

Harvey

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: 1891

Current Population: The 2020 U.S. Census population was 20,331. The 2022 U.S. Census estimate indicated the population was 19,590.

Population Growth: The overall population has decreased 20.50 percent between 2018 and 2022.

Location and Description: Harvey is a city in Cook County, Illinois, United States, near Chicago. Harvey is bordered by Dixmoor and Riverdale to the north, Dolton, Phoenix, and South Holland to the east, East Hazel Crest to the south, and Hazel Crest, Markham and Posen to the west. Interstate 57 runs along the western border of the City, and the Metra Electric District Line runs through the middle of the City. According to the 2010 census, the city has a total area of 6.30 square miles (16.3 km²), all land.

Brief History: In 1889, Turlington Harvey, a wealthy Chicago lumberman and banker, organized a real-estate syndicate to promote the industrial suburb of Harvey, Illinois. The founders envisioned Harvey as a model town, a blend of capitalism and Christianity. The investors provided residents with a high quality of city services, similar to nearby Pullman. But unlike Pullman, Harvey encouraged home ownership by offering potential residents a variety of house plans. By 1900 the town contained 5,395 residents, a bank, and 11 industries. However, in 1895 residents voted by a slight majority to license saloons, ending the temperance experiment. Throughout the first decades of the twentieth century, industrialists and local merchants functioned in tandem. By their efforts, Harvey acquired a fine public school system with Thornton Township High School as its centerpiece. In the 1920s, industrialist Frederick Ingalls endowed a community hospital whose board brought together the prestigious members of the community. The development of a Young Men's Christian Association also united the interests of industrial outsiders and the local community.

Climate: The climate in Harvey is classified as humid continental, with all four seasons distinctly represented: wet springs; hot/often humid summers; pleasant autumns; and cold winters. Annual precipitation is average - reaching its lowest points in the months of January and February and peaks in the months of May and June. Snowfall in the City has ranged from 9.8 inches (1920–21) up to 89.7 inches (1978–79). Winter conditions can persist well into April and even occasionally into May.

Thunderstorms are especially prevalent in the spring as the City’s proximity to Chicago’s lakeside location makes it a center of conflicts between large volumes of warmer and colder air, triggering many kinds of severe weather. In the summer humidity is usually moderately high and temperatures ordinarily reach anywhere between 78 and 92 °F (26 and 33 °C). Overnight temperatures in summer usually drop to around 65–70 °F (18–21 °C). Although in July and August, there are usually several nights where the temperature drops below 60 °F (16 °C). The community’s yearly precipitation is on average 36 inches; however, during the summer, rain arises from short-lived, hit-or-miss rain rather than actual prolonged rainfalls as thunderstorms also occur with regularity at night. In a normal summer, temperatures exceed 90 °F (32 °C) on 23 days. Summer is both the rainiest and sunniest season. The extreme heat that Harvey is capable of experiencing during the height of the summer season can persist into the autumn season. Temperatures have reached 100 degrees as late as September 7 (with 99 °F or 37 °C occurring as late as September 29), and temperatures have reached the lower-to-mid 90s Fahrenheit (low 30s Celsius) as late as October 6. Conversely, temperatures have dropped below freezing overnight as early as September 23, and subzero temperatures (below –18 °C) have arrived as early as November 23. Therefore, autumn in Harvey, in some ways, is calmer than the other three seasons.

Governing Body Format: The City of Harvey is governed by an elected Mayor and City Council. In 1991, the municipal government began operating under the aldermanic system of government. Under this system, the City is divided into six wards. Each ward is represented by an alderman who serves as a legislator in the City Council. This body will assume the responsibility for the adoption and implementation of this plan. Working in concert with the Clerk’s and Treasurer’s Offices, the Mayor serves as the City’s chief executive officer, responsible for the administration, direction and implementation of all city services and functions. All city services are administered by eleven City departments, led by appointed department heads, under the direction of the Mayor.

Development Trends: The City of Harvey offers both new and continuing businesses a wealth of opportunities. Harvey used to be a large manufacturing center, however factories have closed and businesses have left the city. In recent years, a developer built a subdivision of housing and the library where I used to study looks brand new. There are separate spaces for teenagers and preschoolers, plenty of computers and charging stations, even a café and fireplace. The library underwent a complete renovation. The current pulse is dependent upon the shoulders of entrepreneurs interested in expanding the community.

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
Codes, Ordinances & Requirements					
Building Code	Yes	No	No	Yes	Ord. 1850; 5-26-69
Zonings	No	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code.
Subdivisions	No	No	No	No	
Stormwater Management	No	No	Yes	Yes	
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. 1669; 2-10-64
Environmental Protection	No	No	No	No	
Planning Documents					
General or Comprehensive Plan	No	No	No	No	
<i>Is the plan equipped to provide integration to this mitigation plan?</i>					N/A
Floodplain or Basin Plan	No	No	Yes	No	
Stormwater Plan	No	No	MWRD	No	
Capital Improvement Plan	No	No	No	No	
<i>What types of capital facilities does the plan address?</i>					N/A
<i>How often is the plan revised/updated?</i>					N/A
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	No	No	Yes	Yes	The Economic Development Commission is charged with reviewing all

					economic development related programs and incentives including tax incentives offered through the Cook County 6b program.
Shoreline Management Plan	No	No	No	No	
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	Yes	Yes	Cook County EMRS
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	No
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY		
Staff/Personnel Resources	Available?	Department/Agency/Position

