Lansing

Hazard Mitigation Plan 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: 1893

Current Population: The 2020 U.S. Census population was 29,081. The 2022 U.S. Census estimate indicated the population was 28,000.

Population Growth: The overall population has increased 1.24 percent between 2018 and 2022.

Location and Description: The Village of Lansing is a south suburb of Chicago and is located approximately 24 miles south of the Chicago Loop. It is on the Indiana/Illinois border with Lake Michigan approximately 15 miles away. Interstate 80/94 travels through the Village. Lansing is bordered by Glenwood and Thornton to the west, Calumet City and South Holland to the north, Lynwood to the south, and by Munster and Hammond in Indiana to the east.

Brief History: The first family to settle in Lansing was that of August Hildebrandt in 1843. Henry, George, and John Lansing settled the area in 1846, which was incorporated in 1893. Early settlement in the village was primarily by Dutch and German immigrants. Industrial development of the surrounding Calumet region attracted immigrants from Ireland and Eastern Europe to the village in the 20th century.

Climate: The climate of Lansing 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. 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 Lansing operates under Home Rule. There is an elected Mayor who appoints a Village Manager, and there are six trustees who are elected. This body of Government will assume the responsibility for the adoption and implementation of this plan. There are 7 operating departments in Lansing that include the Building Department, Clerk's Office, Fire Department, Human Resources Department, Planning Department, Police Department, and Public Works Department.

Development Trends: Economic development is slow to moderate in Lansing. An economic development committee has been formed to build on the existing businesses and to create new opportunities. Residential development is slow in Lansing. The community is almost fully developed with little room for new home construction. The village developed a Comprehensive Plan to serve as a Village's official guide for land use, physical improvement and development. The Comprehensive Plan provides a foundation for decision-making based on community consensus, community vision, existing conditions and future potentials. The Plan serves as a "road map" for 10 to 15 years into the future by guiding policy decisions and helping the community achieve its long-term objectives. The 2014 Comprehensive Plan for the Village of Lansing addresses many issues including, land use and development, transportation and circulation, community facilities, infrastructure, environmental features and open space, community character and urban design. The Comprehensive Plan provides community-wide plans for land use & development, transportation and mobility, open space and environmental features, community facilities and infrastructure, image, identify and community character and sustainability. In addition to the community-wide plans, the Comprehensive Plan provides more detailed plans for several key areas in the community, including the Torrence Avenue Corridor, Downtown, and the area surrounding the Lansing Municipal Airport.

Changes in Community Priorities: The Village is making improvements to building structures, building codes, and piping.

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 *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, Ordinance	es & Requirem	ents			•
Building Code	Yes	No	No	Yes	Ch. 46-24 1969 5-21- 2013
Zonings	Yes	No	No	Yes	Ch. 56 May 2003
Subdivisions	Yes	No	No	No	Ch. 55 August 1981
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Ord. 8- 13 June 2008
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. Ord. 4-32 Sep. 2004
Environmental Protection	No	No	No	No	
Planning Documents					
General or Comprehensive Plan	Yes	No	No	No	Code 1969 Code 1982, Adopted 2003
Is the plan equipped to provide integration to this mitigation plan?				Yes – Land Use	
Floodplain or Basin Plan	Yes	No	No	No	Ord. 85-29 Aug 1985

Ctorpourate:					Ord. 8-13
Stormwater Plan	Yes	No	No	No	Ora. 8-13 June 2008
Capital Improvement Plan	Yes	No	No	No	Lansing began development of their capital improvement in March 2023 - plans are currently in draft form waiting on community feedback
What types of capit	tal facilities doe	es the plan addres.	s?		Village owned facilities and infrastructure
How often is the pla	an revised/upd	ated?			6-year CIP, updated annually
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	Yes	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 The Village Plan should be completed in May 2014
Shoreline Management Plan	No	No	No	No	
Response/Recove	ery Planning				
Comprehensive Emergency	Yes	No	Yes	Yes	Cook County EMRS Ord.

Management					84-02 Apr
Plan					1984
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County EMRS Preparing THIRA
Terrorism Plan	No	No	Yes	Yes	Cook County EMRS
Post-Disaster Recovery Plan	No	No	No	No	
Continuity of Operations Plan	No	No	Yes	No	Cook County EMRS
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	Yes
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
Other	Yes

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY			
Staff/Personnel Resources	Available?	Department/Agency/Position	
Planners or engineers with			
knowledge of land development	Yes	Planning and Development	
and land management practices			
Engineers or professionals trained			
in building or infrastructure	Yes	Planning and Development	
construction practices			
Planners or engineers with an	Yes	Planning and Development	
understanding of natural hazards	103	T tarring and Development	
Staff with training in benefit/cost	No		
analysis	110		
Surveyors	No		
Personnel skilled or trained in GIS	Yes	Cook County GIS Consortium	
applications	103	Cook County Clo Consortium	
Scientist familiar with natural	No		
hazards in local area	140		
Emergency manager	Yes	Village Administrator	
Grant writers	Yes	Police Department	

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TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Public Works
Who is your jurisdiction's floodplain administrator? (department/position)	Superintendent
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date of adoption of your flood damage prevention ordinance?	June 2008
When was the most recent Community Assistance Visit or Community Assistance Contact?	05/11/1998
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 Village is not looking to improve its classification at this time.

NFIP Participation Activities

Maintaining compliance under the NFIP is an important component of flood risk reduction. All planning partners that participate in the NFIP have identified actions to maintain their compliance and good standing. Cook County entered the NFIP on April 15, 1981. Structures permitted or built in the County before then are called "pre-FIRM" structures, and structures built afterwards are called "post-FIRM." The insurance rate is different for the two types of structures. The effective date for the current countywide FIRM is August 19, 2008. This map is a DFIRM (digital flood insurance rate map). The communities in Cook County that participate in the NFIP are shown in *Table: NFIP Participating Communities in Cook County* in *Volume I* of the Cook County MJ-HMP.

The NFIP makes federally-backed flood insurance available to homeowners, renters, and business owners in participating communities. The communities in Cook County that participate in the NFIP and their "Policies in Force," "Total Coverage," and "Total Written Premiums" are shown in *Table: Cook County Flood Insurance Policies* in *Volume I* of the Cook County MJ-HMP.

