

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

**Lemont 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
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## Jurisdiction Profile

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

- **Date of Incorporation:** 1873
- **Current Population:** 17,155 as of the 2018 US Census population estimate.
- **Population Growth:** Lemont has experienced steady and substantial population growth since 1940 and has increased over 5 percent from 2010 to 2018.
- **Location and Description:** Lemont is a historic village located in Cook, DuPage, and Will counties and Lemont Township. It is roughly 27 miles southwest of Chicago. The historic Village is nestled among the bluffs of the Des Plaines River Valley offering views unique in the Chicago-land area. Lemont surrounded mostly by large Forest Preserve areas to the north (which surrounds Argonne National Laboratory) north east, east, and partially to the west. Orland Park and Romeoville border Lemont to the south. Interstate 355 runs through the south west portion of Lemont, with Interstate 55 intersecting it 1.2 miles north of Lemont. According to the 2010 U.S. Census, Lemont is 8.3 square miles. Lemont is home to the Argonne National Laboratory and to Cog Hill Golf & Country Club (home of the PGA Tour's Western Open and now the PGA Tour's BMW Championship). Sacred architecture is another strong suit of Lemont, whose skyline is dominated by two landmark religious edifices: the Hindu Temple of Greater Chicago and SS. Cyril and Methodius church in the Polish Cathedral style.
- **Brief History:** One of the oldest communities in northeast Illinois, Lemont's history originated with the construction of the Illinois and Michigan canal which linked the Mississippi River and the Great Lakes. Subsequently, quarrying, railroad, and canal employment brought many residents. Established in 1836, the village of Lemont stands as one of the oldest American communities in northeastern Illinois. It is historically significant for its role in transforming the northern region of the state from a sparsely settled frontier to a commercial, agricultural, and industrial region that supplied Chicago and areas beyond with commodities. Lemont is also unique in boasting an authentic historic district that remains intact and has been continually used since the 19th century. Lemont is credited with being the largest recruiting station for the Union Army during the American Civil War, and the Old Stone Church, built in 1861 of limestone, was used as a recruiting depot. It served as the Lemont Methodist Episcopal Church for 100 years, from 1861 until 1970, when it became home to the Lemont Area Historical Society. The oldest building in Lemont, it now serves as a museum and is listed on the National Register of Historic Places.
- **Climate:** The climate of Lemont 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 city 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 city's 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 city's 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 100 degrees high and subzero lows below -18 °C. Spring, and summer can bring heavy thunderstorms, many of which are capable of producing flooding; this also can run into the fall season. The average first accumulating snow occurs around Nov 19.

- **Governing Body Format:** The Village of Lemont is a Mayor-Council form of government with a strong mayor and six Village Trustees making up the Village Board. This body of Government will assume the responsibility for the adoption and implementation of this plan. The Village operates 7 departments including the Office of Administration, Building Department, Emergency Management Agency, Finance Department, Planning & Economic Development Department, Police Department, and Public Works Department. Lemont is part of the Lemont Fire Protection District.
- **Development Trends:** Lemont has a Comprehensive plan that was adopted in 2002 and presently being reviewed. As of 2019, there are 3 new townhome and single family home developments. The Village of Lemont is committed to fostering the continued growth of our community through the retention of existing businesses and the attraction of new business and industry. The Village works closely with the Lemont Area Chamber of Commerce, Downtown Merchants Alliance, and other business community leaders to achieve our shared economic vitality and prosperity.