Planners or engineers with knowledge of land development and land management practices	Yes	Engineering Consultant, Public Works, Department of Buildings
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering Consultant, Public Works Department
Planners or engineers with an understanding of natural hazards	Yes	Engineering Consultant
Staff with training in benefit/cost analysis	Yes	Engineering Consultant
Surveyors	Yes	Engineering Consultant
Personnel skilled or trained in GIS applications	Yes	Engineering Consultant, Cook County GIS Consortium
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Fire Chief
Grant writers	Yes	Grant Administrator

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)	Public Works
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	Unknown
When was the most recent Community Assistance Visit or Community Assistance Contact?	Have not received a Community Assistance Visit
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	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
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; Undecided

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:

15-64-020 Definitions

“Substantial improvement” means any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure either: (a) before the improvement or repair is started, or (b) if the structure has been damaged, and is being restored, before the damage occurred. For the purposes of this definition “substantial improvement” is considered to occur 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 structure. The term does not, however, include either: (1) 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 assure safe living conditions; or (2) any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

15-64-070 Occupation and use of identified floodways.

This section applies to proposed development, redevelopment, site modification or building modification within a regulatory floodway. The regulatory floodway for the Little Calumet River, Dixie Creek and the Calumet Union Drainage Ditch shall be as delineated on the regulatory floodway maps designated by DWR and referenced in Section [15-64-020](#). Only those uses and structures will be permitted which meet the criteria in this section. All floodway modifications shall be the minimum necessary to accomplish the purpose of the project. The development shall also meet the requirements of Section 1564-090.

B. Preventing Increased Damages and a List of Appropriate Uses.

1. The only development in a floodway which will be allowed is appropriate uses, which will not cause a rise in the base flood elevation, and which will not create a damaging or potentially damaging increase in flood heights or velocity or be a threat to public health and safety. Only those appropriate uses listed in 92 Illinois Administrative Code 708 will be allowed. Appropriate uses do not include the construction or placement of any new structures, fill, building additions, buildings on stilts, fencing (including landscaping or planting designed to

act as a fence) and storage of materials except as specifically defined above as an appropriate use. The approved appropriate uses are as follows:

- j. Floodproofing activities to protect previously existing lawful structures including the construction of watertight window wells, elevating structures, or construction of floodwalls around residential, commercial or industrial principal structures where the outside toe of the floodwall shall be no more than ten feet away from the exterior wall of the existing structure, and, which are not considered substantial improvements to the structure;

16-60-200 Building regulations.

Building permits are required for all proposed construction, substantial improvements, or other development, including the placement of mobile homes, within floodplain areas having special flood hazards. Such permits shall assure that all other necessary permits have been received from those governmental agencies from which approval is required by federal or state law.

16-60-220 Design criteria.

The following general design criteria shall apply to all new construction and substantial improvements which may be authorized in flood plains:

A. Residential Structures. The lowest floor, including the basement, of residential structures must be at an elevation not less than that of the base flood elevation plus one foot, unless they are adequately floodproofed and the city has been granted an extension from the Federal Insurance Administration for placing the lowest floor of the structures at a lower elevation. Within any AO Zone, all new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated above the crown of the nearest street to or above the depth number specified on the community's FIRM map.

B. Nonresidential Structures. The lowest floor, including the basement, of nonresidential structures must be elevated or floodproofed to an elevation not less than that of the base flood elevation plus one foot. Within any AO Zone, all new construction and substantial improvements of nonresidential structures shall have the lowest floor, including basement, elevated above the crown of the nearest street to or above the depth number specified on the FIRM, or together with attendant utility and sanitary facilities shall be completely floodproofed to or above that level to Federal Insurance Administration (FIA) standards.

Their ordinance did not include 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 Grading Schedule	Yes	Unknown	Unknown
Public Protection/ISO	Yes	Unknown	Unknown
StormReady	Yes	Gold (Countywide)	2014

Tree City USA	No	N/A	N/A
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Opportunities to Expand and Improve Capabilities

Opportunities to expand and improve capabilities include:

- Improving GIS capabilities and maps of existing underground utilities
- Need assistance to upgrade existing critical public safety buildings.
- Need a full-time grant writer.
- Assistance with sewer and storm infrastructure.
- Water way updates with piping.

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 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: 33 (27 Single Family, 5 Two-Four Family Residence, 1 Other Residential)
- 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 5/25/2011	High Wind, Tornadoes, Torrential Rain
4/18/2013 4/20/2013 4/21/2013 4/25/2013 4/30/2013	Severe Storms, Heavy Rainfall, Flooding, Straight-line Winds
1/6/2014	Heavy Snowfall, Frigid Temperatures
7/12/2017 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 (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	-	6/30/2014	-
Severe Storms, Straight-Line Winds, Flooding	DR-4116	4/26/2013	-
Severe Winter Snowstorm	DR-1960	1/31/2011	-
Severe Storms and Flooding	DR-1935	7/19/2010	-
Severe Storms and Flooding	DR-1800	9/13/2008	-
Severe Storms and Flooding	DR-1729	8/20/2007	-
Illinois Flooding	DR-1188	8/16/1997	-
Illinois Flooding	DR-1129	7/17/1996	-

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.

