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

# **Maywood Annex**

#### **FINAL**

July 2019

Prepared for:



Cook County
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# Hazard Mitigation Point of Contact

Primary Point of Contact	Alternate Point of Contact
Craig Bronaugh, Fire Chief	John West, Director of Public Works
700 St. Charles Road	40 Madison St,
Maywood, IL 60153	Maywood, IL 60153
Telephone: 708-257-5794	Telephone: 708-491-8842
Email Address:	Email Address:
cbronaugh@maywoodfire-il.org	jwest2@maywood-il.org

#### Jurisdiction Profile

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

• Date of Incorporation: 1881

• **Current Population:** 23,368 as of the 2018 U.S. Census population estimate.

- Population Growth: Maywood's economic development and population growth has hinged on light history, dating back to 1884. By the year 1901 the American Can Company was established. Other industries came to the area settling in the factory district along what is now known as the Union Pacific Rail Line. Most of the industries transferred out of the region in the 1970s, resulting in a significant departure of residents. There was a bit of a rebound in the 1990. Economic change has been also accompanied by demographic shifts, as the African American population increased from three to eighty-two percent in the year 2000. Whites and Hispanics constitute ten and eleven percent of the population, respectively, and live in the village's integrated north eastern section. Recent population trends have been declining, with a 1.4 percent loss of population from 2010 to 2016.
- Location and Description: The Village of Maywood is located eleven miles west of the Chicago Loop. A planned community from the outset, Maywood lies on the west bank of the Des Plaines River, stretching from Roosevelt Road on the south to just beyond Augusta Street on the North. Maywood was originally part of a larger area known as Noyesville, named after one of Proviso Township's early settlers, who established the area's first post office in the mid-1830s.
- **Brief History:** In the year 1869, a group of Vermont businessmen formed the Maywood Company and purchased the Village's original plat- a narrow, one-and-three-quarters-mile strip along the Des Plaines River. Company president William T. Nichols named the village after his daughter May, and immediately began subdividing the land and creating improvements necessary to "build up a neat, desirable suburb." In 1870, wide streets were laid out, 20,000 trees were planted, and building commenced on the north side of the Chicago and Northwestern railroad tracks (now known as the Union Pacific railroad tracks), which bisected the community. In the same year, an advertisement boasted easy access to the city with regular train service, as well as a school, churches, post office grocery store, hotel and a beautiful park, as among Maywood's many amenities.
- Climate: Maywood's weather is typical of the Great Lakes Region. The village experiences all four seasons. Although mostly typical of the seasons, there has been a tendency to be a bit of unusual weather patterns over the last five years. Even so, the weather has proven to be extreme during the summer and winter seasons. The precipitation has been down for some time, although the area has experienced more snow than last year (even at this point).
- Governing Body Format: The Village of Maywood is governed by a seven-member council. The Village consists of eight departments: Finance, Community Development, Public Works, Police, Fire, Water and the Village Manager's Office. The Village has thirteen Committees, Commissions and Task Forces, which report to the City Council. The Fire Department Chief and Captain will assume the responsibility for the adoption and implementation of this plan.

• Development Trends: Development has been low, consisting primarily of residential development. Crime and the economy has been a factor in the low activity of development in the community. The Village established Tax Increment Finance Districts in an effort to spur development. Although crime has come down significantly over the last eight to ten years, effects from the economy, many residents not having much money and a lack of small business owners, development has been at a standstill. In December 2017, Maywood Board of Trustees, William Paul, the president of Xsite Real Estate, presented a plan to the board that would entail redeveloping three parcels of land on First and Lake. development prospects could range from retailers and restaurants to apartments.

## 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 & F	Requirements	3			
Building Code	Yes	No	No	Yes	In accordance with Public Act 096-0704, Illinois has adopted the IBC as its state Building Code Not Found
Zonings	Yes	No	No	Yes	Maywood Zoning Ordinance CO- 2010-20 Amended: 11/16/2010
Subdivisions	Yes	No	No	No	Not Found
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Not Found
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	No	No	No	No	
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health.
Environmental Protection	No	No	No	No	
Planning Documents					
General or Comprehensive Plan	Yes	No	No	No	Maywood Comp. Plan, April 2008
Is	the plan equi	ipped to provide	linkage to this mit	igation plan?	Yes- Land Use, Natural Resources, Redevelopment
Floodplain or Basin Plan	No	No	No	No	
Stormwater Plan	No	No	MWRD	No	
Capital Improvement Plan	No	No	No	No	
	What	types of capital	facilities does the p	lan address?	N/A
		How oft	en is the plan revis	ed/updated?	N/A
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	No	No	Yes	Yes	The Economic Development Commission is charged with reviewing all economic development related programs and incentives including tax incentives offered through the Cook County 6b program.