## 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	Ch. 15 Code 1988 No date available
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code. Municipal Code 07-08 adopted: Feb. 25, 2008
Subdivisions	Yes	No	No	No	Adopted 09/13/10
Stormwater Management	Yes	No	Yes	Yes	Lemont has a Unified Development Ordinance which covers Storm Water Management. Municipal. Code 07-08 Adopted Feb. 25th, 2008. The ordinance is updated at least annually
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	No	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	No	No	Yes	Yes	Cook County Health Dept.
Environmental Protection	No	No	No	No	
<b>Planning Documents</b>					
General or Comprehensive Plan	Yes	No	No	No	The village is currently updating its Comprehensive plan through 2030.
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>					Yes, Plan will include land use, and redevelopment components.
Floodplain or Basin Plan	No	No	No	No	
Stormwater Plan	No	No	Yes	No	Regional Stormwater impacts are managed by MWRD. The Village lies within the Cal-Sag Channel watershed planning area of MWRD's comprehensive Stormwater Master Planning Program
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	Yes	No	The State is monitoring the Hines Emerald Dragon Fly project
Economic Development Plan	Yes	No	Yes	Yes	The Village has a Planning and Economic Departments which assist business owners in applying for incentives including tax incentives offered through the Cook County 6b program.
Shoreline Management Plan	No	No	No	No	
<b>Response/Recovery Planning</b>					
Comprehensive Emergency Management Plan	Yes	Yes	Yes	No	Updating now Emergency Operations Plan (EOP)
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County DHSEM Preparing THIRA
Terrorism Plan	Yes	Yes	Yes	No	Village EOP
Post-Disaster Recovery Plan	Yes	Yes	Yes	No	Village EOP
Continuity of Operations Plan	Yes	Yes	Yes	No	Village EOP
Public Health Plans	No	No	Yes	No	Cook County DPH Point of Dispensing (POD)

**TABLE: FISCAL CAPABILITY**



<b>Financial Resources</b>	<b>Accessible or Eligible to Use?</b>
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	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

<b>TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY</b>		
<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	Economic Dept. Dept. Director, Planning Dept. Village Planner
Engineers or professionals trained in building or infrastructure construction practices	Yes	Contracted out.
Planners or engineers with an understanding of natural hazards	Yes	Contracted out.
Staff with training in benefit/cost analysis	Yes	Contracted out
Surveyors	Yes	Contracted out
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Lemont Emergency Management Agency Director
Grant writers	Yes	Lemont Police Dept. Accreditation Manager/Grants

<b>TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE</b>	
What department is responsible for floodplain management in your jurisdiction?	Planning and Economic Development
Who is your jurisdiction's floodplain administrator? (department/position)	Planning and Economic Development Director by ordinance
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	August 19, 2008
When was the most recent Community Assistance Visit or Community Assistance Contact?	June 10, 2010
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

<b>TABLE: COMMUNITY CLASSIFICATIONS</b>			
	<b>Participating?</b>	<b>Classification</b>	<b>Date Classified</b>
Community Rating System	No	N/A	No
Building Code Effectiveness Grading Schedule	Yes	Unknown	Unknown
Public Protection/ISO	Yes	3/5	August 22, 2005
StormReady	Yes	Unknown	June, 2013
Tree City USA	No	N/A	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: 0
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

<b>TABLE: NATURAL HAZARD EVENTS</b>			
<b>Type of Event</b>	<b>FEMA Disaster # (if applicable)</b>	<b>Date</b>	<b>Preliminary Damage Assessment</b>
Hail	-	5/14/2018	-
Severe Weather	-	5/17/2017	-
Hail	-	4/8/2015	-
Snow Storm	031-42795	2/3/2011	Subdivisions entrances were impassable, roadways thru town had issues.
Flooding	1935	7/19/2010	Subdivisions entrances were impassable, roadways thru town had issues.
Hurricane Ike storm	1800-031-42795-00 DR-1800	9/15/2008	Street Flooding, Roads closed Park Dist. Issues.
Severe Storm	1729-031-42795	9/20/2007	Street Flooding, Roads closed.
Flooding	1729-031-42795	7/27/2003	Street Flooding, Roads closed.
Flooding	-	7/1996	Street Flooding, Roads closed, Fire Station 1, Village Hall Basement, flooded.
Tornado	-	3/27/1991	Homes, trees, 300' Communications Tower down

### [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:** A specific area in our town experiences significant flooding during and post significant rainfall. This is due, in part, to an ongoing drainage issue between Cotlin and Forth St. It poses low risk to the community property however it does pose a significant threat to life safety due to it being the main road traveled by the public and in numerous instances vehicles have been caught by water and in isolated cases rescues were necessary.

**Severe Weather:** Five trees were blown down across parts of Bluff Road. Other tree limbs and power lines were blown down. A powerful line of severe thunderstorms moved northeast across northern Illinois during the evening hours of June 21st producing damaging winds and widespread wind damage.

**Dam/Levee Failure:** The Village wishes to coordinate with IDOT/MWRD. Conduct study for solution to 16490 New Ave, Lemont. Roadway floods when we have 2" or more of rain, needs to be drained off of roadway.

