# Steger

## **Hazard Mitigation Plan Point of Contact**

Primary Point of Contact	Alternate Point of Contact
Jason Stevenson, EMA Chief	Mary Jo Seehausen, Village Administrator
3035 Lewis	35 W 34th St
Steger, IL 60475	Steger, IL 60475
708-359-8028	Telephone: 708-754-3395
jstevenson@villageofsteger.org	mseehausen@villageofsteger.org

#### **Jurisdiction Profile**

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

Date of Incorporation: December 1896

**Current Population:** The 2020 U.S. Census population was 9,584. The 2022 U.S. Census estimate indicated the population was 9,334.

Population Growth: The overall population has decreased by 1.29% between 2016 and 2022.

**Location and Description:** Steger is a far south suburb of Chicago that lies in two counties; Cook and Will, and is 35 miles south of Chicago city limits. The Village is surrounded by the following three Villages: South Chicago Heights to the north, Sauk Village to the east, and Crete to the south. The West Side Village limits are Cook County Forest preserve property and unincorporated Will County areas. According to the 2010 census, the Village has a total area of 4 square miles; 2 square miles are considered rural (well & septic) and the other 2 are provided for by Village water and sewer services.

**Brief History:** In 1893, John Valentine Steger opened a piano factory on 20 acres (81,000 square meters) of land alongside the railroad south of Chicago Heights. When the Village grew to 324 residents, the village incorporated in 1896. John Steger agreed to pay \$400 toward incorporation costs to ensure that the name of the town be dubbed "Steger" rather than "Columbia Heights." Steger and Son pianos were made in the village until 1926. By 1920, Steger was considered by some as the "piano capital of the world" producing more than a hundred pianos a day. Steger & Sons built exceptionally high quality, expensive pianos from 1893-1956 in the village of Steger.

Climate: The climate of Steger 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 as 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 degrees F (-18 degrees

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.

**Governing Body:** The Village of Steger operates under the Village President/Trustee form of government. The legislative body consists of the Village President, Board of six Trustees and Village Clerk. The Village President and Board of Trustees serve a term of four years. The Village of Steger is divided between two congressional districts. The area in Cook County is in Illinois' 2nd congressional district, while the area in Will County is in the 11th district.

**Developmental Trends**: The Village has a strategic plan from 2006 focusing on a downtown redevelopment. Steger will have limited residential development within the Village limits due to the Village being mostly landlocked. The HCDC is a member of the South Suburban Land Bank & Development Authority (SSLBDA), which was formed in 2012. The HCDC is continually working on identifying properties for rehabilitation & demolition in order to increase value for homeowners in the Village. Within the Village limits is a 90 acre parcel for sale located at Route 394 & Steger Road. The Village is pursuing development in this area with either retail or warehousing/storage facility. There are no permanent plans for this development as of this time. Additionally, in December 2014, HCDC applied for the Illinois Housing Development Authority's (IDHA's) Blight Reduction Program which partners with South Suburban Land Bank & Development Authority, Park Forest, City of Joliet & Village of Robbins. The Blight Reduction Program is an IDHA program to decrease preventable foreclosure and stabilize neighborhoods by supporting Illinois units of government and Not-For-Profit Partners as we target blighted, vacant residential properties in our communities for demolition, greening and eventual reuse or redevelopment. On August 29, 2017, Steger hosted a panel discussion with the focus on "Homes For A Changing Region".

**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	Codes, Ordinances & Requirements				
Building Code	Yes	No	No	Yes	In accordance with Public

					Act 096-0704, Illinois has adopted the IBC as its state Building Code. Municipal Code adopted: 2003
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code. Municipal Code adopted: 1963
Subdivisions	Yes	No	No	No	Municipal Code adopted: 1962
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Municipal Code adopted: 1995
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	No	No	No	No	
Site Plan Review	Yes	No	No	No	Municipal Code adopted: 2003
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health.

