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

Broadview 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	Alternate Point of Contact	Alternate Point of Contact
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Jurisdiction Profile

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

- **Date of Incorporation:** 1914
- **Current Population:** The US Census 2016 population estimate for Broadview was 7,823.
- **Population Growth:** Broadview's population has been declining since 1970. The percent of decrease was over 10 percent between 1970 and 1980. Population decrease has slowed recently, but is still declining. From 2010 to 2016, the population decreased 1.21 percent.
- **Location and Description:** Broadview is located in Proviso Township, in Cook County, 12 miles west of downtown Chicago. Suburbs adjacent to Broadview include Maywood to the north, La Grange Park to the south, Hines to the east, and Westchester to the west. Interstate 290 runs through the northern tip of Broadview and intersects 294 3 miles west of the border. According to the U.S. Census Bureau, the Village of Broadview has a total land area of 1.78 square miles.
- **Brief History:** In the 1880s the railroad came through the area and the first subdivision was platted. In 1883, eighty acres of northeast Broadview was named the Western Addition (presumably of Maywood). In the same year, the Chicago, Madison and Northern Railroad Company (which became the Illinois Central Railroad) bought a right of way from farmers a half a mile south of this subdivision. In 1890, the Union Land Association was formed by 35 investors and $100,000 in capital. The following year they subdivided a portion south of 12th Street and drew in street numbers from Ninth Avenue to 21st Avenue. They named their map Broad View (two words). On an 1899 Rand McNally map of Chicago, the railroad station at 17th Avenue and the railroad right of way was shown as Broadview (one word).
- **Climate:** The climate of Broadview and the Chicago area is classified as humid continental, with all four seasons distinctly represented: wet springs; hot and humid summers; pleasant autumns; and cold winters. Annual precipitation is average, and reaches its lowest points in the months of January and February, and peaks in the months of May and June. Winter proves quite variable; seasonal snowfall in the Village has ranged from 9 – 90 inches. The daily average temperature in January at Midway Airport is 24.8 °F (−4.0 °C), and temperatures often stay below freezing for several consecutive days or even weeks in January and February. Temperatures drop to or below 0 °F (−18 °C) on 5.5 nights annually at Midway and 8.2 nights at O'Hare. Spring in the Chicago area is perhaps the areas wettest and unpredictable season. Winter like conditions can persist well into April and even occasionally into May. Thunderstorms are especially prevalent in the spring time as the areas lakeside location makes it a center of conflicts between large volumes of warmer and colder air, triggering many kinds of severe weather. Temperatures vary tremendously in the springtime; March is the month with the greatest span between the record highs and lows. On a typical summer day, humidity is usually moderately high and temperatures ordinarily reach anywhere between 78 and 92 °F (26 and 33 °C). The extreme heat that the Chicago area is capable of experiencing during the height of the summer season can persist into the autumn season. Temperatures have reached as high as 100 degrees and as low as below −18 °C. Fall can bring heavy thunderstorms, many of which are capable of producing flooding. The average first accumulating snow occurs around Nov 19.

- **Governing Body Format:** The Village of Broadview is a Trustee-Village form of government with 6 operating departments including Fire, Police, Water, Finance, Building, and Public Works. This body will assume the responsibility for the adoption and implementation of this plan.
- **Development Trends:** Anticipated development levels for Broadview are low to moderate, consisting of some commercial development. Broadview is land-locked and future development will take place on current vacant parcels within the village. As of 2019, some issues currently facing the Village of Broadview include long term stability of the sales tax base, increasing pension obligations, rising health care cost, and funding for vehicles, equipment, building capital improvements, as well as streets and alleys capital improvements.

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	VOB Title 9 2006
Zonings	Yes	No	No	Yes	VOB Title 10 2001
Subdivisions	No	No	No	No	
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. VOB Title 8 2009
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	VOB Title 10 2002
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health. VOB Title 6&7 2001

Environmental Protection	No	No	No	No	
Planning Documents					
General or Comprehensive Plan	*In Progress*	No	No	No	Soon to be adopted
Is the plan equipped to provide linkage to this mitigation plan?					Yes
Floodplain or Basin Plan	No	No	No	No	
Stormwater Plan	No	No	Yes	No	MWRD Detailed Watershed Plan for Lower Des Plains River watershed.
Capital Improvement Plan	No	No	No	No	
What types of capital facilities does the plan address?					N/A
How often is the plan revised/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 Planning					
Comprehensive Emergency Management Plan	Being Edited	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	Cook County DHSEM
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	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
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	Yes	Hancock Engineering
Engineers or professionals trained in building or infrastructure construction practices	Yes	Hancock Engineering

