the requirements of section 7-6-7 of this chapter.

G. Damage Determinations: Make damage determinations of all damaged buildings in the SFHA after a flood to determine substantially damaged structures which must comply with subsection 7-6-9(C)2(b) of this chapter.

7-6-9 Permitting Requirements Applicable to all Floodplain Areas

In addition to the requirements found in sections 7-6-6, 7-6-7, and 7-6-8 of this chapter for development in flood fringes, designated floodways, and SFHAs or floodplains where no floodways have been identified, the following requirements shall be met:

C. Protecting Buildings:

- 1. 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:
 - Construction or placement of a new building or alteration or addition to an existing building valued at more than one thousand dollars (\$1,000.00) or seventy (70) square feet;
 - 2. Substantial improvements or structural alterations made to an existing building that increase the floor area by more than twenty percent (20%) or equal or exceed the market value by fifty percent (50%). Alteration shall be figured cumulatively during the life of the building. If substantially improved, the existing structure and the addition must meet the flood protection standards of this section;
 - 3. Repairs made to a substantially damaged building. These repairs shall be figured cumulatively during the life of the building. If substantially damaged, the entire structure must meet the flood protection standards of this section;
 - 4. Installing a manufactured home on a new site or a new manufactured home on an existing site (the building protection requirements do not apply to returning a manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage);
 - 5. Installing a travel trailer or recreational vehicle on a site for more than one hundred eighty (180) days per year; and
 - 6. "Repetitive loss" to an existing building, as defined in section 7-6-2 of this chapter.
- 2. This building protection requirement may be met by one of the following methods:
 - 1. A residential or nonresidential building, when allowed, may be constructed on permanent land fill in accordance with the following:
 - 1. Lowest Floor: The lowest floor (including basement) shall be at or above the flood protection elevation; and
 - 2. Fill Requirements:
 - The fill shall be placed in layers no greater than six inches (6") deep before compaction and should extend at least ten feet (10') beyond the foundation of the building before sloping below the flood protection elevation; and
 - 2. The top of the fill shall be above the flood protection elevation. However, the ten foot (10') minimum may be waived if a structural engineer certifies

an alternative method to protect the building from damages due to hydrostatic pressures; and

- 3. The fill shall be protected against erosion and scour during flooding by vegetative cover, riprap or other structural measure; and
- 4. The fill shall be composed of rock or soil and not incorporate debris or refuse materials; and
- 5. The fill shall not adversely affect the flow or surface drainage from or onto neighboring properties, and when necessary, stormwater management techniques such as swales or basins shall be incorporated.
- b. A residential or nonresidential building may be elevated in accordance with the following:
 - The building or improvements shall be elevated on crawl space, stilts, piles, walls, or other foundation that is permanently open to floodwaters and not subject to damage by hydrostatic pressures of the base flood or 100-year frequency flood. Designs must either be certified by a licensed professional engineer or architect or the permanent openings, one on each wall, shall be no more than one foot (1') above existing grade, and consist of a minimum of two (2) openings. The openings must have a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding below the base flood elevation; and
 - 2. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice and floating debris; and
 - 3. All areas below the flood protection elevation shall be constructed of materials resistant to flood damage; and
 - 1. The lowest floor (including basement) and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the flood protection elevation; and
 - 2. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the flood protection elevation, provided they are waterproofed; and
 - 4. The areas below the flood protection elevation may only be used for the parking of vehicles, building access or storage in an area other than a basement and not later modified or occupied as habitable space; and
 - 5. In lieu of the above criteria, the design methods to comply with these requirements may be certified by a licensed professional engineer or architect.
 - 6. Manufactured homes, and travel trailers to be installed on a site for more than one hundred eighty (180) days, shall be elevated to or above the flood protection elevation; and shall be anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the rules and regulations for the Illinois mobile home tie down act issued pursuant to 77 Illinois administrative code part 870. In addition, all manufactured homes shall meet the following elevation requirements:
 - 1. In the case of manufactured homes placed or substantially improved: 1) outside of a manufactured home park or subdivision; 2) in a new manufactured home park or subdivision; 3) in an expansion to an existing manufactured home park or subdivision;

or 4) in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage from a flood, the top of the lowest floor shall be elevated to or above the flood protection elevation.