					Municipal Code adopted: 1969
Environmental Protection	No	No	No	No	
Planning Docume	nts				
General or Comprehensive Plan	No	No	No	No	
	Is the plan equ	ipped to provide ir	ntegration to this mi	tigation plan?	N/A
Floodplain or Basin Plan	Yes	No	No	No	
Stormwater Plan	Yes	No	Yes	No	MWRD-Deer Creek Detailed Watershed Plan
Capital Improvement Plan	No	No	No	No	
	Wh	at types of capital	facilities does the p	olan address?	N/A
		How o	ften is the plan revis	sed/updated?	N/A
Habitat Conservation Plan	No	No		No	
Economic Development Plan	Yes	No	Yes	Yes	Steger Economic Development Board
Shoreline Management Plan	No	No	No	No	
Response/Recove	ery Planning				
Comprehensive Emergency Management Plan	No	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 Plans	No	No	Yes	No	Cook County DPH

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

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY			
Staff/Personnel Resources	Available?	Department/Agency/Position	
Planners or engineers with			
knowledge of land development	Yes	Engineering	
and land management practices			
Engineers or professionals trained			
in building or infrastructure	Yes	Engineering	
construction practices			
Planners or engineers with an	No	Engineering	
understanding of natural hazards	110	Engineering	
Staff with training in benefit/cost	Yes	Village Treasurer	
analysis	100	Villago Trousuroi	
Surveyors	Yes	Engineering	
Personnel skilled or trained in GIS	Yes	Cook County GIS Consortium	
applications	163	Cook County Old Consortium	
Scientist familiar with natural	No		
hazards in local area	140		
Emergency manager	Yes	Fire Chief	
Grant writers	No	Fire Chief/Village Administrator	

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Public Works
Who is your jurisdiction's floodplain administrator? (department/position)	PW Director
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	2003
When was the most recent Community Assistance Visit or Community Assistance Contact?	5/21/2001
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	Not according to last Community Assistant visit.
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?	Yes, all that apply

Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?

No; Undecided

#### **NFIP Participation Activities**

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

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

#### 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:

Sec. 38-27 Definitions

Substantial damage means damage of any origin sustained by a structure whereby the cumulative percentage of damage subsequent to the adoption of this chapter equals or exceeds 50 percent of the market value of the structure before the damage occurred regardless of actual repair work performed. Volunteer labor and materials must be included in this determination. The term includes repetitive loss buildings. See section 38-27 "Repetitive Loss".

Substantial improvement means any reconstruction, rehabilitation, addition, or improvement of a structure taking place subsequent to the adoption of this chapter during the life of the building in which the cumulative percentage of improvements equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started, or increases the floor area by more than 20 percent.

(1) "Substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the

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

- (2) The term does not, however, include either:
  - i. 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
  - ii. 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.

#### Sec. 38-28 Duties of the Village Administrator

- (a) Determining the floodplain designation.
  - (1) Check all new development sites to determine whether they are in a floodplain using criteria listed in section 38-29, Base Flood Elevations.
  - (2) If they are in a floodplain, 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.
    - (i) If the site is within a flood fringe, the village administrator shall require that the minimum requirements of section 38-30 be met.
    - (ii) If the site is within a floodway, the village administrator shall require that the minimum requirements of <u>section 38-31</u> be met.
    - (iii) If the site is located within a floodplain for which no detailed study has been completed and approved, the village administrator shall require that the minimum requirements of section 38-32 be met.
- (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 P.E. under the employ or contract of the village for review to ensure that the development meets sections <u>38-31</u> or <u>38-32</u>.
  - (2) In the case of an appropriate use, the P.E. shall state in writing that the development meets the requirements of <u>section 38-31</u>.
- (g) Substantial damage and substantial improvement determinations. Establish, in coordination with the village administrator, procedures for administering and documenting determinations, as outlined below, of substantial improvement and substantial damage made pursuant to section 38-33.
  - (1) Determine the market value or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work. In the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made.

- (2) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure.
- (3) Determine and document whether the proposed work constitutes substantial improvement or substantial damage.
- (4) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the village and this chapter is required.

#### Sec. 38-33 Permitting Requirements Applicable to all Floodplain Areas

In addition to the requirements found in sections <u>38-30</u>, <u>38-31</u> and <u>38-32</u> for development in flood fringes, designated floodways, and floodplains where no floodways have been identified, the following requirements shall be met.

