

## 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:** 1897

**Current Population:** The 2020 U.S. Census population was 16,324. The 2022 U.S. Census estimate indicated the population was 15,821.

**Population Growth:** The overall population has increased 2.47 percent between 2018 and 2022.

**Location and Description:** The Village La Grange is located 14 miles west of Chicago in Cook County and covers approximately 2.5 square miles. Four State highways cross our boundaries on two major routes: Route 12/20/45 and Route 34. The Village is bisected by two major railroads, Burlington Northern Santa Fe railroad and the Indiana Harbor Belt railroad. The Burlington Northern Santa Fe runs a high volume of freight, Amtrak and Metra commuter trains to Chicago from the Western suburbs transporting 65,000 commuters daily. The Indiana Harbor Belt Railroad handles strictly freight with an average 2,905 freight cars per day. Within the Village boundaries, we have a level II trauma center hospital, two nursing homes and a regional high school. The Village is bordered by La Grange Park to the north, Brookfield and McCook to the east, Countryside and unincorporated La Grange Highlands to the south and Western Springs to the west.

**Brief History:** Rich in history, the Village of La Grange offers the modern conveniences of an urban community while preserving much of the authenticity of character originally envisioned by its founding father, F. D. Cossitt, back in 1879. La Grange retains a strong sense of community, with historic homes, traditional downtown business district, schools, parks, and public transportation, all of which contribute to the community's character, quality of life and economic vibrancy.

**Climate:** Typical weather for the Great Lakes region with four distinct seasons, spring, summer, fall and winter. 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. A wide range of temperatures from below zero at times to higher temperatures with high heat indexes in the summer.

**Governing Body Format:** The President and Village Board of Trustees constitute the legislative body of the Village with the Village President serving as Chief Executive Officer. The President and Village Board oversee the following areas: Adoption of ordinances and resolutions, Adoption of an annual Budget, Approval of

payment for expenses and liabilities, Determination of policy under which the Village operates, and appointment of personnel. The Village consists of the following Departments: Administration, Finance, Public Works, Community Development, Fire and Police. The Fire Chief who is assigned as the Emergency Management Coordinator will oversee the adoption and implementation of the plan. The Village Board will adopt the plan by a resolution.

**Development Trends:** Over the next twenty years, La Grange will remain a community with diverse housing, strong community services, and a reputation for civic involvement and volunteerism. Downtown La Grange remains strong, and revitalization of the West End will unify the entire BNSF Railroad Corridor. We will have experienced redevelopment, revitalization and change community-wide. Much of our housing stock will have been upgraded, but the Village will sustain a mix of housing to meet various lifestyle needs. They have invested in and safeguarded our quality education, recreation, open space, and municipal service systems – all of which are important to our family-oriented community. There is a Community Development Department responsible for economic development information and programs throughout the Village of La Grange and is available to assist with locating business in La Grange. As a progressive community, they offer many opportunities for retailers, services, industries, and offices. In 2017 a 254 unit luxury apartment complex was completed and some additional residential properties are being built.

**Changes in Community Priorities:** There have been no significant changes in priority regarding the hazards that could potentially impact the community or changes in priority regarding resilience.

## 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  |
| <b>Codes, Ordinances &amp; Requirements</b> |                 |                               |                                |                |   |
| Building Code                               | Yes             | No                            | No                             | Yes            | 2015 International Building Code<br>2015 International Residential Code |
| Zoning                                      | Yes             | No                            | No                             | Yes            | (65 ILCS 5/)<br>Illinois Municipal Code. 1/91                           |
| Subdivisions                                | Yes             | No                            | Yes                            | No             | Subdivision Code Chapter  |

|   |     |    |     |     |   |
|---|-----|----|-----|-----|---|
|   |     |    |     |     | 52 1969 and as amended  |
| Stormwater Management   | Yes | No | Yes | Yes | State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Local Ordinances, IEPA MS4 permit, MWRD WMO |
| Post Disaster Recovery  | No  | No | No  | No  |   |
| Real Estate Disclosure  | No  | No | Yes | Yes | (765 ILCS 77/) Residential Real Property Disclosure Act.  |
| Growth Management   | No  | No | No  | No  |   |
| Site Plan Review  | Yes | No | No  | No  | Zoning Code Article 14  |
| Public Health and Safety  | Yes | No | Yes | Yes | Cook County Board of Health. In addition applicable local ordinances.   |
| Environmental Protection  | Yes | No | Yes | Yes | Local, state and federal requirements.  |
| <b>Planning Documents</b>   |     |    |     |     |   |
| General or Comprehensive Plan   | Yes | No | No  | No  | Ordinance 0-05-07. May 9, 2005  |
| <i>Is the plan equipped to provide integration to this mitigation plan?</i> |     |    |     |     | Yes - Land Use  |
| Floodplain or Basin Plan  | Yes | No |     | No  | NFIP Participant  |
| Stormwater Plan   | Yes | No | Yes | No  | Local Ordinances, IEPA MS4 permit, MWRD sewer regulations.  |

|  |     |    |     |     |  |
|--|-----|----|-----|-----|--|
| Capital Improvement Plan                                       | Yes | No | No  | No  | Most recent 05/01/2019   |
| <i>What types of capital facilities does the plan address?</i> |     |    |     |     | All Village assets including roadways, water mains, sewer mains, street lighting, buildings, trees, drainage, and pedestrian safety, and other capital improvement projects. |
| <i>How often is the plan revised/updated?</i>                  |     |    |     |     | Annually   |
| Habitat Conservation Plan                                      | No  | No |     | No  |  |
| Economic Development Plan                                      | Yes | No | Yes | Yes | Village Ord. 0-05-07 May 9, 2005   |
| Shoreline Management Plan                                      | No  | No | No  | No  |  |
| <b>Response/Recovery Planning</b>                              |     |    |     |     |  |
| Comprehensive Emergency Management Plan                        | Yes | No | Yes | Yes | Village of La Grange, May 2005   |
| Threat and Hazard Identification and Risk Assessment           | Yes | No | Yes | No  | Village of La Grange October 25, 1993  |
| Terrorism Plan   | No  | No | Yes | Yes | Cook County EMRS   |
| Post-Disaster Recovery Plan                                    | Yes | No | Yes | Yes | Village of La Grange, October 25, 1999   |
| Continuity of Operations Plan                                  | No  | No | Yes | No  | Village of La Grange, October 25, 1999   |
| Public Health Plans  | No  | No | Yes | No  | Cook County DPH  |

**TABLE: FISCAL CAPABILITY**

| <b>Financial Resources</b>                           | <b>Accessible or Eligible to Use?</b> |
|--|---------------------------------------|
| 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 (Water & Sewer)                   |
| 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   | Yes                                   |
| State Sponsored Grant Programs                       | Yes                                   |
| Development Impact Fees for Homebuyers or Developers | No                                    |
| Other  | 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               |   |
| Engineers or professionals trained in building or infrastructure construction practices | Yes               | Public Works/ Director of Public Works/ Illinois Licensed Professional Engineer |
| Planners or engineers with an understanding of natural hazards                          | Yes               | Public Works/ Director of Public Works  |
| Staff with training in benefit/cost analysis  | Yes               | Public Works/ Director of Public Works  |
| Surveyors   | Yes               | Consultants are hired on as needed basis  |
| Personnel skilled or trained in GIS applications  | Yes               | GIS Consortium  |
| Scientist familiar with natural hazards in local area                                   | Yes               | Public Works/ Director of Public Works  |
| Emergency manager   | Yes               | Fire Chief  |
| Grant writers   | Yes               | Department Staff  |

| <b>TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE</b>  |                                     |
|--|-------------------------------------|
| What department is responsible for floodplain management in your jurisdiction?   | Public Works/ Community Development |
| Who is your jurisdiction's floodplain administrator? (department/position)   | Community Development/ Director     |
| Are any certified floodplain managers on staff in your jurisdiction?   | No                                  |
| What is the date of adoption of your flood damage prevention ordinance?  | March 12, 2001                      |
| When was the most recent Community Assistance Visit or Community Assistance Contact?   | Unknown                             |
| 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?  | Yes, general NFIP training |
| 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                         |

### **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.

### **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:*

(42) Subsection 1612.4 is amended to add the following sentence at the end of the paragraph: "and any applicable Cook County Storm-water ordinance, FEMA, 33 Metropolitan Water Reclamation District of Greater Chicago and Village of La Grange flood plain ordinances."