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

e. 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 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	No	N/A	N/A
Building Code Effectiveness Grading Schedule	Yes	Unknown	Unknown
Public Protection/ISO	Yes	5	May 2011
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	No	N/A	N/A

Opportunities to Expand and Improve Capabilities

At this time, the Village of Summit has not identified opportunities to expand or improve our current capabilities. Should such opportunities be identified in the future, this Capability Assessment will be updated accordingly.

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 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: 1 (1 Single Family)
- 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	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	
Hail		5/2/2018	Quarter size hail was	

Tornado		5/26/2015	A brief EF-0 tornado touched down in Summit. The tornado mainly damaged trees with several large branches down and a couple of weaker hard wood trees snapped. There was also minor roof damage and a wooden fence partially blown down. An electrical pole was cracked at the base. Peak winds were estimated at 75 mph.
Severe Storms	DR-4116	2013	-
Severe Storms/Flooding		8/26/2012	Several side streets had water up to car bumpers in Summit.
Severe Winter Storms	DR-1960	2011	-
Severe Storms/Flooding	DR-1935	2010	-
Severe Storms/Flooding	DR-1800	2008	-
Severe Storms/Flooding		8/10/2006	Two to three feet of standing water closed the intersection of Archer Avenue and 63rd Street in Summit.
Severe Storms/Flooding	DR-1729	2007	-
Severe Winter Storm	EM-3161	2000	-
Winter Snow Storm	EM-3134	1999	-
Flooding	DR-1188	1997	-
Flooding	DR-1129	1996	-
Severe Storms/Flooding	DR-997	1993	-
Severe Storms/Flooding	DR-798	1987	-
Severe Storms/Flooding	DR-776	1986	-

Jurisdiction-Specific Hazards: Vulnerabilities and Impacts

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

Flood: The roadway underpass at 63rd and Archer Road and residential streets throughout the Village are subject to flooding.

High Winds: The Village is vulnerable to experiencing tree damage and power line damage during high wind events.

Severe Weather: In 2010, the roof of a storage facility near 66th Street and Narragansett partially collapsed during heavy rain which fell during the early morning hours of July 24th. In 2011, tree limbs 5 to 6 inches in diameter were blown down along 62nd Street. A 20-inch diameter tree was split vertically down the middle.

Additional areas of concern include;

- Rain and snow melt
- Viaduct flooding on Archer & 63rd St., causing major traffic delays
- Sewer and rainwater are combined into one sewer

Winter Storms and Severe Cold: Like high wind events, power outages can occur, which is particularly bad for the population 65 and older (<u>8.8% of the population</u>). Additionally, freezing pipes occur when temperatures drop too low. See additional areas of concern under Severe Weather for additional points of concern.

Indicator	Number	Percent
Families in poverty	596	12.8%
People with disabilities	2,000	10.1%
People over 65 years	2,925	14.8%
People under 5 years	1,390	7%
People of color	12,793	64.8%
Black	1,365	6.9%
Native American	22	0.1%
Hispanic	10,956	55.5%
Difficulty with English	2,433	13.3%
Households with no car	455	7%
Mobile homes	574	8.9%

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 hazardprone 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	Remained the Same	
Drought	Increased	
Earthquake	Remained the Same	
Flood (Riverine, Urban, Shoreline)	Increased	
Severe Weather (Extreme Heat, Lightning, Hail,	Increased	
Fog, High Wings)	Increased	
Severe Winter Weather (Ice Storms, Heavy Snow,	Increased	
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	Increase	
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)	Increase	
Tornado	Increase	
Wildfire (Wildfire Smoke)	No Change is Anticipated	

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	Remained the Same
Drought	Increased
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	Remained the Same
Wildfire (Wildfire Smoke)	Remained the Same

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	No Change is Anticipated
Drought	Increase
Earthquake	No Change is Anticipated