#### (c) Protecting buildings.

- (1) In addition to the damage prevention requirements in sections 38-30(b) and 38-31(b) of this chapter, all buildings located within a floodplain, shall be protected from flood damage below the flood protection elevation. This building protection criteria applies to the following situations:
  - i. Construction or placement of a new building or alteration or addition to an existing building valued at more than \$1,500.00 or 70 square feet.
  - ii. Substantial improvements or structural alterations made to an existing building that increase the floor area by more than 20 percent or equal or exceed the market value by 50 percent. Alteration shall be figured cumulatively subsequent to the adoption of this chapter. If substantially improved, the existing structure and the addition must meet the flood protection standards of this section.
  - iii. Repairs made to a substantially damaged building. These repairs shall be figured cumulatively subsequent to the adoption of this chapter. If substantially damaged the entire structure must meet the flood protection standards of this section.
  - iv. Installing a new manufactured home on a new site or a new manufactured home on an existing site. (The building protection requirements do not apply when returning a manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage).
  - v. Installing a travel trailer or recreational vehicle on a site for more than 180 days per year; and
  - vi. Repetitive loss to an existing building as defined in section 38-27.
- (2) Residential or non-residential buildings can meet the building protection requirements by one of the following methods:
  - i. The building may be constructed on permanent land fill in accordance with the following:
    - (A) The lowest floor (including basement) shall be at or above the *flood* protection elevation.

- (B) The fill shall be placed in layers no greater than six inches before compaction and should extend at least ten feet beyond the foundation before sloping below the *flood* protection elevation.
- (C) The top of the fill shall be above the *flood* protection elevation. However, the ten foot minimum may be waived if a structural engineer certifies an alternative method to protect the building from damages due to hydrostatic pressures.
- (D) The fill shall be protected against erosion and scour during *flooding* by vegetative cover, riprap, or other structural measure.
- (E) The fill shall be composed of rock or soil and not include debris or refuse material.
- (F) The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties and, when necessary, include stormwater management techniques such as swales or basins.
- (ii) The building may be elevated in accordance with the following:
  - (A) The building or improvements shall be elevated on stilts, piles, walls, crawlspace, or other foundation that is permanently open to *flood* waters.
  - (B) If walls are used, all enclosed areas below the *flood* protection elevation shall address hydrostatic pressures by allowing the automatic entry and exit of *flood* waters. Designs must either be certified by a licensed professional engineer or by having a minimum of one permanent opening on each wall no more than one foot above grade with a minimum of two openings. The openings shall provide 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
  - (C) The lowest floor and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the *flood* protection elevation.
  - (D) The foundation and supporting members shall be anchored, designed, and certified so as to minimize exposure to hydrodynamic forces such as current, waves, ice, and floating debris.
  - (E) All structural components below the *flood* protection elevation shall be constructed of materials resistant to *flood* damage.
  - (F) Water and sewer pipes, electrical and telephone lines, submersible pumps, and other service facilities may be located below the *flood* protection elevation provided they are waterproofed.
  - (G) The area below the *flood* protection elevation shall be used solely for parking or building access and not later modified or occupied as habitable space.
  - (H) In lieu of the above criteria, the design methods to comply with these requirements may be certified by a licensed professional engineer or architect.

xiii. 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 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	No	N/A	N/A
Public Protection/ISO	Yes	ISO 6	03/13
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	No	N/A	N/A

#### Opportunities to Expand and Improve Capabilities

Due to the technical expertise needed to develop grant applications and benefit cost analyses for FEMA HMA grants, the Village of Thornton has a need for qualified grant writers to assist in the development and management of these grants.