(56) Appendix G entitled "Flood-resistant construction" is hereby adopted by reference as the as part of the Building Code of the Village as if fully set forth in this section.

(34) Subsection R322.1 is amended to add the following sentence at the end of the paragraph: "and any applicable Cook County floodplain ordinance, FEMA, Metropolitan Water Reclamation District of Greater Chicago or other Village of La Grange ordinances."

Their ordinance did not include substantial improvement / substantial damage rule provisions; future updates will consider inclusion of these rules as applicable and as appropriate.

| TABLE: COMMUNITY CLASSIFICATIONS                |                |                   |                               |
|---|----------------|-------------------|-------------------------------|
|   | Participating? | Classification    | Date Classified               |
| Community Rating System                         | No             | N/A               | N/A                           |
| Building Code Effectiveness<br>Grading Schedule | No             | N/A               | N/A                           |
| Public Protection/ISO                           | Yes            | 3                 | 4/1/2020                      |
| StormReady                                      | Yes            | Gold (Countywide) | 2014                          |
| Tree City USA                                   | Yes            | N/A               | Tree City USA<br>for 36 years |

### **Plan Integration**

Opportunities to expand and improve capabilities include:

- Update Building Code
- Implement Flood Mitigation measures and obtain grant funds or matching funds to do so

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.

### *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: 7 (7 Single Family)
- 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<br>4/20/2013<br>4/21/2013<br>4/25/2013<br>4/30/2013 | Severe Storms, Heavy Rainfall, Flooding, Straight-line Winds |
| 1/6/2014  | Heavy Snowfall, Frigid Temperatures                          |
| 7/12/2017<br>7/14/2017  | Thunderstorms, Heavy Rainfall, Flooding                      |
| 1/29/2019   | Winter Storm   |
| 2/6/2020  | Severe Storms  |
| 3/12/2020 – present (reissued monthly)                        | COVID-19   |
| 2/16/2021   | Winter Storms  |
| 2/1/2022  | Winter Storms  |
| 8/1/2022<br>(reissued monthly through 10/28/2022)             | Monkeypox  |

| TABLE: NATURAL HAZARD EVENTS |                                      |                         |  |
|------------------------------|--------------------------------------|-------------------------|--|
| Type of Event                | FEMA Disaster Number (if applicable) | Date                    | Preliminary Damage Assessment/ Event Narrative |
| Severe Weather/Cold          | -                                    | 1/29/2019 - 1/31/2019   | -  |
| Severe Storms/Flooding       | -                                    | 10/14/2017 - 10/15/2017 | -  |
| Severe Storms/Flooding       | -                                    | 8/22/2014               | -  |
| Severe Storms/Flooding       | -                                    | 6/30/2014               | -  |
| Severe Storms/Flooding       | -                                    | 6/24/2014               | -  |
| Severe Snow Event            | -                                    | 1/4/2014 - 1/7/2014     | \$38,541                                       |
| Severe Storms/Winds          | -                                    | 4/2013                  | -  |
| Severe Storms/Wind           | -                                    | 7/21/2001               | -  |
| Severe Storms/Wind           | -                                    | 7/11/2011               | -  |
| Blizzard/Snow Storm          | DR-1960                              | 1/31/2011               | \$72,000                                       |
| Severe Storms/Flooding       | DR-1935                              | 7/2010                  | -  |
| Severe Storms/Flooding       | DR-1800                              | 9/2008                  | -  |
| Severe Storms/Flooding       | DR-1729                              | 8/2007                  | -  |
| Snow Storm                   | EM-3134                              | 1/1/1999                | -  |
| Severe Storms/Flooding       | DR-1129                              | 7/7/1996                | -  |
| Severe Storms                | DR-997                               | 4/13/1993               | -  |
| Blizzard/Snow Storm          | EM-3068                              | 1/1979                  | -  |

### 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.

**Flooding:** In 2006, flash/urban flooding was caused by heavy rain falling across parts of south central Cook County on August 10th. 1.80 inches of rain was measured in 75 minutes in La Grange from 6:30 pm to 7:45 pm. Eight to fourteen inches of standing water was reported on La Grange Road between Plainfield Road and 55th Street in La Grange.

Several additional areas of town flood frequently after heavy rains. Efforts to mitigate this hazard include;

- South of 47th Street Drainage Basin; install a relief storm sewer to improve drainage in depressional areas that flood during significant rain events. Partnering with MWRD to execute a project to mitigate regional flooding issues [#L1.18]
- Extend the completed Maple Avenue Relief Sewer (MARS) phase west of La Grange Road. Conducting a comprehensive stormwater planning effort to construct and tie into MWRD Deep Tunnel Connection Improvements. [#L1.20]

**Severe Winter Weather:** 2010 a winter storm moved across northern Illinois on January 7th. Snow began falling late in the evening on January 6 and continued into the morning hours of January 8. Storm total snowfall amounts included 7.6 inches in La Grange.

**Drought:** Drinkable water supply concerns the community, and drought would limit the supply.

**Dam/Levee Failure:** Plainfield Road from Willow Springs Road to East Avenue is particularly susceptible to overtopping and failure.

| Indicator                | Number | Percent |
|--------------------------|--------|---------|
| Families in poverty      | 68     | 1.6%    |
| People with disabilities | 1,432  | 8.7%    |
| People over 65 years     | 2,688  | 15.9%   |
| People under 5 years     | 1,060  | 6.3%    |
| People of color          | 2,966  | 17.5%   |
| Black                    | 784    | 4.6%    |
| Native American          | 5      | 0%      |
| Hispanic                 | 1,550  | 9.2%    |
| Difficulty with English  | 112    | 0.7%    |
| Households with no car   | 269    | 4.5%    |
| Mobile homes             | 13     | 0.2%    |

*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     |
|---|-------------------|
| <b>Current Vulnerability</b>  |                   |
| Dam and Levee Failure   | Not Applicable    |
| Drought   | Unknown           |
| Earthquake  | Remained the Same |
| Flood (Riverine, Urban, Shoreline)                                      | Unknown           |
| Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)         | Increased         |
| Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold) | Unknown           |
| Tornado   | Unknown           |
| Wildfire (Wildfire Smoke)   | Remained the Same |

| Hazard  | Vulnerability            |
|---|--------------------------|
| <b>Future Vulnerability</b>   |                          |
| Dam and Levee Failure   | Not Applicable           |
| Drought   | Unknown                  |
| Earthquake  | No Change is Anticipated |
| Flood (Riverine, Urban, Shoreline)                                      | Increase                 |
| Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)         | Increase                 |
| Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold) | Increase                 |
| Tornado   | Unknown                  |
| Wildfire (Wildfire Smoke)   | Unknown                  |

### Jurisdiction-Specific Changes (or Expected Changes) in Development Trends in Hazard-Prone 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     |
|------------------------------|-------------------|
| <b>Current Vulnerability</b> |                   |
| Dam and Levee Failure        | Not Applicable    |
| Drought                      | Remained the Same |
| Earthquake                   | Remained the Same |

|   |                   |
|---|-------------------|
| Flood (Riverine, Urban, Shoreline)                                      | Remained the Same |
| Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)         | Remained the Same |
| Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold) | Remained the Same |
| Tornado   | Remained the Same |
| Wildfire (Wildfire Smoke)   | Remained the Same |

| Hazard  | Vulnerability            |
|---|--------------------------|
| <b>Future Vulnerability</b>   |                          |
| Dam and Levee Failure   | Not Applicable           |
| Drought   | No Change is Anticipated |
| Earthquake  | No Change is Anticipated |
| Flood (Riverine, Urban, Shoreline)                                      | Decrease                 |
| Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)         | No Change is Anticipated |
| Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold) | No Change is Anticipated |
| Tornado   | No Change is Anticipated |
| Wildfire (Wildfire Smoke)   | No Change is Anticipated |

We have several retired and assisted living facilities as well as a Hospital and an aging community. We have several flood relief projects on the books but if they do not happen and we experience widespread flooding events we may have some problem at these facilities.

