

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

Burbank Annex

FINAL

July 2019

Prepared for:



Cook County
Department of Homeland Security and Emergency Management
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Hazard Mitigation Point of Contact

Primary Point of Contact	Alternate Point of Contact
Dave Gilgenberg, Fire Chief 6530 West 79th Street Burbank, Illinois 60459 Telephone: 708-599-7766 Email Address: dgilgenberg@burbankil.gov	Martin W. Kreil Burbank Fire/ Battalion Chief 708-473-8681 mwkreil@burbankil.gov

Jurisdiction Profile

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

- **Date of Incorporation:** 1970
- **Current Population:** 28,534 as of the US Census 2018 population estimate.
- **Population Growth:** The population decreased slightly from 2010 to 2017 – about -0.5 percent.
- **Location and Description:** Burbank is a city located in Cook County at the southwest edge of the City of Chicago; the Chicago city limit is in common with Burbank’s eastern city limit. The city has a total area of 4.2 square miles and shares a boundary with Oak Lawn to its South, Bridgeview to its West, and Bedford Park to its North.
- **Brief History:** The early history of Burbank features a series of false starts and frustrated plans. The Burbank area contained scattered farms when, in 1850, it became the southeastern portion of Lyons Township. One of the earliest roads to run through the area was the diagonal State Road that connected Ridgeland/Narragansett Avenues to Cicero Avenue. By 1871, State Road attracted the attention of a Pittsburgh investor who laid out a subdivision along this route that apparently never materialized. Instead German and Dutch truck farmers settled in the area. Railroad executive A. B. Stickney planned a massive freight railroad transfer center that included the northern part of Burbank, but the 1893 Depression curtailed his plans. In 1901, this area became the southern end of the newly formed Stickney Township, an 18 square mile tract split from the eastern side of Lyons Township. The subdivision boom of the 1920s spread to this area as real estate developers bought up farmland and plotted subdivisions. But the ongoing drainage problems, poor roads, and inadequate water and sewer systems, as well as the Great Depression, dampened the enthusiasm of many would-be buyers. The creation of the South Stickney Sanitary District in 1952 changed the course of Burbank’s history. By 1959, the area known as South Stickney or Burbank Manor had a water and sewer system for the first time, and the flooding problems diminished. Roads were improved and streetlights installed. The area’s population tripled during this decade, reaching an estimated 20,720 in 1960. Burbank was the last part of Stickney Township to incorporate. In 1970, to avoid annexation by Chicago, residents formed the City of Burbank. The name was taken from the local Luther Burbank Elementary School, named after the famous horticulturist. Six years later, in 1976, the city’s population peaked at 29,448. By 1979, nearly all of the City’s land was subdivided. Burbank’s population declined to 27,902 in 2000. More than half of the City’s revenue comes from retail sales taxes. Stores are concentrated along Harlem and Cicero Avenues, the City’s main north-south thoroughfares, with some retail businesses also on 79th and 87th Streets. There is almost no manufacturing in Burbank.
- **Climate:** The climate of Burbank is classified as humid continental, with all four seasons distinctly represented: wet springs; hot and often humid summers; pleasant autumns; and cold winters. Annual precipitation is average, and reaches its lowest points in the months of January and February, and peaks in the months of May and June. The temperature tends to hover around 23.5 F in January, and 75.5 F in July. In addition, Burbank receives 38.35 inches of rain each year.

- **Governing Body Format:** The City of Burbank is governed by Mayor and a seven-member city council. This body will assume the responsibility for the adoption and implementation of this plan. The city consists of five departments: Finance, Building, Public Works, Police and Fire. In addition to police and fire services, the City of Burbank maintains an Emergency Services and Disaster Agency, which is an extension of the City of Burbank Fire Department. Its mission is to provide assistance to the fire and police departments and to the citizens of Burbank in times of critical need or disaster. This assistance comes in many requests. They can range from evacuation from flooding to general safety and preparedness training. Water and sanitary services are provided by South Stickney Sanitary District (Stickney Township) The South Stickney Sanitary District is a government agency responsible for the delivery of water and the maintenance of sewers for all the residents of the City of Burbank and the unincorporated area of Stickney Township known as Nottingham Park. The South Stickney Sanitary District handles approximately 9,300 individual residential customer and commercial customer water accounts. The South Stickney Sanitary District is also responsible for the construction, maintenance and repair of all of the sewer lines within the district that are not the property and responsibility of an individual property owner or the Metropolitan Water Reclamation District.
- **Development Trends:** Anticipated development trends for Burbank are moderate, consisting of primarily of residential development and citywide infrastructure. Burbank’s development priority is the maintaining of a safe, wholesome, and residential community. Burbank is approximately 90% residential and the city’s infrastructure is a high priority serving its residents. There is no major commercial development plans forecasted in the near future.