The following are NFIP-related activities completed by our community:

- Our staff provide the following services: permit reviews, GIS, inspections, engineering capability.
- My community's Floodplain Administrator is a Certified Floodplain Manager (CFM).
- My community teaches property owners or other stakeholders about the importance of flood insurance through public outreach events, workshops, and/or seminars.
- Our community enforces local floodplain regulations and monitors compliance.
- Our floodplain development regulations meet or exceed Federal Emergency Management Agency (FEMA) or State minimum requirements.

Further details include: Improvement to Calumet River walls and new underground pipes for drainage in older sections of village.

Substantial Improvement Rule and the Substantial Damage Rule

The IDNR/OWR has developed a model ordinance for floodplain management, which has been adopted by most communities in Illinois. The ordinance includes the minimum requirements an NFIP participating jurisdiction must adopt and enforce, as well as additional higher regulatory requirements. The optional, higher regulatory standards include a minimum one foot of freeboard above the base flood elevation and cumulative tracking of damage repairs and improvements to establish substantial damage and substantial improvement compliance. Some jurisdictions have chosen to exceed the requirements of the model ordinance and have adopted more restrictive ordinances. This is most common in the communities in northeastern Illinois.

Existing Municipal Code:

Sec. 52-46 Definitions

Substantial damage means damage of any origin sustained by a structure whereby the cumulative percentage of damage, subsequent to the effective date of the ordinance from which this article is derived, equals or exceeds 50 percent of the market value of the structure before the damage occurred regardless of actual repair work performed. Volunteer labor and materials must be included in this determination. The term "substantial damage" includes repetitive loss buildings. See Repetitive loss.

Substantial improvement means any reconstruction, rehabilitation, addition, or improvement of a structure taking place, subsequent to the effective date of the ordinance from which this article is derived, in which the cumulative percentage of improvements equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started.

- (1) A substantial improvement occurs when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term "substantial improvement" also includes structures which have incurred repetitive loss or substantial damage, regardless of the actual work done.
- (2) The term "substantial improvement" does not, however, include either:
- a. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to ensure safe living conditions; or
- b. Any alteration of a "historic structure" listed on the National Register of Historic Places or the state register of historic places; provided the alteration will not preclude the structure's continued designation as a historic structure.

Sec. 52-48 Building Commissioner's Duties

(a) Determine floodplain designations. In determining floodplain designations the building commissioner shall include the following criteria:

- (1) Check all new development sites to determine whether they are in a special flood hazard area (SFHA).
- (2) If the new development sites are in a SFHA, determine whether they are in a floodway, flood fringe or in a floodplain for which a detailed study has not been conducted and which drains more than one square mile.
- (3) Check whether the development is potentially within an extended SFHA, with a drainage area less than one square mile, indicating that the development would have adverse impacts regarding storage, conveyance, or inundation which would be the basis for the applicant being required to delineate the floodplain and floodway and be subject to the remaining sections of this article.
- (b) *Professional engineer review.* The building commissioner shall use professional engineering reviews where applicable:
- (1) If the development site is within a floodway or in a floodplain for which a detailed study has not been conducted and which drains more than one square mile, the permit shall be referred to a licensed professional engineer under the employ or contract of the village for review to ensure that the development meets the requirements of sections 52-51 or 52-52.
- (2) In the case of an appropriate use, the licensed professional engineer shall state in writing that the development meets the requirements of section 52-51.
- (g) Damage determinations. The building commissioner shall make damage determinations of all damaged buildings in the SFHA after a flood to determine substantially damaged structures which must comply with section 52-53(c)(3).

Sec. 52-53 Permitting Requirements Applicable to all Floodplain Areas

In addition to the requirements found in <u>sections 52-50</u> through <u>52-52</u> for development in flood fringes, designated floodways, and SFHA or floodplains where no floodways have been identified, the following requirements shall be met:

- (3) Protecting buildings. The following building protection standards shall be met:
- a. All buildings located within a 100-year floodplain, also known as a SFHA, shall be protected from flood damage below the flood protection elevation. This building protection criteria applies to the following situations:
- 1. Construction or placement of a new building or alteration or addition to an existing building valued at more than \$1,000.00 or 70 square feet;
- 2.Substantial improvements or structural alterations made to an existing building that increase the floor area by more than 20 percent or equal to, or exceed, the market value by 50 percent. Alterations shall be figured cumulatively, subsequent to the adoption of the ordinance from which this article is derived. If substantially improved, the existing structure and the addition must meet the flood protection standards of this section;

- 3. Repairs made to a substantially damaged building shall be figured cumulatively, subsequent to the adoption of the ordinance from which this article is derived. If substantially damaged the entire structure must meet the flood protection standards of this section;
- 4. Installing a manufactured home on a new site or a new manufactured home on an existing site (the building protection requirements do not apply to returning a manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage);
- 5. Installing a travel trailer or recreational vehicle on a site for more than 180 days per year; and
- 6. Repetitive loss to an existing building as defined in <u>section 52-46</u>. This building protection requirement may be met by any method approved by the village.
- c. A residential or nonresidential building may be elevated in accordance with the following:
- 1. The building or improvements shall be elevated on crawl spaces, stilts, piles, walls, or other foundation that is permanently open to floodwaters and not subject to damage by hydrostatic pressures of the base flood or 100-year frequency flood. Designs must either be certified by a licensed professional engineer or architect or the permanent openings, one on each wall, shall be no more than one foot above existing grade, and consist of a minimum of two openings. The openings must have a total net area of no less than one square inch for every one square foot of enclosed area subject to flooding below the base flood elevation;
- 2. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice and floating debris; and
- 3. All areas below the flood protection elevation shall be constructed of materials resistant to flood damage; and:
- (i) The lowest floor (including basement) and all electrical, heating, ventilating, plumbing, air conditioning equipment and utility meters shall be located at or above the flood protection elevation;
- (ii) Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the flood protection elevation; provided they are waterproofed;
- (iii) The areas below the flood protection elevation may only be used for the parking of vehicles, building access or storage in an area other than a basement and not later modified or occupied as habitable space;
- (iv) In lieu of the criteria contained in this section, the design methods to comply with these requirements may be certified by a licensed professional engineer or architect; and
- (v) Manufactured homes, and travel trailers to be installed on a site for more than 180 days, shall be elevated to or above the flood protection elevation; and, shall be anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the rules and regulations for the State Mobile Home Tie-Down Act issued pursuant to 77 Ill. Admin. Code Part 870. In addition, all manufactured homes shall meet the following elevation requirements:

A. In the case of manufactured homes placed or substantially improved: (i) outside of a manufactured home park or subdivision; (ii) in a new manufactured home park or subdivision; (ii) in an expansion to an existing manufactured home park or subdivision; or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage from a flood, the top of the lowest floor shall be elevated to or above the flood protection elevation;

B. In the case of manufactured homes placed or substantially improved in an existing manufactured home park or subdivision, the manufactured home shall be elevated so that either the top of the lowest floor is above the base flood elevation or the chassis is at least 36 inches in height above grade and supported by reinforced piers or other foundations of equivalent strength, whichever is less;

f. Construction of new or substantially improved critical facilities shall be located outside the limits of the floodplain. Construction of new critical facilities shall be permissible within the floodplain if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor (including basement) elevated or structurally dry-floodproofed to the 500-year flood frequency elevation or three feet above the level of the 100-year flood frequency elevation whichever is greater. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities.

TABLE: COMMUNITY CLASSIFICATIONS				
	Participating?	Classification	Date Classified	
Community Rating System	Yes	Rating 7	11/13/2013	
Building Code Effectiveness Grading Schedule	Yes	Commercial = 6 Residential = 6	08/02/2013	
Public Protection/ISO	Yes	ISO 4	2011	
StormReady	Yes	Gold (Countywide)	2014	
Tree City USA	No	N/A	N/A	

Opportunities to Expand and Improve Capabilities

Opportunities to expand and improve capabilities include enforcing building plans. Opportunities to expand and improve capabilities include developing a strategy to identify and set aside municipal funds to assist with the 25% cost match for FEMA HMA mitigation grants. Due to the technical expertise needed to develop grant applications and benefit cost analyses for FEMA HMA grants, the municipality has a need for qualified grant writers to assist in the development and management of these grants.

Improvement in drainage pipes and pump stations.

Plan Integration

The capability assessment describes opportunities to "link" or integrate the mitigation plan into other planning mechanisms. The process and mechanism to identify opportunities to integrate the Cook County MJ-HMP into other planning mechanisms will occur during the Annual Update Process and be reflected in the Jurisdictional Annual Report each year. Specific plan integration opportunities will include:

- The goals and actions of the Hazard Mitigation Plan will be considered in the next capital improvement planning process.
- The hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the Comprehensive Plan.
- The hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the jurisdiction's land use plans, zoning, and subdivision codes.

Emergency Plan Integration:

Cook County EMRS is supporting communities to develop and update their respective Emergency Operations Plans, Continuity of Operations Plan/Continuity of Government Plan, and Recovery Plan in 2024. This is an ongoing countywide initiative and is being implemented in all municipalities.

Emergency Operations Plan (EOP)

An EOP template was created for all municipalities. The 2019 Cook County MJ-HMP and the hazards in the mitigation plan have been integrated into the Situation and Assumptions section of the EOP. Within that section, the natural hazards based on the 2019 MJ-HMP were added in the Initial Analysis and Assessment and Identification of Hazards section of the EOP. The hazards in the 2019 plan and the 2024 MJ-HMP did not change apart from adding wildfires for the Forest Preserve and unincorporated areas of the County. Future updates of the EOP will take into consideration any additional new natural hazards that are added to subsequent updates to the MJ-HMP.

Continuity of Operations Plan (COOP)

The Continuity of Operations Plan (COOP) for the municipality includes a Situation section that is based on the 2019 Cook County MJ-HMP jurisdictional annex, and specifically the hazards identified in the annex. The COOP-specific risk assessment is hazard-specific and based on likelihood of occurrence and severity of impact.

Recovery Plan

The goals of the Recovery Plan were developed to align with the 2019 Cook County MJ-HMP, and specifically prioritizes the responsibility of officials under this plan to save lives, protect property, relieve human suffering, sustain survivors, repair essential facilities, restore services, and protect the environment. The plan acknowledges that hazard mitigation is an important priority and consideration during the rebuilding process.

Jurisdiction-Specific Natural Hazard Event History

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: 15 (14 Single Family, 1 Other-Nonresidential)
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0

• Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

Federal Disasters Declared

Disaster Declaration Number	Date Declared	Event
DR-227	4/25/1967	Tornado
DR-351	9/4/1972	Flood
DR-373	4/26/1973	Flood
DR-509	6/18/1976	Severe Storm(s)
DR-643	6/30/1981	Severe Storm(s)
DR-776	10/7/1986	Flood
DR-798	8/21/1987	Flood
DR-997	7/9/1993	Flood
DR-1129	7/25/1996	Severe Storm(s)
DR-1188	9/17/1997	Severe Storm(s)
DR-1729	9/25/2007	Severe Storm(s)
DR-1800	10/3/2008	Severe Storm(s)
DR-1935	8/19/2010	Severe Storm(s)
DR-1960	3/17/2011	Snow
EM-3068	1/16/1979	Snow
EM-3134	1/8/1999	Snow
EM-3161	1/17/2001	Snow
EM-3230	9/7/2005	Hurricane – Katrina Evacuation
EM-3435	3/13/2020	Biological
DR-4116	5/10/2013	Flood
DR-4489	3/26/2020	Biological
DR-4728	8/15/2023	Severe Storm(s)
DR-4749	11/20/2023	Flood

State Disaster Declarations

Date Declared	Event
7/26/2010	Severe Storms, High Winds, Torrential Rain
1/31/2011	Winter Weather
4/25/2011	High Wind, Tornadoes, Torrential Rain
5/25/2011	
4/18/2013	Severe Storms, Heavy Rainfall, Flooding, Straight-line Winds
4/20/2013	
4/21/2013	
4/25/2013	
4/30/2013	
1/6/2014	Heavy Snowfall, Frigid Temperatures
7/12/2017	Thunderstorms, Heavy Rainfall, Flooding
7/14/2017	
1/29/2019	Winter Storm
2/6/2020	Severe Storms
3/12/2020 – present (reissued	COVID-19
monthly)	
2/16/2021	Winter Storms

2/1/2022	Winter Storms
8/1/2022	Monkeypox
(reissued monthly through	
10/28/2022)	

TABLE: NATURAL HAZARD EVENTS				
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment/ Event Narrative	
Severe Weather	-	6/30/2014	-	
Hail	-	5/20/2014	-	
Severe Storm	DR-4116	4/26/2013	-	
Severe Winter Storm	DR-1960	1/31/2011	\$74,537.71	
Severe Storm and Flooding	DR-1935	7/19/2010	\$24,130.71	
Severe Storm and Flooding	DR-1800	9/13/2008	\$106,815.84	
Severe Storm and Flooding	DR-1729	8/20/2007	No data available. Minor damage.	
Severe Winter Storm	EM-3161	12/11/2000	No data available. Minor damage.	
Winter Snow Storm	EM-3134	1/1/1999	No data available. Minor damage.	
Severe Storm and Flooding	DR-798	8/13/1987	No data available. Major damage.	
Severe Storm and Flooding	DR-776	9/21/1986	No data available. Major damage.	
Severe Storm (Micro- burst)	-	8/2004	No data available. Moderate damage.	