## 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	54
2	Flood	54
3	Tornado	32
4	Winter Weather	27
5	Earthquake	18
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.

<b>TABLE: HAZARD MITIGATION ACTION PLAN MATRIX</b>						
<b>Status</b>	<b>Hazards Mitigated</b>	<b>Objectives Met</b>	<b>Lead Agencies</b>	<b>Estimated Cost</b>	<b>Sources of Funding</b>	<b>Timeline/Projected Completion Date (a)</b>
<b>Action L4.1</b> —Put in a ditch along Main St. from Kotlin to Wheeler to relieve flooding on Main St.						
Ongoing	Flooding, Severe Weather	1, 9, 12	Village of Lemont	High	Bond, MWRD Phase-II, FEMA grant	Long-term
<b>Action L4.2</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 Lemont	High	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
<b>Action L4.3</b> —Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	Village of Lemont	Low	General Fund	Short- and long-term
<b>Action L4.4</b> —Actively participate in the plan maintenance strategy identified in this plan.						

Ongoing	All	3, 4, 6	DHSEM, Village of Lemon	Low	General Fund	Short-term
<b>Action L4.5</b> —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 Lemont	Low	General Fund	Short-term and ongoing
<b>Action L4.6</b> —Where feasible, implement a program to record high water marks following high-water events.						
Ongoing	Flooding, Severe Weather	3, 6, 9	Village of Lemont	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
<b>Action L4.7</b> —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment most, notable the on-going update to the Village’s comprehensive plan.						
Ongoing	All	3, 4, 6, 10, 13	Village of Lemont	Low	General Fund	Short-term
<b>Action L4.8</b> —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
<b>Action L4.9</b> —Coordinate with IDOT/MWRD. Conduct study for solution to 16490 New Ave, Lemont. Roadway floods when we have 2" or more of rain, it needs to be drained off of roadway.						
New	Dam/Levee Failure, Flood, Secondary Impacts from Mass Influx of Evacuees	1, 2, 3, 4, 8, 10	Lemont EMA	TBD	Grant Funds	Short-term
(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	Yes	High	High	Yes	No	Medium
2	2	High	High	Yes	Yes	No	Medium
3	13	Medium	Low	Yes	No	Yes	High
4	3	Low	Low	Yes	Yes	Yes	High
5	3	Medium	Low	Yes	No	Yes	High
6	3	Medium	Low	Yes	Yes	No	Medium
7	5	Medium	Low	Yes	No	Yes	High
8	3	High	High	Yes	Yes	No	Medium
9	6	High	Unknown	Unknown	Yes	Yes	High

(a) See Chapter 1 for explanation of priorities.



### New Mitigation Actions

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

**Action L - 4.9**

<b>Mitigation Action</b>	Coordinate with IDOT/MWRD. Conduct study for solution to 16490 New Ave, Lemont. Roadway floods when we have 2" or more of rain, it needs to be drained off of roadway.
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	Lemont
<b>Lead Agency/Organization</b>	Lemont EMA
<b>Supporting Agencies/Organizations</b>	IDOT
<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> <li>• Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events.</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>• Integrate hazard mitigation policies into land use plans in the planning area.</li> <li>• Establish partnerships among all levels of local government, the private sector, and/or nongovernmental organizations to improve and implement methods to protect people and property.</li> <li>• Strengthen codes and land use planning and their enforcement, so that new construction or redevelopment can avoid or withstand the impacts of natural hazards.</li> </ul>
<b>Potential Funding Source</b>	Grant Funds
<b>Estimated Cost</b>	TBD
<b>Benefits (loss avoided)</b>	Reduce flooding to road
<b>Projected Completion Date</b>	TBD
<b>Priority and Level of Importance (Low, Medium, High)</b>	High

<b>Benefit Analysis (Low, Medium, High)</b>	High
<b>Cost Analysis (Low, Medium, High)</b>	TBD
<b>Actual Completion Date</b>	

<b>Recommended Mitigation Action/Implementation Plan and Project Description</b>	
<b>Action/Implementation Plan and Project Description:</b>	

<b>Mitigation Action and Project Maintenance</b>		
<b>Year</b>	<b>Status</b>	<b>Comments</b>
2019	New	
2020		
2021		
2022		
2023		