## 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> |                      |
|-----------------------------------|----------------------|
| Rank                              | Hazard Type          |
| 1                                 | Severe Storms/Wind   |
| 2                                 | Flood                |
| 3                                 | Severe Winter Storms |
| 4                                 | Tornado              |
| 5                                 | Earthquake           |
| 6                                 | Drought              |
| 7                                 | Dam Failure          |

## New Mitigation Actions

The following are new mitigation actions created during the 2024 update.

### Action L-1.25

| Mitigation Action #23: Ogden Avenue Relief Sewer (OARS) Project                   |  |                                |  |  |   |
|---|--|--------------------------------|--|--|---|
| <b>Lead Agency/Department Organization:</b><br>La Grange PW and MWRD              | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>High | <b>Potential Funding Source:</b><br>General Fund<br>State Special Funds<br>Hazard Mitigation Grant Program (HMGP)<br>Flood Mitigation Assistance (FMA) Program | <b>Estimated Projected Completion Date:</b><br>Long-term | <b>Hazard(s) Mitigated:</b><br>Flood (Riverine, Urban, Coastal/Shoreline) |
| <b>Year Initiated</b>   |  | 2024                           |  |  |   |
| <b>Applicable Jurisdiction</b>  |  | Village of La Grange           |  |  |   |
| <b>Applicable Goal</b>  |  | 1,2,3,4,5,6                    |  |  |   |
| <b>Applicable Objective</b>   |  | 1,2,3,4,6,9,11,12              |  |  |   |
| <b>Cost Analysis (Low, Medium, High)</b>  |  | High                           |  |  |   |
| <b>Priority and Level of Importance (Low, Medium, High)</b>                       |  | High                           |  |  |   |
| <b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b> |  | High                           |  |  |   |

|  |  |
|--|--|
| <b>Action/Implementation Plan and Project Description:</b>   | May include construction of a new trunk sewer along portions of Plainfield Road, 55th Street and East Avenue and stormwater improvements to the McCook Ditch, McCook Ditch Overflow, and McCook Levee. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |  |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | N  |

## Ongoing Mitigation Actions

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

### Action L-1.1

| Mitigation Action #1: Maintain Warning Siren and Modified plan to provide notification for early warning to residents |  |                                      |  |   |  |
|---|--|--------------------------------------|--|---|--|
| <b>Lead Agency/Department Organization:</b><br>Fire Department  | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>\$700; Low | <b>Potential Funding Source:</b><br>General Fund | <b>Estimated Projected Completion Date:</b><br>Annual | <b>Hazard(s) Mitigated:</b><br>All Hazards |
| <b>Year Initiated</b>   | 2014                                       |                                      |  |   |  |
| <b>Applicable Jurisdiction</b>  | Village of La Grange                       |                                      |  |   |  |
| <b>Applicable Goal</b>  | 2  |                                      |  |   |  |
| <b>Applicable Objective</b>   | 1, 2, 5                                    |                                      |  |   |  |
| <b>Cost Analysis (Low, Medium, High)</b>  | Low  |                                      |  |   |  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>   | High                                       |                                      |  |   |  |
| <b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>                                     | High                                       |                                      |  |   |  |

|  |  |
|--|--|
| <b>Action/Implementation Plan and Project Description:</b>   | The warning siren is maintained annually. The amount necessary is budgeted annually. Code Red is maintained and is also budgeted for annually. The Public Safety Departments are reviewing options to the Code Red system or alternatives to the system. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |  |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O  |

**Action L-1.3**

| <b>Mitigation Action #3: Research and amend building and fire codes that improve public safety.</b> |  |   |  |   |  |
|---|--|---|--|---|--|
| <b>Lead Agency/Department Organization:</b><br>Fire, Community Development                          | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>\$100,000; High | <b>Potential Funding Source:</b><br>General Fund | <b>Estimated Projected Completion Date:</b><br>Short-term | <b>Hazard(s) Mitigated:</b><br>All Hazards |
| <b>Year Initiated</b>   | 2014                                       |   |  |   |  |
| <b>Applicable Jurisdiction</b>  | Village of La Grange                       |   |  |   |  |
| <b>Applicable Goal</b>  | 2,3  |   |  |   |  |
| <b>Applicable Objective</b>   | 1, 2, 4, 10                                |   |  |   |  |
| <b>Cost Analysis (Low, Medium, High)</b>  | High                                       |   |  |   |  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>   | Medium                                     |   |  |   |  |
| <b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>                   | Medium                                     |   |  |   |  |
| <b>Action/Implementation Plan and Project Description:</b>  |  |   |  |   |  |
| <b>Actual Completion Date or Ongoing Indefinite</b>   |  |   |  |   |  |
| <b>Project Status &amp; Changes in Priority</b>   | O  |   |  |   |  |

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

**Action L-1.4**

| <b>Mitigation Action #4: Ensure new developments, large and small, are designed to reduce or eliminate flooding, as Village code requires, including providing on-site water retention capabilities.</b> |  |                               |  |   |                                       |
|--|--|-------------------------------|--|---|---------------------------------------|
| <b>Lead Agency/Department Organization:</b><br>Community Development/<br>Public Works  | <b>Supporting Agencies/ Organizations:</b>   | <b>Estimated Cost:</b><br>Low | <b>Potential Funding Source:</b><br>General Fund | <b>Estimated Projected Completion Date:</b><br>On-going | <b>Hazard(s) Mitigated:</b><br>Floods |
| <b>Year Initiated</b>  | 2014   |                               |  |   |                                       |
| <b>Applicable Jurisdiction</b>   | Village of La Grange   |                               |  |   |                                       |
| <b>Applicable Goal</b>   | 3  |                               |  |   |                                       |
| <b>Applicable Objective</b>  | 1, 2, 3, 4, 9, 10  |                               |  |   |                                       |
| <b>Cost Analysis (Low, Medium, High)</b>   | Low  |                               |  |   |                                       |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | Medium   |                               |  |   |                                       |
| <b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>  | High   |                               |  |   |                                       |
| <b>Action/Implementation Plan and Project Description:</b>   | As part of new development the Village requires that storm water management improvements be incorporated into the design. This includes residential, commercial, and industrial, for both small and large properties. Several recent large projects include the Uptown Development, 40 S. Ashland, BEDS, La Grange Country Club, Mason Home Development and Pathway Development. The Village applies both local storm water management regulations and MWRD's WMO. |                               |  |   |                                       |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |  |                               |  |   |                                       |
| <b>Project Status &amp; Changes in Priority</b>  | O  |                               |  |   |                                       |