Planners or engineers with an understanding of natural hazards	Yes	Hancock Engineering
Staff with training in benefit/cost analysis	No	
Surveyors	No	
Personnel skilled or trained in GIS applications	No	Cook County GIS Consortium
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Cook County DHSEM
Grant writers	Yes	Grantmasters, New York

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Building Department
Who is your jurisdiction's floodplain administrator? (department/position)	Building Commissioner
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	2006
When was the most recent Community Assistance Visit or Community Assistance Contact?	Have not had a Community Assistance Visit
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	Unknown
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. Yes we would be interested.

TABLE: COMMUNITY CLASSIFICATIONS			
	Participating?	**Classification**	**Date Classified**
Community Rating System	No	N/A	N/A

Building Code Effectiveness Grading Schedule	Yes	Unknown	Unknown
Public Protection/ISO	Yes	Unknown	N/A
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	No	--	--

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: 1
- 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
Flood	DR-4116	2013	-
Severe Winter Weather	DR-1960	2011	-
Flood	DR-1935	2010	-
Severe Weather	-	2009	-
Flood	8611262	1972	-
Severe Winter Weather	8564238	1967	-

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.

Flooding: In 2010, nine inches of standing water was reported on Route 171 between 22nd and 26th Streets due to sudden urban/flash flooding. Flooding continues to be a problem in the area during heavy rain events.

Severe Weather: In 2011, a powerful line of severe thunderstorms moved northeast across during the evening hours of June 21st producing damaging winds and widespread wind damage.

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	Severe Winter Weather	54
3	Tornado	54
4	Earthquake	45
5	Flood	11
6	Drought	4
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 B11.1—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.						
Ongoing	All Hazards	7, 13	Building Department	High	FEMA Mitigation Grant Funding	Long-term (depending on funding)
Action B11.2—Construct regional storm water control facilities.						
Ongoing	Flood, Severe Weather	1, 2, 4, 9, 13	Public Works	High	FEMA Mitigation Grant Funding, MWRD-Phase II	Long-term (depending on funding)
Action B11.3—Retrofit existing storm drainage system to insure full capacity is utilized.						
Ongoing	Flood, Severe Weather	1, 2, 9	Public Works	High	FEMA Mitigation Grant	Short-term

					Funding, MWRD-Phase II	
Action B11.4—Consider participation in the Community Rating System.						
Ongoing	Flood	4, 5, 6, 8, 11	Public Works	Low	General Fund	Long-term
Action B11.5—Provide sandbags and plastic sheeting to residents in anticipation of rainstorms, deliver materials to the disabled and elderly, and provide public information on where these materials are stored and how to get them.						
Completed	Severe Weather, Flood	5, 6, 8	Public Works	Low	General Fund	Completed
Action B11.6—Continue to support the implementation, monitoring, maintenance, and updating of this plan.						
Ongoing	All Hazards	1, 11	DHSEM, Fire Department	Low	General Fund	Long-term, Ongoing
Action B11.7—Continue to participate in mutual-aid agreements and also in the Mutual Aid Box Alarm System for cooperative response to all hazards and disasters.						
Completed	All Hazards	1, 8	Fire Department	Low	General Fund	Completed
Action B11.8—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	Broadview	Low	General Fund	Short-term, Ongoing
Action B11.9—Where feasible, implements a program to record high water marks following high-water events.						
Ongoing	Flooding, Severe Weather	3, 6, 9	Broadview	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
Action B11.10—Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						