Shoreline Management Plan	No	No	No	No	
Response/Recovery Pl	anning				
Comprehensive Emergency Management Plan	Yes	No	Yes	Yes	Cook County DHSEM
Threat and Hazard Identification and Risk Assessment	Yes	No	Yes	No	Cook County DHSEM Preparing THIRA
Terrorism Plan	Yes	No	Yes	Yes	Cook County DHSEM
Post-Disaster Recovery Plan	No	No	No	No	
Continuity of Operations Plan	Yes	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	Yes	
Authority to Levy Taxes for Specific Purposes	Yes	
User Fees for Water, Sewer, Gas or Electric Service	Yes	
Incur Debt through General Obligation Bonds	No	
Incur Debt through Special Tax Bonds	Yes	
Incur Debt through Private Activity Bonds	No	
Withhold Public Expenditures in Hazard-Prone Areas	Yes	
State Sponsored Grant Programs	No	
Development Impact Fees for Homebuyers or Developers	No	

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	Yes	Contracted	
Planners or engineers with an understanding of natural hazards	Yes	Contracted	
Staff with training in benefit/cost analysis	Yes	Finance Department	
Surveyors	Yes	Contracted	
Personnel skilled or trained in GIS applications	No		
Scientist familiar with natural hazards in local area	No		
Emergency manager	Yes	Village Department	
Grant writers	Yes	Fire Department	

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE			
What department is responsible for floodplain management in your jurisdiction?	Code Department		
Who is your jurisdiction's floodplain administrator? (department/position)	Community Development		
Are any certified floodplain managers on staff in your jurisdiction?	No		
What is the date of adoption of your flood damage prevention ordinance?	8-19-2008/10-6-2009		
When was the most recent Community Assistance Visit or Community Assistance Contact?	Have not received Community Assistance Visit		
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No		
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes		
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No		

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

No, and yes we are interested in joining.

TABLE: COMMUNITY CLASSIFICATIONS				
	Participating?	Classification	Date Classified	
Community Rating System	No	N/A	N/A	
Building Code Effectiveness Grading Schedule	Yes	9/9	10-2012	
Public Protection/ISO	Yes	4	08/2012	
StormReady	Yes	Gold (Countywide)	2014	
Tree City USA	No	N/A	N/A	

# Jurisdiction-Specific Natural Hazard Event

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: 3
- 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
Flash Flood	-	8/17/2015	-
Lightning	-	8/17/2015	\$2,000 in property damage.
Flash Flood	-	6/15/2015	-
Flash Flood	-	8/22/2014	-
Flash Flood	-	8/4/2014	\$150,000 in property damage.
Flash Flood	-	6/24/2014	-
Severe Storms	DR-4116	2013	-
Severe Winter Storms	DR-1960	2011	-
Severe Storms/Flooding	DR-1935	2010	-
Severe Storms/Flooding	DR-1800	2008	-
Severe Storms/Flooding	DR-1729	2007	-
Severe Winter Storm	EM-3161	2000	-
Winter Snow Storm	EM-3134	1999	-
Flooding	DR-1188	1997	-
Flooding	DR-1129	1996	-

Severe Storms/Flooding	DR-997	1993	-
Severe Storms/Flooding	DR-798	1987	-
Severe Storms/Flooding	DR-776	1986	-

#### **Jurisdiction-Specific Hazards and Impacts**

Hazards that represent a county-wide risk are addressed in the Risk Assessment section of the 2019 Cook County Multi-Jurisdictional Hazard Mitigation Plan Update. This section only addresses the hazards and their associated impacts that are **relevant** and **unique** to the municipality.