<b>Mitigated Hazards</b>	
	<b>All Hazards</b>
X	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
X	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 L - 4.1**

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# L—4.1	Put in a ditch along Main St. from Kotlin to Wheeler to relieve flooding on Main St.	
Status Description: Yes	Project has started. Idot did clean and widen ditch from Kotlin to 4th street. The problem now is where they stopped digging creates a dam and was not cut right to let water flow past that point and also needs a bigger culver under 4th street to mover more water. Idot has a plan to replace all culverts from Route 83 to Wheeler st around 2021. This is a big project with widening road and other items. Phase 1 of this project to be completed by end of this summer. Would like to see if we can move up time table. Will have to check with Idot.	O
Completion status legend: <b>N</b> = New <b>O</b> = Action Ongoing toward Completion <b>C</b> = Project Completed <b>R</b> = Want Removed from Annex <b>X</b> = No Action Taken		

**Action L - 4.2**

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# L—4.2	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	No update	X
Completion status legend: <b>N</b> = New <b>O</b> = Action Ongoing toward Completion <b>C</b> = Project Completed <b>R</b> = Want Removed from Annex <b>X</b> = No Action Taken		

**Action L - 4.3**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# L—4.3	Continue to support the countywide actions identified in this plan.	
Status Description: Yes		O
Completion status legend: <b>N</b> = New <b>O</b> = Action Ongoing toward Completion <b>C</b> = Project Completed <b>R</b> = Want Removed from Annex <b>X</b> = No Action Taken		

**Action L - 4.4**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# L—4.4	Actively participate in the plan maintenance strategy identified in this plan	
Status Description: Yes		O
Completion status legend: <b>N</b> = New <b>O</b> = Action Ongoing toward Completion <b>C</b> = Project Completed <b>R</b> = Want Removed from Annex <b>X</b> = No Action Taken		

**Action L - 4.5**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# L—4.5	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		O
<p>Completion status legend:  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action L - 4.6**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# L—4.6	Where feasible, implement a program to record high water marks following high-water events.	
Status Description: Yes		O
<p>Completion status legend:  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action L - 4.7**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# L—4.7	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment most notable the on-going update to the Village’s comprehensive plan.	
Status Description: Yes		O
Completion status legend: <b>N</b> = New <b>O</b> = Action Ongoing toward Completion <b>C</b> = Project Completed <b>R</b> = Want Removed from Annex <b>X</b> = No Action Taken		

**Action L - 4.8**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# L—4.8	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		O
Completion status legend: <b>N</b> = New <b>O</b> = Action Ongoing toward Completion <b>C</b> = Project Completed <b>R</b> = Want Removed from Annex <b>X</b> = No Action Taken		



### Completed Mitigation Actions

Lemont has no completed mitigation actions at this time.

## Future Needs to Better Understand Risk/Vulnerability

No needs have been identified at this time.

## Additional Comments

Logan St. Dam replaced. Completed 1996

New Ave. Culvert replaced Completed 1996. Since this replacement, flooding has been reduced.

## HAZUS-MH Risk Assessment Results

LEMONT EXISTING CONDITIONS	
2010 Population	16,000
Total Assessed Value of Structures and Contents	\$4,692,516,743
Area in 100-Year Floodplain	621.16 acres
Area in 500-Year Floodplain	631.64 acres
Number of Critical Facilities	70

HAZARD EXPOSURE IN LEMONT						
	Number Exposed		Value Exposed to Hazard		Total	% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents		
<b>Dam Failure</b>						
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%
<b>Flood</b>						
100-Year	36	11	\$15,130,048	\$15,199,490	\$30,329,537	0.65%