Ongoing	All	3, 4, 6, 10, 13	Hancock Engineering	Low	General Fund	Short-term
Action B11.11—Consider the development and implementation of a Capital Improvements program as a means to increase the resiliency of the Village's critical facilities and infrastructure.						
Ongoing	All Hazards	1, 2	Village of Broadview/Public Works	High	General Fund	Long-term
Action B11.12—Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	Broadview	Low	General Fund	Short- and long-term
Action B11.13—Actively coordinate the Emergency Operation Plan to with Mitigation plans.						
New	All	6, 10	Fire Department	$1,000; Low	Local Funds	November 2019
Action B11.14—Implement the Addison Creek Channel Improvements.						
New	Flood	2, 9	MWRD	$43,400,000; High	Unknown	Unknown
(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	5	High	High	Yes	Yes	No	Medium
3	3	High	High	Yes	Yes	Yes	High
4	5	Medium	Low	Yes	Yes	Yes	Medium
5	3	Medium	Low	Yes	No	Yes	High
6	2	Low	Low	Yes	Yes	Yes	High
7	2	High	Low	Yes	No	Yes	High
8	3	Medium	Low	Yes	No	Yes	High

9	3	Medium	Medium	Yes	Yes	No	Medium	
10	5	Medium	Low	Yes	No	Yes	High	
11	2	High	High	Yes	No	No	Medium	
12	13	Medium	Low	Yes	No	Yes	High	
13	2	Medium	Low	Yes	No	Yes	High	
14	2	Unknown	High	Unknown	Unknown	Unknown	Unknown	

(a) See Chapter 1 for explanation of priorities.

New Mitigation Actions

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

Action B-11.13

Mitigation Action	Actively coordinate the Emergency Operation Plan with Mitigation plans
Year Initiated	2019
Applicable Jurisdiction	Broadview Fire Department
Lead Agency/Organization	Fire Department
Supporting Agencies/Organizations	Public Works
Applicable Goal	• 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. • Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards. • Promote public understanding of and support for hazard mitigation.
Applicable Objective	• Use the best available data, science and technologies to educate the public and to improve understanding of the location and potential impacts of natural hazards, the vulnerability of building types and community development patterns, and the measures needed to protect life safety. • Strengthen codes and land use planning and their enforcement, so that new construction or redevelopment can avoid or withstand the impacts of natural hazards.
Potential Funding Source	Local Funds
Estimated Cost	$1,000
Benefits (loss avoided)	This Emergency Operations Plan includes all Village department in conjunction with programs that create safe shelters and communications with stakeholders
Projected Completion Date	November 2019
Priority and Level of Importance (Low, Medium, High)	High Priority
Benefit Analysis (Low, Medium, High)	Medium—Project will have a long-term impact on the reduction of risk exposure for life and

	property, or project will provide an immediate reduction in the risk exposure for property.
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	November 2019

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	Each Village entity has an involvement in this new Emergency Operations Plan. There is also added communication to residents and stakeholders as well as community shelters and churches

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

Mitigated Hazards	
X	**All Hazards**
	Dam/Levee Failure
	Drought
	Earthquake
	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

Action B-11.14

Mitigation Action	Implement the Addison Creek Channel Improvements
Year Initiated	2019
Applicable Jurisdiction	Broadview
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	Broadview
Applicable Goal	• 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 and potential damage from such activities. • Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.
Applicable Objective	• Increase the resilience of (or protect and maintain) infrastructure and critical facilities. • Provide or improve flood protection on a watershed basis with flood control structures and drainage maintenance plans.
Potential Funding Source	Unknown
Estimated Cost	$43,400,000
Benefits (loss avoided)	Unknown
Projected Completion Date	Unknown
Priority and Level of Importance (Low, Medium, High)	Unknown
Benefit Analysis (Low, Medium, High)	Unknown
Cost Analysis (Low, Medium, High)	High
Actual Completion Date	Unknown

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	ID: ADCR-6B Contract: 11-187-3F Watershed: Lower Des Plaines Location: Northlake, Melrose Park, Stone Park, Bellwood, Westchester, and Broadview, IL

	Improves channel conveyance through channel improvements from Northlake to Broadview that include open channel, solider piles wall, articulated concrete blocks, gabions, and channel clearing. Removal of 3 bridges along Harrison St. at 30th Ave., 31st Ave., and 32nd Ave.

