

**COOK COUNTY
MULTI-JURISDICTIONAL
HAZARD MITIGATION PLAN
VOLUME 2 - Municipal Annexes**

Posen Annex

FINAL

July 2019

Prepared for:



Cook County
Department of Homeland Security and Emergency Management
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Hazard Mitigation Point of Contact

Primary Point of Contact	Alternate Point of Contact
Kevin Szewczyk, Fire Chief 2440 Walter Zimny Drive Posen, Illinois 60469 Telephone: 708-385-3110 Email Address: kszewczyk@villageofposen.org	Dawn Cotillo, Bldg. Inspector 2440 Walter Zimny Drive Posen, Illinois 60469 Telephone: 708-385-3110 Email Address: dcotillo@villageofposen.org

Jurisdiction Profile

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

- **Date of Incorporation:** 1901
- **Current Population:** 5,851 as of the 2018 US Census population estimate.
- **Population Growth:** As of the 2010 census, there were 5,987 people, 1,765 households, and 1,383 families residing in the village. Population increased by more than 26% from the 2000 Census. From 2010 to 2016, there has been a slight decrease of around 1 percent in the Village of Posen.
- **Location and Description:** The Village of Posen, Illinois is a small suburban community 2 miles from the City of Chicago’s South border. Posen is bordered by Blue Island to the north, Harvey to the south, Midlothian to the west, and Dixmoor to the east. The Village of Posen is densely populated with approximately 5900 residents in roughly a one square mile area. The village is mostly bedroom community with low to moderate-income residents. Within the village are two industrial parks which are mostly vacant and a third industrial manufacturing area has been closed for years and is awaiting purchase for redevelopment. Also running through the village are three major highways, Interstates 57 and 294 along with State Route 83, all of which are major thoroughfares for interstate commerce. Two major railroads, the Canadian National and the Indiana Harbor belt intersect in the Village of Posen and enter a switching and staging yard in neighboring Blue Island. The village is also home to three public elementary schools, which have doubled in size in recent years. The Village of Posen has a total land area of 1.17 square miles.
- **Brief History:** The area that is now Posen was settled by farmers, mainly of Dutch and German origin, in the second half of the 19th century. In 1893 a Chicago-based real estate firm hired 75 agents in the Polish-speaking areas of Germany to sell land to Poles seeking to immigrate to the United States. Over the next few years the village emerged as a place largely inhabited by factory workers, mainly employed in nearby Harvey. In 1894 the Roman Catholic Archdiocese of Chicago established a mission to serve the Polish residents of Posen, which was elevated to parish status as St. Stanislaus the Martyr in 1898. In the 1930s the population of Posen was 98% of Polish origin, and in 1960 only 0.1% of the population was identified in the census as being not white, or 4 of the 4,513 inhabitants. In 1990 Posen, having fallen to 4,226 inhabitants, was still 94.5% white, a large portion of this population being Polish. About 4% of the population identified as being both white and Hispanic for an overall 7.3% or 310 people identifying as being Hispanic. In 2010, 3,171 residents of Posen identified as Hispanic, representing the expansion of the Hispanic population to 10 times what it had been 20 years before (or an increase of more than 900% over 10 years). In the same time period the number of African American residents of the village increased from 60 (or 1.4% of the population) to 1,035. This means that the percentage rate of growth of the African American population of Posen over the last 20 years has been greater than that of the Hispanic population. While as late as 2004 the Encyclopedia of Chicago still referred to Posen as “predominantly Polish American” even then an actual examination of the 2000 census ancestry report would have shown that only a quarter of the population claimed to have Polish ancestry.

