



Cook County Multi-Jurisdictional Hazard Mitigation Plan 2021 Annual Report

Cook County Overview

Cook County is in northeastern Illinois on the western shores of Lake Michigan. It is the most populous of Illinois' 102 counties, comprising approximately 40 percent of the state's population with an estimated population of 5.2 million in 2018. By area, Cook County is the sixth largest county in Illinois, covering 946 square miles. It is surrounded by Lake and McHenry counties to the north, Kane and DuPage to the west and Will to the southwest. Lake Michigan is the county's eastern border.

Cook County is the second most populous county in the United States, after Los Angeles County. It contains 135 municipalities, covering about 85 percent of the area of the county. The remaining unincorporated areas are under the jurisdiction of the Cook County Board of Commissioners, a 17-member board elected by district.

Plan Background

The Cook County Multi-Jurisdictional Hazard Mitigation Plan (HMP) was developed under a grant from the Federal Emergency Management Agency. The project was completed by a planning team comprised of Cook County Department of Emergency Management and Regional Security (EMRS) staff and expert consultants, with guidance from a steering committee representing the planning partners and other local stakeholders.

On September 10, 2014, the Cook County Board of Commissioners adopted the first-ever Cook County HMP (Volumes 1 and 2), making it the largest U.S. plan of its kind with 115 planning partners. It was created to reduce the impact of a critical incident on the lives, property, and economy of those that live in, work in, and/or visit the County. The plan identified the risks of natural hazards facing Cook County, established mitigation goals, evaluated existing mitigation activities, and recommended additional mitigation steps.

The 2014 Cook County Multi-Jurisdictional Hazard Mitigation Plan was updated in 2019 at the completion of the 5-year cycle. HMP participants increased to 122 and included the Metropolitan Water Reclamation District (MWRD), unincorporated Cook County and the City of Chicago. Municipalities that are not part of

the HMP border other counties and have chosen to join other HMPs. The 2019 update was officially adopted on September 26, 2019.

Among the mitigation steps identified in the current is a maintenance strategy to ensure not only that the HMP remains an active and relevant document but also that the planning partners maintain eligibility for applicable federal grant funding sources. The HMP's format also allows for regular updates to those mitigation strategies identified by participants. This annual report serves to reflect updates to mitigation strategies and report on the status of ongoing mitigation activities.

Purpose

The purpose of this report is to provide an annual update on the implementation of the action plan items identified in Volume 2 of the 2019 revised HMP. The objective is to ensure a continual and robust planning process that will keep the HMP dynamic and responsive to the needs and capabilities of all partner jurisdictions in a regional approach to hazard mitigation. This report covers the following:

- Review and update of the jurisdictional points of contact
- Review of the action item plan matrix
- Natural hazard events that have occurred within the last year
- Mitigation success stories
- Plan evaluation

To achieve the HMP's overarching goals of helping to mitigate hazards/events and create safer communities, the HMP planning partners identified action items and activities within their respective annexes to reduce loss of life and property. To aid planning partners in reporting their action items and activity progress, EMRS utilized a Knowledge Management System and created an annual progress report template. The following chart is a quantitative breakdown of completed action items, ongoing action items, no action taken, new action items and action items to be removed from each participating municipality's Annex. Out of 121 municipalities, all have participated in this update.

COVID-19 hampered some municipalities' ability to complete mitigation projects. Due to the pandemic, the 2020 annual report was not completed. The reported numbers account for years 2020 and 2021.

Out of 2,092 mitigation action items, 305 were reported completed. 577 action items were reported as ongoing, 48 as no action taken, 113 new, and 84 to be removed. To review jurisdictional progress reports, please go to <https://www.cookcountyemergencymanagement.org/annual-progress-reports>.