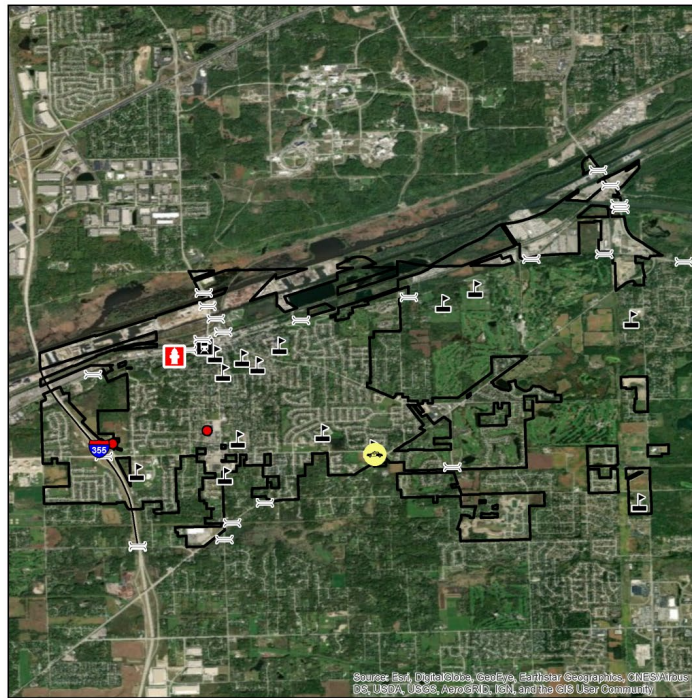
500-Year	39	12	\$15,325,979	\$0	<b>\$30,709,006</b>	0.65%
<b>Tornado</b>						
100-Year	—	—	\$542,793,200	\$433,057,330	<b>\$975,850,531</b>	20.80%
500-Year	—	—	\$824,631,810	\$594,311,730	<b>\$1,418,943,540</b>	30.24%

**ESTIMATED PROPERTY DAMAGE VALUES IN LEMONT**

	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%
U. Salt Cr. #2	\$0	\$0	<b>\$0</b>	0.00%
Touhy	\$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	\$162,953,888	\$51,958,507	<b>\$214,912,395</b>	4.58%
<b>Flood</b>				
10-Year	\$92,536	\$281,352	<b>\$373,888</b>	0.01%
100-Year	\$120,815	\$454,519	<b>\$575,334</b>	0.01%
500-Year	\$194,321	\$502,267	<b>\$696,588</b>	0.01%

<b>Tornado</b>				
100-Year	\$54,279,320	\$43,305,733	<b>\$97,585,053</b>	2.08%
500-Year	\$120,396,244	\$86,769,513	<b>\$207,165,757</b>	4.41%