- **Climate:** The climate in Posen is typical for the mid-west. Average rainfall is 32 inches and the average snow fall is 24 inches annually. The July high temperature is 83 degrees and the January low temperature is 11 degrees. The comfort index, which is based on humidity during hot months, is 46, which is close to the national average of 44.
- **Governing Body Format:** The Village of Posen is a home rule community with a council-manager form of government that provides policy leadership by elected official. The Village Board is composed of six Trustees and one Village President, who is the Mayor. This body of Government will assume the responsibility for the adoption and implementation of this plan. The Village consists of four departments including: Police Department, Fire Department, Public Works Department, and Building Department.
- **Development Trends:** The developmental trends for the Village of Posen are low to moderate consisting primarily of the redevelopment of older commercial and residential properties. The village is landlocked so further annexations of vacant land are no longer possible. According to the plan some rezoning for redevelopment may be needed in the future. There are some new businesses/developments coming to Posen such as a Climate Controlled Storage Facility to be located in the 147th block of Western Ave., and a Thornton’s Fuel Station located on 147th and Western Ave.

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 & Requirements					
Building Code	Yes	No	No	Yes	Code# 6-1-1 BOCA 11th edition 1990, adopted: 7/13/1999
Zonings	Yes	No	No	Yes	Code# 2-1-1 Adopted: 2/23/1988
Subdivisions	Yes	No	No	No	
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. MWRD Code # 4-4-9 Adopted: 2/23/1988
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	Yes	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.

					Code 6-16-1 Adopted: 7/23/1991
Growth Management	No	No	No	No	
Site Plan Review	No	No	No	No	Ord.# 1-14-3
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health. Code# 1-14-3 Adopted 2/25/1965
Environmental Protection	No	No	Yes	Yes	Cook County EPA IEPA
Planning Documents					
General or Comprehensive Plan	No	No	No	No	
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>					N/A
Floodplain or Basin Plan	Yes	No	IEMA	No	Ord.#?2008-21 Adopted: 11/25/2008
Stormwater Plan	No	No	MWRD	No	
Capital Improvement Plan	No	No	No	No	
<i>What types of capital facilities does the plan address?</i>					N/A
<i>How often is the plan revised/updated?</i>					N/A
Habitat Conservation Plan	No	No	IEPA	No	
Economic Development Plan	No	No	Yes	Yes	The Economic Development Commission is charged with reviewing all economic development related programs and incentives including tax incentives

					offered through the Cook County 6b program.
Shoreline Management Plan	No	No	No	No	
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	Yes	Yes	Cook County DHSEM
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County DHSEM preparing THIRA
Terrorism Plan	No	No	Yes	Yes	Cook County DHSEM
Post-Disaster Recovery Plan	No	No	No	No	
Continuity of Operations Plan	No	No	Yes	No	Cook County DHSEM
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	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	No

Development Impact Fees for Homebuyers or Developers	No
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TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY		
Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	No	
Engineers or professionals trained in building or infrastructure construction practices	No	
Planners or engineers with an understanding of natural hazards	No	
Staff with training in benefit/cost analysis	No	
Surveyors	No	
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Cook County DHSEM
Grant writers	No	

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Posen Public Works Dept.
Who is your jurisdiction’s floodplain administrator? (department/position)	Public Work Director
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	11/25/2008
When was the most recent Community Assistance Visit or Community Assistance Contact?	3/24/2004
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	Yes; According to Illinois Department of Natural Resources, there are violations present.
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
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

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	4	1/1/2008
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	No	N/A	N/A

Jurisdiction-Specific Natural Hazard Event

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: 4
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment
Severe Weather	-	6/22/2016	-
Severe Storm	DR-4116	4/26/2013	-
Winter Snow Storm	DR-1960	1/31/2011	-
Severe Storms/Flooding	DR-1935	7/19/2010	-
Severe Storms/Flooding	DR-1800	9/13/2008	-
Severe storms/flooding	DR-1729	8/20/2007	-
Flooding	DR-1188	8/16/1997	-
Flooding	DR-1129	7/17/1996	-
Severe Storms/Flooding	DR-997	4/13/1993	-
Severe Storms/Flooding	DR-776	9/21/1986	-
Severe Storms/Flooding	DR-643	6/30/1981	-
Severe Storms/Flooding	DR-509	6/18/1976	-