Capability Assessment

The assessment of the jurisdiction’s legal and regulatory capabilities is presented in the *Legal and Regulatory Capability Table* below. The assessment of the jurisdiction’s fiscal capabilities is presented in the *Fiscal Capability Table* below. The assessment of the jurisdiction’s administrative and technical capabilities is presented in the *Administrative and Technical Capability Table* below. Information on the community’s National Flood Insurance Program (NFIP) compliance is presented in the *National Flood Insurance Program Compliance Table* below. Classifications under various community mitigation programs are presented in the *Community Classifications Table* below.

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	In accordance with Public Act 096-0704, Illinois has adopted the IBC as its state Building Code 2018.
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code. 35-12-10 (2010)
Subdivisions	Yes	No	No	No	35-12-10 (2010)
Stormwater Management	No	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA.
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	35-12-10 (2010)

Public Health and Safety	No	No	Yes	Yes	Stickney Public Health District. April 4, 1970
Environmental Protection	No	No	No	No	
Planning Documents					
General or Comprehensive Plan	No	No	No	No	
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>					N/A
Floodplain or Basin Plan	No	No	No	No	
Stormwater Plan	No	No	MWRD	Yes	Regional storm water impacts are managed by MWRD. The Village lies within the Calumet Sag-Channel watershed planning area of MWRD's comprehensive Storm water Master Planning Program
Capital Improvement Plan	No	No	No	No	
<i>What types of capital facilities does the plan address?</i>					N/A
<i>How often is the plan revised/updated?</i>					N/A
Habitat Conservation Plan	No	No	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	No	No	Cook County DHSEM
Threat and Hazard Identification and Risk Assessment	No	No	No	No	Cook County DHSEM Preparing for THIRA
Terrorism Plan	No	No	No	No	Cook County DHSEM
Post-Disaster Recovery Plan	No	No	No	No	Cook County DHSEM
Continuity of Operations Plan	No	No	No	No	Cook County DHSEM
Public Health Plans	No	No	No	No	Stickney Public Health Distric

TABLE: FISCAL CAPABILITY	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	No
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

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	Frank Novotny & Associates
Engineers or professionals trained in building or infrastructure construction practices	Yes	Frank Novotny & Associates
Planners or engineers with an understanding of natural hazards	Yes	Frank Novotny & Associates
Staff with training in benefit/cost analysis	Yes	Burbank Police, Fire, Public Works: Department Heads
Surveyors	Yes	Frank Novotny & Associates
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Fire Chief
Grant writers	Yes	Administration for Fire & Police

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Building Department
Who is your jurisdiction’s floodplain administrator? (department/position)	Building Department
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	October 25, 2000
When was the most recent Community Assistance Visit or Community Assistance Contact?	Has 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.	Not at this time
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No

Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No
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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	3	2012
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	No	N/A	N/A

Jurisdiction-Specific Natural Hazard Event

The information provided below was solicited from the jurisdiction and supported by NOAA and other relevant data sources.