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Drought: We have senior citizens buildings that would be exposed to the drought. A hub transport for busses could be affected, as drought conditions could overheat busses. The City of Harvey distributes water to many other surrounding communities in addition to its own residents. In the event of a drought, the impacts (e.g. limited water distribution and supply, increase fire risk and reduced firefighting resources) will spread to all communities.

Earthquake: The aging infrastructure (water distribution, storm, sanitary) are not structurally reinforced for seismic events and are prone to collapse if an event were to occur. The City also has many abandoned buildings that can present a hazard to the local residents and passersby. For example, the Fire Station and Robey Avenue have experienced water main and storm infrastructure breaks recently.

Flood: During heavy rain events, businesses and residents experience backflow of water from the combined sewer system which severely impedes vehicular and pedestrian safety. Residential neighborhoods adjacent to the CSX rail line are especially susceptible. 147th to 159th and Wood St. within the central area of the City is flood-prone. Our intersection, which is a major roadway, get flooded every time there a heavy rain. We have many side streets with major street that gets regularly flooded.

Severe Weather: The City of Harvey has a significant population of people over the age of 65 and people with disabilities who would be uniquely susceptible to severe weather (e.g. Extreme Heat, Lightning, Hail, Fog, and High Winds), especially in the context of safety, available resources, and mobility. We have hospital in our jurisdiction with extreme heat can create power outages. Increase for EMS calls. The critical facilities we have are a power grid that supply power to the entire city. Severe weather instances include a period when multiple large tree branches, 6 to 8 inches in diameter, were blown down south of 155th Street between Wood Street and Halstead Ave.

Severe Winter Weather: The significant aging and disabled population in the City are uniquely susceptible and vulnerable to severe winter weather, which affects safety and mobility for those individuals. Additionally, the homeless would be vulnerable to a severe winter weather event. A period of severe winter weather included when severe thunderstorms moved southeast across far northeast Illinois during the late evening hours of June 30th 2011. Thousands of trees were blown down in eastern Lake County Illinois. Hail as large as baseballs fell across many areas of the city of Chicago.

Tornado: Our City Hall does not have a backup generator. Our police department does not have a working generator.

Indicator	Number	Percent
Families in poverty	2,051	21%
People with disabilities	5,575	13%
People over 65 years	5,534	12.9%
People under 5 years	2,525	5.9%
People of color	39,766	92.5%
Black	26,992	62.8%
Native American	77	0.2%
Hispanic	11,575	26.9%
Difficulty with English	1,940	4.8%
Households with no car	1,934	13%
Mobile homes	443	3%

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	Not Applicable
Drought	Unknown
Earthquake	Unknown
Flood (Riverine, Urban, Shoreline)	Increased
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	Increased
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Increased
Tornado	Unknown
Wildfire (Wildfire Smoke)	Increased

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	Unknown
Earthquake	Unknown
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)	Increase

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
Current Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	
Earthquake	
Flood (Riverine, Urban, Shoreline)	Unknown
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	Unknown
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	
Tornado	
Wildfire (Wildfire Smoke)	

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	Not Applicable
Drought	
Earthquake	
Flood (Riverine, Urban, Shoreline)	Increase
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	Unknown
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	
Tornado	
Wildfire (Wildfire Smoke)	

Our community anticipates that the following future major assets may be exposed or vulnerable to any of the natural hazards identified in this Hazard Mitigation Plan:

- Community life line and critical infrastructures.
- Economy that is value to the community and the resources available to the community.

The city of Harvey is an underserved community and has a socially vulnerable population that will be impacted by all natural hazards. The aging infrastructure and critical facilities (ex. hospital) will also be vulnerable to hazards such as severe weather, severe winter weather, floods, earthquakes, and droughts.

Hazard Risk Ranking

The *Hazard Risk Ranking Table* below presents the ranking of the hazards of concern. Hazard area extent and location maps are included at the end of this chapter. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes.

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

New Mitigation Actions

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

Action H-2.19

Mitigation Action #19: Install Backflow valves for all residents and businesses during heavy rains					
Lead Agency/Department Organization: Administration	Supporting Agencies/ Organizations: Antero Group	Estimated Cost: Medium	Potential Funding Source: Building Resilient Infrastructure and Communities (BRIC) Flood Mitigation Assistance (FMA) FEMA Public Assistance (PA)	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline) Severe Weather (Extreme Heat, Lightning. Hail, Fog, High Winds) Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold)
Year Initiated		2024			
Applicable Jurisdiction		City of Harvey			
Applicable Goal		1,2,3			
Applicable Objective		4,6,9			
Cost Analysis (Low, Medium, High)		Medium			
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:		Install Backflow valves for all residents and businesses during heavy rains			
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	N
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Action H-2.20

Mitigation Action #20: Combined Sewer Separation Project					
Lead Agency/Department Organization: Engineering	Supporting Agencies/ Organizations: Public Works	Estimated Cost: High	Potential Funding Source: Building Resilient Infrastructure and Communities (BRIC) Flood Mitigation Assistance (FMA) FEMA Public Assistance (PA)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2024			
Applicable Jurisdiction		City of Harvey			
Applicable Goal		1,2,3			
Applicable Objective		4,6,9			
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:	Separation of Combined Sanitary and Storm sewers to reduce surcharging during severe storm events
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	N