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	Risk Rating Score (Probability x Impact)
1	Flood	54
2	Severe Weather	54
3	Severe Winter Weather	54
4	Tornado	54
5	Earthquake	32
6	Drought	2
7	Dam Failure	0

Mitigation Strategies and Actions

The heart of the mitigation plan is the mitigation strategy, which serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The mitigation strategy describes how the community will accomplish the overall purpose, or mission, of the planning process. In this section, mitigation actions/projects were updated/amended, identified, evaluated, and prioritized. This section is organized as follows:

- New Mitigation Actions - New actions identified during this 2019 update process
- Ongoing Mitigation Actions - Ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.
- Completed Mitigation Actions - An archive of all identified and completed projects, including completed actions since 2014.

The *Hazard Mitigation Action Plan Matrix Table* below lists the actions that make up the jurisdiction’s hazard mitigation plan. The *Mitigation Strategy Priority Schedule Table* identifies the priority for each action.

TABLE: HAZARD MITIGATION ACTION PLAN MATRIX						
Status	Hazards Mitigated	Objectives Met	Lead Agencies	Estimated Cost	Sources of Funding	Timeline/Projected Completion Date (a)
Action P8.1 —Separate combined sewer/Storm water systems.						
Ongoing	Flood, Severe Weather	1, 2, 9	Public Works, Building Department	High	FEMA Mitigation Grant	Long-term
Action P8.2 —Update the Village Emergency Operations Center.						
Completed	All	1, 2	Fire Department	Minimal	General Fund	Completed
Action P8.3 —Replace lift station/provide emergency power at 149th and Harrison Streets to eliminate basement flooding						
Ongoing	Flood, Severe Weather	2, 9	Public Works, Building Department	High	FEMA Mitigation Grant	Long-term
Action P8.4 —Replace tornado warning siren; add additional siren for better coverage.						

Ongoing	Tornado, Severe Weather	1, 5	Fire Department	Medium	General Fund/Grants	Short-term
Action P8.5 —Replace old water mains/increase capacity.						
Ongoing	All	1, 2	Public Works	High	FEMA Mitigation Grants/Tax Increment Financing	Long-term
Action P8.6 —Continue community notification system; improve by adding automated weather notification system and increase use through publicity campaign.						
Ongoing	All	1, 5	Fire Department	Low	General Fund	Long-term
Action P8.7 —Continue to participate in mutual aid programs for fire, police, and public works departments.						
Ongoing	All	1, 8	Fire Department, Police Department, Public Works	Low	General Fund	Long-term
Action P8.8 —Strengthen building codes; review codes to minimize damage from all hazards.						
Ongoing	All	2, 3, 10	Building Department	Minimal	General Fund	Short-term
Action P8.9 —Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.						
Ongoing	All	7, 13	Village of Posen	High	FEMA Hazard Mitigation Grants	Long-term(depending on funding)
Action P8.10 —Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	Village of Posen	Low	General Fund	Short-and Long-term
Action P8.11 —Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6	DHSEM, Village of Posen	Low	General Fund	Short-term

Action P8.12 —Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady						
Ongoing	All	3, 4, 5, 6, 7, 9, 10, 11, 13	Village of Posen	Low	General Fund	Long-term
Action P8.13 —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.						
Ongoing	Flooding	4, 6, 9	Village of Posen	Low	General Fund	Short-term and ongoing
Action P8.14 —Where feasible, implement a program to record high water marks following high-water events.						
Ongoing	Flooding, Severe Weather	3, 6, 9	Village of Posen	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
Action P8.15 —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
Ongoing	All	3, 4, 6, 10, 13	Village of Posen	Low	General Fund	Short-term
Action P8.16 —Consider the development and implementation of a Capital Improvements Program (CIP) to increase the Village’s regulatory, financial and technical capability to implement mitigation actions.						
Ongoing	All	1, 2, 7	Public Works	High	CIP Component of general fund(if implemented)	Long-term
Action P8.17 —Posen 18-IGA-15 Village of Posen Green Infrastructure Project - Rain Garden and Permeable Block Parking Lots						
New	Flood	13	MWRD	\$180,000; Low	Grant from MWRD	11/2019
(a) Ongoing indicates continuation of an action that is already in place. Short-term indicates implementation within five years. Long-term indicates implementation after five years.						