Mitigation Action and Project Maintenance		
Year	**Status**	**Comments**
2019	New	Executed intergovernmental agreements with all six villages. Final Design. Right-of-way acquisition in progress.
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 B-11.1

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.1	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: No	The area that is impacted the most backs up to a creek and forest preserve maintained by Cook County.	X
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.2

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.2	Construct regional storm water control facilities.	
Status Description: Yes	Phase 2 of this project and will be ongoing for the next 3 years	O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.3

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.3	Retrofit existing storm drainage system to insure full capacity is utilized.	
Status Description: Yes	An ongoing project as all lines are being scoped and cleaned.	O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.4

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.4	Consider participation in the Community Rating System.	
Status Description: Yes		O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.6

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.6	Continue to support the implementation, monitoring, maintenance, and updating of this plan.	
Status Description: Yes	With the restructuring of public works new equipment and manning helps support this plan	O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.8

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.8	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	This will be ongoing with the new street resurfacing program	O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.9

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.9	Where feasible, implements a program to record high water marks following high-water events.	
Status Description: Yes	Reduction of flooding in specific flood zones has dropped since the first phase of scoping and cleanout	O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.10

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.10	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.	
Status Description: Yes	New resurfacing has worked with developers to angle streets to needed overflow areas	O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.11

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.11	Consider the development and implementation of a Capital Improvements program as a means to increase the resiliency of the Village's critical facilities and infrastructure.	
Status Description: Yes	This will be ongoing as the resurphasing is in stages	O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.12

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.11	Continue to support the countywide actions identified in this plan.	
Status Description: Yes	Will continue to support all actions in this plan.	O
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.

Action B-11.5

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.5	Provide sandbags and plastic sheeting to residents in anticipation of rainstorms, deliver materials to the disabled and elderly, and provide public information on where these materials are stored and how to get them.	
Status Description: Yes	Completed and always available through public works	C
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action B-11.7

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B-11.7	Continue to participate in mutual-aid agreements and also in the Mutual Aid Box Alarm System for cooperative response to all hazards and disasters.	
Status Description: Yes	MABAS Division XX has an agreement for Fire Mutual Aid	C
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

BROADVIEW EXISTING CONDITIONS	
2010 Population	7,932
Total Assessed Value of Structures and Contents	$2,918,185,032
Area in 100-Year Floodplain	63.47 acres
Area in 500-Year Floodplain	108.21 acres
Number of Critical Facilities	38

HAZARD EXPOSURE IN BROADVIEW						
	Number Exposed		Value Exposed to Hazard			% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents	**Total**	
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	42	13	$14,265,280	$21,391,920	**$35,663,200**	1.22%

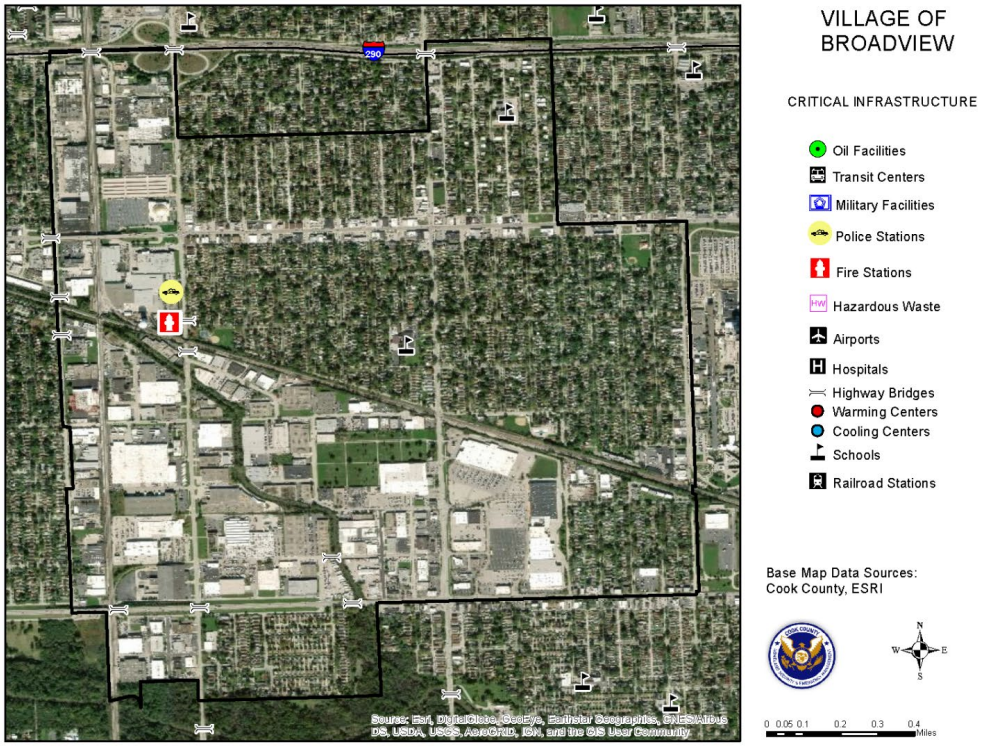
500-Year	244	75	$30,124,373	$33,410,966	**$63,535,339**	2.18%
Tornado						
100-Year	—	—	$483,371,202	$473,368,648	**$956,739,850**	32.79%
500-Year	—	—	$770,527,737	$619,264,794	**$1,389,792,531**	47.63%