#### **Plan Integration**

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

• The 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
Flooding	-	May/June 2016	-
Extreme Cold	-	2/26/2014	-
Extreme Cold	-	2/25/2014	-
Flooding	-	2/19/2014	-
Blizzard Conditions Heavy Snow and High winds	-	2/17/2014	
Blizzard Conditions Heavy Snow and High winds	DR 4116	4/26/2013	-
Blizzard	DR 4116	1/31/2011	-
Severe Storms Flooding	DR 1935	7/19/2010	-
Severe Storms Flooding	DR 1800	9/13/2008	-
Severe Weather	-	7/23/2003	-
Blizzard	EM 3068	1/16/1979	-

# Jurisdiction-Specific Hazards: Vulnerabilities and Impacts

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

**Severe Weather:** In 2003, several trees, large tree limbs and power lines were blown due to severe thunderstorms and wind gusts. The large tree limbs also resulted in a house being damaged.

**Flooding:** As recent (2019) the northwest segment of town area is in flood condition and has previously flooded the last 12 months. Residential area with school, police, and fire departments HQs impacted. Flood mitigation/drainage northwest segment of town. Flooding on the northwest side of Steger is historically severe. Specific locations include 33rd St/Holman and Lewis; on the South side, 35th and Susan Lane, Richton Road and Crescent (by the retention pond), Miller Woods, 225th St and State, George St and 227th.

Indicator	Number	Percent
Families in poverty	469	12.2%
People with disabilities	2,201	14.3%
People over 65 years	2,726	17.7%
People under 5 years	784	5.1%
People of color	8,170	52.9%
Black	5,298	34.3%
Native American	14	0.1%
Hispanic	2,294	14.9%
Difficulty with English	130	0.9%
Households with no car	338	5.4%
Mobile homes	13	0.2%

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

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

#### Jurisdiction-Specific Climate Change Vulnerability and Impacts

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

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

Hazard	Vulnerability
Current Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	Not Applicable
Earthquake	Remained the Same
Flood (Riverine, Urban, Shoreline)	Remained the Same

Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Wings)	Remained the Same
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Remained the Same
Tornado	Remained the Same
Wildfire (Wildfire Smoke)	Not Applicable

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	Not Applicable
Earthquake	No Change is Anticipated
Flood (Riverine, Urban, Shoreline)	No Change is Anticipated
Severe Weather (Extreme Heat, Lightning, Hail,	No Change is Anticipated
Fog, High Wings)	No Change is Anticipated
Severe Winter Weather (Ice Storms, Heavy Snow,	No Change is Anticipated
Blizzards, Extreme Cold)	No Change is Anticipated
Tornado	No Change is Anticipated
Wildfire (Wildfire Smoke)	Not Applicable

# <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	Not Applicable		
Drought	Not Applicable		
Earthquake	Remained the Same		
Flood (Riverine, Urban, Shoreline)	Remained the Same		
Severe Weather (Extreme Heat, Lightning, Hail,	Remained the Same		
Fog, High Wings)			
Severe Winter Weather (Ice Storms, Heavy Snow,	Remained the Same		
Blizzards, Extreme Cold)	Remained the barne		
Tornado	Remained the Same		
Wildfire (Wildfire Smoke)	Not Applicable		

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	Not Applicable
Earthquake	No Change is Anticipated
Flood (Riverine, Urban, Shoreline)	No Change is Anticipated
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Wings)	No Change is Anticipated

Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	No Change is Anticipated
Tornado	No Change is Anticipated
Wildfire (Wildfire Smoke)	Not Applicable

Our community does not anticipate future major assets may be exposed or vulnerable to any of the natural hazards identified in this Hazard Mitigation Plan. Any new assets (e.g., new construction in hazard prone areas) will be constructed to adhere to the latest building codes and standards, and mitigation to protect them from identified and anticipated hazards, especially those that are expected to increase due to climate change.