TABLE: MITIGATION STRATEGY PRIORITY SCHEDULE

Action Number	Number of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Priority (a)
1	3	High	High	Yes	Yes	No	High
2	2	High	Low	Yes	No	Yes	High
3	2	High	High	Yes	Yes	No	High
4	2	High	Medium	Yes	No	Yes	Medium
5	2	High	High	Yes	Yes	No	High
6	2	High	Low	Yes	No	Yes	High
7	2	High	Low	Yes	No	Yes	High
8	3	Medium	Low	Yes	No	Yes	High
9	2	High	High	Yes	yes	No	Medium
10	13	Medium	Low	Yes	No	Yes	High
11	3	Medium	Low	Yes	Yes	Yes	High
12	9	Medium	Low	Yes	No	Yes	Medium
13	3	Medium	Low	Yes	No	Yes	High
14	3	Medium	Medium	Yes	Yes	No	Medium
15	5	Medium	Low	Yes	No	Yes	High
16	3	High	High	Yes	No	No	Medium
17	1	High	Low	Yes	Yes	Unknown	High

(a) See Chapter 1 for explanation of priorities.

New Mitigation Actions

The following are new mitigation actions created during the 2019 update.

Action P8.17

Mitigation Action	Posen 18-IGA-15 Village of Posen Green Infrastructure Project - Rain Garden and Permeable Block Parking Lots
Year Initiated	2018
Applicable Jurisdiction	Village of Posen
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	
Applicable Goal	<ul style="list-style-type: none"> • Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects. • Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards. • Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events. • Develop, promote, and integrate mitigation action plans.
Applicable Objective	<ul style="list-style-type: none"> • Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.
Potential Funding Source	Grant from MWRD for rain garden and permeable block parking lots
Estimated Cost	\$180,000
Benefits (loss avoided)	Rain water control - flood management
Projected Completion Date	11/2019
Priority and Level of Importance (Low, Medium, High)	High Priority
Benefit Analysis (Low, Medium, High)	High—Project will provide an immediate reduction of risk exposure for life and property.
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.
Actual Completion Date	TBD

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	Grant funding for this project has been approved by MWRD. They are currently performing all the engineering work for this project and when plans are complete, project will be placed out for bid.

Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	
2020		
2021		
2022		
2023		

Mitigated Hazards	
	All Hazards
	Dam/Levee Failure
	Drought
	Earthquake
X	Flood
	Extreme Heat
	Lightning
	Hail
	Fog
	High Wind
	Snow
	Blizzard
	Extreme Cold
	Ice Storms
	Tornado
	Epidemic or pandemic
	Nuclear Power Plant Incident
	Widespread Power Outage
	Coastal Erosion
	Secondary Impacts from Mass Influx of Evacuees
	Hazardous Materials Incident

Ongoing Mitigation Actions

The following are ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Action P8.1

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.1	Separate combined sewer/Storm water systems	
Status Description: No	No action started on this project	X-Funding for project not available
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.3

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.3	Replace lift station/provide emergency power at 149th and Harrison Streets to eliminate basement flooding.	
Status Description: Yes	Seeking funding for this project. Engineering completed.	O-Listed as a priority with the State of Il. Infrastructure Bill
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.4

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.4	Replace tornado warning siren; add additional siren for better coverage.	
Status Description: No	Seeking funding for this project. no progress made.	O-In progress, obtaining quotes presently and funding through TIF Funds available
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.5

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.5	Replace old water mains/increase capacity.	
Status Description: Yes	The Village has completed engineering and plans to replace approximately 3000' of water main, Add an additional main leaving our main pumping station and adding a 1 million gallon storage tank to boost fire flows. Application being made for federal funding	O- The additional water main leaving our pumping facility has been completed. Low interest EPA loan applied for to replace water mains is ongoing.
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.6