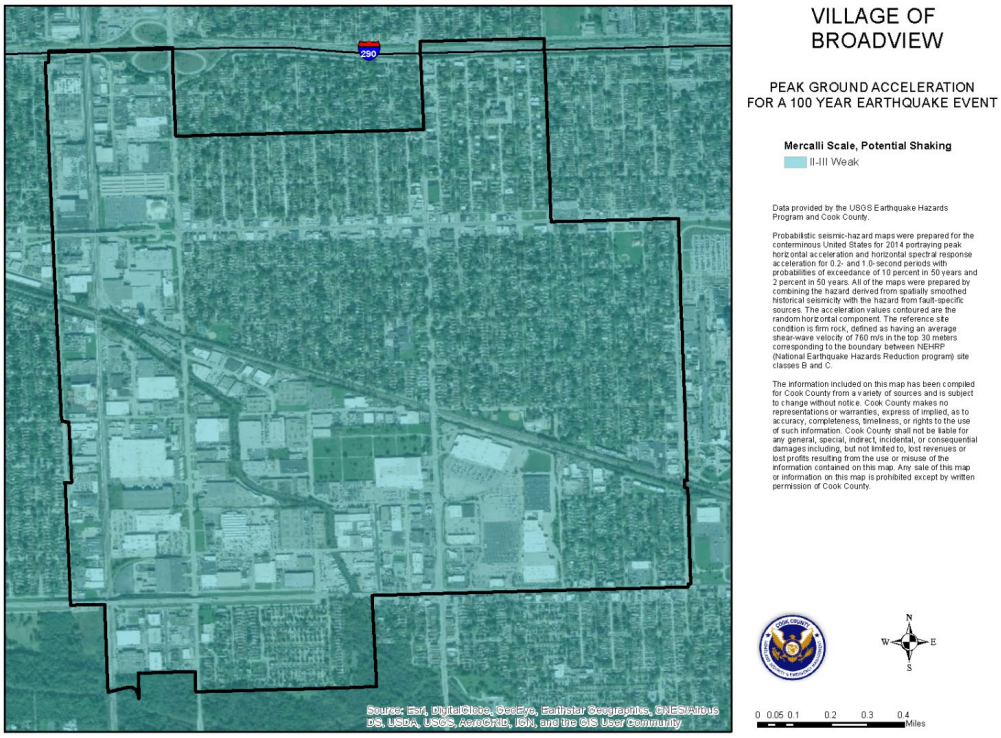
ESTIMATED PROPERTY DAMAGE VALUES IN BROADVIEW

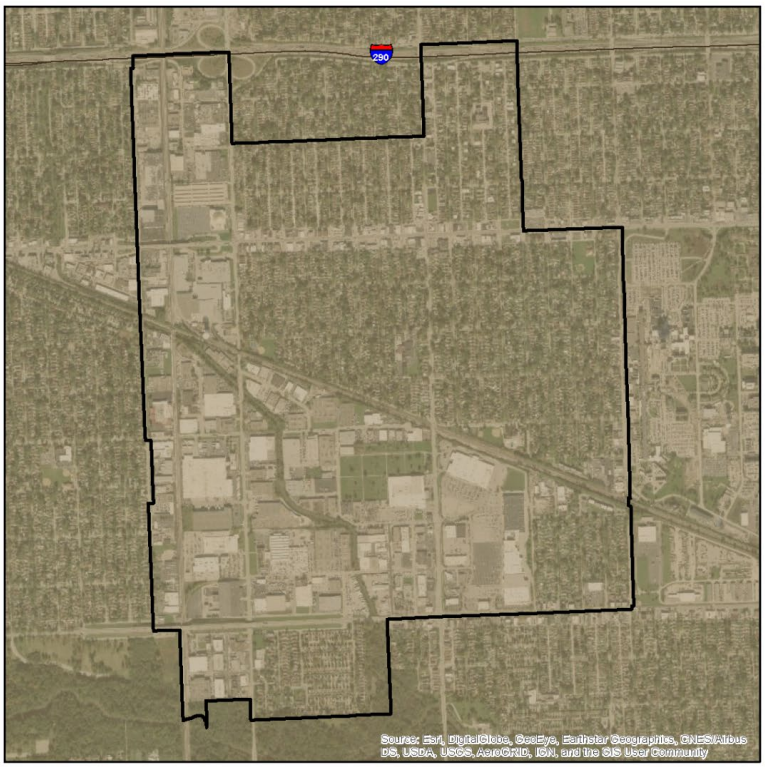
	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	**Total**	
Dam Failure				
Buffalo Creek	$0	$0	**$0**	0.00%
U. Salt Cr. #2	$0	$0	**$0**	0.00%
Touhy	$0	$0	**$0**	0.00%
U. Salt Cr. #3	$0	$0	**$0**	0.00%
U. Salt Cr. #4	$0	$0	**$0**	0.00%
Earthquake				
1909 Historical Event	$17,688,776	$5,408,923	**$23,097,699**	0.79%