The *Natural Hazard Events Table* lists all past occurrences of natural hazards within the jurisdiction. Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: 2
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment
Severe Weather	-	6/30/2014	-
Flood	-	7/23/2013	\$30,790.27
Snow Storm	FEMA -1960-031-09642-00	2/02/2011	\$47,864.50
Flood	-	7/23/2010	-
Snow Storm	EM-3161	12/11/2000	-
Snow Storm	EM-3134	1/01/1999	-
Snow Storm	EM-3068	1/16/1979	-
Flood	DR-509	6/18/1976	-

Jurisdiction-Specific Hazards and Impacts

Hazards that represent a county-wide risk are addressed in the Risk Assessment section of the 2019 Cook County Multi-Jurisdictional Hazard Mitigation Plan Update. This section only addresses the hazards and their associated impacts that are **relevant** and **unique** to the municipality.

Flood: Within the community, the 8600 Block of Rutherford cul-de-sac is prone to flooding. Additionally, Narrangansett Ave. (between 81st and 85th), Parkside (78th Street to 79th Street), 83rd street, and Mobile Ave are prone to flooding.

Earthquake: Although earthquakes or their effects are not commonly felt in Burbank, earthquakes have happened on several occasions in Illinois over the last few decades. Burbank continues to prepare and mitigate against this hazards.

Severe Weather: Severe thunderstorms, hail, and wind have impacted residences throughout Burbank. Trees, power lines, and even power poles have all been toppled on multiple occasions. Damage has also occurred to business on 95th street as a result of these events.

Tornado: Although available data may not show any tornado events within Burbank specifically, these events have caused notable damage in nearby parts of Cook County. Burbank continues to prepare and mitigate against this hazard.

Severe Winter Weather: These events can threaten life, property, and major utilities. Burbank continues to pursue mitigation actions to ensure utility service cannot be as easily impacted by things like high winds and ice accumulation.

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	Risk Rating Score (Probability x Impact)
1	Severe Weather	54
2	Severe Winter Weather	54
3	Flood	54*
4	Earthquake	32
5	Tornado	27
6	Drought	2
7	Dam Failure	0

*Note: Flood risk ranking score was raised from 33 to 54 based on urban drainage issues experienced in the past.

Mitigation Strategies and Actions

The heart of the mitigation plan is the mitigation strategy, which serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The mitigation strategy describes how the community will accomplish the overall purpose, or mission, of the planning process. In this section, mitigation actions/projects were updated/amended, identified, evaluated, and prioritized. This section is organized as follows:

- New Mitigation Actions - New actions identified during this 2019 update process
- Ongoing Mitigation Actions - Ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.
- Completed Mitigation Actions - An archive of all identified and completed projects, including completed actions since 2014.

The *Hazard Mitigation Action Plan Matrix Table* below lists the actions that make up the jurisdiction’s hazard mitigation plan. The *Mitigation Strategy Priority Schedule Table* identifies the priority for each action.

TABLE: HAZARD MITIGATION ACTION PLAN MATRIX						
Status	Hazards Mitigated	Objectives Met	Lead Agencies	Estimated Cost	Sources of Funding	Timeline/Projected Completion Date (a)
Action B14.1 —Perform a study of the urban drainage problem.						
Ongoing	Flood	6, 9	Burbank Building and Fire Departments	Low	Local/General Fund	Short-term
Action B14.2 —Pursue all opportunities to put utilities underground.						
Ongoing	Sever Weather, Sever Winter Weather, Tornado, Earthquake	1, 2, 5	Burbank Building Department	High	Grants State/Federal Funding	Ongoing

Action B14.3 —Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.						
Ongoing	All	7, 13	Burbank Building Department	High	Grants State/Federal Funding	Long-term (depending on funding)
Action B14.4 —Enhance the Severe Weather warning capability by joining the NOAA “Storm Ready” program.						
Completed	Tornado, Flood, Sever Weather, Severe Winter Weather	1, 2, 5, 6, 8, 11	Burbank Fire Department	Low	Local/General Fund	Completed
Action B14.5 —Update/Enhance Flood Damage Prevention ordinance.						
Ongoing	Flood	2, 10	Burbank Building Department	Low	Local/General Fund	Short-term
Action B14.6 —Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	Burbank	Low	General Fund	Short- and long-term
Action B14.7 —Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6	DHSEM (Burbank)	Low	General Fund	Short-term
Action B14.8 —Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.						
Ongoing	Flooding	4, 6, 9	Burbank	Low	General Fund	Short-term, Ongoing
Action B14.9 —Where feasible, implement a program to record high water marks following high-water events.						
Ongoing	Flooding, Severe Weather	3, 6, 9	Burbank	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
Action B14.10 —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						