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.6	Continue community notifications system; improve by adding automated weather notification system and increase use through publicity campaign.	
Status Description: No	Seeking funding for this project. No progress made.	X
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.7

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.7	Continue to participate in mutual aid programs for fire, police and public works departments.	
Status Description: Yes	Ongoing mutual aid agreements in place for Police, Fire, and Public Works. Recently completed MOU for use of equipment through Cook County DHS	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.8

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.8	Strengthen building codes, review codes to minimize damage from all hazards.	
Status Description: Yes	Ongoing updates of codes.	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.9

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.9	Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.	
Status Description: No	Seeking funding for this project. no progress made.	X
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.10

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.10	Continue to support the county-wide actions identified in this plan.	
Status Description: Yes	Ongoing support given	O
<p>Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.11

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.11	Actively participate in the plan maintenance strategy identified in this plan.	
Status Description: Yes		O
<p>Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.12

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.12	Consider participation in incentive based programs such as the Community Rating System, Tree City and StormReady.	
Status Description: No	Seeking funding for this project. no progress made.	X
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.13

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.13	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 flood plain mapping updates, and providing public assistance and information on floodplain requirements and impacts.	
Status Description: Yes	Minimum NFIP requirements being followed. We look to expand in this area with more training	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.14

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.14	Where feasible, implement a program to record high water marks following high-water events.	
Status Description: No	No progress made.	X
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.15

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
#8.15	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment	
Status Description: Yes	Ongoing	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P8.16

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 18.16	Consider the development and implementation of a Capital Improvements Program (CIP) to increase the Village's regulatory, financial and technical capability to implement mitigation actions.	
Status Description: No	Seeking funding for this project. No progress made.	X
<p style="text-align: center;">Completion status legend:</p> <p style="text-align: center;"> N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken </p>		

Completed Mitigation Actions

The following section represents completed mitigation actions, and serves as an archive of identified and completed projects.

Action P8.2

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 8.2	Update Village Emergency Operations Center	
Status Description: Yes	The Village has entered into agreement with the Village of Calumet Park to join ETSB 911 boards and 911 center. As a result Posen will utilize an established EOC at the 911 center.	C
<p style="text-align: center;">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Future Needs to Better Understand Risk/Vulnerability

No needs have been identified at this time.

Additional Comments

The Village of Posen has ongoing and historical incidences of basement flooding, which affects about one-third of the homes occupied by full-time residents. Flood losses in the Village have not been accurately recorded for a variety of reasons; primarily due to a lack of claim requests by residents for the full cost of recovery from flood damage. The Village of Posen has 8 structures that have been identified as repetitive loss structures, mostly homes with repeated basement flooding.

One other item that could affect the Village of Posen, but that is not clearly addressed in this natural hazard data gathering process is as follows:

The CSX Railroad and Indiana Harbor Belt Railroad parallel the Village of Posen, making passing by automobile down Western Avenue practically impossible, if a train is stopped on the single crossing or derailed at that location. These two railroads parallel each other at Western Avenue are separated by less than 1/2 mile. When both crossings are blocked by trains, this 1/2 mile completely cuts off access to business and residences in between the 2 crossings. This includes 3 high capacity Mobile Home parks, several single and multiple family dwellings, as well as approximately 10 businesses that get cut off from customer and delivery traffic. In the past 20-plus years, there have been several derailments or breakdowns which caused a blockage of traffic for two days or more although it did not result in significant damage. A derailment involving a chemical spill or other hazard would be a significant impact on the entire community.