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

# **New Mitigation Actions**

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

Mitigation Action #11: Rep	lacing Water Pipes					
Lead Agency/Department	Supporting Agencies/	Estimated Cost:	Potential Funding	Estimated Projected	Hazard(s) Mitigated: Flood (Riverine, Urban,	
Organization:	Organizations:	High	Source:	Completion	Coastal/Shoreline)	
Administration	Public Works		ARPA Funds	Date:		
	(Engineering Firm)			Short-term		
Year Initiated		2024				
Applicable Jurisdiction		Village of Stege	er			
Applicable Goal		2,3				
Applicable Objective		1,2,3,9				
Cost Analysis (Low, Mediu	ım, High)	High				
Priority and Level of Impor Medium, High)	High					
Benefits of the Mitigation I Avoided or Issue Being Mitig	•	High				
Action/Implementation Plan and Project Description:		The Village is replacing smaller diameter pipes with larger diameter pipes (in the vicinity of 33rd St, from Hopkins to Loverock) in an effort to increase water flow and reduce potential flooding.				
Actual Completion Date of	Actual Completion Date or Ongoing Indefinite					
Project Status & Changes Completion status legend N = New; I = In Progress Tow O = Ongoing Indefinitely; C = R = Want Removed from An Taken/Delayed	N					

# **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 prevent future damage. Give		— · ·		ructures in hazard-p	orone areas to	
Lead Agency/Department Organization:	Supporting Agencies/	Estimated Cost: High	Potential Funding	Estimated Projected	Hazard(s) Mitigated:	
Village Administration	Organizations:		Source: FEMA Hazard Mitigation Grants, BRIC, HMGP, FMA	Completion Date: Long-term (depending on funding)	All	
Year Initiated		2014	•		·	
Applicable Jurisdiction		Village of Steger				
Applicable Goal		1,2,3				
Applicable Objective		7,13				
Cost Analysis (Low, Medium	, High)	High				
Priority and Level of Importance (Low, Medium, High)		Medium				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	• '	High				
Action/Implementation Plan and Project Description:		Ongoing as funds allow				
Actual Completion Date or Ongoing Indefinite						
Project Status & Changes in Priority  Completion status legend:		0				
<ul><li>N = New; I = In Progress Toward Completion;</li><li>O = Ongoing Indefinitely; C = Project</li></ul>						

Completed; <b>R</b> = Want Removed from Annex; <b>X</b> =	
No Action Taken/Delayed	

### Action S8.2

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 Steger				
Applicable Goal		1,5				
Applicable Objective		All				
Cost Analysis (Low, Medium,	High)	Low				
Priority and Level of Importar	nce (Low,	High				
Medium, High)		I ligit				
Benefits of the Mitigation Pro	<b>ject</b> (Loss	Medium				
Avoided or Issue Being Mitigate	ed)	Piculani				
Action/Implementation Plan	and Project	Ongoing as funds allo	2147			
Description:		Ongoing as funds allow.				
Actual Completion Date or O	ngoing Indefinite					
Project Status & Changes in F	Priority					
Completion status legend:						
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;		0				
<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;						
<b>R</b> = Want Removed from Annex; <b>X</b> = No Action						
Taken/Delayed						

## **Action S8.3**

Mitigation Action #3: 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, Village	Organizations:		Source:	Completion	All	
Administration			General	Date:		
			Fund	Short-term		
Year Initiated		2014				
Applicable Jurisdiction		Village of Steger				
Applicable Goal		1,5				
Applicable Objective		3,4,6				
Cost Analysis (Low, Medium	, High)	Low				
Priority and Level of Importa	nce (Low,	Ligh				
Medium, High)		High				
Benefits of the Mitigation Pro	oject (Loss	Medium				
Avoided or Issue Being Mitigat	ed)					
Action/Implementation Plan	and Project	Continually working to improve infrastructure and preparedness				
Description:		Continuating working to improve infrastructure and preparedness				
Actual Completion Date or C	ngoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:						
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;		0				
	<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project					
Completed; <b>R</b> = Want Remove	Completed; <b>R</b> = Want Removed from Annex; <b>X</b> =					
No Action Taken/Delayed						

Mitigation Action #4: Consid and StormReady.	er participation in in	centive-based progra	ms such as the Co	ommunity Rating Sys	tem, Tree City,
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All
Year Initiated		2014			

Applicable Jurisdiction	Village of Steger
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
Medium, High)	Mediani
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:	
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;	0
<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project	O
Completed; <b>R</b> = Want Removed from Annex; <b>X</b> =	
No Action Taken/Delayed	