Jurisdiction-Specific Hazards: Vulnerabilities and Impacts

Hazards that represent a county-wide risk are addressed in the Risk Assessment section of the 2024 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.

Earthquake: On 4/18/2008 at 09:36:59, a magnitude 5.4 (Depth: 8.9 mi) earthquake occurred 216.1 miles away from Lansing center.

Drought: The village promotion of water conservation programs Village wide indicates impacts.

Flood: Severe thunderstorms formed across far northern Illinois during the afternoon hours of July 17th 2003 and moved south across the Chicago Metro area through the evening. Minor flooding of some streets and low lying areas was reported across southern Cook County. Additional areas at risk of flooding include the Calumet River region. The Oakwood Estates subdivision is vulnerable to flooding from local creeks. In many areas, basements are at risk of flooding.

Severe Weather: Extensive damage was sustained from two separate lines of thunderstorms on Monday, June 30th 2014 which was officially determined to be from two separate derecho events. During these two events, 80 to 110 MPH straight line winds along with several tornadoes of up to EF-1 intensity produced wind damage from Central Iowa east into Michigan and Ohio. Thunderstorms developed over Iowa during the early afternoon and organized into a forward-propagating quasilinear convective system (QLCS) and tracked across lake Michigan by early to mid evening.

Meanwhile, a second complex of intense thunderstorms developed over central and eastern Iowa and also evolved into a QLCS, tracking across northern Illinois and northwest Indiana late in the evening into the overnight hours. Additional risks are due to high heat, as there is no back power at some assisted living facilities. Severe Weather also may cause the Calumet River to flood. Lansing Municipal Airport is an additional location that is vulnerable within our jurisdiction.

Tornadoes: A brief tornado touched down near 179th street, east of Burnham Road and ended near the Indiana State line and 177th Street. Several tree limbs were blown down. One tree limb fell onto a car. (6/7/2008) There is no back up power at assisted living facilities, and older municipal buildings have possible structural issues. Lansing Municipal Airport is an additional location that is vulnerable within our jurisdiction.

Severe Winter Weather: Overpasses on Wentworth Ave. and Torrence Ave. freeze over and can not be utilized by vehicles during Severe Winter Weather events.

Indicator	Number	Percent
Families in poverty	921	10.4%
People with disabilities	4,303	12%
People over 65 years	5,966	16.5%
People under 5 years	1,606	4.5%
People of color	25,975	72%
Black	18,355	50.9%
Native American	239	0.7%
Hispanic	5,340	14.8%
Difficulty with English	1,091	3.2%
Households with no car	656	4.8%
Mobile homes	378	2.8%

Data are from the U.S. Census Bureau, American Community Survey. See methods for more information.

The community evaluated whether vulnerability, and subsequently the potential impacts, in hazard-prone areas had increased, decreased, or remained the same for each natural hazard identified in this Hazard Mitigation Plan. Climate change, infrastructure expansion, and economic shifts that can affect vulnerability were considered. For example, if planned development is in an identified hazard area or is not built to the updated building codes, it may increase the community's vulnerability to future hazards and disasters. On the other hand, if development occurred with mitigation practices in place, the vulnerability may have remained the same or decreased. Additionally, shifting demographics were taken into consideration when assessing development trends.

Jurisdiction-Specific Climate Change Vulnerability and Impacts

The table below outlines if climate change, as assessed by the local planning team, has increased or decreased the municipality's vulnerability/exposure, and thereby the potential impacts, to each natural hazard over the past five (5) years (**Current Vulnerability**), and the effect of climate change in the future probability of occurrence and impacts (**Future Vulnerability**) from each natural hazard.

Future studies are needed to better understand the impact of climate change on the community's assets.

Hazard	Vulnerability
Current Vulnerability	

Dam and Levee Failure	Remained the Same	
Drought	Remained the Same	
Earthquake	Remained the Same	
Flood (Riverine, Urban, Shoreline)	Increased	
Severe Weather (Extreme Heat, Lightning, Hail,	Increased	
Fog, High Wings)		
Severe Winter Weather (Ice Storms, Heavy Snow,	Increased	
Blizzards, Extreme Cold)		
Tornado	Remained the Same	
Wildfire (Wildfire Smoke)	Remained the Same	

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	No Change is Anticipated
Drought	No Change is Anticipated
Earthquake	No Change is Anticipated
Flood (Riverine, Urban, Shoreline)	Increase
Severe Weather (Extreme Heat, Lightning, Hail,	Increase
Fog, High Wings)	Iliciease
Severe Winter Weather (Ice Storms, Heavy Snow,	Increase
Blizzards, Extreme Cold)	Iliciease
Tornado	No Change is Anticipated
Wildfire (Wildfire Smoke)	No Change is Anticipated

<u>Jurisdiction-Specific Changes (or Expected Changes) in Development Trends in Hazard-Prone</u> Areas

The table below outlines if development, as assessed by the local planning team, over the past five (5) years (**Current Vulnerability**) has increased or decreased the jurisdiction's vulnerability/exposure, and thereby the potential impacts, to these natural hazards, and the anticipated effects changes in development may have on the future probability of occurrence and impacts (**Future Vulnerability**) from these natural hazards.