Municipality	# Of Action Items	Complete Action Items	Ongoing Action Items	No Action Taken Items	New Action Items	Removed Action Items
Alsip	12	1	11	0	0	0
Arlington Heights	21	4	14	1	2	0
Barrington	1	0	1	0	0	0
Bartlett	5	1	1	0	2	1
Bedford Park	18	6	10	1	0	1
Bellwood	16	3	12	0	1	0
Berkeley	13	2	10	0	0	1
Berwyn	10	0	7	3	0	0
Blue Island	17	6	10	0	0	1
Bridgeview	16	6	7	0	0	0
Broadview	14	0	14	0	0	0
Brookfield	19	2	17	0	0	0
Burbank	13	1	12	0	0	0
Burnham	17	1	16	0	0	0
Calumet City	22	7	13	2	0	0
Calumet Park	20	0	15	5	0	0
Chicago Heights	16	5	8	0	1	2
Chicago Ridge	23	2	18	0	1	0
Cicero	13	0	13	0	0	0
City of Chicago	49	14	35	0	0	3
Cook County	82	5	61	0	12	4
Country Club Hills	18	4	13	0	1	0
Countryside	26	2	17	0	0	7
Crestwood	14	0	14	0	0	0
Dixmoor	15	0	15	0	0	0
Dolton	18	0	18	0	0	0
East Hazel Crest	17	0	13	0	0	4
Elk Grove Village	19	3	15	0	0	1
Elmwood Park	12	6	6	0	0	0
Evanston	33	6	12	0	15	0
Evergreen Park	11	2	7	0	2	1
Flossmoor	20	1	13	2	1	3
Ford Heights	19	0	18	1	0	0
Forest Park	11	0	8	0	3	0

Municipality	# Of Action Items	Complete Action Items	Ongoing Action Items	No Action Taken Items	New Action Items	Removed Action Items
Forest View	15	0	14	0	0	0
Franklin Park	25	10	12	0	2	1
Glencoe	21	6	15	0	0	0
Glenview	26	10	16	0	0	0
Glenwood	18	5	10	1	2	0
Golf	13	5	7	0	0	1
Hanover Park	31	8	16	0	4	3
Harvey	16	0	16	0	0	0
Harwood Heights	9	0	9	0	0	0
Hazel Crest	20	0	19	0	1	0
Hickory Hills	18	0	16	0	0	2
Hillside	28	8	17	0	3	0
Hodgkins	27	2	23	0	1	1
Hoffman Estates	19	0	15	2	0	2
Hometown	1	0	1	0	0	0
Homewood	12	2	10	0	0	0
Indian Head Park	10	1	9	0	0	0
Inverness	19	4	12	2	5	0
Justice	20	5	15	0	0	0
Kenilworth	11	0	10	0	0	1
LaGrange	24	1	19	0	0	4
LaGrange Park	22	4	13	2	3	0
Lansing	27	7	20	0	0	0
Lemont	9	0	9	0	0	0
Lincolnwood	21	9	11	0	1	0
Lynwood	9	0	9	0	0	0
Lyons	18	2	16	0	0	0
Markham	18	2	16	0	0	0
Matteson	19	4	14	0	1	0
Maywood	11	1	7	0	3	0
McCook	13	0	9	0	4	0
Melrose Park	9	3	4	2	0	0
Merrionette Park	17	3	3	9	1	1

Municipality	# Of Action Items	Complete Action Items	Ongoing Action Items	No Action Taken Items	New Action Items	Removed Action Items
Midlothian	26	8	15	0	0	1
Morton Grove	18	2	13	0	0	3
Mount Prospect	22	0	16	0	0	6
MWRD	22	3	19	0	0	0
Niles	18	2	16	0	0	0
Norridge	15	2	13	0	0	0
North Riverside	10	0	8	2	0	0
Northbrook	22	8	12	0	1	1
Northfield	17	3	9	4	0	1
Northlake	24	4	20	0	0	0
Oak Forest	19	4	15	0	0	0
Oak Lawn	22	3	18	0	0	1
Oak Park	17	4	9	0	2	2
Olympia Fields	10	1	9	0	0	0
Orland Hills	16	0	16	0	0	0
Orland Park	29	2	24	0	2	1
Palatine	30	2	19	0	3	6
Palos Heights	18	4	14	0	0	0
Palos Hills	12	6	5	0	1	0
Palos Park	18	3	15	0	0	0
Park Ridge	20	0	15	3	1	1
Phoenix	18	0	17	0	1	0
Posen	17	1	16	0	0	0
Prospect Heights	19	6	13	0	0	0
Richton Park	5	0	5	0	0	0
Riverdale	14	0	13	0	0	1
Riverside	22	0	22	0	0	0
River Forest	21	4	15	0	2	0
River Grove	11	0	11	0	0	0
Robbins	16	0	13	0	0	3
Rolling Meadows	16	2	9	0	2	3
Rosemont	12	1	11	0	0	0
Sauk Village	11	1	9	1	0	0