Action H-2.21

Mitigation Action #21: Construct Detention Basin and Implement Separate Sewer Improvements in Central Park					
Lead Agency/Department Organization: MWRD	Supporting Agencies/ Organizations: Antero Group	Estimated Cost: Medium	Potential Funding Source: Building Resilient Infrastructure and Communities (BRIC) Flood Mitigation Assistance (FMA) FEMA Public Assistance (PA)	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline) Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds) Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold)
Year Initiated	2024				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	1,2,3				
Applicable Objective	4,6,9				
Cost Analysis (Low, Medium, High)	Medium				
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:	Construct Detention Basin and Implement Separate Sewer Improvements in Central Park
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 Completed; R = Want Removed from Annex; X = 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 H-2.1

Mitigation Action #H - 2.1: Educate property owners about flood mitigation techniques, including using outreach activities to facilitate technical assistance programs that address measures citizens can take or reduce funding for mitigation measures.					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flooding, Severe Weather
Year Initiated	2014				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	1, 2, 5, 6				
Applicable Objective	1, 12				
Cost Analysis (Low, Medium, High)	Low				
Priority and Level of Importance (Low, Medium, High)	Medium				

Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium
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; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O

Action H-2.2

Mitigation Action #H - 2.2: Improve stormwater drainage capacity by increasing the capacity of the City's storm sewer drainage system					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: HMGP, BRIC	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flooding, Severe Weather
Year Initiated	2014				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	1, 2, 3, 5				
Applicable Objective	1, 2, 9, 13				
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; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O
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Action H-2.3

Mitigation Action #H - 2.3: Assess vulnerability to severe wind using GIS to map areas at risk of the wind hazard associated with straight-line wind conditions.					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Severe Weather
Year Initiated	2014				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	1, 3				
Applicable Objective	3, 4, 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:					
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O				

Action H-2.4

Mitigation Action #H - 2.4: Incorporate a GIS system/management plan for tracking permitting, land use patterns, tracking hazard data, and mapping risk for various hazards.					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: SHSP	Estimated Projected Completion Date: Ongoing/Long-Term	Hazard(s) Mitigated: All Hazards
Year Initiated		2014			
Applicable Jurisdiction		City of Harvey			
Applicable Goal		1, 6			
Applicable Objective		3, 4, 10			
Cost Analysis (Low, Medium, High)		Medium			
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:					
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		O			

Action H-2.5

Mitigation Action #H - 2.5: Develop and maintain a database to track community vulnerability to known hazard areas.
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Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		City of Harvey			
Applicable Goal		1, 2, 3, 6			
Applicable Objective		1, 5, 6			
Cost Analysis (Low, Medium, High)		Medium			
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:					
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		O			

Action H-2.6

Mitigation Action #H - 2.6: Protecting infrastructure and critical facilities from damage by engineering and/or retrofitting roads to withstand hazards.					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: BRIC, HMGP	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All
Year Initiated		2014			

Applicable Jurisdiction	City of Harvey
Applicable Goal	1, 2, 3
Applicable Objective	1, 2, 9, 13
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; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O

Action H-2.7

Mitigation Action #H - 2.7: Improve sewer capacity for stormwater and snowmelt by separating the combined sewer system.					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: IEPA, HMGP, BRIC	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flooding, Severe Weather, Severe Winter Weather
Year Initiated	2014				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	1, 2, 3				
Applicable Objective	1, 2, 9, 13				
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; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O

Action H-2.8

Mitigation Action #H - 2.8: Where appropriate, support retrofitting, purchasing, or relocating structures in hazard-prone areas to prevent future damage. Give priority to properties with exposure to repetitive losses.					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: HMGP, BRIC	Estimated Projected Completion Date: Long-term (depending on funding)	Hazard(s) Mitigated: All
Year Initiated	2014				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	1, 3				
Applicable Objective	7, 13				
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:	
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O

Action H-2.9

Mitigation Action #H - 2.9: Continue to support the countywide actions identified in this plan.					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short- and long-term	Hazard(s) Mitigated: All
Year Initiated	2014				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	All				
Applicable Objective	All				
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 Description:					
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority	O				

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	
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Action H-2.10

Mitigation Action #H - 2.10: Actively participate in the plan maintenance strategy identified in this plan.					
Lead Agency/Department Organization: EMRS, City of Harvey	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: All
Year Initiated	2014				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	1, 2, 3, 5, 6				
Applicable Objective	3, 4, 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 Description:					
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O				

Action H-2.11

Mitigation Action #H - 2.11: Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		City of Harvey			
Applicable Goal		1, 2, 3, 5, 6			
Applicable Objective		3, 4, 5, 6, 7, 9, 10, 11, 13			
Cost Analysis (Low, Medium, High)		Low			
Priority and Level of Importance (Low, Medium, High)		Medium			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
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; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		O			

Action H-2.12

Mitigation Action #H - 2.12: 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
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ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.					
Lead Agency/Department Organization: City of Harvey Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term and Ongoing	Hazard(s) Mitigated: Flooding
Year Initiated		2014			
Applicable Jurisdiction		City of Harvey			
Applicable Goal		1, 2, 3, 6			
Applicable Objective		4, 6, 9			
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 Description:					
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		O			

Action H-2.13

Mitigation Action #H - 2.13: Where feasible, implement a program to record high water marks following high water events.					
Lead Agency/Department Organization: City of Harvey Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source:	Estimated Projected Completion Date:	Hazard(s) Mitigated:

			General Fund; FEMA Public Assistance (PA)	Long-term	Flooding, Severe Weather
Year Initiated	2014				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	1, 2, 3, 5, 6				
Applicable Objective	3, 6, 9				
Cost Analysis (Low, Medium, High)	Medium				
Priority and Level of Importance (Low, Medium, High)	Medium				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium				
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; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O				

Action H-2.14

Mitigation Action #H - 2.14: Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment					
Lead Agency/Department Organization: Engineering Consultant, Public Works, Department of Buildings	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: All
Year Initiated	2014				

Applicable Jurisdiction	City of Harvey
Applicable Goal	1, 2, 3, 5, 6
Applicable Objective	3, 4, 6, 10, 13
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 Description:	
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O

Action H-2.15

Mitigation Action #H - 2.15: Consider developing and implementing a Capital Improvements Program (CIP) to increase the Village's regulatory, financial, and technical capability to implement mitigation actions.					
Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: CIP component of the general fund (if implemented)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All
Year Initiated	2014				
Applicable Jurisdiction	City of Harvey				
Applicable Goal	1, 2, 3				
Applicable Objective	1, 2, 7				
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:	
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 Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	O

Action H-2.16

Mitigation Action #H - 2.16: Storm sewer replacement, green infrastructure, and permeable pavement					
Lead Agency/Department Organization: MWRD/Cook County	Supporting Agencies/Organizations: MWRD/Cook County	Estimated Cost: \$5,000,000	Potential Funding Source: MWRD/Cook County, BRIC, HMGP	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flooding
Year Initiated		2019			
Applicable Jurisdiction		City of Harvey			
Applicable Goal		All			
Applicable Objective		9			
Cost Analysis (Low, Medium, High)		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).			
Priority and Level of Importance (Low, Medium, High)		High priority			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Flood mitigation, Project will provide an immediate reduction of risk exposure for life and property.			

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; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = 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
Install Generators
Install two Generators

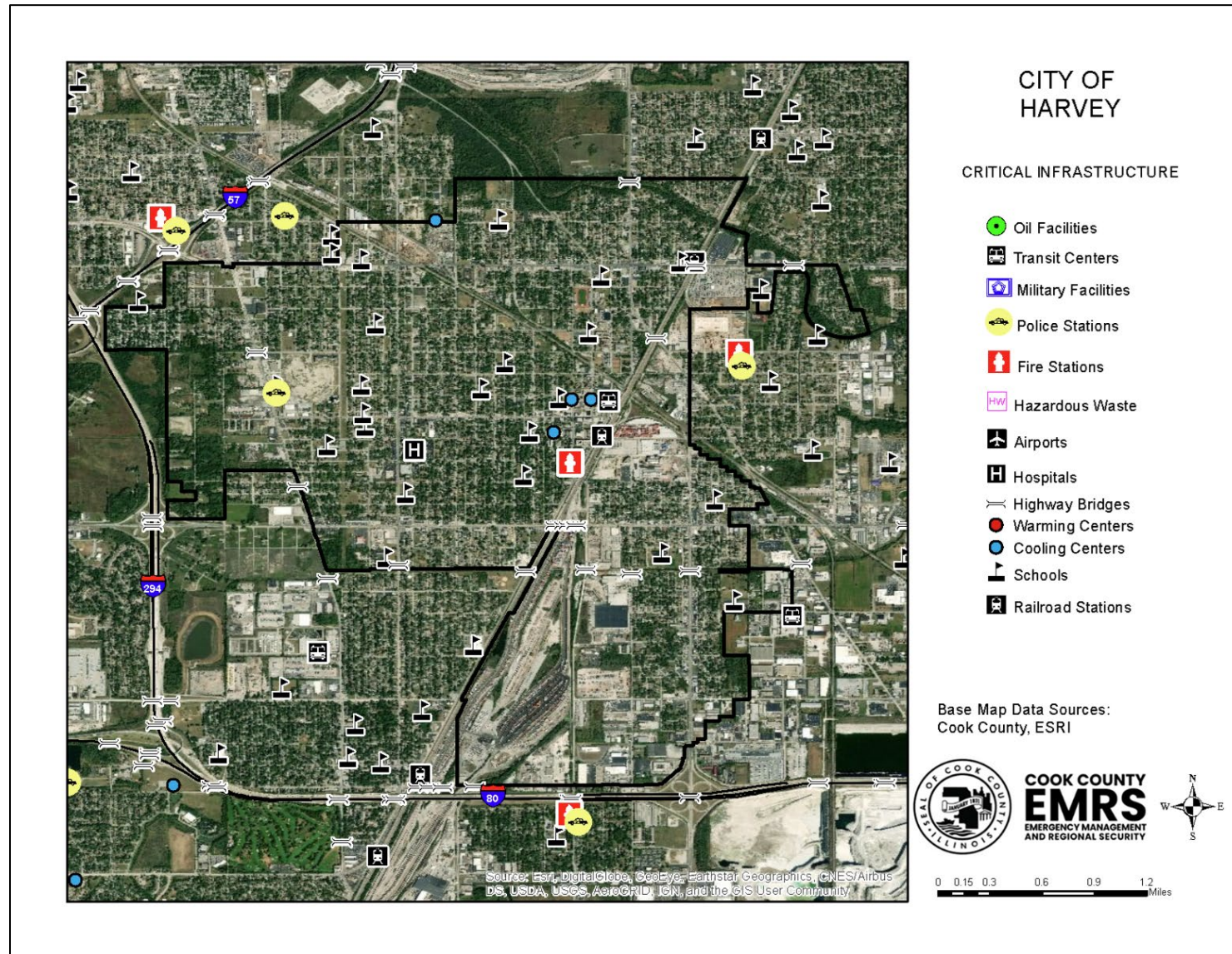
Future Needs to Better Understand Risk/Vulnerability