# Hazard Mapping

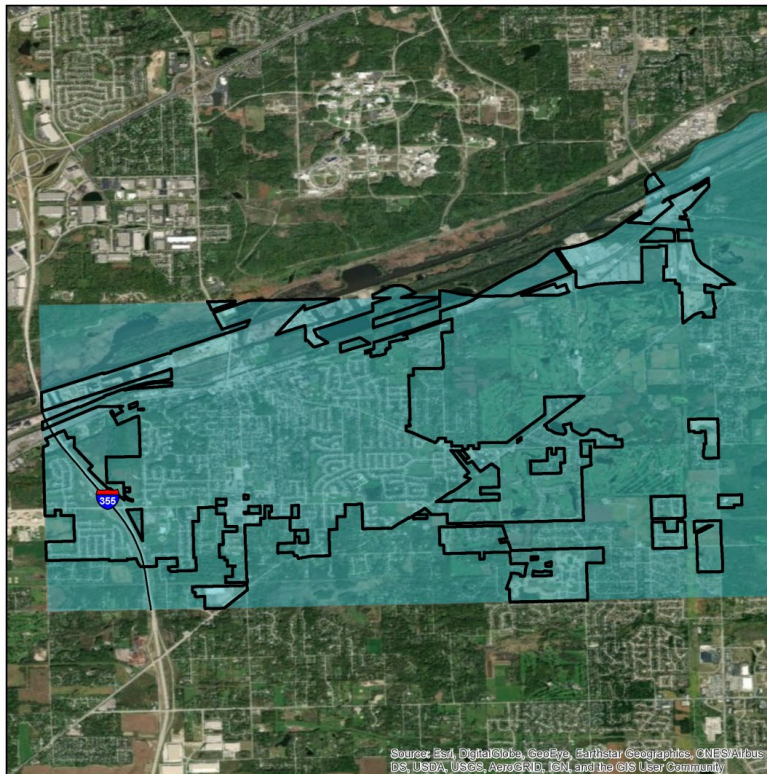


## VILLAGE OF LEMONT

### 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



## VILLAGE OF LEMONT

### PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

**Mercalli Scale, Potential Shaking**  
 II-III Weak

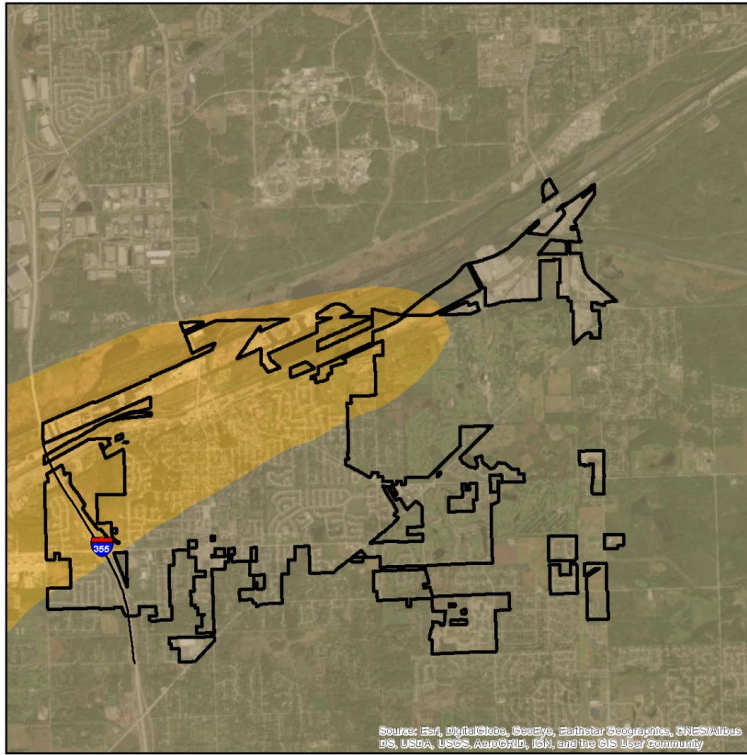
Data provided by the USGS Earthquake Hazards Program and Cook County.

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 760 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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**VILLAGE OF LEMONT**

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

**TYPE**

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

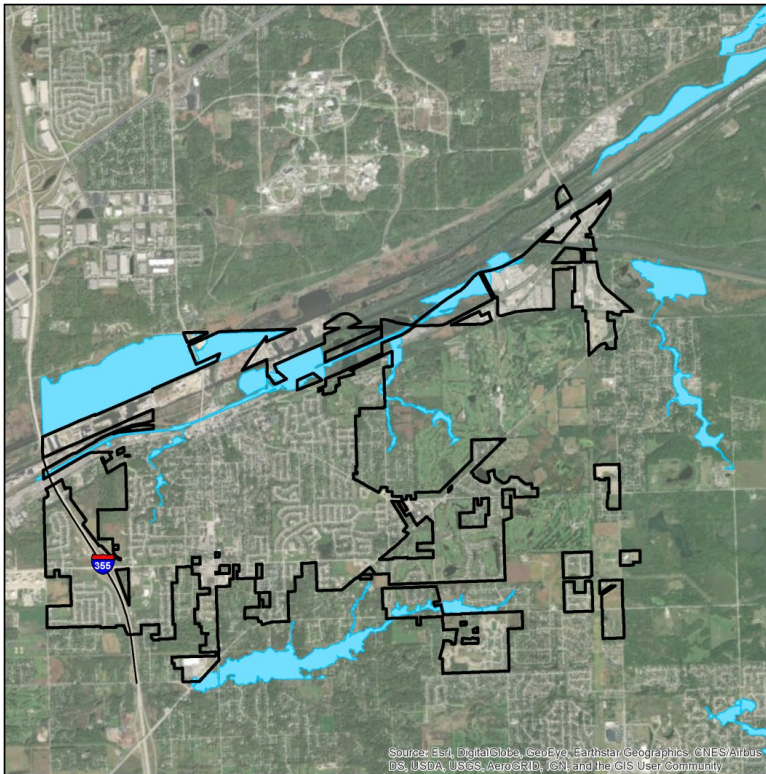
Data provided by the Illinois State Geological Survey and Cook County.