HAZUS-MH Risk Assessment Results

POSEN EXISTING CONDITIONS	
2010 Population	5,987
Total Assessed Value of Structures and Contents	\$2,499,820,335
Area in 100-Year Floodplain	89.67 acres
Area in 500-Year Floodplain	101.85 acres
Number of Critical Facilities	18

HAZARD EXPOSURE IN POSEN						
	Number Exposed		Value Exposed to Hazard		Total	% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents		
Dam Failure						
Buffalo Creek	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	0	0	\$0	\$0	\$0	0.00%
Touhy	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	0	0	\$0	\$0	\$0	0.00%
Flood						
100-Year	351	108	\$48,283,165	\$38,339,893	\$86,623,058	3.47%

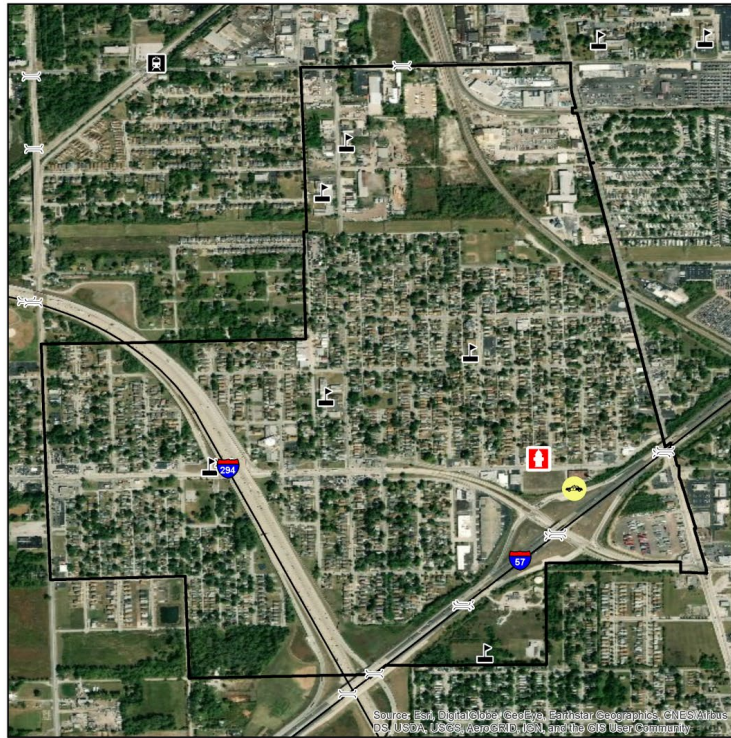
500-Year	348	107	\$48,100,451	\$38,248,537	\$86,348,988	3.45%
Tornado						
100-Year	—	—	\$439,993,794	\$346,577,124	\$786,570,918	31.47%
500-Year	—	—	\$974,481,718	\$849,891,151	\$1,824,372,869	72.98%

ESTIMATED PROPERTY DAMAGE VALUES IN POSEN

	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	Total	
Dam Failure				
Buffalo Creek	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	\$0	\$0	\$0	0.00%
Touhy	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	\$0	\$0	\$0	0.00%
Earthquake				
1909 Historical Event	\$11,710,386	\$3,764,051	\$15,474,436	0.62%
Flood				
10-Year	\$459,491	\$416,347	\$875,838	0.04%
100-Year	\$1,683,118	\$1,212,161	\$2,895,279	0.12%
500-Year	\$2,038,215	\$1,571,663	\$3,609,879	0.14%

Tornado				
100-Year	\$43,999,379	\$34,657,712	\$78,657,092	3.15%
500-Year	\$142,274,331	\$124,084,108	\$266,358,439	10.66%

Hazard Mapping



VILLAGE OF POSEN

CRITICAL INFRASTRUCTURE

- Oil Facilities
- Transit Centers
- Military Facilities
- Police Stations
- Fire Stations
- Hazardous Waste
- Airports
- Hospitals
- Highway Bridges
- Warming Centers
- Cooling Centers
- Schools
- Railroad Stations