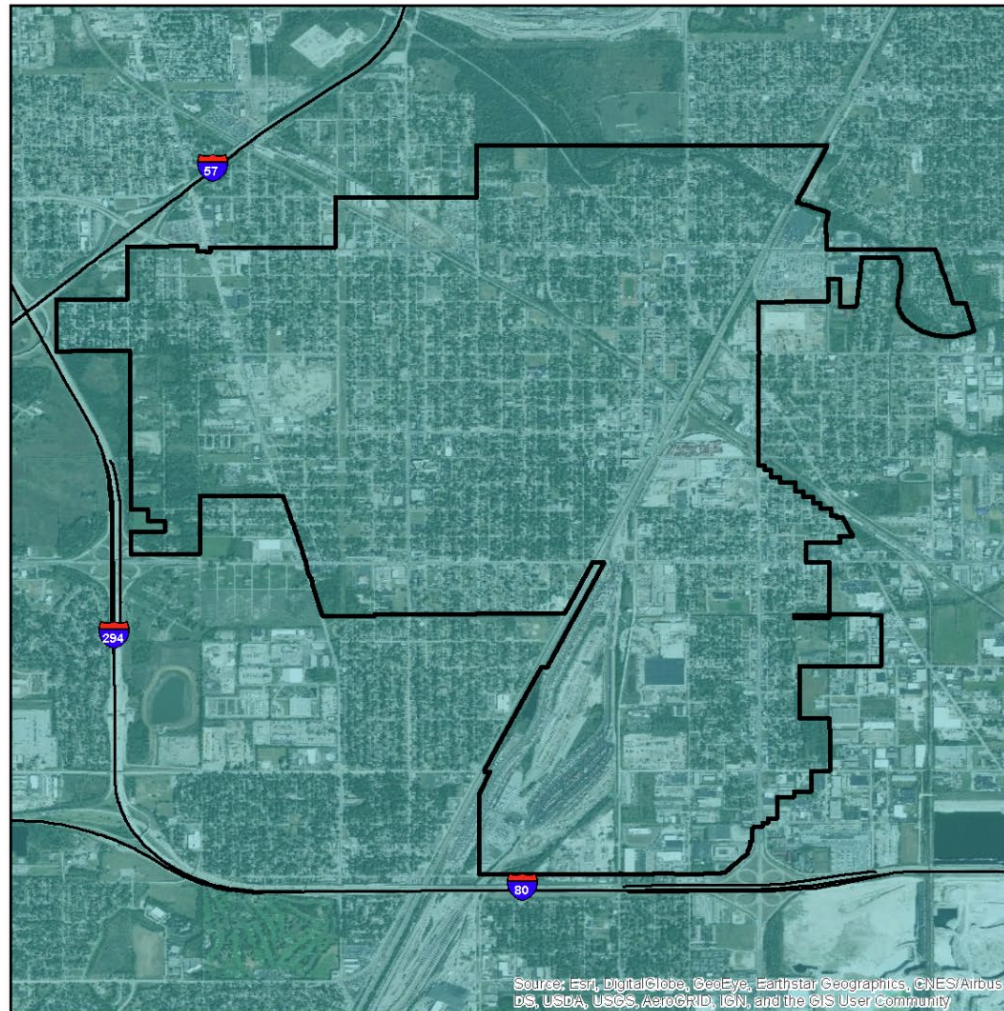
No needs have been identified at this time.

Additional Comments

Storm sewer replacement, green infrastructure, and permeable pavement has been added as a new mitigation action in 2019.

Hazard Mapping





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

CITY OF HARVEY

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

Mercalli Scale, Potential Shaking

II-III Weak

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

Probabilistic seismic-hazard maps were prepared for the conterminous United States for 2014 portraying peak horizontal acceleration and horizontal spectral response acceleration for 0.2- and 1.0-second periods with probabilities of exceedance of 10 percent in 50 years and 2 percent in 50 years. All of the maps were prepared by combining the hazard derived from spatially smoothed historical seismicity with the hazard from fault-specific sources. The acceleration values contoured are the random horizontal component. The reference site condition is firm rock, defined as having an average shear-wave velocity of 760 m/s in the top 30 meters corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction program) site classes B and C.