*Flood:* Previously, the Village has experienced flooding in the following areas: Hugh Muir Lane (1st-5th), 17th Avenue Railroad, 9th and Warren (entire intersection), 2nd Avenue Pine, and 13th Ave (N. Maywood Dr. to Harrison). In addition, many impacted areas are dependent on MWRD closing the deep tunnel. In 2014, Flash/Urban flooding occurred leading Interstate 290 to be closed between 17th Avenue and 25th Avenue.

**High Winds:** High winds have caused large outages throughout the Village. Moreover, in the case that high winds and rainstorms occur simultaneously, properties become flooded.

**Tornado:** Similar to the impacts of high winds, tornadoes affect power, preventing many flood controls measures.

## 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	Severe Weather	54
2	Flooding	36
3	Severe Winter Weather	54
4	Tornado	42
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)
<b>Action M3.1</b> —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 Maywood	High	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
Action M3.2	2—Continue t	o support th	e countywide act	ions identifi	ed in this plan.	
Ongoing	All	Village of Maywood	Village of Maywood	Low	General Fund	Short-and long- term
Action M3.3	Action M3.3—Actively participate in the plan maintenance strategy identified in this plan.					
Ongoing	All	3, 4, 6	DHSEM,Village of Maywood	Low	General Fund	Short-term
	1—Consider p e City, and Sto	•	in incentive-based	d programs	such as the Com	munity Rating

Ongoing	All	3, 4, 5, 6, 7, 9, 10, 11, 13	Village of Maywood	Low	General Fund	Long-term
programs the	Action M3.5—Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.					
Ongoing	Flooding	4, 6, 9	Village of Maywood	Low	General Fund	Short-term and ongoing
Action M3.6 events.	6—Where fea	sible, implen	nent a program to	record high	n water marks fo	ollowing high-water
Completed	Flooding, Severe Weather	3, 6, 9	Village of Maywood	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Completed
	7—Integrate t use or redeve		itigation plan into	other plans	s, programs, or r	esources that
Ongoing	All	3, 4, 6, 10,	Village of Maywood	Low	General Fund	Short-term
	Action M3.8—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
		_	•	_		loors to help with ewer for Village Hall
New	Flood, Widespread Power Outage, Secondary Impacts from Mass Influx of Evacuees	2, 3, 12, 13	TBD	TBD	Madison TiF, general fund, CDBG funds	2018; 2019
Action M3.1	Action M3.10—Install First Avenue from Roosevelt Road to Cermak Road Flood Control					

New	Flood	2, 3, 12, 13	MWRD	\$652,000; High	MWRD	TBD	
Action M3.11—Launch Green Infrastructure Project							
New	Flood	2, 3 ,12, 13	MWRD	TBD	MWRD	TBD	

<sup>(</sup>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	2	High	High	Yes	Yes	No	Medium
2	13	Medium	Low	Yes	No	Yes	High
3	3	Medium	Low	Yes	Yes	Yes	High
4	9	Medium	Low	Yes	No	Yes	Medium
5	3	Medium	Low	Yes	No	Yes	High
6	3	Medium	Medium	Yes	Yes	No	Medium
7	5	Medium	Low	Yes	No	Yes	High
8	3	High	High	Yes	No	No	Medium
9	4	High	Unknown	Yes	Yes	Yes	Medium, High
10	4	High	High	Yes	Yes	Unknown	High
11	4	Medium	Unknown	Unknown	Yes	Unknown	Low
(a) See Ch	(a) See Chapter 1 for explanation of priorities.						

## **New Mitigation Actions**

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

Mitigation Action	Installation of green allies to help with flooding. Install new garage doors to help with emergency service participation during power outages; and integrating installing sewer for Village Hall
Year Initiated	2019
Applicable Jurisdiction	Maywood
Lead Agency/Organization	
Supporting Agencies/Organizations	
Applicable Goal	<ul> <li>Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards.</li> <li>Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events.</li> <li>Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.</li> </ul>
Applicable Objective	<ul> <li>Increase the resilience of (or protect and maintain) infrastructure and critical facilities.</li> <li>Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change.</li> <li>Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.</li> <li>Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.</li> </ul>
Potential Funding Source	Madison TIF, general fund, CDBG funds
Estimated Cost	TBD
Benefits (loss avoided)	Better drainage; quicker emergency response
Projected Completion Date	2018; 2019; varied on alleys
Priority and Level of Importance (Low, Medium, High)	Medium, High
Benefit Analysis (Low, Medium, High)	High
Cost Analysis (Low, Medium, High)	TBD
Actual Completion Date	