Ongoing	All	3, 4, 6, 10, 13	Frank Novotny & Associates	Low	General Fund	Short-term
Action B14.11 —Consider the development and implementation of a capital improvement program (CIP) to increase the Village’s regulatory, financial and technical capability to implement mitigation actions.						
Ongoing	All	1, 2, 7	Public Works	High	CIP component of general fund (if implemented)	Long-term
Action B14.12 —Improve community awareness and preparedness. Specifically improve local web site to include interactive sections to report flood and/or damage.						
New	All	6, 8	Fire	\$50,000; Medium	Grant and Corporate Funding	2021
Action B14.13 —Melvina Ditch Reservoir Improvements.						
New	Flood	9	MWRD	\$14,245,000 ; High	Unknown	No
(a) Ongoing indicates continuation of an action that is already in place. Short-term indicates implementation within five years. Long-term indicates implementation after five years.						

TABLE: MITIGATION STRATEGY PRIORITY SCHEDULE							
Action Number	Number of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Priority (a)
1	2	Medium	Low	Yes	No	Yes	High
2	3	High	High	Yes	Yes	Yes	High
3	2	High	High	Yes	Yes	No	Medium
4	6	Low	Low	Yes	No	Yes	High
5	2	Medium	Low	Yes	No	Yes	High
6	13	Medium	Low	Yes	No	Yes	High
7	3	Low	Low	Yes	Yes	Yes	High

8	3	Medium	Low	Yes	No	Yes	High
9	3	Medium	Medium	Yes	No	No	Medium
10	5	Medium	Low	Yes	No	Yes	High
11	3	High	High	Yes	No	No	Medium
12	2	High	Medium	Yes	Yes	No	High
13	1	Unknown	High	Unknown	Unknown	Unknown	Unknown

(a) See Chapter 1 for explanation of priorities.

New Mitigation Actions

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

Action B - 14.12

Mitigation Action	Improve community awareness and preparedness. Specifically, improve local web site to include interactive sections to report flood and/or damage.
Year Initiated	2019
Applicable Jurisdiction	City of Burbank
Lead Agency/Organization	Fire
Supporting Agencies/Organizations	Police, Public Works
Applicable Goal	<ul style="list-style-type: none"> Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards. Promote public understanding of and support for hazard mitigation.
Applicable Objective	<ul style="list-style-type: none"> Use the best available data, science and technologies to educate the public and to improve understanding of the location and potential impacts of natural hazards, the vulnerability of building types and community development patterns, and the measures needed to protect life safety. Establish partnerships among all levels of local government, the private sector, and/or nongovernmental organizations to improve and implement methods to protect people and property.
Potential Funding Source	Grant and Corporate Funding
Estimated Cost	\$50,000 (???)
Benefits (loss avoided)	<ul style="list-style-type: none"> Help people prepare for and minimize person and property loss. Instructions on how to help during emergencies
Projected Completion Date	2021
Priority and Level of Importance (Low, Medium, High)	High priority
Benefit Analysis (Low, Medium, High)	High - Project will provide an immediate reduction of risk exposure for life and property.
Cost Analysis (Low, Medium, High)	Medium - The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, of the cost of the project would have to be spread over multiple years.
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description
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Action/Implementation Plan and Project Description:	
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Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	
2020		
2021		
2022		
2023		

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

Action B - 14.13

Mitigation Action	Melvina Ditch Reservoir Improvements
Year Initiated	2019
Applicable Jurisdiction	Burbank
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	<ul style="list-style-type: none"> • Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards. • Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events and potential damage from such activities. • Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards. • Develop, promote, and integrate mitigation action plans.
Applicable Goal	<ul style="list-style-type: none"> • Provide or improve flood protection on a watershed basis with flood control structures and drainage maintenance plans.
Applicable Objective	Unknown
Potential Funding Source	Unknown
Estimated Cost	\$14,245,000
Benefits (loss avoided)	Unknown
Projected Completion Date	Unknown
Priority and Level of Importance (Low, Medium, High)	Unknown
Benefit Analysis (Low, Medium, High)	Unknown
Cost Analysis (Low, Medium, High)	High
Actual Completion Date	Unknown