Hazard	Vulnerability			
Current Vulnerability				
Dam and Levee Failure	Remained the Same			
Drought	Remained the Same			
Earthquake	Remained the Same			
Flood (Riverine, Urban, Shoreline)	Remained the Same			
Severe Weather (Extreme Heat, Lightning, Hail,	Remained the Same			
Fog, High Wings)	Nomalica the dame			
Severe Winter Weather (Ice Storms, Heavy Snow,	Remained the Same			
Blizzards, Extreme Cold)	Normanica the Same			
Tornado	Remained the Same			
Wildfire (Wildfire Smoke)	Remained the Same			

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	No Change is Anticipated
Drought	No Change is Anticipated
Earthquake	No Change is Anticipated

Flood (Riverine, Urban, Shoreline)	No Change is Anticipated		
Severe Weather (Extreme Heat, Lightning, Hail,	No Chango is Anticipated		
Fog, High Wings)	No Change is Anticipated		
Severe Winter Weather (Ice Storms, Heavy Snow,	No Change is Anticipated		
Blizzards, Extreme Cold)			
Tornado	No Change is Anticipated		
Wildfire (Wildfire Smoke)	No Change is Anticipated		

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: HAZ	TABLE: HAZARD RISK RANKING		
Rank	Hazard Type		
1	Tornado		
2	Flood		
3	Severe Weather		
4	Severe Winter Weather		
5	Earthquake		
6	Drought		
7	Dam Failure		

New Mitigation Actions

Lansing did not have any new mitigation actions created during the 2024 update.

Ongoing Mitigation Actions

During the 2024 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Mitigation Action #2: Raise p	Mitigation Action #2: Raise public awareness about regional hazards.					
Lead Agency/Department Organization: Village of Lansing Public Works	Supporting Agencies/ Organizations:	Estimated Cost: \$5000; Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: All Hazards	
Year Initiated	L	2014		I		
Applicable Jurisdiction		Village of Lansing				
Applicable Goal		2,6				
Applicable Objective		5, 6				
Cost Analysis (Low, Medium	, High)	Low				
Priority and Level of Importance (Low, Medium, High)		High				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium				
Action/Implementation Plan	and Project	Awareness via annual letters sent to residents on flood plains along with				
Description:	Description:		quarterly notices/information on a Village wide new letter.			
Actual Completion Date or Ongoing Indefinite						
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project		0				

Completed; R = Want Removed from Annex; X =	
No Action Taken/Delayed	

Mitigation Action #3: Maintain political support for hazard mitigation and response programs.					
Lead Agency/Department Organization: Village of Lansing Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General	Estimated Projected Completion Date:	Hazard(s) Mitigated: All Hazards
Year Initiated		2014	Fund	Ongoing	
Applicable Jurisdiction		Village of Lansing			
Applicable Goal		4			
Applicable Objective	•••	1, 6 Low			
	Cost Analysis (Low, Medium, High)				
Priority and Level of Importa Medium, High)	nce (Low,	Medium			
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	I MEUIIM				
Action/Implementation Plan Description:	ementation Plan and Project The Village of Lansing's Mayor, Trustees, and Administrators continue t		continue to		
Actual Completion Date or C	Ingoing Indefinite				
Project Status & Changes in	Priority				
Completion status legend:					
N = New; I = In Progress Toward Completion;		0			
O = Ongoing Indefinitely; C = Project					
Completed; R = Want Removed from Annex; X = No Action Taken/Delayed					

Action #4

Mitigation Action #4: Maintai	Mitigation Action #4: Maintain and improve infrastructure throughout the Village of Lansing.				
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)
Organization:	Agencies/	High	Funding	Projected	Mitigated:
Village of Lansing Public	Organizations:		Source:	Completion	All Hazards
Works			CIP, Bonds,	Date:	
			BRIC, HMGP	Long-term	
Year Initiated		2014			
Applicable Jurisdiction		Village of Lansing			
Applicable Goal		2,3			
Applicable Objective		1, 2, 5, 6, 7, 10			
Cost Analysis (Low, Medium	, High)	High			
Priority and Level of Importa	nce (Low,	Llidh			
Medium, High)		High			
Benefits of the Mitigation Pro	oject (Loss	High			
Avoided or Issue Being Mitigat	ed)				
Action/Implementation Plan	and Project	The Village continues to work on upgrading sewers, streets, and waterlines as			
Description:		needed.			
Actual Completion Date or C	Ingoing Indefinite				
Project Status & Changes in	Priority				
Completion status legend:					
N = New; I = In Progress Toward Completion;		0			
O = Ongoing Indefinitely; C = Project					
Completed; R = Want Removed from Annex; X =					
No Action Taken/Delayed					

Action #6

Mitigation Action #6: Evaluate critical facilities and retrofit as needed.

Lead Agency/Department Organization: Village of Lansing Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund, BRIC, HMGP	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Earthquake
Year Initiated		2014			
Applicable Jurisdiction		Village of Lansing			
Applicable Goal		2,3			
Applicable Objective		1, 2, 7, 10			
Cost Analysis (Low, Medium	ı, High)	Medium			
Priority and Level of Importa Medium, High)	Priority and Level of Importance (Low, Medium, High)				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigation	•	High			
Action/Implementation Plan Description:	and Project				
Actual Completion Date or C Indefinite	Ongoing				
Project Status & Changes in Completion status legend: N = New; I = In Progress Towa O = Ongoing Indefinitely; C = I Completed; R = Want Remove No Action Taken/Delayed	rd Completion; Project	0			

Mitigation Action #7: Promote the purchase of earthquake insurance.						
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding	Projected	Mitigated:	
Village of Lansing Public	Organizations:		Source:	Completion	Earthquake	
Works			General fund	Date:		
				Long-term		

Year Initiated	2014
Applicable Jurisdiction	Village of Lansing
Applicable Goal	2,6
Applicable Objective	1, 2
Cost Analysis (Low, Medium, High)	Low
Priority and Level of Importance (Low,	Medium
Medium, High)	Mediani
Benefits of the Mitigation Project (Loss	Medium
Avoided or Issue Being Mitigated)	Mediani
Action/Implementation Plan and Project	
Description:	
Actual Completion Date or Ongoing	
Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project	
Completed; R = Want Removed from Annex; X =	
No Action Taken/Delayed	

Mitigation Action #8: Mainta	Mitigation Action #8: Maintain/enhance Community Rating System (CRS) classification to reduce flood insurance rates.						
Lead Agency/Department Organization: Village of Lansing Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flood		
Year Initiated		2014	<u>.</u>				
Applicable Jurisdiction		Village of Lansing					
Applicable Goal		2					
Applicable Objective		7, 9, 11					
Cost Analysis (Low, Medium	Cost Analysis (Low, Medium, High)				_		