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

**Action L-1.5**

| <b>Mitigation Action #5: Continue to expand the Maple Ave. (MARS) sewer west of La Grange Road</b>   |   |   |  |   |  |
|--|---|---|--|---|--|
| <b>Lead Agency/Department Organization:</b><br>Village of LaGrange Public Works  | <b>Supporting Agencies/Organizations:</b> | <b>Estimated Cost:</b><br>\$10M plus; Very High   | <b>Potential Funding Source:</b><br>Capital Improvements, BRIC, HMGP | <b>Estimated Projected Completion Date:</b><br>Long-term MARS Project | <b>Hazard(s) Mitigated:</b><br>Floods/Severe Weather |
| <b>Year Initiated</b>  |   | 2014  |  |   |  |
| <b>Applicable Jurisdiction</b>   |   | Village of La Grange  |  |   |  |
| <b>Applicable Goal</b>   |   | 1   |  |   |  |
| <b>Applicable Objective</b>  |   | 1, 2, 9, 11   |  |   |  |
| <b>Cost Analysis (Low, Medium, High)</b>   |   | High  |  |   |  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  |   | High  |  |   |  |
| <b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>  |   | High  |  |   |  |
| <b>Action/Implementation Plan and Project Description:</b>   |   | The Village completed preliminary plans for the remainder of the project and continues to seek funding for the next stages of the work. |  |   |  |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |   |   |  |   |  |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed |   | O   |  |   |  |

## Action L-1.6

| Mitigation Action #6: Storm Hardening of public utilities  |  |  |   |  |   |
|--|--|--|---|--|---|
| <b>Lead Agency/Department Organization:</b><br>Fire, Emergency Management Agency (EMA), Utilities  | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>High   | <b>Potential Funding Source:</b><br>Private Funding, General Fund | <b>Estimated Projected Completion Date:</b><br>Long-term | <b>Hazard(s) Mitigated:</b><br>Severe Weather |
| <b>Year Initiated</b>  |  | 2014   |   |  |   |
| <b>Applicable Jurisdiction</b>   |  | Village of La Grange   |   |  |   |
| <b>Applicable Goal</b>   |  | 3  |   |  |   |
| <b>Applicable Objective</b>  |  | 1, 2, 3, 8   |   |  |   |
| <b>Cost Analysis (Low, Medium, High)</b>   |  | High   |   |  |   |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  |  | High   |   |  |   |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  |  | High   |   |  |   |
| <b>Action/Implementation Plan and Project Description:</b>   |  | Common Wealth Edison and NICOR have made significant upgrades to their specific utilities throughout the village. Nicor has replaced more than 50% of its infrastructure over the past four years. Similarly, ComEd has replaced poles and wires based on assessments of outage locations and age of infrastructure. This work continues as the utilities upgrade their facilities in coordination with the Village. |   |  |   |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |  |  |   |  |   |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed |  | O  |   |  |   |

## Action L-1.8

| Mitigation Action #8: Continue to support the implementation of the Hazard Plan and updating  |   |   |  |  |  |
|---|---|---|--|--|--|
| <b>Lead Agency/Department Organization:</b><br>Public Works   | <b>Supporting Agencies/Organizations:</b><br>Fire / EMA | <b>Estimated Cost:</b><br>Low   | <b>Potential Funding Source:</b><br>General Fund | <b>Estimated Projected Completion Date:</b><br>Ongoing | <b>Hazard(s) Mitigated:</b><br>All Hazards |
| <b>Year Initiated</b>   |   | 2014  |  |  |  |
| <b>Applicable Jurisdiction</b>  |   | Village of La Grange  |  |  |  |
| <b>Applicable Goal</b>  |   | 1,2,3,4,5,6   |  |  |  |
| <b>Applicable Objective</b>   |   | All   |  |  |  |
| <b>Cost Analysis (Low, Medium, High)</b>  |   | Low   |  |  |  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>   |   | High  |  |  |  |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)   |   | High  |  |  |  |
| <b>Action/Implementation Plan and Project Description:</b>  |   | The Village of La Grange has met every request for updated reports. Continue to review and update the Hazard Mitigation Plan. |  |  |  |
| <b>Actual Completion Date or Ongoing Indefinite</b>   |   | Ongoing Indefinitely  |  |  |  |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed; <b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed |   | O   |  |  |  |

## Action L-1.10

| Mitigation Action #10: Participate in Active Shooter Training and Drills |   |  |                                  |                            |  |
|--|---|--|----------------------------------|----------------------------|--|
| <b>Lead Agency/Department Organization:</b>                              | <b>Supporting Agencies/Organizations:</b> | <b>Estimated Cost:</b><br>\$20,000; Medium | <b>Potential Funding Source:</b> | <b>Estimated Projected</b> | <b>Hazard(s) Mitigated:</b><br>All Hazards |

|  |  |  |              |  |  |
|--|--|--|--------------|--|--|
| Fire, Police, Village of LaGrange Public Works   |  |  | General Fund | <b>Completion Date:</b><br>Bi-Annual, short-term |  |
| <b>Year Initiated</b>  | 2014   |  |              |  |  |
| <b>Applicable Jurisdiction</b>   | Village of La Grange   |  |              |  |  |
| <b>Applicable Goal</b>   | 1,2,3,4,5,6  |  |              |  |  |
| <b>Applicable Objective</b>  | All  |  |              |  |  |
| <b>Cost Analysis (Low, Medium, High)</b>   | Medium   |  |              |  |  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | High   |  |              |  |  |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  | High   |  |              |  |  |
| <b>Action/Implementation Plan and Project Description:</b>   | Department has participated in a number of Active Shooter trainings locally with neighboring departments. Attempts continue to be made to schedule a drill as listed in the Action Item Description. |  |              |  |  |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |  |  |              |  |  |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O  |  |              |  |  |

**Action L-1.11**

| <b>Mitigation Action #11: Increase efforts on water conservation</b>                                   |  |                               |  |  |  |
|--|--|-------------------------------|--|--|--|
| <b>Lead Agency/Department Organization:</b><br>Village of LaGrange Public Works, Community Development | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>Low | <b>Potential Funding Source:</b><br>General Fund | <b>Estimated Projected Completion Date:</b><br>1-3 years | <b>Hazard(s) Mitigated:</b><br>Drought |

|  |  |
|--|--|
| <b>Year Initiated</b>  | 2014   |
| <b>Applicable Jurisdiction</b>   | Village of La Grange   |
| <b>Applicable Goal</b>   | 2  |
| <b>Applicable Objective</b>  | 1, 2, 8, 10  |
| <b>Cost Analysis (Low, Medium, High)</b>   | Low  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | Medium   |
| <b>Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)</b>  | High   |
| <b>Action/Implementation Plan and Project Description:</b>   | The Village has reduced non-revenue significantly through repair of water main leaks and leak locating. The Village continues to advocate and provide educational materials on best water conservation practices in an effort to reduce potable water consumption. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |  |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O  |

