

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

**Bartlett Annex**

**FINAL**

July 2019

Prepared for:



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## Hazard Mitigation Point of Contact

Primary Point of Contact	Alternate Point of Contact	Alternate Point of Contact
Michael McGuigan, EMA 630-742-6295 <a href="mailto:mmcguigan@vbartlett.org">mmcguigan@vbartlett.org</a>	James Durbin, Deputy Chief 630-837-0846 X 5105 <a href="mailto:jdurbin@vbartlett.org">jdurbin@vbartlett.org</a>	Brian Goralski, Building Director 630-837-0800 <a href="mailto:bgoralski@vbartlett.org">bgoralski@vbartlett.org</a>

## Jurisdiction Profile

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

- Date of Incorporation: 1891
- Current Population: In 2019, 41,208 (100% urban, 0% rural). (City-Data)
- Population Growth: Based on the data tracked by the U.S. Census Bureau, population change from 2000 to 2010 is 8.9%
- Location and Description: Bartlett is located at Latitude: 41°995'0 N Longitude: 88°185'6 W. Bartlett is a suburb of Chicago in Cook, DuPage, and Kane County Illinois, United States, approximately 40 miles northwest of Chicago. The area total is 15.88 sq mi and 10,165 acres. Bartlett has 1 Metra station connecting it to downtown Chicago, on the Big Timber Line.
- Brief History: In 1891 Bartlett was founded by Luther Bartlett.
- Climate: In Bartlett, the summers are warm and wet, the winters are freezing and windy, and it is partly cloudy year round. Over the year, the
- temperature typically varies from 19°F to 83°F and is rarely below -0°F or above 91°F.
- Governing Body Format: The Village of Bartlett is governed by a Village President and six-member Board of Trustees, all of whom are elected for four-year staggered terms, and who serve with pay. The Board is the legislative body of the Village government. All administrative work is performed under the direction of the Village Administrator, who is salaried and appointed by the Village President and Board of Trustees. Bartlett is represented by the 6th Congressional District of Illinois, 22nd District of the Illinois Senate and the 44th District of the Illinois House of Representatives.
- Development Trends: Bartlett has seen a steady growth of housing and business over the past decade.

## 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.

<b>TABLE: LEGAL AND REGULATORY CAPABILITY</b>					
	<b>Local Authority</b>	<b>State or Federal Prohibitions</b>	<b>Other Jurisdictional Authority</b>	<b>State Mandated</b>	<b>Comments</b>
<b>Codes, Ordinances &amp; Requirements</b>					
Building Code	Yes	No	No	Yes	IRC 2012 IBC 2012 2018 IL Energy
Zonings	Yes	No	No	Yes	Ord. 2011-70, 10-18-2011
Subdivisions	Yes	No	No	-	
Stormwater Management	Yes-Partial	No	DuPage, Kane	-	DuPage Co. 8-1-19 Stormwater Ordinance
Post Disaster Recovery	Yes	-	-	-	
Real Estate Disclosure	No	-	-	-	
Growth Management	Yes	-	-	-	
Site Plan Review	Yes	No	No	No	
Public Health and Safety	Yes	No	-	-	
Environmental Protection	Yes	-	-	-	
<b>Planning Documents</b>					
General or Comprehensive Plan	Yes	-	Yes	Yes	
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>					
Floodplain or Basin Plan	Yes	No	Yes	Yes	DuPage County and Cook County
Stormwater Plan	Yes	No	Yes	Yes	DuPage County
Capital Improvement Plan	Yes	No	No	Yes	DuPage County and Cook County
<i>What types of capital facilities does the plan address?</i>					
<i>How often is the plan revised/updated?</i>					
Habitat Conservation Plan	No	No	-	-	
Economic Development Plan	Yes	No	-	-	
Shoreline Management Plan	No	-	-	-	
<b>Response/Recovery Planning</b>					
Comprehensive Emergency Management Plan	Yes	No	-	-	Cook County DHSEM