Base Map Data Sources:
Cook County, ESRI



0 0.05 0.1 0.2 0.3 0.4
Miles

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



VILLAGE OF POSEN

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

Mercalli Scale, Potential Shaking

- II-III Weak

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

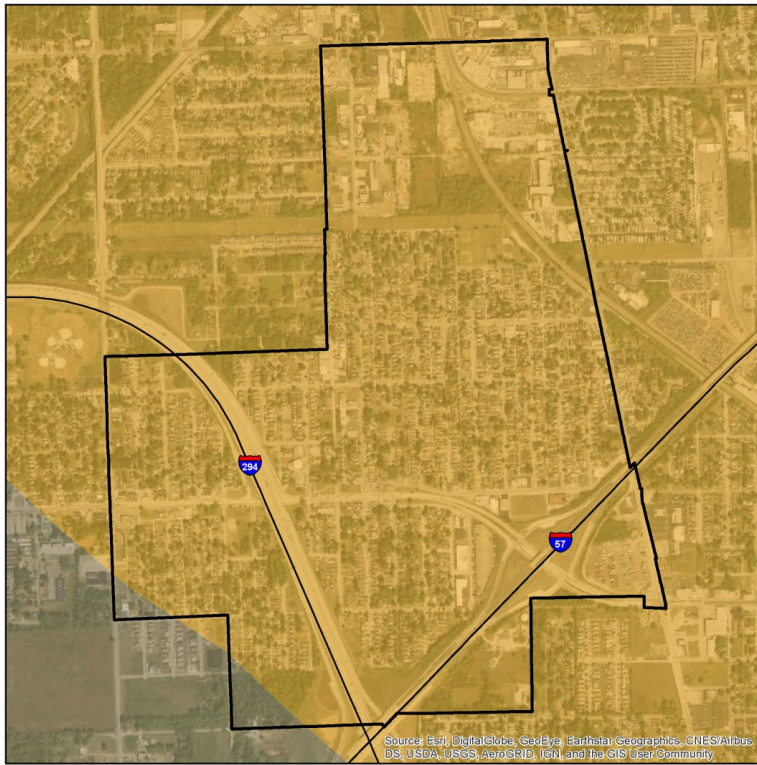
Probabilistic seismic-hazard maps were prepared for the conterminous United States for 2014 portraying peak horizontal acceleration and horizontal spectral response acceleration for 0.2- and 1.0-second periods with probabilities of exceedance of 10 percent in 50 years and 2 percent in 50 years. All of the maps were prepared by combining the hazard derived from spatially smoothed historical seismicity with the hazard from fault-specific sources. The acceleration values contoured are the random horizontal component. The reference site condition is firm rock, defined as having an average shear-wave velocity of 750 m/s in the top 30 meters corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction Program) site classes B and C.

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0 0.05 0.1 0.2 0.3 0.4
Miles

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



**VILLAGE OF
POSEN**

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

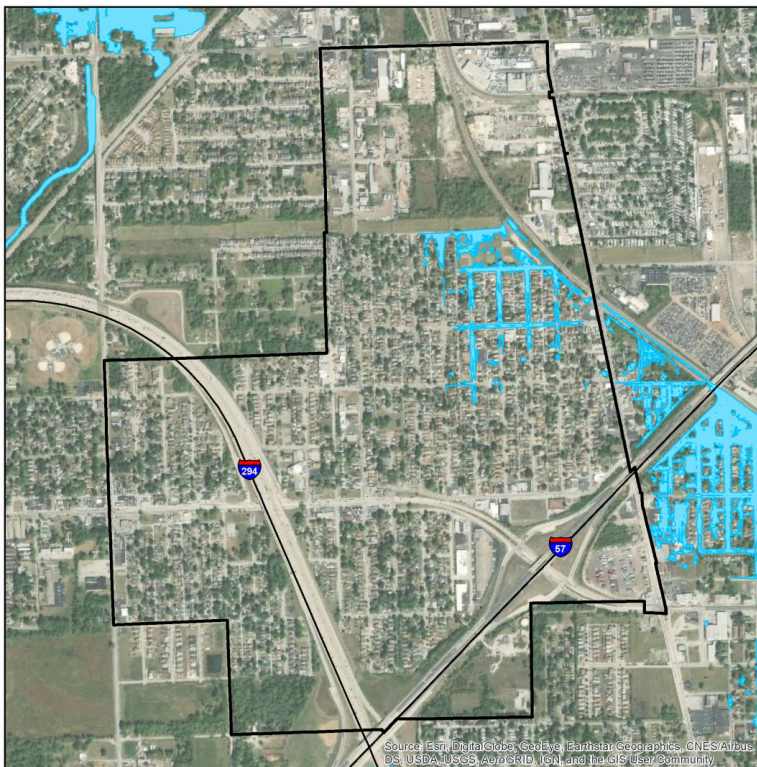
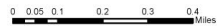
TYPE