**Action L-1.13**

| <b>Mitigation Action #13: Reduce flooding and improve drainage in the area south of 47th Street by installing relief storm sewers.</b> |  |                                |  |  |   |
|--|--|--------------------------------|--|--|---|
| <b>Lead Agency/Department Organization:</b><br>Village of LaGrange Public Works  | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>High | <b>Potential Funding Source:</b><br>General Fund, BRIC, HMGP | <b>Estimated Projected Completion Date:</b><br>Long-term | <b>Hazard(s) Mitigated:</b><br>Severe Weather, Floods |
| <b>Year Initiated</b>  | 2014                                       |                                |  |  |   |
| <b>Applicable Jurisdiction</b>   | Village of La Grange                       |                                |  |  |   |
| <b>Applicable Goal</b>   | 2,3  |                                |  |  |   |
| <b>Applicable Objective</b>  | 1, 2, 9, 11                                |                                |  |  |   |

|  |  |
|--|--|
| <b>Cost Analysis (Low, Medium, High)</b>   | High   |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | High   |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  | High   |
| <b>Action/Implementation Plan and Project Description:</b>   | In 2015, Village residents approved a \$15 million bond referendum to construct a new storm sewer on 50th Street to address overland flooding in the area south of 47th Street. The Village is partnering with MWRD, Hanson Quarry, IDOT, Village of McCook, and other stakeholders on the construction of a new detention facility and relief sewer that will reduce flooding in depressional areas south of 47th Street. The Village's 50th Street storm will eventually connect into the connecting storm sewer and detention facility. Improvements to the McCook Ditch are also being planned as part of this project. The project may also include drainage improvements in the 47th Street and East Avenue intersection that are being planned by IDOT. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |  |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O  |

**Action L-1.15**

|  |  |                               |                                  |   |   |
|--|--|-------------------------------|----------------------------------|---|---|
| <b>Mitigation Action #15: 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.</b> |  |                               |                                  |   |   |
| <b>Lead Agency/Department Organization:</b>  | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>Low | <b>Potential Funding Source:</b> | <b>Estimated Projected Completion Date:</b> | <b>Hazard(s) Mitigated:</b><br>Flooding |

|  |   |  |              |                        |  |
|--|---|--|--------------|------------------------|--|
| Village of LaGrange Public Works/Community Development   |   |  | General Fund | Short-term and ongoing |  |
| <b>Year Initiated</b>  | 2014  |  |              |                        |  |
| <b>Applicable Jurisdiction</b>   | Village of La Grange                              |  |              |                        |  |
| <b>Applicable Goal</b>   | 2,3,4   |  |              |                        |  |
| <b>Applicable Objective</b>  | 4, 6, 9   |  |              |                        |  |
| <b>Cost Analysis (Low, Medium, High)</b>   | Low   |  |              |                        |  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | High  |  |              |                        |  |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  | Medium  |  |              |                        |  |
| <b>Action/Implementation Plan and Project Description:</b>   | The Village continues to participate in the NFIP. |  |              |                        |  |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |   |  |              |                        |  |
| <b>Project Status &amp; Changes in Priority Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O   |  |              |                        |  |

**Action L-1.16**

| <b>Mitigation Action #16: Integrate the Hazard Mitigation Plan into other plans, programs, or resources that dictate land use or redevelopment.</b> |  |                               |  |   |  |
|---|--|-------------------------------|--|---|--|
| <b>Lead Agency/Department Organization:</b><br>Community Development  | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>Low | <b>Potential Funding Source:</b><br>General Fund | <b>Estimated Projected Completion Date:</b><br>Short-term | <b>Hazard(s) Mitigated:</b><br>All Hazards |
| <b>Year Initiated</b>   | 2014                                       |                               |  |   |  |
| <b>Applicable Jurisdiction</b>  | Village of La Grange                       |                               |  |   |  |

|  |  |
|--|--|
| <b>Applicable Goal</b>   | 1,4  |
| <b>Applicable Objective</b>  | 3, 4, 6, 10, 13  |
| <b>Cost Analysis (Low, Medium, High)</b>   | Low  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | High   |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  | Medium   |
| <b>Action/Implementation Plan and Project Description:</b>   | As part of new development the Village requires that storm water management improvements be incorporated into the design. This includes residential, commercial, and industrial, for both small and large properties. Several recent large projects include the Uptown Development, 40 S. Ashland, BEDS, La Grange Country Club, Mason Home Development, and Pathway Development. Also, the Village continues to require drainage improvements for single family homes when redevelopment occurs as part of local storm water management requirements. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |  |
| <b>Project Status &amp; Changes in Priority Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O  |

**Action L-1.17**

| <b>Mitigation Action #17: Continue to support the county-wide actions identified in this plan.</b> |  |                               |  |   |  |
|--|--|-------------------------------|--|---|--|
| <b>Lead Agency/Department Organization:</b><br>Village of LaGrange Public Works                    | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>Low | <b>Potential Funding Source:</b><br>General Fund | <b>Estimated Projected Completion Date:</b><br>Short- and long-term | <b>Hazard(s) Mitigated:</b><br>All Hazards |
| <b>Year Initiated</b>  | 2014                                       |                               |  |   |  |



|  |  |
|--|--|
| <b>Applicable Jurisdiction</b>   | Village of La Grange   |
| <b>Applicable Goal</b>   | 1,2,3,4,5,6  |
| <b>Applicable Objective</b>  | All  |
| <b>Cost Analysis (Low, Medium, High)</b>   | Low  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | High   |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  | Medium   |
| <b>Action/Implementation Plan and Project Description:</b>   | The Village continues to support ongoing projects as we seek funding opportunities to help reduce flooding impacts in the community. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |  |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O  |

**Action L-1.25**

| <b>Mitigation Action #25: North Basin Flood Mitigation Study</b>                 |  |                                   |   |   |   |
|--|--|-----------------------------------|---|---|---|
| <b>Lead Agency/Department Organization:</b><br>Village of La Grange Public Works | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>Unknown | <b>Potential Funding Source:</b><br>MWRD, Cook County, State of Illinois, BRIC, HMGP, FMA | <b>Estimated Projected Completion Date:</b><br>2044 | <b>Hazard(s) Mitigated:</b><br>Flooding |
| <b>Year Initiated</b>  | 2023                                       |                                   |   |   |   |
| <b>Applicable Jurisdiction</b>   | Village of La Grange                       |                                   |   |   |   |
| <b>Applicable Goal</b>   | 1,2,3,4,5,6                                |                                   |   |   |   |
| <b>Applicable Objective</b>  | 13   |                                   |   |   |   |

|  |   |
|--|---|
| <b>Cost Analysis (Low, Medium, High)</b>   | Low—The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.  |
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | Medium  |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  | High—Project will provide an immediate reduction of risk exposure for life and property.<br>Study will provide a prioritized list of mitigation actions                   |
| <b>Action/Implementation Plan and Project Description:</b>   | Consulting engineers CBEL are developing a North Basin Study to further identify water basin drainage characteristics and prioritized lists of flood mitigation projects. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |   |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O   |

**Action L-1.21**

| <b>Mitigation Action #21: Reduce flooding and improve drainage along Plainfield Road from Willow Springs Road to East Avenue.</b> |   |                                |   |  |  |
|---|---|--------------------------------|---|--|--|
| <b>Lead Agency/Department Organization:</b><br>CCDTH  | <b>Supporting Agencies/ Organizations:</b><br>Village of La Grange Public Works, MWRD   | <b>Estimated Cost:</b><br>High | <b>Potential Funding Source:</b><br>CCDTH, MWRD, HMGP, BRIC | <b>Estimated Projected Completion Date:</b><br>Long-term | <b>Hazard(s) Mitigated:</b><br>Dam/Levee Failure, Flooding |
| <b>Year Initiated</b>   | 2019  |                                |   |  |  |
| <b>Applicable Jurisdiction</b>  | Village of La Grange  |                                |   |  |  |
| <b>Applicable Goal</b>  | 2,3,4,5   |                                |   |  |  |
| <b>Applicable Objective</b>   | 2, 3, 9, 12, 13   |                                |   |  |  |
| <b>Cost Analysis (Low, Medium, High)</b>  | High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases). |                                |   |  |  |

|  |   |
|--|---|
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | Medium  |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  | High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).   |
| <b>Action/Implementation Plan and Project Description:</b>   | CCDTH 4 Contract: 14-112-5C, Watershed: Lower Des Plaines Location: LaGrange, Countryside, McCook, and Lyons Township. May include construction of a new trunk sewer along portions of Plainfield Road, 55th Street and East Avenue and stormwater improvements to the McCook Ditch, McCook Ditch overflow, and McCook levee. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |   |
| <b>Project Status &amp; Changes in Priority Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O   |