Threat and Hazard Identification and Risk Assessment	Yes	No	-	-	Cook County DHSEM
Terrorism Plan	Yes	No	-	-	Cook County DHSEM
Post-Disaster Recovery Plan	Yes	No	-	-	Cook County DHSEM
Continuity of Operations Plan	Yes	No	-	-	Cook County DHSEM
Public Health Plans	Yes	No	-	-	

<b>Financial Resources</b>	<b>Accessible or Eligible to Use?</b>
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes Water and Sewer
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 Hazard Prone Areas
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Other	No

<b>Staff/Personnel Resources</b>	<b>Available?</b>	<b>Department/Agency/Position</b>
Planners or engineers with knowledge of land development and land management practices	Yes	Public Works Engineer/Planning Development Service
Engineers or professionals trained in building or infrastructure construction practices	Yes	Public Works
Planners or engineers with an understanding of natural hazards	Yes	Public Works
Staff with training in benefit/cost analysis	-	
Surveyors	Yes	Public Works Engineer
Personnel skilled or trained in GIS applications	Yes	IT Department
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Police Department EMA coordinator
Grant writers	Yes	Police Department Accreditation Manager

What department is responsible for floodplain management in your jurisdiction?	Building Department and Public Works
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Who is your jurisdiction’s floodplain administrator? (department/position)	Building Department/Building Director
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	7/16/19
When was the most recent Community Assistance Visit or Community Assistance Contact?	May 2017; 5 year CRS Cycle 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?	Yes; Class 6 jurisdiction

<b>TABLE: COMMUNITY CLASSIFICATIONS</b>			
	<b>Participating?</b>	<b>Classification</b>	<b>Date Classified</b>
Community Rating System	Yes	6	3/2018
Building Code Effectiveness Grading Schedule	Yes	4 Res. 3 Com.	10/2016
Public Protection/ISO	Yes	4, 3	2016
StormReady	Yes		
Tree City USA	Yes		

## 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: 0
- 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	-	5/30/2018	\$50,000 in property damage
Flood	-	4/17/2019 - 4/19/2019	No property damage
Hail	-	6/28/2012	-
Blizzard	-	2/1/2011 - 2/3/2011	No property damage
Lightning	-	4/5/2010	\$10,000 in property damage.
Flood	-	4/26/2009	-
Severe Weather	-	8/4/2008	\$50,000 in property damage
Lightning	-	5/2/2008	\$10,000 in property damage.
Hail	-	3/1/2004	-
Hail	-	8/1/2003	-

### **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/Severe Weather:** Multiple events have caused extensive property damage in the area.

**Hail:** This event occurs during thunderstorms, which often cause flooding and severe wind events. Power line, structures, and trees are frequently damaged.

**Tornado/High Winds:** High winds have historically affected residential areas, causing downed trees and downed electrical lines.

**Snow:** Senior citizens and individuals with functional and access needs in the community have historically had issues when there is a large amount of snow or severe winter weather.



**Extreme Cold:** Senior citizen complexes/housing, and those that reside in those facilities are especially vulnerable during extreme cold incidents.

## 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.

<b>TABLE: HAZARD RISK RANKING</b>		
<b>Rank</b>	<b>Hazard Type</b>	<b>Risk Rating Score (Probability x Impact)</b>
1	Severe Weather	51
2	Severe Winter Weather	51
3	Tornado	42
4	Flood	32
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.

Status	Hazards Mitigated	Objectives Met	Lead Agencies	Estimated Cost	Sources of Funding	Timeline/Projected Completion Date (a)
<b>Action B1.1</b> —Provide Businesses with Rapid Response First Aid Kits to be used On-Site by First Responders during an Emergency						
New	Extreme Heat, High Wind, Blizzard, Extreme Cold, Tornado, Hazardous Materials Incident	1, 2, 3, 12, 13	Bartlett Police Department	TBD	TBD	2020
(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.						