## **Recommended Mitigation Action/Implementation Plan and Project Description**

Action/Implementation Plan and Project Description:

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

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

Mitigation Action	Install First Avenue from Roosevelt to Cermak Road Flood Control
Year Initiated	2019
Applicable Jurisdiction	Village of Maywood
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	Village of Maywood
Applicable Goal	<ul> <li>Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards.</li> <li>Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events.</li> <li>Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.</li> </ul>
Applicable Objective	<ul> <li>Increase the resilience of (or protect and maintain) infrastructure and critical facilities.</li> <li>Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change.</li> <li>Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.</li> <li>Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.</li> </ul>
Potential Funding Source	MWRD
Estimated Cost	\$652,000
Benefits (loss avoided)	TBD
Projected Completion Date	TBD
Priority and Level of Importance (Low, Medium, High)	High
Benefit Analysis (Low, Medium, High)	High
Cost Analysis (Low, Medium, High)	High
Actual Completion Date	

**Recommended Mitigation Action/Implementation Plan and Project Description** 

Action/Implementation

ID: IDOT-15

Plan and Project

Contract: 14-111-5C

Description:

Watershed: Lower Des Plaines

Location: Maywood, IL

Flood relief along 1st Avenue from Roosevelt Road to Cermak Road

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

	Mitigated Hazards					
	All Hazards					
	Dam/Levee Failure					
	Drought					
	Earthquake					
Х	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					

Mitigation Action	Launch Green Infrastructure Project
Year Initiated	2019
Applicable Jurisdiction	Village of Maywood
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	Village of Maywood
Applicable Goal	<ul> <li>Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards.</li> <li>Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events.</li> <li>Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.</li> </ul>
Applicable Objective	<ul> <li>Increase the resilience of (or protect and maintain) infrastructure and critical facilities.</li> <li>Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change.</li> <li>Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.</li> <li>Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.</li> </ul>
Potential Funding Source	MWRD
Estimated Cost	TBD
Benefits (loss avoided)	TBD
Projected Completion Date	TBD
Priority and Level of Importance (Low, Medium, High)	Low
Benefit Analysis (Low, Medium, High)	Medium
Cost Analysis (Low, Medium, High)	TBD
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description		
Action/Implementation Plan and Project Description:		

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

	Mitigated Hazards			
	All Hazards			
	Dam/Levee Failure			
	Drought			
	Earthquake			
Х	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.

TABLE: ACTION PLAN MATRIX				
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)		
# M-3.1	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: Yes		0		
Completion status legend:  N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken				

TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N Action Item Description			Status (X, O, C, R, N)		
# M-3.2	Continue to su	pport the countywide actions identified in this plan.			
Status Description: No			Х		
Completion status legend:  N = New O = Action Ongoing toward Completion  C = Project Completed R = Want Removed from Annex X = No Action Taken					

TABLE: ACTION PLAN MATRIX			
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)	
# M-3.3 Actively participate in the plan maintenance strategy identified in this plan.			
Status Description: No		Х	
Completion status legend:  N = New O = Action Ongoing toward Completion  C = Project Completed R = Want Removed from Annex X = No Action Taken			

TABLE: ACTION PLAN MATRIX				
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)		
# M-3.4	Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.			
Status Description: Yes		0		
Completion status legend:  N = New O = Action Ongoing toward Completion  C = Project Completed R = Want Removed from Annex X = No Action Taken				

	TABLE: ACTION PLAN MATRIX				
Action Number Action Taken Y/N	Action Item Description				
# M-3.5	Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.				
Status Description: Yes	Description:				
Completion status legend:  N = New O = Action Ongoing toward Completion  C = Project Completed R = Want Removed from Annex X = No Action Taken					

TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)			
# M-3.7	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.				
Status Description: Yes		Х			
C = Pro	Completion status legend:  N = New O = Action Ongoing toward Completion  C = Project Completed R = Want Removed from Annex X = No Action Taken				

TABLE: ACTION PLAN MATRIX			
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)	
# M-3.8	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: Yes		0	
Completion status legend:  N = New O = Action Ongoing toward Completion  C = Project Completed R = Want Removed from Annex X = No Action Taken			

## Completed Mitigation Actions

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

TABLE: ACTION PLAN MATRIX			
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)	
# M-3.6	# M-3.6 Where feasible, implement a program to record high water marks following high-water events.		
Status Description: Yes		С	
Completion status legend:  N = New O = Action Ongoing toward Completion  C = Project Completed R = Want Removed from Annex X = No Action Taken			

# Future Needs to Better Understand Risk/Vulnerability

No needs have been identified at this time.