Flood (Riverine, Urban, Shoreline)	Increase	
Severe Weather (Extreme Heat, Lightning, Hail,	Increase	
Fog, High Wings)		
Severe Winter Weather (Ice Storms, Heavy Snow,	Increase	
Blizzards, Extreme Cold)	Increase	
Tornado	No Change is Anticipated	
Wildfire (Wildfire Smoke)	No Change is Anticipated	

There are 22 acres near the canal; 7700 Canal Bank Road may be exposed or vulnerable to any of the natural hazards identified in this Hazard Mitigation Plan

Hazard Risk Ranking

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

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

New Mitigation Actions

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

Mitigation Action #10: Improve conditions/infrastructure for Fire Department					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)
Organization:	Agencies/	High	Funding Source:	Projected	Mitigated:
Summit Fire Department	Organizations:		Hazard Mitigation	Completion	Severe
	Public Works		Grant Program	Date:	Weather
			(HMGP)	Long-term	(Extreme
			Building Resilient		Heat,
			Infrastructure		Lightning.
			and		Hail, Fog,
			Communities		High Winds)
			(BRIC)		Severe Winter
			Community		Weather (Ice
			Development		Storm, Heavy
			Block Grant		Snow,
			(CDBG)		Blizzards,
					Extreme
					Cold)
Year Initiated		2024			
Applicable Jurisdiction		Village of Summit			
Applicable Goal		1,2,3,4,5			
Applicable Objective		1,2,3,5,10			
Cost Analysis (Low, Medium, High)		High			
Priority and Level of Importa	ince (Low,	High			
Medium, High)					
Benefits of the Mitigation Project (Loss		High			
Avoided or Issue Being Mitigated)					
Action/Implementation Plan	n and Project	Fire department 7339 W 59th Street			
Description:		During severe weat	her specifically heavy r	ain, we routinely hav	re flooded

	parking lot, interior spaces take on water from the rain. (IT ROOM sleeping quarters)
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	Ν
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #11: Via	duct Project						
Lead	Supporting	Estimated	Potential	Estimated	Hazard(s) Mitigated:		
Agency/Department	Agencies/	Cost:	Funding	Projected	Dam and Levee		
Organization:	Organizations:	High	Source:	Completion	Failure, Flood		
Public Works	MWRD		Hazard	Date:	(Riverine, Urban,		
			Mitigation Grant	Long-term	Coastal/Shoreline),		
			Program		Severe Weather		
			(HMGP)		(Extreme Heat,		
			Building		Lightning. Hail, Fog,		
			Resilient		High Winds), Severe		
			Infrastructure		Winter Weather (Ice		
			and		Storm, Heavy Snow,		
			Communities		Blizzards, Extreme		
			(BRIC)		Cold)		
Year Initiated		2024					
Applicable Jurisdiction		Village of Summit					
Applicable Goal	1,2,3,4,5,6						
Applicable Objective	1,2,6,9,13						
Cost Analysis (Low, Medium, High)		High					
Priority and Level of Impo	rtance (Low,	High					
Medium, High)		LIBII					

Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project Description:	Rain and snow melt. Viaduct floods Archer & 63rd St, Causing major traffic delays Sewer and rainwater are combined into one sewer.
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 	Ν