Flood				
10-Year	$322	$0	**$322**	0.00%
100-Year	$778,540	$0	**$1,872,634**	0.06%
500-Year	$2,278,794	$0	**$4,548,694**	0.16%

Tornado				
100-Year	$48,337,120	$47,336,865	**$95,673,985**	3.28%
500-Year	$112,497,050	$90,412,660	**$202,909,709**	6.95%

Hazard Mapping







VILLAGE OF BROADVIEW

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

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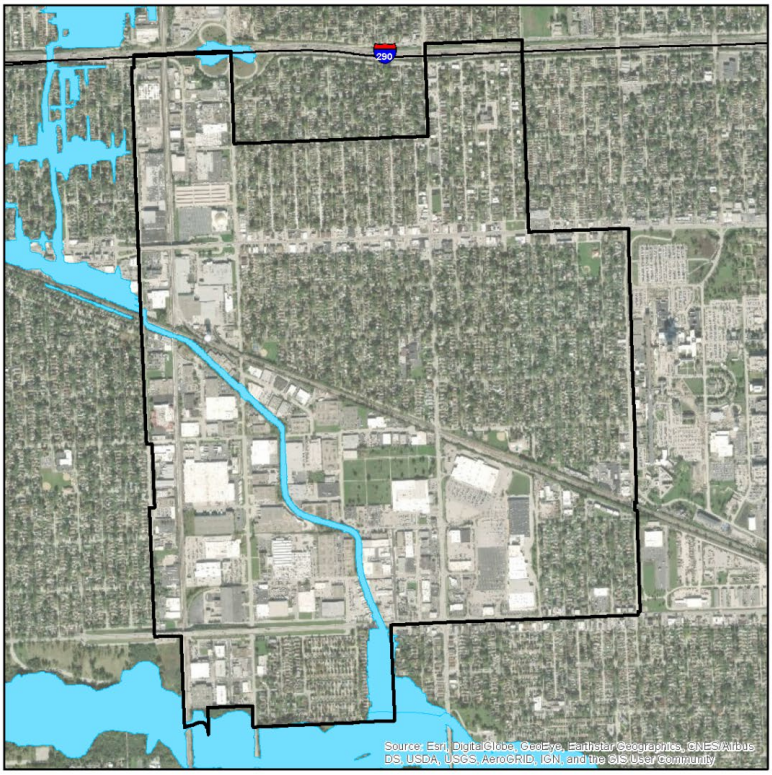
N W E S