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	5	Medium	Medium	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 B1.1**

<b>Mitigation Action</b>	Provide Businesses with Rapid Response First Aid Kits to be used On-Site by First Responders during an Emergency
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	Village of Bartlett
<b>Lead Agency/Organization</b>	Bartlett Police Department
<b>Supporting Agencies/Organizations</b>	
<b>Applicable Goal</b>	<ul style="list-style-type: none"> <li>• Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards.</li> </ul>
<b>Applicable Objective</b>	<ul style="list-style-type: none"> <li>• Eliminate or minimize disruption of local government operations caused by natural hazards through all phases of emergency management.</li> <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>
<b>Potential Funding Source</b>	TBD
<b>Estimated Cost</b>	TBD
<b>Benefits (loss avoided)</b>	Enhanced Citizen Response
<b>Projected Completion Date</b>	2020
<b>Priority and Level of Importance (Low, Medium, High)</b>	High Priority
<b>Benefit Analysis (Low, Medium, High)</b>	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.
<b>Cost Analysis (Low, Medium, High)</b>	Medium—The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years
<b>Actual Completion Date</b>	

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

<b>Action/Implementation Plan and Project Description:</b>	Provide businesses, through our Bartlett PD Business Academy with rapid response first aid kits on site to be utilized by first responders in response to human-caused or natural disaster casualty situations.
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Mitigation Action and Project Maintenance						
Year	Status	Comments				
2019	New					
2020						
2021						
2022						
2023						

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

### Ongoing Mitigation Actions

Bartlett has no ongoing actions at this time.

### Completed Mitigation Actions

Bartlett has no completed actions at this time.



## Future Needs to Better Understand Risk/Vulnerability

None at this time.

## Additional Comments

None at this time.

## HAZUS-MH Risk Assessment Results

<b>BARTLETT EXISTING CONDITIONS</b>	
2010 Population	41,208
Total Assessed Value of Structures and Contents	\$6,463,810,000
Area in 100-Year Floodplain	351.791 acres
Area in 500-Year Floodplain	502.558 acres
Number of Critical Facilities	39

<b>HAZARD EXPOSURE IN BARTLETT</b>						
	Number Exposed		Value Exposed to Hazard			% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents	Total	
<b>Dam Failure</b>						
Buffalo Creek	0	0	\$0	\$0	<b>\$0</b>	0.00%
Touhy	0	0	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #2	0	0	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #3	0	0	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #4	0	0	\$0	\$0	<b>\$0</b>	0.00%
<b>Flood</b>						
100-Year	660	1	\$123,319,000	\$1,210,000	<b>\$124,529,000</b>	1.92%
500-Year	660	2	\$260,000,000	\$1,261,000	<b>\$261,261,000</b>	4.04%
<b>Tornado</b>						
100-Year	-	-	\$353,584,676	\$214,392,943	<b>\$567,977,916</b>	8.79%
500-Year	-	-	\$1,172,585,479	\$1,430,943,562	<b>\$2,603,529,041</b>	40.27%

<b>ESTIMATED PROPERTY DAMAGE VALUES IN BARTLETT</b>
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	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	Total	
<b>Dam Failure</b>				
Buffalo Creek	0	\$0	<b>\$0</b>	0.00%
Touhy	0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #2	0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #3	0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #4	0	\$0	<b>\$0</b>	0.00%
<b>Earthquake</b>				
1909 Historical Event	\$1,379,655.95	\$373,094.17	<b>\$1,752,750.12</b>	0.027%
<b>Flood</b>				
100-Year	\$123,319,000	\$1,210,000	<b>\$124,592,000</b>	1.93%
500-Year	\$260,000,000	\$1,261,000	<b>\$261,261,000</b>	4.04%
<b>Tornado</b>				
100-Year	\$353,584,676	\$214,392,943	<b>\$567,977,916</b>	8.79%
500-Year	\$1,172,585,479	\$1,430,943,562	<b>\$2,603,529,041</b>	40.27%

Hazard Mapping