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	ID: MD Rsvr Exp Contract: 14-263-3F Watershed: Cal-Sag Channel Location: Burbank, IL Expands the existing Melvina Ditch Reservoir by up to 195 acre-feet to increase its storage capacity (up to a 118 percent increase), modifying the pumping station to accommodate the reservoir expansion, and installing a new emergency overflow weir to reduce the likelihood of reservoir overtopping.

Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	Project under construction
2020		
2021		
2022		
2023		

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

Ongoing Mitigation Actions

The following are ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Action B - 14.1

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.1	Perform a study of the urban drainage problem	
Status Description: No		X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action B - 14.2

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.2	Pursue all opportunities to put utilities underground.	
Status Description: No		X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action B - 14.3

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.3	Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.	
Status Description: No		X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action B - 14.5

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.5	Update/Enhance Flood Damage Prevention ordinance.	
Status Description: No		X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action B - 14.6

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.6	Continue to support the countrywide actions identified in this plan.	
Status Description: No		O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action B - 14.7

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.7	Actively participate in the plan maintenance strategy identified in this plan.	
Status Description: No		X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action B - 14.8

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.8	Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.	
Status Description: No		O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action B - 14.9

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.9	Where feasible, implement a program to record high water marks following high-water events.	
Status Description: No		X
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action B - 14.10

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.10	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.	
Status Description: No		O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Action B - 14.11

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.11	Consider the development and implementation of a capital improvement program (CIP) to increase the Village’s regulatory, financial and technical capability to implement mitigation actions.	
Status Description: No		O
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

Completed Mitigation Actions

The following section represents completed mitigation actions, and serves as an archive of identified and completed projects.

Action B - 14.4

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# B—14.4	Enhance the Severe Weather warning capability by joining the NOAA "Storm Ready" program.	
Status Description: Action Taken?	We are already classified as Storm Ready, As a municipality within Cook County.	C
<p style="text-align: center;">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Future Needs to Better Understand Risk/Vulnerability

No needs have been identified at this time.

Additional Comments

No additional comments at this time

HAZUS-MH Risk Assessment Results

BURBANK EXISTING CONDITIONS	
2010 Population	28,925
Total Assessed Value of Structures and Contents	\$6,843,467,168
Area in 100-Year Floodplain	0.00 acres
Area in 500-Year Floodplain	0.00 acres
Number of Critical Facilities	31

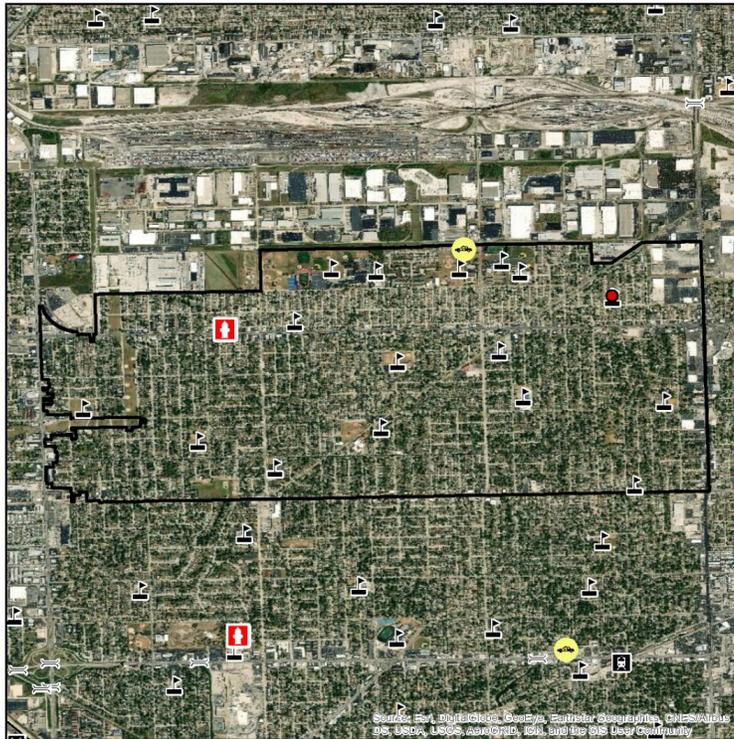
HAZARD EXPOSURE IN BURBANK						
	Number Exposed		Value Exposed to Hazard		Total	% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents		
Dam Failure						
Buffalo Creek	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	0	0	\$0	\$0	\$0	0.00%
Touhy	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	0	0	\$0	\$0	\$0	0.00%
Flood						
100-Year	0	0	\$0	\$0	\$0	0.0%