**Action L-1.22**

| <b>Mitigation Action #22: Reduce flooding and improve drainage of La Grange Central Business District.</b> |  |  |   |   |   |
|--|--|--|---|---|---|
| <b>Lead Agency/Department Organization:</b><br>Village of LaGrange Public Works                            | <b>Supporting Agencies/ Organizations:</b> | <b>Estimated Cost:</b><br>\$500,000; Low   | <b>Potential Funding Source:</b><br>La Grange and MWRD green infrastructure partnership program | <b>Estimated Projected Completion Date:</b><br>2019 | <b>Hazard(s) Mitigated:</b><br>Flooding |
| <b>Year Initiated</b>  |  | 2019   |   |   |   |
| <b>Applicable Jurisdiction</b>   |  | Village of La Grange   |   |   |   |
| <b>Applicable Goal</b>   |  | 1,2,3,4,5,6  |   |   |   |
| <b>Applicable Objective</b>  |  | 2, 3, 9, 13  |   |   |   |
| <b>Cost Analysis (Low, Medium, High)</b>   |  | Low—The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program. |   |   |   |

|  |   |
|--|---|
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | High  |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  | High—Project will provide an immediate reduction of risk exposure for life and property.<br>Green infrastructure project designed to reduce flooding and improve capacity of combined sewer system resulting in a reduction in structure damage and flood streets during severe rain events   |
| <b>Action/Implementation Plan and Project Description:</b>   | The Village and MWRD partnered to reconstruct two surface parking lots in the central business district with permeable pavers. The purpose of the project is to reduce the volume of storm water entering the combined sewer system by redirecting the water through a infiltration system. The project is currently under construction and is anticipated to be completed in 2019. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |   |
| <b>Project Status &amp; Changes in Priority</b><br><b>Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O   |

**Action L-1.23**

| <b>Mitigation Action #23: Install Plainfield Road flood control.</b> |  |                                |  |   |   |
|--|--|--------------------------------|--|---|---|
| <b>Lead Agency/Department Organization:</b><br>MWRD                  | <b>Supporting Agencies/ Organizations:</b><br>La Grange Public Works | <b>Estimated Cost:</b><br>High | <b>Potential Funding Source:</b><br>MWRD | <b>Estimated Projected Completion Date:</b><br>Short-term | <b>Hazard(s) Mitigated:</b><br>Flooding |
| <b>Year Initiated</b>  | 2019   |                                |  |   |   |
| <b>Applicable Jurisdiction</b>                                       | Village of La Grange   |                                |  |   |   |
| <b>Applicable Goal</b>   | 1,2,3,4,5,6  |                                |  |   |   |
| <b>Applicable Objective</b>  | 2, 3, 9, 13  |                                |  |   |   |
| <b>Cost Analysis (Low, Medium, High)</b>                             | High   |                                |  |   |   |

|  |   |
|--|---|
| <b>Priority and Level of Importance (Low, Medium, High)</b>  | High  |
| <b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)  | High  |
| <b>Action/Implementation Plan and Project Description:</b>   | May include construction of a new trunk sewer along portions of Planfield Road, 55th Street and East Avenue and stormwater improvements to the McCook Ditch, McCook Ditch Overflow, and McCook Levee. |
| <b>Actual Completion Date or Ongoing Indefinite</b>  |   |
| <b>Project Status &amp; Changes in Priority Completion status legend:</b><br><b>N</b> = New; <b>I</b> = In Progress Toward Completion;<br><b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;<br><b>R</b> = Want Removed from Annex; <b>X</b> = No Action Taken/Delayed | O   |

## Completed Actions

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

| Completed Action Items  |
|---|
| Continue supporting mutual assistance from local jurisdictions to ensure response readiness during all hazards and disasters. |
| La Grange Parking Lots Green Infrastructure Retrofit.   |