Priority and Level of Importance (Low, Medium, High)	Medium
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project	The Village continues to work with mortgage companies and insurance
Description:	companies in this matter.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project	
Completed; R = Want Removed from Annex; X =	
No Action Taken/Delayed	

Mitigation Action #9: Maintain "Good Standing" within the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. This includes enforcing an adopted flood damage prevention ordinance,							
updating floodplain maps, a		assistance and inform	ation on floodpla	in requirements and	impacts.		
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)		
Organization:	Agencies/	Low	Funding	Projected	Mitigated:		
Village of Lansing Public	Organizations:		Source:	Completion	Flood		
Works			General	Date:			
			Fund	Ongoing			
Year Initiated	Year Initiated		2014				
Applicable Jurisdiction		Village of Lansing					
Applicable Goal		2,3					
Applicable Objective		4, 6, 9					
Cost Analysis (Low, Medium	, High)	Low					
Priority and Level of Importa	Priority and Level of Importance (Low,						
Medium, High)		High					
Benefits of the Mitigation Project (Loss		High					
Avoided or Issue Being Mitigat	ed)	' ''ס'''					

Action/Implementation Plan and Project Description:	The Village continues to research flood damage prevention ordinances and annually sends out fliers notifying residents about Village floodplains and insurance requirements.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project	0
Completed; R = Want Removed from Annex; X =	
No Action Taken/Delayed	

Mitigation Action #10: Upgra	Mitigation Action #10: Upgrade/retrofit pump stations at 170th Street.					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	\$200,000; Medium	Funding	Projected	Mitigated:	
Village of Lansing Public	Organizations:		Source:	Completion	Flood	
Works			General Fund	Date:		
				Long-term		
		2011				
Year Initiated		2014				
Applicable Jurisdiction		Village of Lansing				
Applicable Goal		2,3				
Applicable Objective		1, 2, 9,11				
Cost Analysis (Low, Medium	, High)	Medium				
Priority and Level of Importa	nce (Low,	M. P.				
Medium, High)		Medium				
Benefits of the Mitigation Pro	oject (Loss	Litale				
Avoided or Issue Being Mitigat	ed)	High				
Action/Implementation Plan and Project		The Village has been replacing number of product				
Description:		The Village has been replacing pumps as needed.				
Actual Completion Date or Ongoing Indefinite						
Project Status & Changes in	Project Status & Changes in Priority					

Completion status legend:
N = New; I = In Progress Toward Completion;
O = Ongoing Indefinitely; C = Project Completed;
R = Want Removed from Annex; X = No Action
Taken/Delayed

Mitigation Action #11: Tree re	litigation Action #11: Tree removal and erosion control					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	\$500,000; Medium	Funding	Projected	Mitigated:	
Village of Lansing Public	Organizations:		Source:	Completion	Flood	
Works			General	Date:		
			fund, HMGP,	Short-term		
			BRIC			
Year Initiated		2014				
Applicable Jurisdiction		Village of Lansing				
Applicable Goal		2				
Applicable Objective		1, 2, 9, 11				
Cost Analysis (Low, Medium	High)	Medium				
Priority and Level of Importa	nce (Low,	Medium				
Medium, High)		Medium				
Benefits of the Mitigation Pro	ject (Loss	High				
Avoided or Issue Being Mitigat	ed)	1 11811				
Action/Implementation Plan	and Project	The Village has been r	emoving trees and	keeping the landsc	aping around the	
Description:		flood walls under con	trol to maintain a s	trong wall structure	·	
Actual Completion Date or O	ngoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:	Completion status legend:					
N = New; I = In Progress Toward Completion;		0				
O = Ongoing Indefinitely; C = Project Completed;						
R = Want Removed from Annex; X = No Action						
Taken/Delayed						

Action #13

Mitigation Action #13: Addres	Mitigation Action #13: Address encroachment areas along the river.					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	\$90,000; Medium	Funding	Projected	Mitigated:	
Village of Lansing Public	Organizations:		Source:	Completion	Flood	
Works			General	Date:		
			fund, BRIC,	Short-term		
			HMGP			
Year Initiated		2014				
Applicable Jurisdiction		Village of Lansing				
Applicable Goal		2,3				
Applicable Objective		1, 2, 9, 11				
Cost Analysis (Low, Medium	, High)	Medium				
Priority and Level of Importa	nce (Low,	Medium				
Medium, High)		Medium				
Benefits of the Mitigation Pro	ject (Loss	High				
Avoided or Issue Being Mitigat	ed)	i ligii				
Action/Implementation Plan	and Project	No issues since the implementation of this plan. The Village continues to				
Description:		monitor areas.				
Actual Completion Date or O	ngoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:	Completion status legend:					
N = New; I = In Progress Toward Completion;		0				
O = Ongoing Indefinitely; C = Project Completed;						
R = Want Removed from Annex; X = No Action						
Taken/Delayed						

Action #14

Mitigation Action #14: Sewer separation project.

Lead Agency/Department Organization: Village of Lansing Public Works, MWRD	Supporting Agencies/ Organizations:	Estimated Cost: \$7,000,000; High	Potential Funding Source: CIP, Bonds, MWRD- phase-II, BRIC, HMGP	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood
Year Initiated		2014			
Applicable Jurisdiction		Village of Lansing			
Applicable Goal		2,3			
Applicable Objective		1, 2, 9, 11			
Cost Analysis (Low, Medium	, High)	High			
Priority and Level of Importa Medium, High)	Priority and Level of Importance (Low, Medium, High)				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	- '	High			
Action/Implementation Plan	and Project				
Description:					
Actual Completion Date or C	Ongoing Indefinite				
Project Status & Changes in Completion status legend: N = New; I = In Progress Towa O = Ongoing Indefinitely; C = F R = Want Removed from Anne Taken/Delayed	rd Completion; Project Completed;	0			