Ongoing Mitigation Actions

The following are ongoing actions with no definitive end or that are still in progress. During the 2024 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Mitigation Action #1: 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	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)		
Agency/Department	Agencies/	High	Funding	Projected	Mitigated:		
Organization:	Organizations:		Source:	Completion	All		
Village Administration			FEMA Hazard	Date:			
			Mitigation	Long-term			
			Grants, BRIC,	(depending on			
			HMGP, FMA	funding)			
Year Initiated		2014			·		
Applicable Jurisdiction		Village of Summit					
Applicable Goal		1,2,3					
Applicable Objective		7,13					
Cost Analysis (Low, Medi	um, 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;	0
O = Ongoing Indefinitely; C = Project Completed;	0
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #2: Continu	Mitigation Action #2: Continue to support the countywide actions identified in this plan.					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding	Projected	Mitigated:	
Village Administration	Organizations:		Source:	Completion	All	
			General Fund	Date:		
				Short- and Long-		
				term		
Year Initiated		2014				
Applicable Jurisdiction		Village of Summit				
Applicable Goal		1,5				
Applicable Objective		All				
Cost Analysis (Low, Medium,	High)	Low				
Priority and Level of Importa	nce (Low,	High				
Medium, High)		i ligit				
Benefits of the Mitigation Project (Loss		Medium				
Avoided or Issue Being Mitigated)		riculum				
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;	0
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #3: Continu	Mitigation Action #3: Continue to support the countywide actions identified in this plan.						
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)		
Organization:	Agencies/	Low	Funding	Projected	Mitigated:		
Village Administration	Organizations:		Source:	Completion	All		
			General Fund	Date:			
				Short- and Long-			
				term			
Year Initiated		2014					
Applicable Jurisdiction		Village of Summit					
Applicable Goal		1,5					
Applicable Objective		All					
Cost Analysis (Low, Medium,	High)	Low					
Priority and Level of Importa	nce (Low,	High					
Medium, High)							
Benefits of the Mitigation Pro	ject (Loss	Modium					
Avoided or Issue Being Mitigate	ed)	Medium					
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 Completion;							
O = Ongoing Indefinitely; C = Project Completed;							

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

Mitigation Action #4: Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.							
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source:	Estimated Projected Completion	Hazard(s) Mitigated: All		
-			General Fund	Date:			
				Long-term			
Year Initiated		2014					
Applicable Jurisdiction		Village of Summit					
Applicable Goal		1,2,3,5,6					
Applicable Objective		3, 4, 5, 6, 7, 9, 10, 11, 13					
Cost Analysis (Low, Medium, High)		Low					
Priority and Level of Importance (Low, Medium, High)		Medium					
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	oject (Loss ted)	Medium					
Action/Implementation Plar	n and Project						
Description:							
Actual Completion Date or C	Ongoing Indefinite						
Project Status & Changes in	Priority						
Completion status legend:		0					
N = New; I = In Progress Toward Completion;							
O = Ongoing Indefinitely; C = Project Completed;							
R = Want Removed from Anne	ex; X = No Action						
Taken/Delayed							

Action S12.5

Mitigation Action #5: Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.

Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding	Projected	Mitigated:	
Village Administration	Organizations:		Source:	Completion	Flooding	
			General Fund	Date:		
				Short-term and		
				Ongoing		
Year Initiated		2014				
Applicable Jurisdiction		Village of Summit				
Applicable Goal		1,2,5				
Applicable Objective		4,6,9				
Cost Analysis (Low, Medium, High)		Low				
Priority and Level of Importance (Low,		High				
Medium, High)						
Benefits of the Mitigation Pro	ject (Loss	Medium				
Avoided or Issue Being Mitigat	ed)					
Action/Implementation Plan	and Project	We have updated flood plain mapping and provide assistance and information				
Description:		to the public. We have a flood damage prevention ordinance.				
Actual Completion Date or O	ngoing 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 Anne:	x; X = No Action					
Taken/Delayed						

Action S12.6

Mitigation Action #6: Where feasible, implement a program to record high water marks following high-water events.					vents.	
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Medium	Funding	Projected	Mitigated:	
Village Administration	Organizations:		Source:	Completion	Flooding;	
			General Fund:	Date:	Severe	
			FEMA Public	Long Term	Weather	
			Assistance			
			(PA)			
Year Initiated		2014				
Applicable Jurisdiction		Village of Summit				
Applicable Goal		1,2,5				
Applicable Objective		3,6,9				
Cost Analysis (Low, Medium)	, High)	Medium				
Priority and Level of Importa	nce (Low,	Medium				
Medium, High)						
Benefits of the Mitigation Pro	o ject (Loss	Medium				
Avoided or Issue Being Mitigat	ed)					
Action/Implementation Plan	and Project					
Description:						
Actual Completion Date or O	ngoing 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 Anne.	x; X = No Action					
Taken/Delayed						

Action S12.7

Mitigation Action #7: Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.

Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding	Projected	Mitigated:	
Engineering Department	Organizations:		Source:	Completion	All	
			General Fund	Date:		
				Short-term		
Year Initiated		2014				
Applicable Jurisdiction		Village of Summit				
Applicable Goal		1,5				
Applicable Objective		3,4,6,10,13				
Cost Analysis (Low, Medium)	, High)	Low				
Priority and Level of Importance (Low,		High				
Medium, High)						
Benefits of the Mitigation Pro	ject (Loss	Medium				
Avoided or Issue Being Mitigat	ed)					
Action/Implementation Plan	and Project	Flood plan is consulted in the zoning and building approval process.				
Description:						
Actual Completion Date or O	ngoing 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 #8: Green Infrastructure Alley Improvements					
Lead Agency/Department Organization: MWRD	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: MWRD	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flooding
Year Initiated		2019	·		
Applicable Jurisdiction		Village of Summit			

Applicable Goal	1,2,3	
Applicable Objective	3,12	
Cost Analysis (Low, Medium, High)	Medium	
Priority and Level of Importance (Low,	Madium	
Medium, High)		
Benefits of the Mitigation Project (Loss	Modium	
Avoided or Issue Being Mitigated)		
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 #9: Educate public on pipe freezing during inclement weather conditions					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)
Organization:	Agencies/	200; Low	Funding	Projected	Mitigated:
Summit Fire Department	Organizations:		Source:	Completion	Severe Winter
			General Fund	Date:	Weather
				Long-term	
Year Initiated		2019			
Applicable Jurisdiction		Village of Summit			
Applicable Goal		2,3,4,5,6			
Applicable Objective		6			
Cost Analysis (Low, Medium, High)		Low—The project could be funded under the existing budget. The project is part			
		of or can be part of an ongoing existing program.			
Priority and Level of Importance (Low,		low			
Medium, High)					

Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Being pro-active Low—Long-term benefits of the project are difficult to quantify in the short term.
Action/Implementation Plan and Project Description:	Newsletter to residents
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

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





VILLAGE OF SUMMIT

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

Mercalli Scale, Potential Shaking

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

Probabilistic elemini-hazard maps were prepared for the conterminous United States for 2014 portraying peak horizontal acceleration and horizontal special response acceleration for 0.2-and 1.0-second periods with probabilities of exceedance of 10 percent in 50 years and 2 percent in 50 years and the maps were prepared by combining the hazard with the hazard monthal specific andom horizontal component. The reference site condition is firm rock, defined as having an average sharar-wave velocity of 700 m/s in the top 30 maters corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction program) site classes B and C.

The Information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warrantiles, express of implied, as to accuracy, completeness, timeliness, or rights to the use of such information. Cook County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of Cook County.



Miles



VILLAGE OF SUMMIT

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 (CUSEG) State Geologists produced a regional Soil Ste Class map. (NEHRP Soil Profile Type Map), a Ligueracian Sueceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophel Pationing Initiative Phase II work. The USS3 Geologic Investigation Series 1-2789 Map of Surficial Deposits and Materials in the Eastern and Central United State (East of 102 degrees West Longitude) by David S. Fulleron, 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 Liguefaction succeptibility 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 mays. CUSEC State Geologists used the entire column and the difference in shear wave velocity of the soils in comparison to the bedrock which Influences much of the amplication.

The information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warranties, county makes no do such information. Cook County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information or chained on this map. Any sale of this map or information on this map is prohibited except by written permission of Cook County.



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





VILLAGE OF SUMMIT

LIQUEFACTION SUSCEPTIBILITY

LIQUEFACTION SUSCEPTIBILITY

high low

very low

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

The Central United States Earthquake Consortium (CUSEC) state Geolgiss 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 FEIAA New Madid Catastrophic Planning Initiative Phase II work. The Userficial Doparties and Mathies in the Gataward New Madid Central United State (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and dean 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 Neurophical by David S. Fullertone Building Codes (International Code Council, 2002) were followed to produce the soil site class may building codes (International Code Council, 2002) were followed to produce the soil site class mays. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which Influences much of the amprilation.

The information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warranties, express of implied, as to accuracy, completeness, timeliness, or rights to the use of such information. Cook County shall not be liable for any general, special, indirect, inclental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information on this map. Any sale of this map or information of Cook County.