Municipality	# Of Action Items	Complete Action Items	Ongoing Action Items	No Action Taken Items	New Action Items	Removed Action Items
Schaumburg	26	5	7	0	10	4
Sauk Village	11	1	9	1	0	0
Schaumburg	26	5	7	0	10	4
Schiller Park	11	2	9	0	0	0
Skokie	16	2	13	0	0	1
South Barrington	16	0	12	4	0	0
South Chicago Hts.	18	1	8	0	9	0
South Holland	20	0	20	0	0	0
Steger	10	1	9	0	0	0
Stickney	11	0	11	0	0	0
Stone Park	10	1	6	0	3	0
Streamwood	10	3	6	0	1	0
Summit	9	0	9	0	0	0
Thornton	12	2	10	0	0	0
Tinley Park	10	0	10	0	0	0
University Park	1	0	1	0	0	0
Westchester	17	2	15	0	0	0
Western Springs	11	1	10	0	0	0
Wheeling	18	7	11	0	0	0
Willow Springs	10	2	5	0	2	1
Wilmette	16	6	10	0	0	0
Winnetka	18	1	16	0	1	0
Worth	9	1	4	1	0	3

Natural Hazard Events in 2020/2021

In 2021, there were no major Presidential disaster declarations within Cook County. All municipalities were affected by the global pandemic, COVID-19. What follows is a summary of the natural hazard events experienced during 2020-2021, as reported by HMP participating municipalities:

Bartlett: COVID 19 pandemic continued into 2021. Village continued to implement mitigation procedures for employees and infrastructure to minimize the virus spread per CDC and IDPH guidelines.

Bedford Park: 2021 also saw significant snowfall in the January and February. Two snowstorms of more than 12" hit the southside region in back-to-back weekends. Bedford Park was luckier than most of our neighbors as we had ordered extra salt due to the supply chain issues. While the snowfall was heavy, the overtime required to clear the streets and provide safe travel was not overburdening.

Brookfield: In 2021, Brookfield experienced multiple high wind events which led to storm damage, property damage, and vehicle damage.

Chicago: October 24-25, 2021: Widespread heavy rain and strong winds, as well as lakeshore flooding.
August 24, 2021: Thunderstorms produced wind damage and localized flooding on the northside of Chicago.

August 10-11, 2021: Multiple rounds of severe storms produced widespread wind damage.

July 29, 2021: Overnight severe thunderstorms produced wind damage across the Chicago metro area; fallen trees.

July 24, 2021: Gusty thunderstorms tracked across part of the area producing fallen trees and localized flooding.

June 25-26, 2021: Severe storms produced flash flooding, roadway flooding.

June 20-21, 2021: Late night wind damage produced fallen trees, roadway flooding.

June 11-12, 2021: Localized severe thunderstorms produced hail and damaging winds.

February 14-16, 2021: Heavy snow brought a foot plus to all of Chicago; caps off record three weeks of snow.

Cook County: Tornado occurred on May 15, 2021.

Dixmoor: On October 16, 2021, the village experienced a village-wide loss of water service. The Village was placed on a boil order until water service was fully restored on October 3, 2021. Although this was not a natural hazard event, it highlighted the inadequacy of the village's water distribution system, and how the village could be at risk of another system-wide failure if an event such as a tornado, earthquake, or extreme cold were to occur.