500-Year	0	0	\$0	\$0	\$0	0.0%
Tornado						
100-Year	—	—	\$889,527,767	\$695,305,970	\$1,584,833,737	23.16%
500-Year	—	—	\$1,541,421,062	\$1,102,029,591	\$2,643,450,654	38.63%

ESTIMATED PROPERTY DAMAGE VALUES IN BURBANK				
	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	Total	
Dam Failure				
Buffalo Creek	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	\$0	\$0	\$0	0.00%
Touhy	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	\$0	\$0	\$0	0.00%
Earthquake				
1909 Historical Event	\$75,584,129	\$24,488,205	\$100,072,334	1.46%
Flood				
10-Year	\$0	\$0	\$0	0.00%
100-Year	\$0	\$0	\$0	0.00%
500-Year	\$0	\$0	\$0	0.00%

Tornado				
100-Year	\$88,952,777	\$69,530,597	\$158,483,374	2.32%
500-Year	\$225,047,475	\$160,896,320	\$385,943,795	5.64%

Hazard Mapping



CITY OF BURBANK

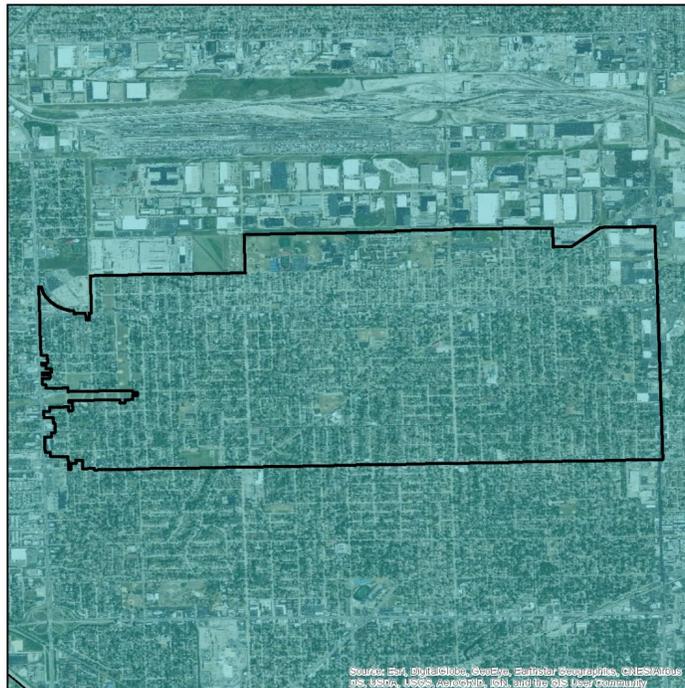
CRITICAL INFRASTRUCTURE

- Oil Facilities
- Transit Centers
- Military Facilities
- Police Stations
- Fire Stations
- Hazardous Waste
- Airports
- Hospitals
- Highway Bridges
- Warming Centers
- Cooling Centers
- Schools
- Railroad Stations