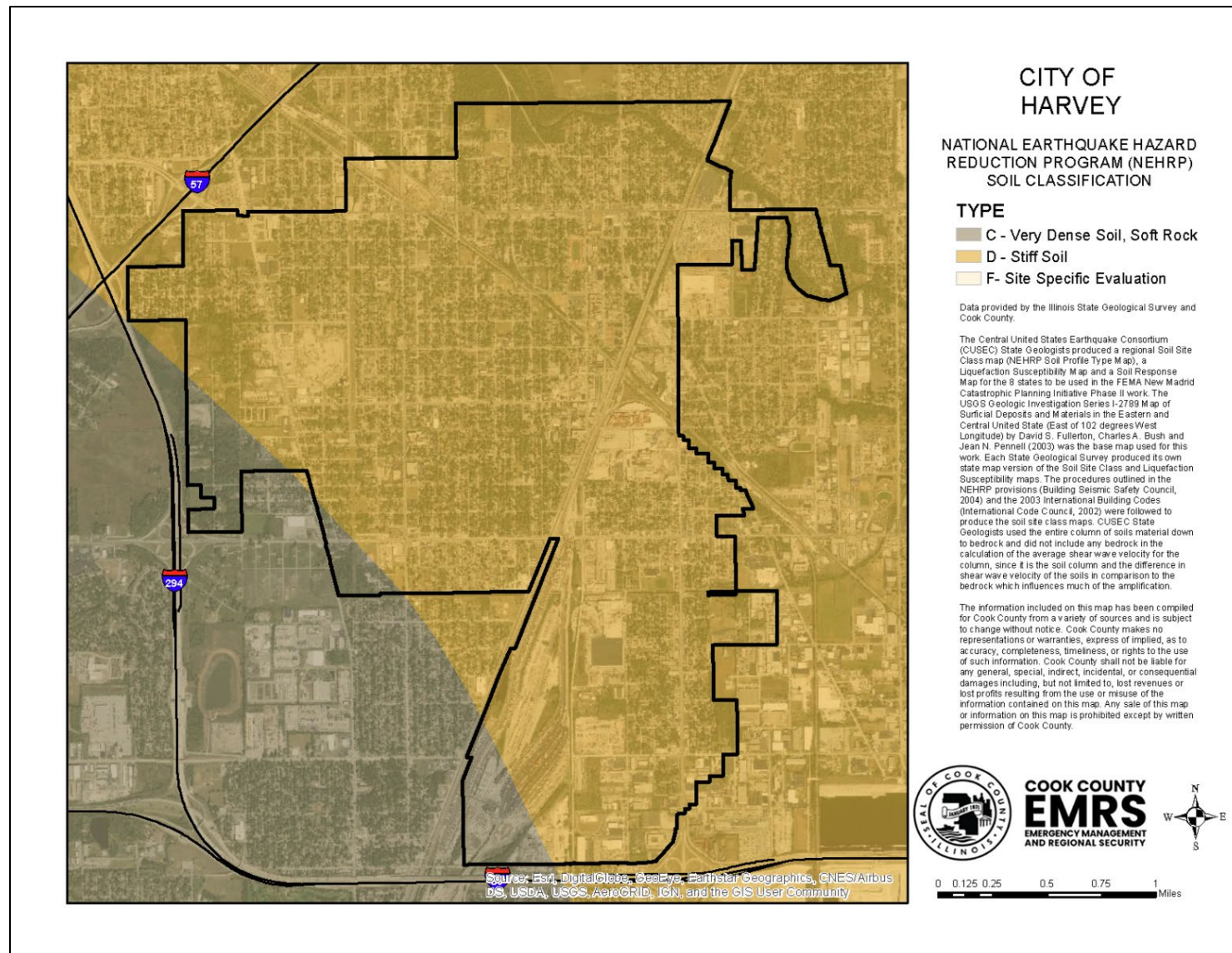
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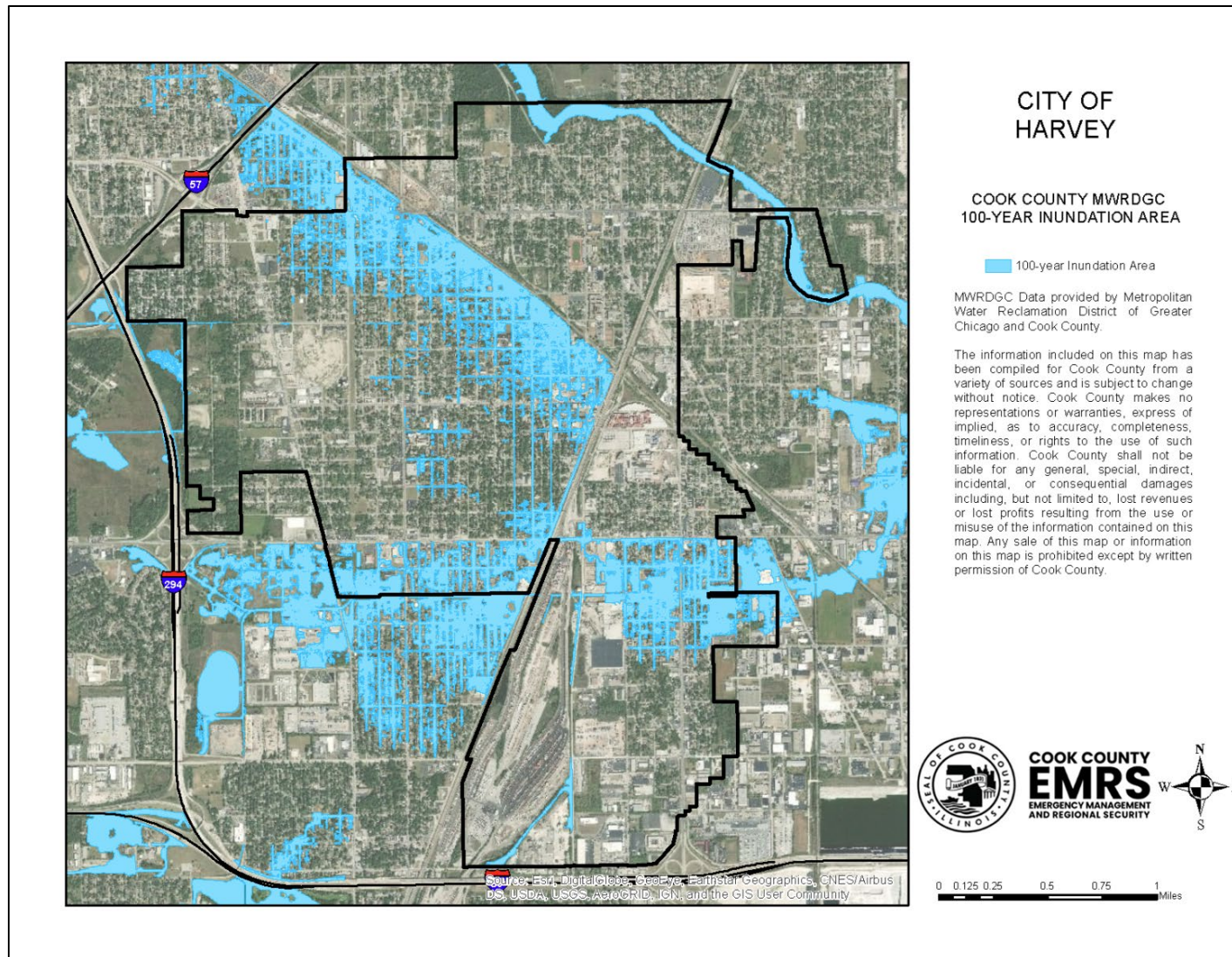
COOK COUNTY
EMRS
EMERGENCY MANAGEMENT
AND REGIONAL SECURITY