Evanston: Damage due to wind-driven events and lakefront flooding most commonly occurs in Evanston. In 2021, major storm activity resulted in large-scale power outages, several hundred trees damaged, and multiple homes suffered minor to moderate damage, the most notable damage occurring on August 11th. Over 6,000 residents sustained power outages, waiting up to three days for their power to be restored. Over 300 trees suffered varying degrees of damage, resulting in damage to several homes in Evanston. Lakefront flooding was less significant than in January 2019, but minor flooding still resulted due to wind activity and high lake levels.

Flossmoor: On August 24, 2021, the Village of Flossmoor experienced a severe thunderstorm that brought straight line winds that caused severe tree damage to the middle and east side of the village. This storm resulted in power outages in the area and a significant amount of tree debris that was cleared by Public Works over a two-week period.

Hoffman Estates: January 30 – 31, 2021 - Heavy snow required large snow removal response to maintain roadway access to emergency vehicles.

February 14 – 16, 2021 - Heavy snow required large snow removal response to maintain roadway access to emergency vehicles.

August 11, 2021 - Severe thunderstorms with widespread wind damage required village-wide tree debris removal between August 13 - August 24.

Homewood: On August 24, 2021, the Village of Homewood was hit with a microburst that caused large power outages in our community along with trees down and large branches blocking streets. Especially hit hard was the area south of 183rd from Western to Halsted.

Indian Head Park: Intermittent flooding at the intersection of Wolf and Joliet Roads due to storm drain blockages.

Inverness: June 11 & 12, 2021: Scattered thunderstorms developed across northern Illinois. Inverness received a 2-day rainfall total of approximately 1.25 inches which created isolated roadway flooding.

July 29, 2021: Overnight Severe Storms caused wind damage to parts of northern Illinois, Inverness experienced wind gusts of up to 50 mph resulting in damaged tree limbs.

August 10-11, 2021: Multiple rounds of severe thunderstorms produced widespread wind damage: Inverness experienced several damaged tree limbs.

LaGrange: May 2020 Severe Storm - Flooding 10-year storm.

June 2021 Severe Storm - Flooding 10-year storm.

Lyons: Heavy snow conditions throughout village causing roof collapse at 8346 47th. Street on February 17, 2021.

Heavy rain conditions causing flooding conditions throughout the village, including a major a roof collapse at 8424 47th. Street on June 26, 2021.

MWRD: October 24-25, 2021: Widespread heavy rain and strong winds, as well as lakeshore flooding.

August 24, 2021: Thunderstorms produce wind damage and localized flooding in northern Illinois.

August 10-11, 2021: Multiple rounds of severe storms produce widespread wind damage.

July 29, 2021: Overnight severe thunderstorms produce wind damage across the Chicago metro area.

July 24, 2021: Gusty thunderstorms track across part of the area.

June 25-26, 2021: Severe storms produce four tornadoes and flash flooding.

June 20-21, 2021: Late night tornadoes & wind damage, including an EF-3 tornado in Naperville to Willow Springs.

February 14-16, 2021: Heavy snow brings a foot plus to all of Chicago; caps off record three weeks of snow.

January 30-31, 2021: Widespread 6-12 " of snow, including largest snow event in Chicago in five years.

November 15, 2020: Widespread 50 mph gusts, part of a windy 2020 autumn.

November 10, 2020: Strong fall weather system produces damaging winds and two **EFO** tornadoes.

August 10, 2020: Powerful derecho brings widespread severe winds and numerous tornadoes.

July 19, 2020: Thunderstorms bring morning wind damage and heavy rain.
June 26-27, 2020: Severe storms bring areas of wind damage followed by flash flooding.
June 9-10, 2020: Wind damage in Chicago area.
May 17, 2020: Significant flash flood event for Chicago and its suburbs.
May 14-15, 2020: Widespread flash flooding in northern Illinois and wind damage. April 28-30, 2020: Heavy rain and lakeshore flooding event.
April 7, 2020: Significant large hail to the size of baseballs near Rockford and in Evanston, Illinois.
March 6, 2020: Lakeshore flooding in northwest IN and parts of Chicago.
January 10-11, 2020: Significant lakeshore flooding in Chicago; gusty winds, heavy rain, and wintry mix.