Mitigation Action #5: Maintain good standing under the National Flood Insurance Program by implementing						
programs that meet or ex	programs that meet or exceed the minimum NFIP requirements.					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term and Ongoing	Hazard(s) Mitigated: Flooding	
Year Initiated		2014				
Applicable Jurisdiction		Village of Steger				
Applicable Goal		1,2,5				
Applicable Objective		4,6,9				
Cost Analysis (Low, Med	ium, 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:	
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;	
<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project	0
Completed; <b>R</b> = Want Removed from Annex;	
X = No Action Taken/Delayed	

Mitigation Action #7: Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
Lead Agency/Department Organization: Bowman Engineering	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: All	
Year Initiated		2014	1	1	-	
Applicable Jurisdiction		Village of Steger				
Applicable Goal		1,5				
Applicable Objective		3,4,6,10,13				
Cost Analysis (Low, Medium, High)		Low				
Priority and Level of Importance (Low, Medium, High)		High				

Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium
Action/Implementation Plan and Project	
Description:	
Actual Completion Date or Ongoing	
Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;	0
<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project	O
Completed; <b>R</b> = Want Removed from Annex;	
X = No Action Taken/Delayed	

Mitigation Action #8: Consider the development and implementation of a Capital Improvements Program (CIP) to increase					) to increase the
Village's regulatory, financia	al and technical capa	bility to implement	mitigation actions.		
Lead Agency/Department Organization:	Supporting Agencies/	Estimated Cost:	Potential Funding Source:	Estimated Projected	Hazard(s) Mitigated:
Public Works	Organizations:	High	of General Fund (if implemented)	Completion Date: Long-term and Ongoing	All
Year Initiated		2014			
Applicable Jurisdiction		Village of Steger			
Applicable Goal		1,5			
Applicable Objective		1,2,7			
Cost Analysis (Low, Medium	n, High)	High			
Priority and Level of Importance (Low, Medium, High)		Medium			
<b>Benefits of the Mitigation Project</b> (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:	
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;	
<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;	0
<b>R</b> = Want Removed from Annex; <b>X</b> = No Action	
Taken/Delayed	

Mitigation Action #9: Mitigate Flooding issues on Northwest side of town.					
Lead Agency/Department Organization: MWRD	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: MWRD	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flooding
Year Initiated		2014			
Applicable Jurisdiction		Village of Steger			
Applicable Goal		1,2,3			
Applicable Objective		2,9,13			
Cost Analysis (Low, Medium	, High)	Low			
Priority and Level of Importance (Low, Medium, High)		High			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High			
Action/Implementation Plan and Project Description:		Working with MWRD	; 30% complete.		
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority					
Completion status legend:  N = New; I = In Progress Toward Completion;  O = Ongoing Indefinitely; C = Project Completed;		О			

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

Mitigation Action #10: Flood	<del>, , , , , , , , , , , , , , , , , , , </del>					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	High	Funding	Projected	Mitigated:	
Steger Public Works	Organizations:		Source:	Completion	Flooding	
	EMA, private		General	Date:		
	engineering firm knight		Fund, HMGP, BRIC, FMA	Current work will terminate in		
	engineering		DNIC, FIMA	2019, and the		
	Criginocring			project will be		
				less than 20%		
				funded. Long-		
				term		
Year Initiated		2019				
Applicable Jurisdiction		Village of Steger				
Applicable Goal		1,2,3,4,5,6 2,9,13				
Applicable Objective	Applicable Objective					
		High—Existing funding will not cover the cost of the project; implementation				
Cost Analysis (Low, Medium	, High)	would require new revenue through an alternative source (for example, bonds,				
		grants, and fee incre	ases).			
Priority and Level of Importance (Low, Medium, High)		High				
			High—Project will provide an immediate reduction of risk exposure for life and			
Benefits of the Mitigation Pro	piect (Loss Avoided	property.				
or Issue Being Mitigated)		As recent today the area is in flood condition and has previously flooded last				
		12 months. Dence residential area with school both police and fire				
A :: (1		departments Hqs impacted.				
Action/Implementation Plan and Project		The current engineering firm has a detail plan to mitigate completely.  However, funding is 75% short.				
Description:		Thowever, runding is	7570 811011.			

Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;	
<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;	0
<b>R</b> = Want Removed from Annex; <b>X</b> = No Action	
Taken/Delayed	

# **Completed Actions**

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

### **Completed Action Items**

Where feasible, implement a program to record high water marks following high-water events.

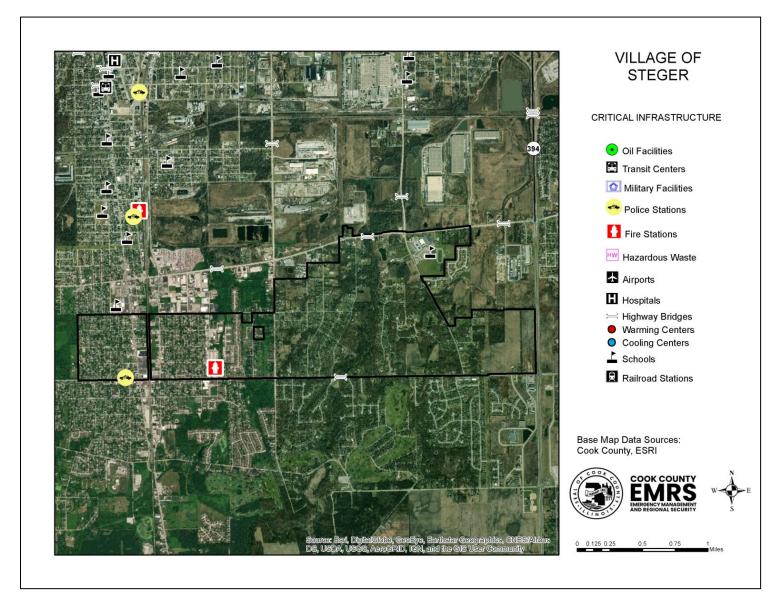
# **Future Needs to Better Understand Risk/Vulnerability**

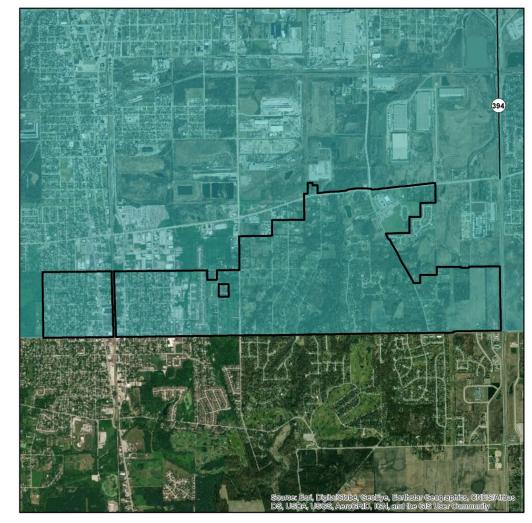
No needs have been identified at this time.

## **Additional Comments**

No additional comments at this time.

# **Hazard Mapping**





### VILLAGE OF STEGER

#### 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.

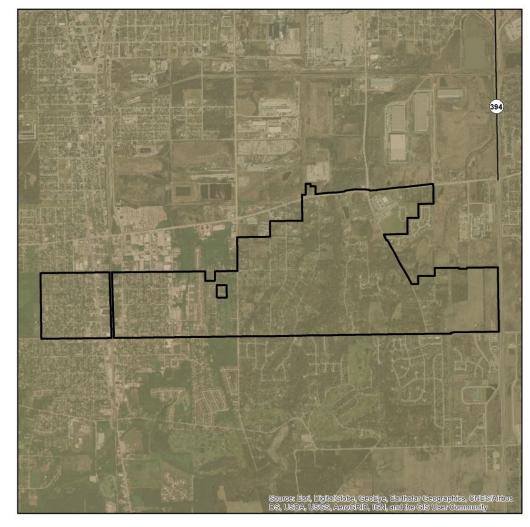
Probabilistic seismic-hazard maps were prepared for the conterminous United States for 2014 portraying peak horizontal acceleration for 0.2 and 10-second professional acceleration for 0.2 and 10-second periods with probabilities of exceedance of 10 percent in 50 years and 2 percent in 50 years. All of 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 side condition is firm rock, defined as having an average shear-wave velocity of 760 m/s in the top 30 meters corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction program) site classes B and C.