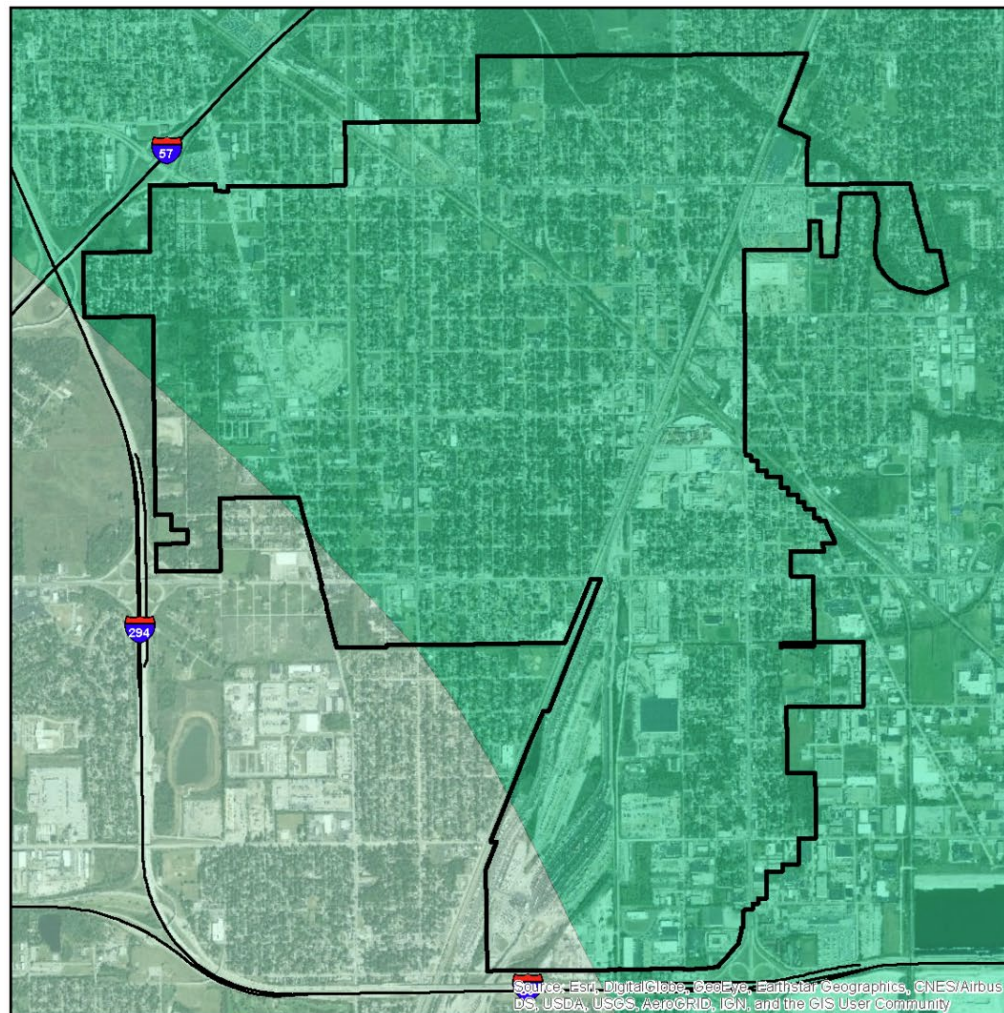


0 0.15 0.3 0.6 0.9 1.2 Miles



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>.





CITY OF HARVEY

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-2789 Map of Surficial Deposits and Materials in the Eastern and Central United State (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean N. Pernell (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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COOK COUNTY
EMRS
EMERGENCY MANAGEMENT
AND REGIONAL SECURITY



0 0.125 0.25 0.5 0.75 1 Miles