Mitigation Action #15: Address the failing culvert in North Creek.						
Lead Agency/Department Organization:	Supporting Agencies/	Estimated Cost: \$8,000,000; High	Potential Funding	Estimated Projected	Hazard(s) Mitigated:	
Village of Lansing Public Works, MWRD	Organizations:	-	Source: CIP, Bonds, MWRD-	Completion Date:	Flood	

		phase-II, BRIC, HMGP	Long-term		
Year Initiated	2014				
Applicable Jurisdiction	Village of Lansing				
Applicable Goal	2				
Applicable Objective	1, 2, 9, 11				
Cost Analysis (Low, Medium, High)	High				
Priority and Level of Importance (Low,	Medium				
Medium, High)	Medium				
Benefits of the Mitigation Project (Loss	High				
Avoided or Issue Being Mitigated)	High				
Action/Implementation Plan and Project	No issues since the implementation of this plan. The Village continues to				
Description:	monitor areas.				
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority					
Completion status legend:	О				
N = New; I = In Progress Toward Completion;					
O = Ongoing Indefinitely; C = Project Completed;					
R = Want Removed from Annex; X = No Action					
Taken/Delayed					

Mitigation Action #17: Bury utility cables to reduce the possibility of power outages.						
Lead Agency/Department Organization: Com-Ed	Supporting Agencies/ Organizations:	Estimated Cost: \$20,000,000; High	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Severe Weather	
Year Initiated		2014				
Applicable Jurisdiction		Village of Lansing				
Applicable Goal		2				
Applicable Objective		1, 2, 5, 7, 8, 10	_			

Cost Analysis (Low, Medium, High)	High
Priority and Level of Importance (Low, Medium, High)	Medium
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project Description:	Some new construction in town consists of under ground cables.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project Completed;	O
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #20: Reinfo	Mitigation Action #20: Reinforce current structures to withstand minimum wind speeds.						
Lead Agency/Department Organization: Village of Lansing Public Works	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: BRIC, HMGP, General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Tornadoes		
Year Initiated Applicable Jurisdiction		2014 Village of Lansing					
Applicable Goal Applicable Objective		2,3 1, 2, 3, 6, 7					
Cost Analysis (Low, Medium	, High)	High					
Priority and Level of Importance (Low, Medium, High)		High					
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		High					

Action/Implementation Plan and Project	
Description:	
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
N = New; I = In Progress Toward Completion;	0
O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #21: Promo	ote the building of saf	fe rooms in schools ar	nd new construction	on.			
Lead Agency/Department Organization: Village of Lansing Public Works	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: BRIC, HMGP	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Tornadoes		
Year Initiated		2014					
Applicable Jurisdiction		Village of Lansing					
Applicable Goal		2					
Applicable Objective		2, 3, 7, 10					
Cost Analysis (Low, Medium	, High)	High					
Priority and Level of Importa High)	nce (Low, Medium,	Medium					
Benefits of the Mitigation Pro or Issue Being Mitigated)	pject (Loss Avoided	High					
Action/Implementation Plan Description:	and Project	The Village and School District 171 combined efforts to install a safe room in the new Coolidge School.					
-	Actual Completion Date or Ongoing Indefinite		the new dooringe demot.				
Project Status & Changes in							
Completion status legend:		0					
N = New; I = In Progress Towar	rd Completion;	_					

O = Ongoing Indefinitely; C = Project Completed;	
R = Want Removed from Annex; X = No Action	
Taken/Delayed	

Mitigation Action #22: Integr redevelopment.	ate the hazard mitig	ation plan into other p	ans, programs, or	resources that dic	tate land use or	
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Low	Funding	Projected	Mitigated:	
Village of Lansing Public	Organizations:		Source:	Completion	All Hazards	
Works			General Fund	Date:		
				Ongoing		
Year Initiated		2014				
Applicable Jurisdiction		Village of Lansing				
Applicable Goal		2,5				
Applicable Objective		1, 4, 6, 8				
Cost Analysis (Low, Medium	, High)	Low				
Priority and Level of Importa	nce (Low,	l live				
Medium, High)		High				
Benefits of the Mitigation Pro	oject (Loss	Medium				
Avoided or Issue Being Mitigat	ed)	Medium				
Action/Implementation Plan	n and Project	The Village is researching an ordinance on the rebuilding of homes on				
Description:		floodplain areas which have been destroyed by flooding.				
Actual Completion Date or C	Ongoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:						
N = New; I = In Progress Toward Completion;		0				
O = Ongoing Indefinitely; C = Project Completed;						
R = Want Removed from Anne	ex; X = No Action					
Taken/Delayed						

Lead Agency/Department Organization: Village of Lansing Public Works	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: BRIC, HMGP	Estimated Projected Completion Date: Long-term (depending on funding)	Hazard(s) Mitigated: All Hazards	
Year Initiated		2014	•	1		
Applicable Jurisdiction		Village of Lansing				
Applicable Goal		3				
Applicable Objective		7, 13				
Cost Analysis (Low, Medium	, High)	High				
Priority and Level of Importa High)	nce (Low, Medium,	Medium				
Benefits of the Mitigation Pro or Issue Being Mitigated)	pject (Loss Avoided	High				
Action/Implementation Plan	and Project					
Description:	-					
Actual Completion Date or C	Ingoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:						
 N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed 		0				

Action #24

Mitigation Action #24: Contin	Mitigation Action #24: Continue to support the countywide actions identified in this plan.						
Lead Agency/Department Organization: Village of Lansing Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short- and long-term	Hazard(s) Mitigated: All Hazards		
Year Initiated	-	2014					
Applicable Jurisdiction		Village of Lansing					
Applicable Goal		1,2,3,4,5,6			1,2,3,4,5,6		
Applicable Objective		All					
Cost Analysis (Low, Medium	, High)	Low					
Priority and Level of Importa Medium, High)	nce (Low,	High					
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	•	Medium					
Action/Implementation Plan Description:	and Project	The Village continues to support the Hazard Mitigation Plan by completing and progressing in the action plans listed above.					
Actual Completion Date or C	Ongoing Indefinite						
Project Status & Changes in Completion status legend: N = New; I = In Progress Towar O = Ongoing Indefinitely; C = F R = Want Removed from Anne Taken/Delayed	rd Completion; Project Completed;	0					

Action #25

Mitigation Action #25: Actively participate in the plan maintenance strategy identified in this plan.