Niles: The village has experienced severe weather events in 2021. Over the summer there was a wind and rainstorm which caused numerous down trees. This required the recall of Public Works employees to open streets being blocked by tires, as well as the removal of debris.

Oak Lawn: January 30-31, 2021: Widespread 6-12 " of snow, including largest snow event in Chicago in five years.

February 14-16, 2021: Heavy snow brings a foot plus to all of Chicago.

March 10-11, 2021: Strong winds gust as high as 50 to 60 mph over the area.

June 20-21, 2021: Late night severe thunderstorms & wind damage, (including an EF3 tornado in nearby communities of Naperville and Woodridge).

June 11-12, 2021: Localized severe thunderstorms produce hail and damaging winds.

July 24, 29, Aug. 9, 10, 11 2021: severe thunderstorms produce wind damage across the village.

August 24, 2021: Thunderstorms produce wind damage and localized flooding in the area.

September 7, 2021: Swaths of large hail and wind damage across area.

October 24-25, 2021: Widespread heavy rain and strong winds.

Oak Park: There were four major rains/windstorms that affected the local Oak Park area (June 26, July 29, August 11, and October 24-25). The June 27th storm was the most severe of the year which resulted in several trees and large limbs down and approximately 30 reported sewer (basement) backups. At the height of the storm the village received 1.25 inches of rain in a 45-minute period. The winter season (fall 2020-spring 2021) produced over 61 inches of snow in the local area over 21 events. The worst period was from January 25, 2021, through February 16, 2021, when over 48 inches of snow fell over nine events. During this period there were no melting periods, so the snow had to be piled up. This constrained roadway and alley width.

Orland Park: There were 16 snow events in the winter of 2021 ranging from 1"-12". Three of the events were ice events. No recorded flash flooding in 2021.

Palatine: January 30-31, 2021: 6 " of snow that impacted roads.

March 10-11, 2021: Strong winds, with some over 50 mph caused loss of power in certain areas of the Village, as well as numerous downed powerlines that blocked roads and interrupted service.

June 20-21, 2021: Late night wind damage caused numerous downed powerlines that blocked roads, and interrupted service.

July 29, 2021: Severe thunderstorms produced damaging winds which caused loss of power, downed lines, blocked roads, and localized flooding.

Park Forest: In August 2020 - a derecho storm/EF0 tornado passed through the village. There was tree damage village-wide and significant tree and property damage in particular areas of where the storm/tornado passed.

Phoenix: We had an overnight severe thunderstorm that produced wind damage across the Chicago metro and South Suburban area.

Richton Park: August 10, 2020: The village experienced inline winds/derecho that took out power poles and caused massive tree damage. Residents were without power for seven days.

Rosemont: Flashing flooding occurred June 26 and July 24. Heavy rains caused flooding in certain residential streets and areas in town. Flood subsided shortly after heavy rains stopped.

Skokie: August 9th & 10th, 2021: Village of Skokie experienced a sustained high-wind event that caused significant damage to the community with downed trees, branches, and power lines, and damage to private property.

South Barrington: The Village of South Barrington experienced a high-wind storm on two occasions during 2021. The first event was on July 28, 2021, and the second on August 10, 2021. The results from both heavy windstorms were several downed trees and tree limbs in the village.

Streamwood: August 20, 2021: A powerful storm knocked down several power lines and caused local street flooding. No damage to municipal infrastructure. Most of our town has above grade power lines, and it would help if we had the power buried to mitigate future power outages.

Westchester: During the first quarter of 2021, Westchester experienced significant snowfall. During 2021 there were several severe thunderstorm events that caused downed trees, localized street flooding, and power outages.