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-2759 Map of Soft-Sediment Deposits and Materials in the Eastern and Central United States (East of 102 degrees West Longitude) by David S. Tullerton, 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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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**VILLAGE OF LEMONT**

**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.

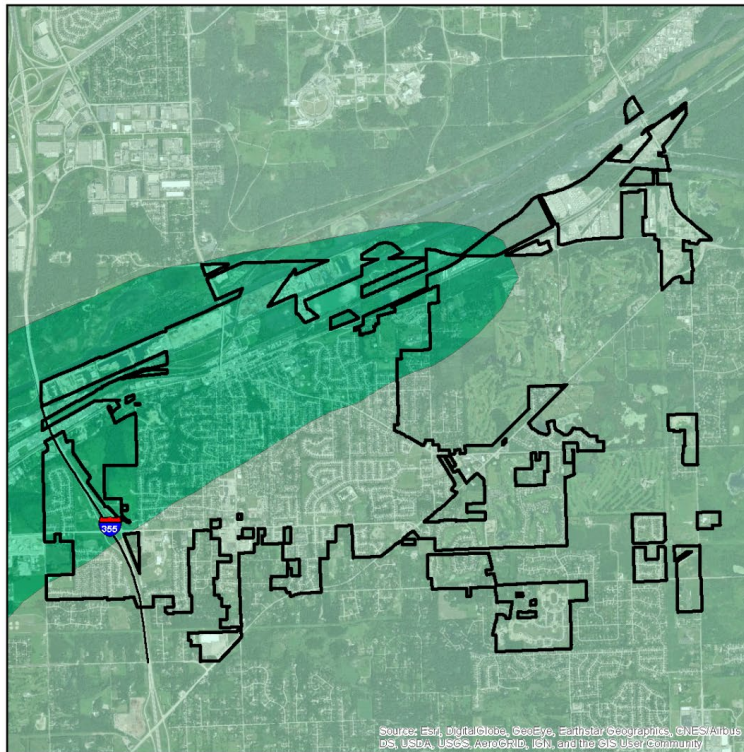
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**DISCLAIMER:** The Cook County MWRDGC 100-year Inundation Map is provided to show general flood risk information regarding floodplains and inundation areas. This map is not regulatory. Official FEMA Flood Insurance Study information and regulatory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



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





### VILLAGE OF LEMONT

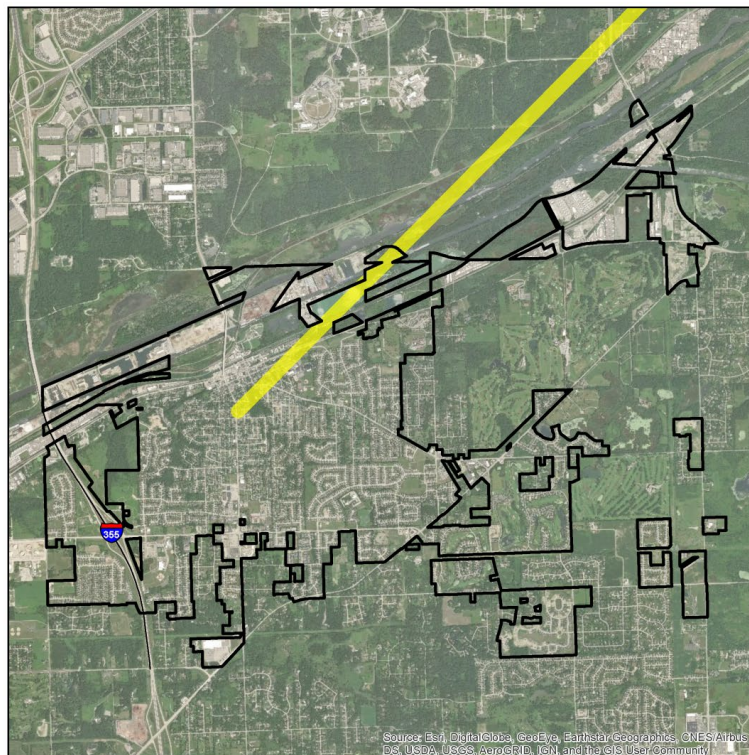
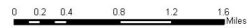
#### LIQUEFACTION SUSCEPTIBILITY

- LIQUEFACTION SUSCEPTIBILITY**
- high
  - low
  - very low

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

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### VILLAGE OF LEMONT

#### 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.