## Future Needs to Better Understand Risk/Vulnerability

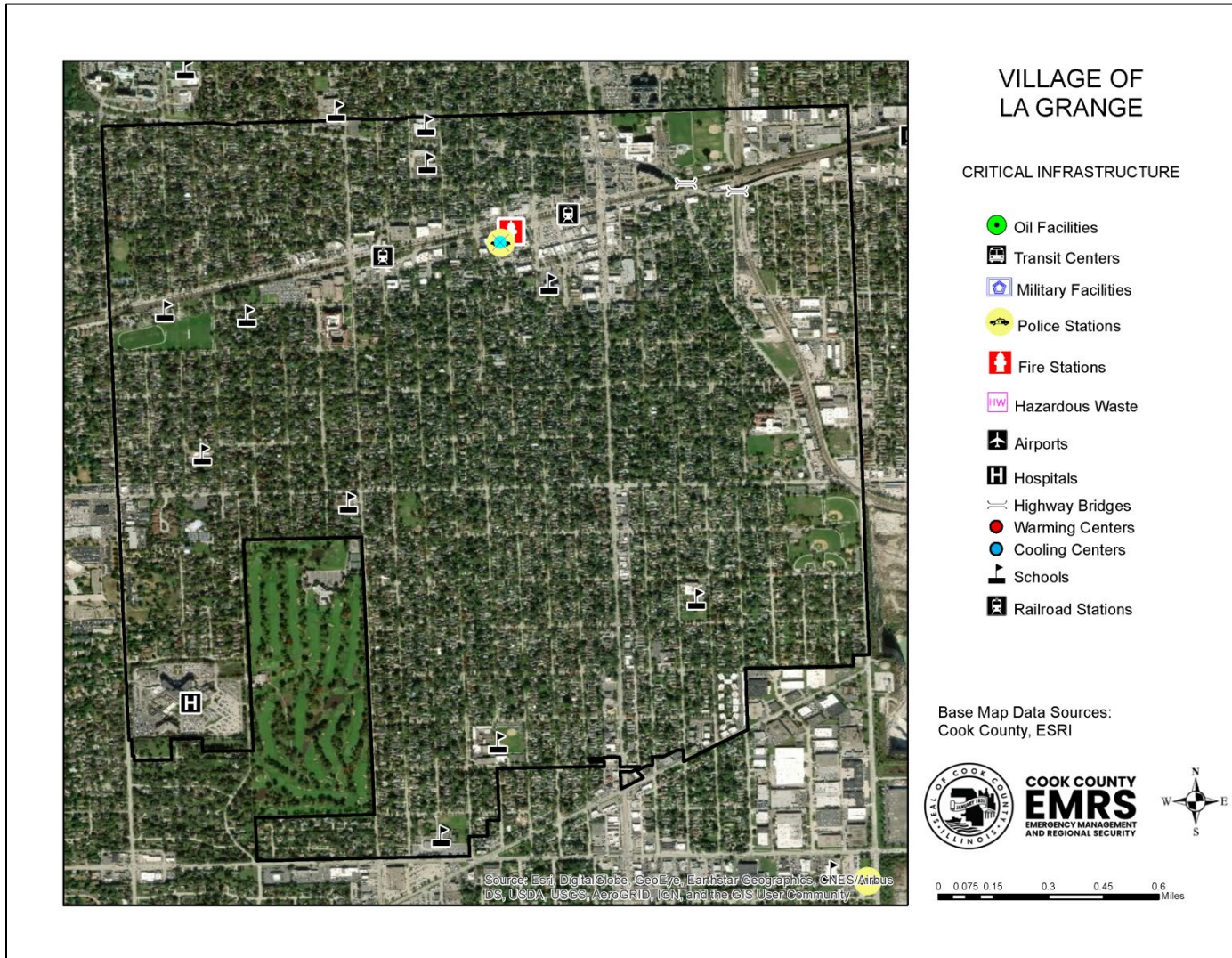
Financing for Capital Projects

## Additional Comments

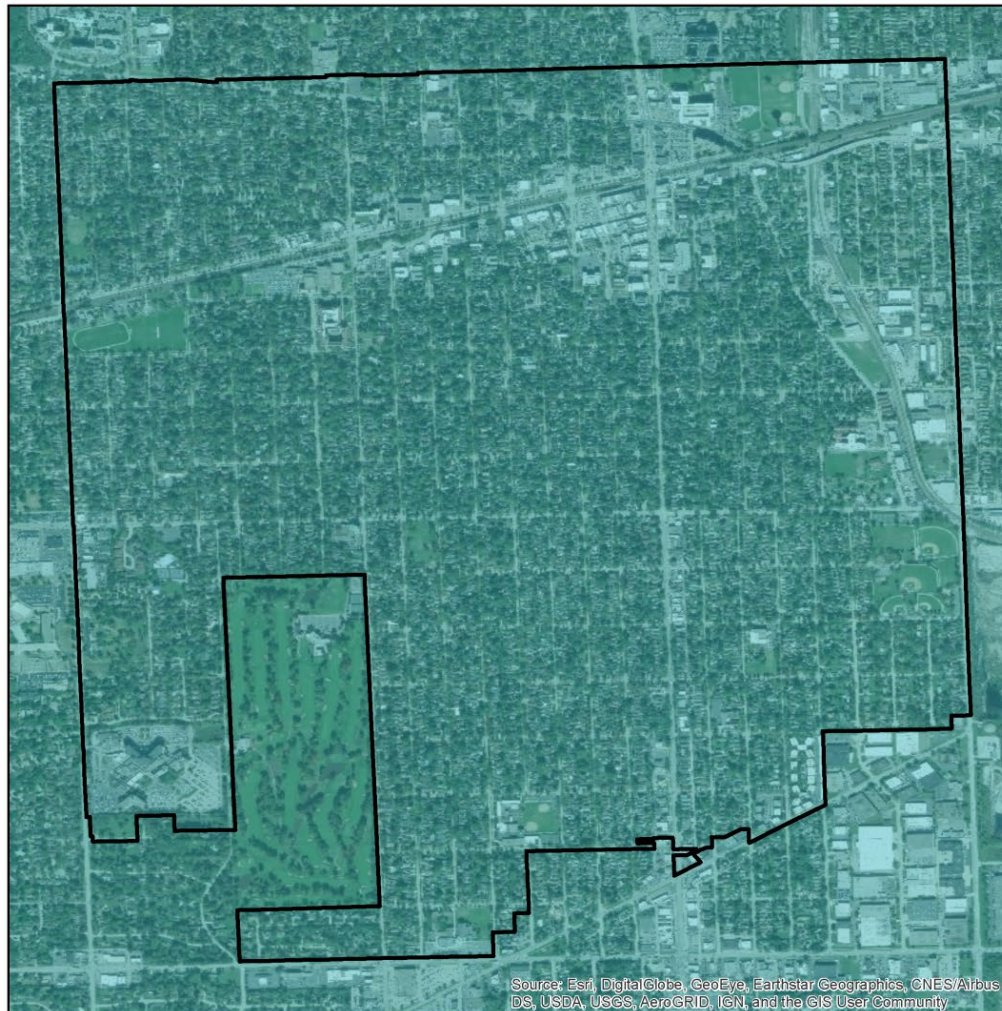
The Village of La Grange is over 140 years old. Aging infrastructure, including aged combined brick sewers, water mains, roadways and buildings need replacement. Due to the economic climate many of the improvement projects have been postponed due to funding

limitations. In order to plan for the future the Village has completed preliminary engineering studies for all drainage basins, which highlight the improvements necessary to address flooding. These projects are identified in the action items contained within this hazard mitigation plan.

## Hazard Mapping







## VILLAGE OF LA GRANGE

### 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 780 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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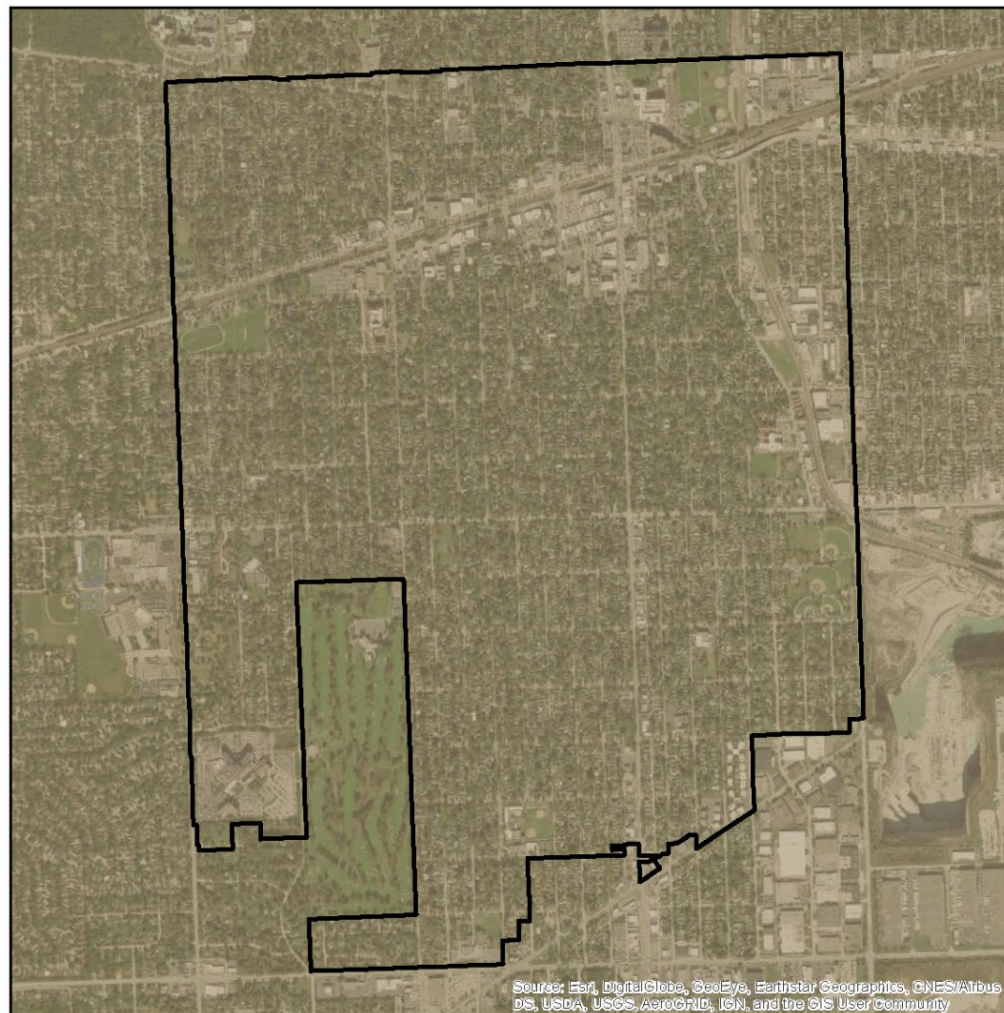