Lead Agency/Department Organization: EMRS, Village of Lansing Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: All Hazards	
Year Initiated	•	2014	•		•	
Applicable Jurisdiction		Village of Lansing				
Applicable Goal		1				
Applicable Objective		3, 4, 6				
Cost Analysis (Low, Medium		Low				
Priority and Level of Importa High)	nce (Low, Medium,	High				
Benefits of the Mitigation Pro or Issue Being Mitigated)	pject (Loss Avoided	Low				
Action/Implementation Plan Description:	and Project	The Village continue:	s to plan maintena	nce strategies as exp	lained in the plan.	
Actual Completion Date or C	ngoing Indefinite					
Project Status & Changes in Completion status legend: N = New; I = In Progress Towar O = Ongoing Indefinitely; C = F R = Want Removed from Anne Taken/Delayed	rd Completion; Project Completed;	О				

Mitigation Action #27: Village of Lansing Parking Lot Improvements					
Lead Agency/Department Organization: MWRD	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: MWRD	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood

Year Initiated	2019		
Applicable Jurisdiction	Village of Lansing		
Applicable Goal	1,2		
Applicable Objective	13		
Cost Analysis (Low, Medium, High)	High		
Priority and Level of Importance (Low, Medium, High)	Low		
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Low		
Action/Implementation Plan and Project	Village of Lansing		
Description:	Washington Street GI Parking Lot Improvements		
Actual Completion Date or Ongoing Indefinite			
Project Status & Changes in Priority			
Completion status legend:			
N = New; I = In Progress Toward Completion;	0		
O = Ongoing Indefinitely; C = Project Completed;			
R = Want Removed from Annex; X = No Action			
Taken/Delayed			

Completed Actions

Completed Mitigation Actions - An archive of all identified and completed projects, including completed actions since 2014.

Completed Action Items		
Improve communications with purchase of mass notification system.		
Promote water conservation programs Village-wide.		
Replace 2 existing lift stations at Paxton and Fernwood.		
Replace Erfert Park pump station.		
Improve early warning systems with sirens and mass notification systems.		

Improve current procedures for treating roads during winter storms.

Back-up Generators

Upgrade radio communications equipment from analog to digital technology.

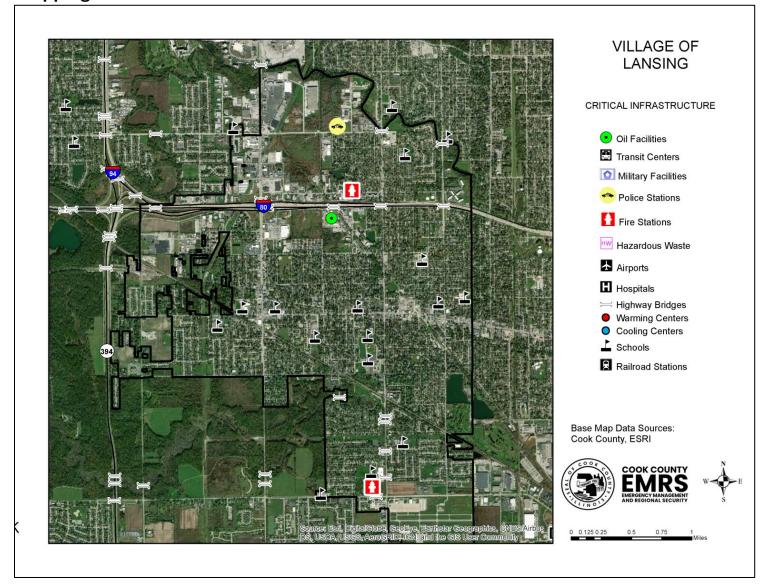
Future Needs to Better Understand Risk/Vulnerability

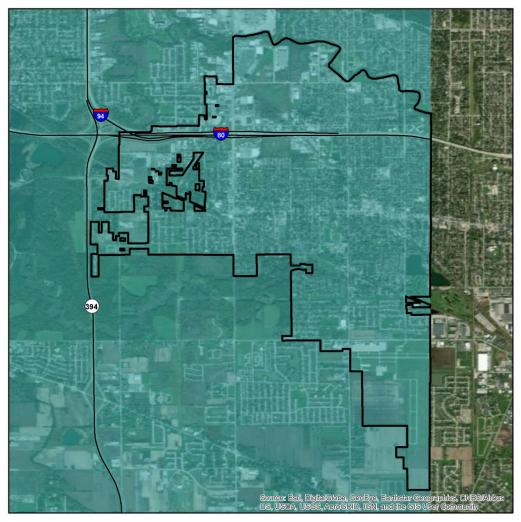
No needs have been identified at this time.

Additional Comments

No additional comments at this time.

Hazard Mapping





VILLAGE OF LANSING

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

Mercalli Scale, Potential Shaking

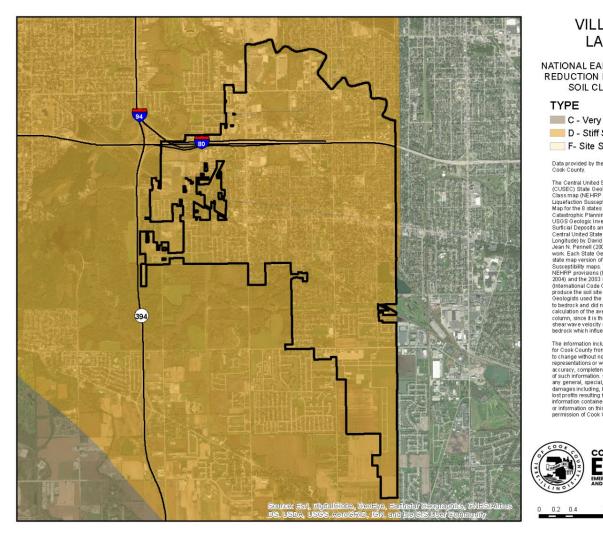
II-III Weak

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 ascelariation and horizontal sectoral response acceleration and horizontal sepectar 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 cod, 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 Casses B a

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VILLAGE OF LANSING

NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP) SOIL CLASSIFICATION

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 Catagrophic Planning Initiative Phase II Work. The USGS Geologic Investigation Series I-2789 Map of Sufficial Deposits and Materials in the Eastern and Central United State (East of 102 degrees West Longitude) Dy David S. Pullerton, Charles A. Bush and Jean N. Pennell (2003) was the base map used for this Jean N. Pennell (2003) was the base map used for first 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 NEHPP provisions (Building Seismic Safey 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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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.