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, inferier, 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 contained on this map, any supplementation of Cook County.





0 0.125 0.25 0.5 0.75 1 Mile



#### VILLAGE OF STEGER

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 Soll Site Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase II work FHD 1953 Geologic Investigation Series 12/789 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 State 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.

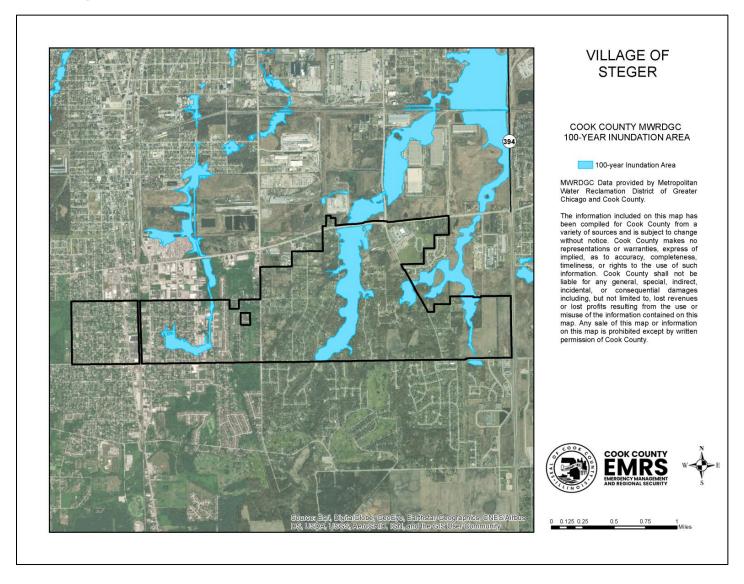
The information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warranties, express of implied, as to accuracy, completeness, timeliness, or rights to the use of such information. Cook County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

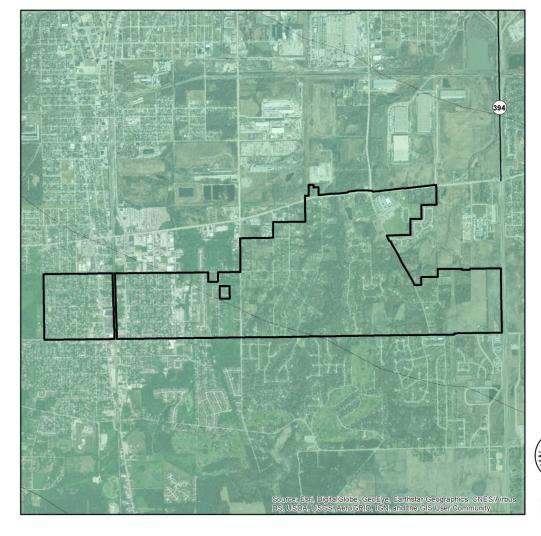




0 0.125 0.25 0.5 0.75 1 Mile

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 <a href="http://www.fema.gov">http://www.fema.gov</a>.





#### VILLAGE OF STEGER

#### LIQUEFACTION SUSCEPTIBILITY

#### LIQUEFACTION SUSCEPTIBILITY

high low

very low

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

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil State Class map (NEHPS 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 Castastophic Planning Initiative Phase II work. The USSG Seologic Investigation Series 1-2789 Map of Sufficial Deposits and Materials in the Eastern and Central United State (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean N. Penneil (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Stote Class and Liquefaction Succeptibility maps. The procedures outlined in the Cookes (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 bedrook 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 ampfication.

The information included on this map has been compiled or 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, 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 contained on this map. Any sale of this map or information contained on this map. Any sale of this map or information contained on this map. Any sale of this map or information colock County.





0 0.125 0.25 0.5 0.75 1