**COOK COUNTY**  
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EMERGENCY MANAGEMENT  
AND REGIONAL SECURITY



0 0.075 0.15 0.3 0.45 0.6 Miles





## VILLAGE OF LA GRANGE

### 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-2769 Map of Surficial Deposits and Materials in the Eastern and Central United States (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean N. Pennell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes (International Code Council, 2002) were followed to produce the soil site class maps. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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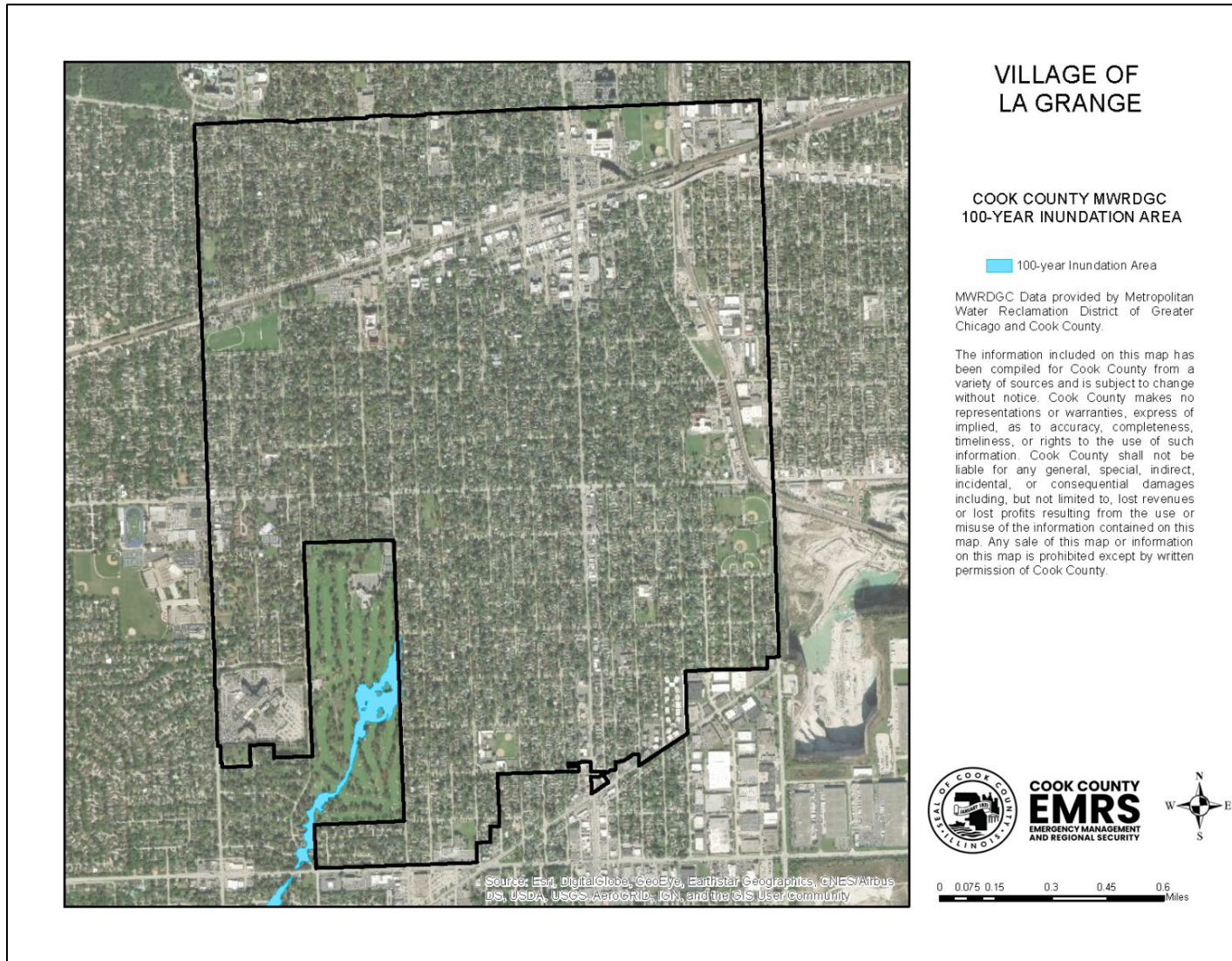


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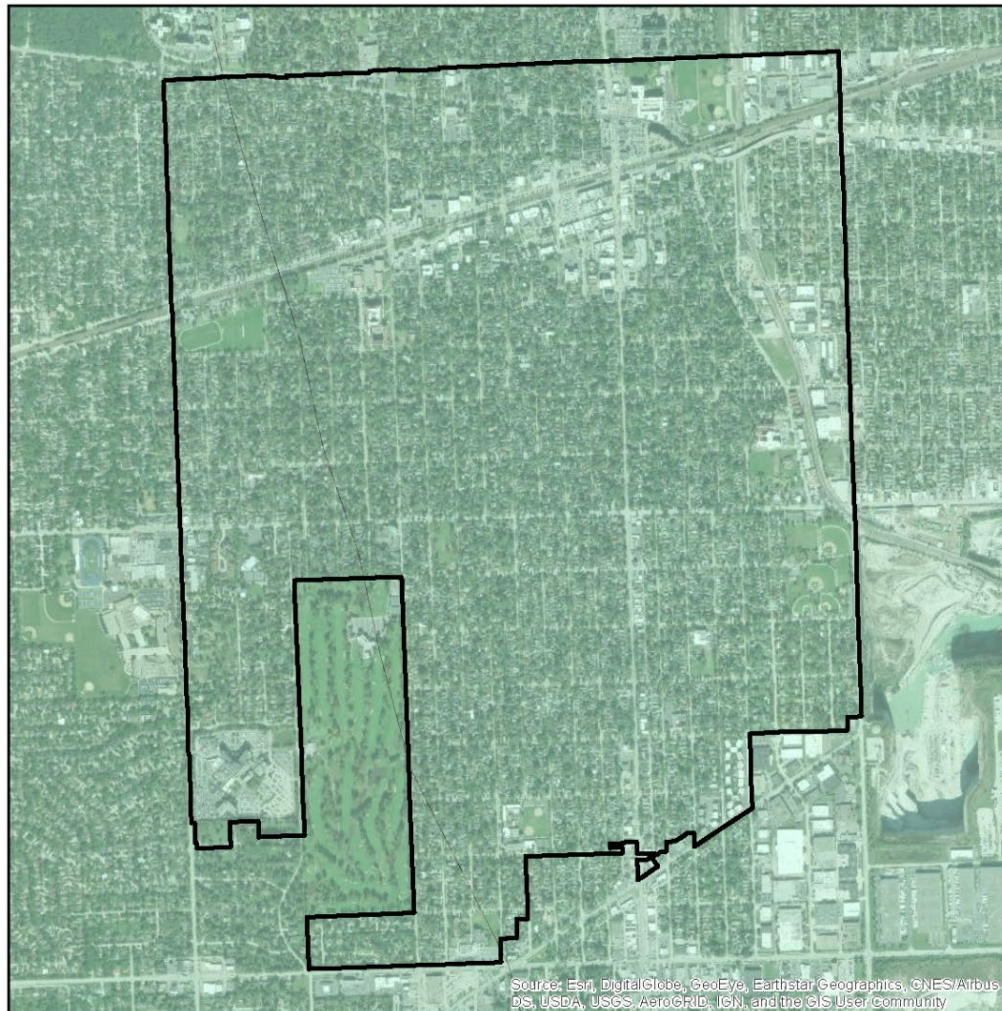


0 0.075 0.15 0.3 0.45 0.6 Miles

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 LA GRANGE

### LIQUEFACTION SUSCEPTIBILITY

#### LIQUEFACTION SUSCEPTIBILITY

- high
- low
- very low

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-2769 Map of Surficial Deposits and Materials in the Eastern and Central United States (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean N. Pennell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes (International Code Council, 2002) were followed to produce the soil site class maps. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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