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

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

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase I work. The USGS Geologic Investigation Series I-2789 Map of Surficial Deposits and Materials in the Eastern and Central United State (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean N. Pienell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes (International Code Council, 2002) were followed to produce the soil site class maps. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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**VILLAGE OF
POSEN**

**COOK COUNTY MWRDGC
100-YEAR INUNDATION AREA**

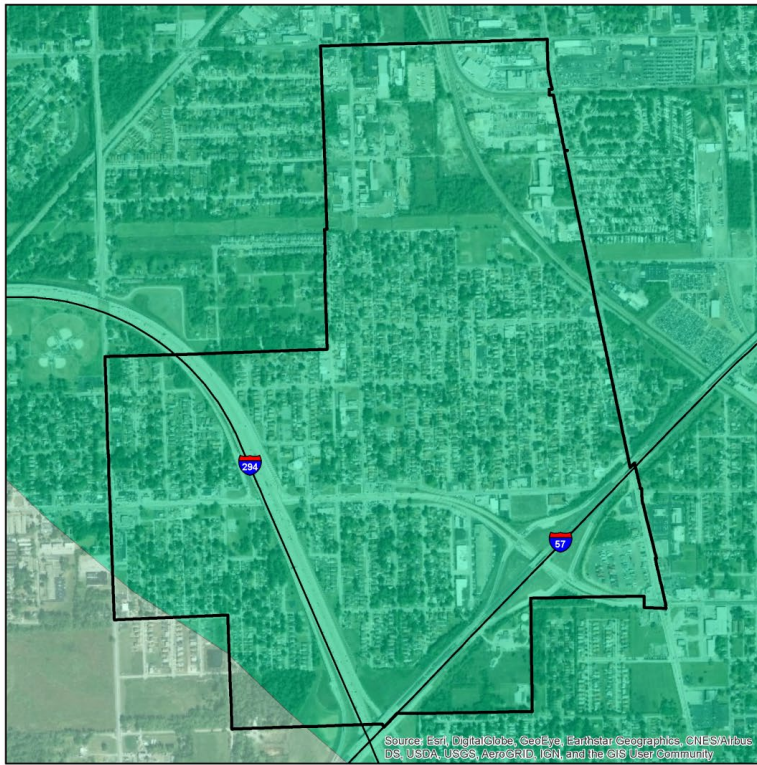
- 100-year Inundation Area

MWRDGC Data provided by Metropolitan Water Reclamation District of Greater Chicago and Cook County.

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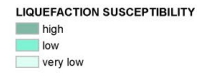
DISCLAIMER: The Cook County MWRDGC 100-year Inundation Map is provided to show general flood risk information regarding floodplains and inundation areas. This map is not regulatory. Official FEMA Flood Insurance Study information and regulatory maps can be obtained from <http://www.fema.gov>.





VILLAGE OF POSEN

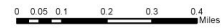
LIQUEFACTION SUSCEPTIBILITY



Data provided by the Illinois State Geological Survey and Cook County

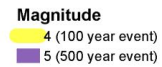
The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase I work. The USGS Geologic Investigation Series I-2789 Map of Surficial Deposits and Materials in the Eastern and Central United States (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean H. Pennel (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes (International Code Council, 2002) were followed to produce the soil site class maps. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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VILLAGE OF POSEN

100- AND 500- YEAR TORNADO EVENTS



Historic tornado data provided by NOAA/NWS showing the initial points and paths of all F4 and F5 events observed from 1950 to 2017.