Base Map Data Sources:
Cook County, ESRI



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



CITY OF BURBANK

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

Mercalli Scale, Potential Shaking
II-III Weak

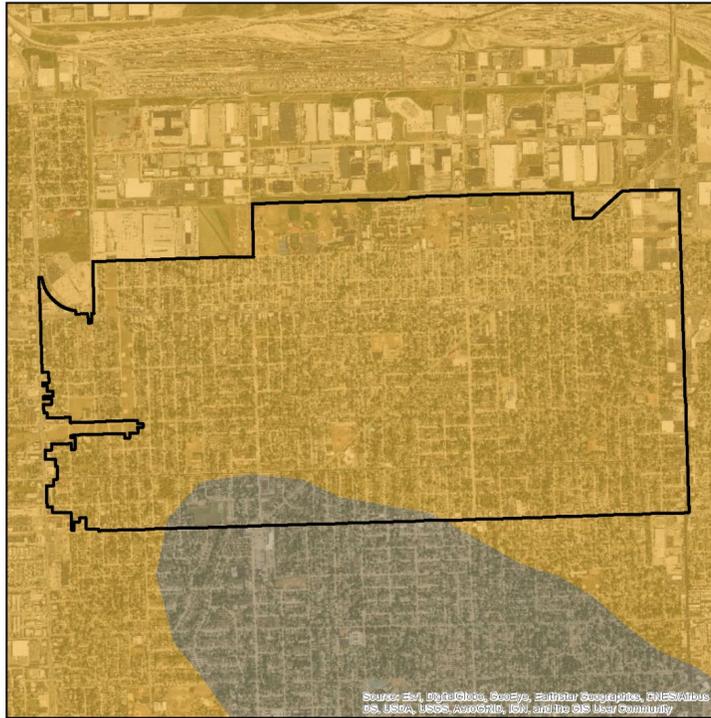
Data provided by the USGS Earthquake Hazards Program and Cook County.

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 100 years. All of the maps were prepared by combining the hazards derived from spatially smoothed historical seismicity with the hazards 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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CITY OF BURBANK
NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP) SOIL CLASSIFICATION

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

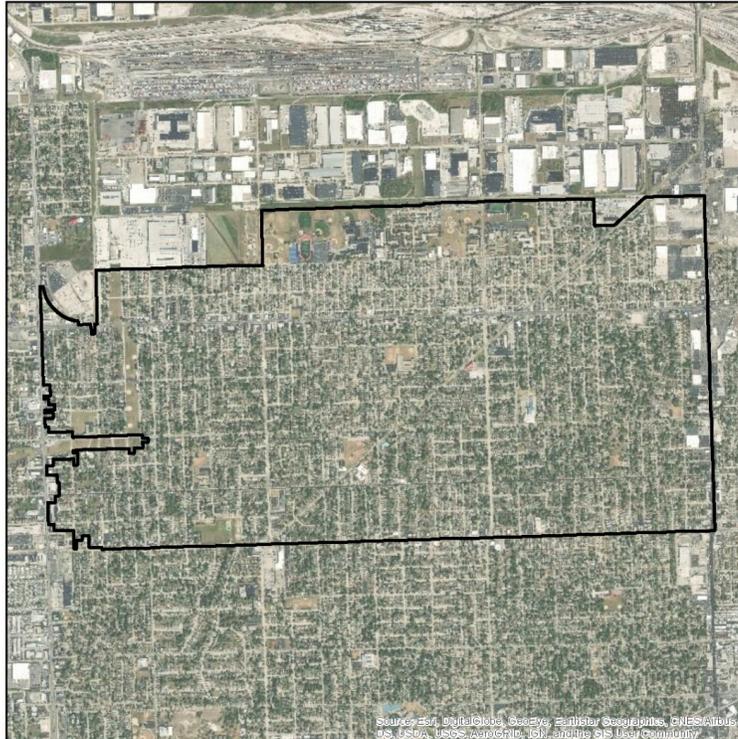
Data provided by the Illinois State Geological Survey and Cook County.