0 0.05 0.1 0.2 0.3 0.4 Miles



VILLAGE OF BROADVIEW

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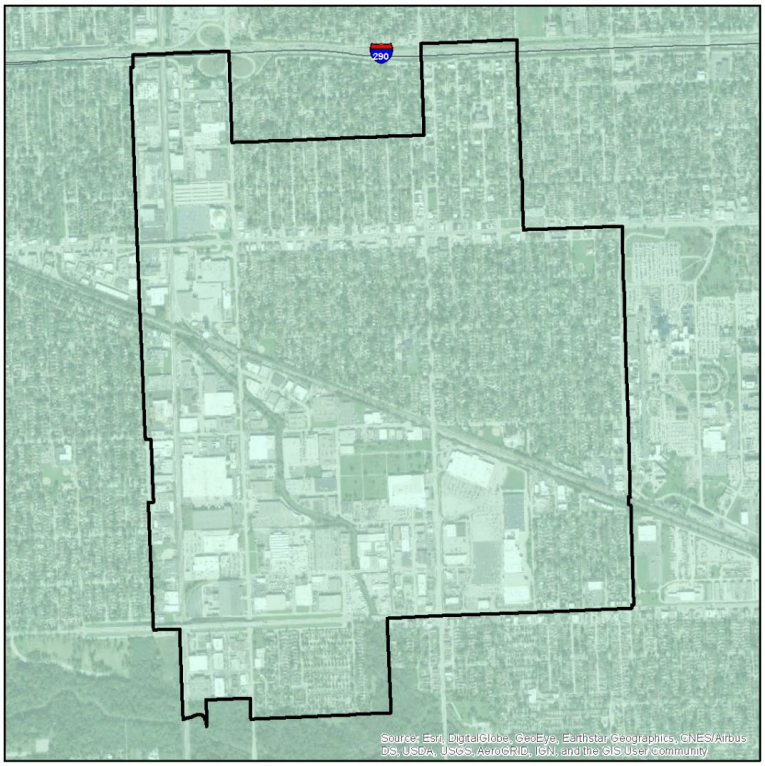
DISCLAIMER: The Cook County MWRDGC 100-year Inundation Map is provided to show general flood risk information regarding floodplains and inundation areas. This map is not regulatory. Official FEMA Flood Insurance Study information and regulatory maps can be obtained from http://www.fema.gov.

N W E S

0 0.05 0.1 0.2 0.3 0.4 Miles



VILLAGE OF BROADVIEW

LIQUEFACTION SUSCEPTIBILITY

LIQUEFACTION SUSCEPTIBILITY
- high
- low
- very low

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

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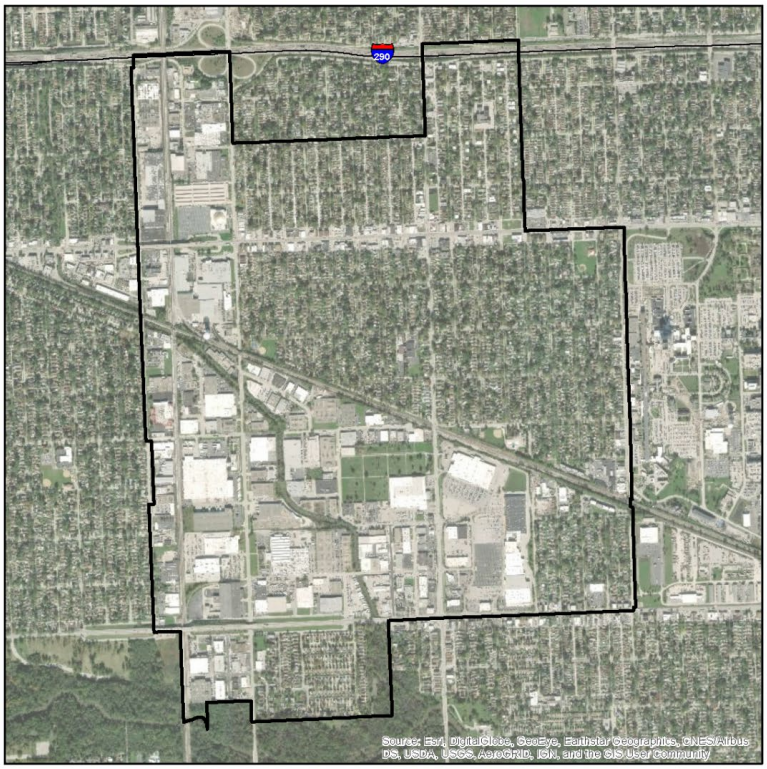

CITY OF BROADVIEW

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.