# Additional Comments

No additional comments at this time

# HAZUS-MH Risk Assessment Results

MAYWOOD EXISTING CONDITIONS				
2010 Population 24,090				
Total Assessed Value of Structures and Contents	\$5,676,088,127			
Area in 100-Year Floodplain	47.88 acres			
Area in 500-Year Floodplain	56.00 acres			
Number of Critical Facilities	34			

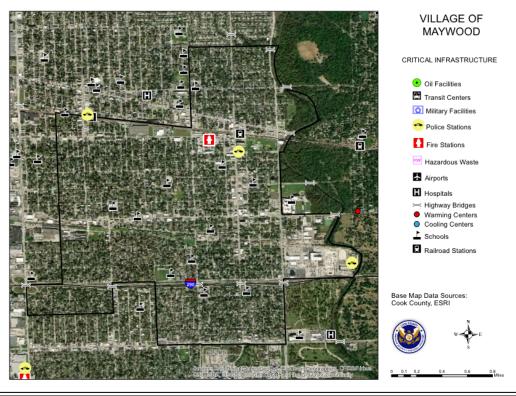
HAZARD EXPOSURE IN MAYWOOD							
	Number Exposed		Value Expos	ed to Hazard		% of Total Assessed	
	Population	Buildings	Structure	Contents	Total	Value Exposed	
Dam Failure	Dam Failure						
Buffalo Creek	0	0	\$0	\$0	\$0	0.00%	
U. Salt Cr. #2	0	0	\$0	\$0	\$0	0.00%	
Touhy	0	0	\$0	\$0	\$0	0.00%	
U. Salt Cr. #3	0	0	\$0	\$0	\$0	0.00%	
U. Salt Cr. #4	0	0	\$0	\$0	\$0	0.00%	
Flood	Flood						
100-Year	7	2	\$576,843	\$288,422	\$865,265	0.02%	

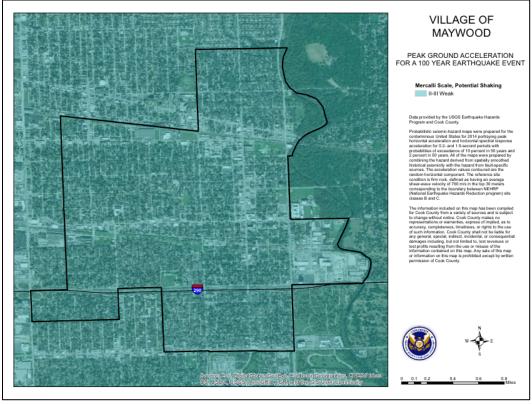
500-Year	10	3	\$4,302,843	\$5,877,422	\$10,180,265	0.18%	
Tornado							
100-Year	_	_	\$1,025,279,835	\$903,599,206	\$1,928,879,041	33.98%	
500-Year	_	_	\$1,559,649,189	\$1,160,893,960	\$2,720,543,149	47.93%	

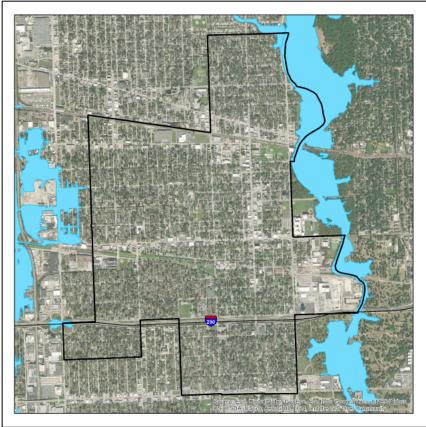
ESTIMATED PROPERTY DAMAGE VALUES IN MAYWOOD								
	Estima	% of Total Assessed						
	Building	Contents	Total	Value Damaged				
Dam Failure								
Buffalo Creek	\$0	\$0	\$0	0.00%				
U. Salt Cr. #2	\$0	\$0	\$0	0.00%				
Touhy	\$0	\$0	\$0	0.00%				
U. Salt Cr. #3	\$0	\$0	\$0	0.00%				
U. Salt Cr. #4	\$0	\$0	\$0	0.00%				
Earthquake								
1909 Historical Event	\$32,980,194	\$9,351,239	\$42,331,433	0.75%				
Flood								
10-Year	\$0	\$0	\$0	0.00%				
100-Year	\$0	\$0	\$0	0.00%				
500-Year	\$0	\$0	\$0	0.00%				