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. Guse and Jean N. Penneil (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, 2003) 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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CITY OF BURBANK

COOK COUNTY MWRDGC 100-YEAR INUNDATION AREA

- 100-year Inundation Area

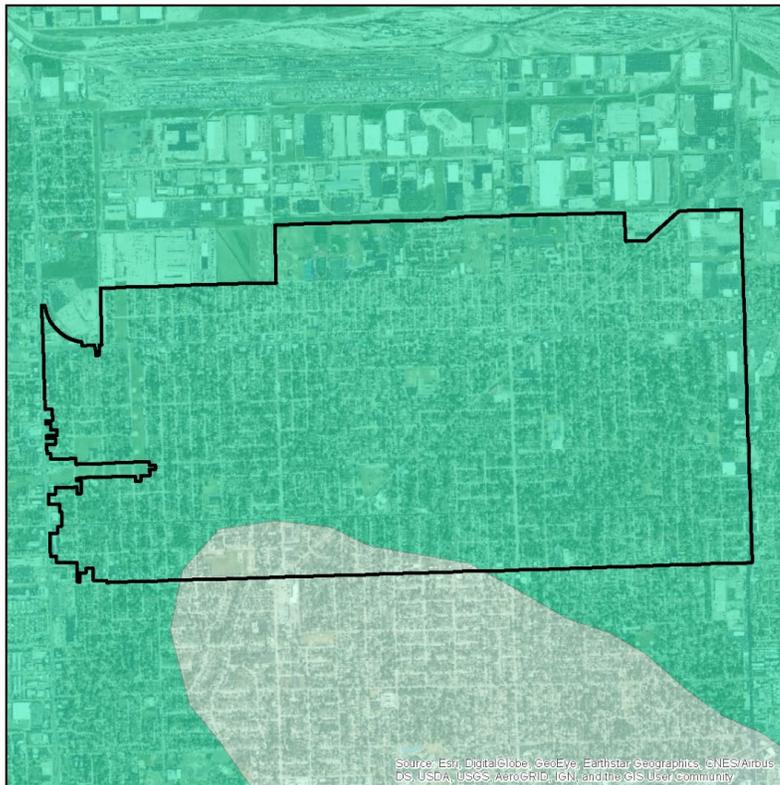
MWRDGC Data provided by Metropolitan Water Reclamation District of Greater Chicago and Cook County.

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

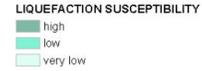


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**CITY OF
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LIQUEFACTION SUSCEPTIBILITY



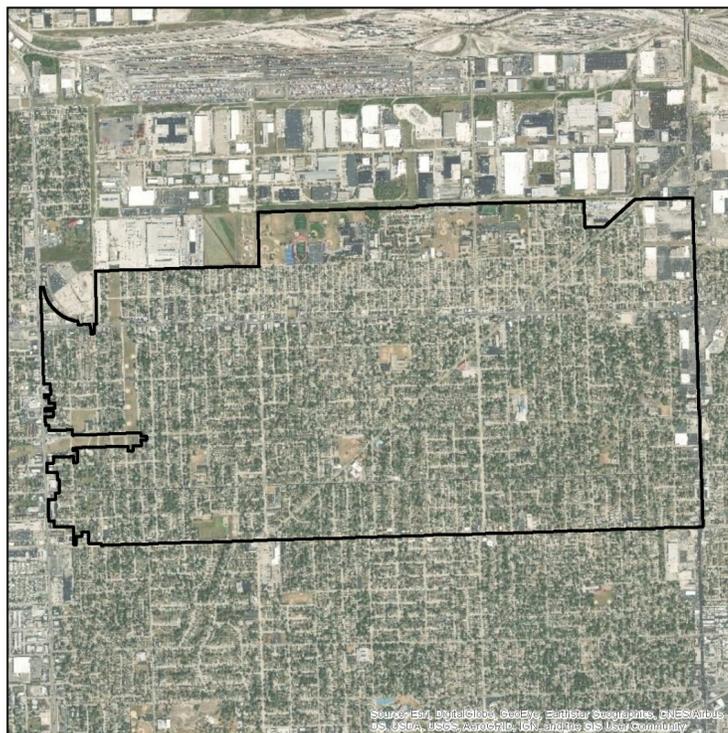
Data provided by the Illinois State Geological Survey and Cook County.

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**CITY OF
BURBANK**

**100- AND 500- YEAR
TORNADO EVENTS**



Historic tornado data provided by NOAA/NWS showing the initial points and paths of all F4 and F5 events observed from 1950 to 2017.



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