Tornado							
100-Year	\$102,527,983	\$90,359,921	\$192,887,904	3.40%			
500-Year	\$227,708,7820	\$169,490,518	\$397,199,300	7.00%			

# Hazard Mapping







#### VILLAGE OF **MAYWOOD**

COOK COUNTY MWRDGC 100-YEAR INUNDATION AREA

100-year Inundation Area

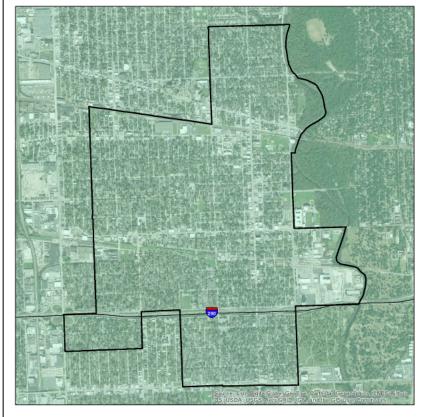
MWRDGC Data provided by Metropolitan Water Reclamation District of Greater Chicago and Cook County.

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

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 **MAYWOOD**

LIQUEFACTION SUSCEPTIBILITY

LIQUEFACTION SUSCEPTIBILITY

low

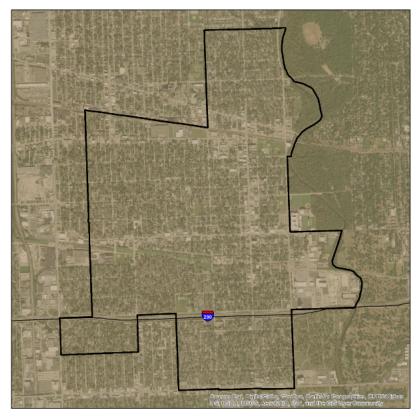
Data provided by the Illinois State Geological Survey and Cook County.

Data provided by the Bitolo State Cardopcal Survey and Cook Contry.

The Certiful United States Earthquise Consortium (CUSEC) State Carbojats produced a regional Soil Site Customers and Customers an







#### VILLAGE OF **MAYWOOD**

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.

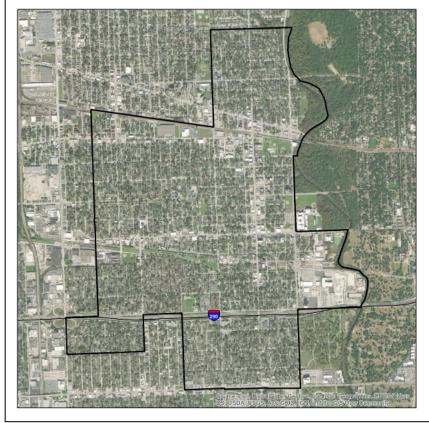
Dails provided by the Batton State Consognal Survey and Cook County.

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badrock which influences much of the amplification. The information included on this range has been compaid for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warrantes, express of implied, as to accuracy, completeness, firmatiness, or rights to the use of such information. Cook County shall not be liather for any operand, security, interact indeeding, or consequential, damages including, but not limited to, but revenues or being roll in studies from the use or intraste of the por information on this map is approximate on the province of the contrast of the por information on this map is approximate on the contrast of the por information on this map is approximate on the contrast of the portions of the contrast of the contrast of the portions of the contrast of the portions of the contrast of t







#### VILLAGE OF MAYWOOD

100- AND 500- YEAR TORNADO EVENTS

#### Magnitude

4 (100 year event) 5 (500 year event)

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