Western Springs: A rainstorm event occurred on 06/26/21 that impacted the Springdale subdivision at Howard Avenue and Franklin Avenue and portions of the Ridgewood subdivision on Ridgewood Drive and Longmeadow Drive. The storm resulted in street flood and basement flooding because of overland flow inundation and backup through the sanitary sewer system.

Willow Springs: A tornado occurred on Sunday June 20, 2021, and impacted Willow Springs and caused damage to property.

Worth: June 20-21, 2021: Overnight severe weather in adjacent towns.

June 20-21, 2021: Severe weather event including EF3 tornado in Chicago metro area.

December 15-16, 2021: Strong damaging winds.

December 15-16, 2021: Record warmth accompanied by strong, damaging winds.

Mitigation Success Stories

The mitigation strategy section of the HMP identifies a range of specific actions and projects considered to reduce the risk to life, property, and the economy. What follows is a recitation of some of the successful mitigation activities, as reported by HMP participating municipalities:

Arlington Heights: 2020: Cypress retention basin - Mitigation of flooding from the residential area. New storm water pipes were installed, and a retention basin was dug to temporarily store storm water. 2021: Greenbriar storm water plan - Expanded the Happiness Park detention capacity to mitigate flooding in the residential area. The project includes new storm water pipes, new water mains and services. New gas lines and services were also installed by the local utility.

Chicago Heights: 2020/2021 –

- 1) Completed Culvert replacement. 10th St. to Hawthorne
- 2) Completed resurfacing, manhole repair and reconstruction. 10th St. Ashland to Chicago Rd.
- 3) Completed road reconstruction including sewers. 26th St. Euclid to Hickory
- 4) Completed road resurfacing and sewer reconstruction. D'Amico Drive 8th to 10th Street.
- 5) Completed storm sewer, sinkhole repair and reconstruction. 70 citywide locations
- 6) Completed Streambed and culvert upgrade including clearing debris and upgrading embankments. 7 citywide locations.
- 7) Completed resurfacing with manhole and sewer reconstruction (CDBG Grant). 16th St. East End to State St.
- 8) Completed west side project. All storm sewer and catch basins reconstructed. Beacon Hill Area. 14th - 16th St. Western to Hickory.

Chicago Ridge: Generator installed at EOC for heating/cooling center.

Cicero: Fire Department Open House was held in October of 2021 - Demonstrated the need for fire and carbon monoxide detectors to the public by use of a burn trailer donated by the National Sprinkler Association. Took applications for and provided free combination/smoke detectors to Cicero residents. Attendance by public estimated at 1500-2000 residents.

Personnel from the Police / Fire / Building / Sheltering Departments met and discussed the ongoing homeless population in Cicero. Identified organizations and shelters in the area. Relayed same information to EMS / PD personnel.

City of Chicago: In 2021 CDOT completed construction on a new, permeable pavement "Green Alley" near the Six Corners intersection in the Portage Park neighborhood. The Green Alley Program is a sustainable infrastructure initiative that is designed to reduce stormwater runoff and standing water, as well as the urban heat island effect.

Cook County: Completed the Cook County Continuity of Operations Plan, Continuity of Government Plan and Recovery Plan.

Elk Grove Village: During the construction of two new fire stations, storm shelters were constructed in each to bring compliance with ICC 500.

During new construction and extensive remodeling projects of village facilities, emergency backup power generation systems were installed for critical loads and systems.

Several undersized corrugated metal pipe culverts were replaced with hydraulically calculated, appropriately sized, concrete box culverts.

New village facility construction projects included on-site storm water detention to reduce the burden on existing storm water conveyance systems.

Evanston: The major mitigation projects completed in 2020 - 2021 include the following: COVID-19 mitigation in Evanston through emergency response and recovery efforts in the form of hiring additional HHS staff to help manage the crisis, public campaigning, testing, and vaccination programming; replacement of entire emergency siren systems with (6) Federal Signal sirens throughout Evanston to improve mass notification capability; implementation of Duo Multi-factor Authentication to improve system security; and implementation of SEIM (security information and event management platform).

Flossmoor: (1) Flossmoor Road Viaduct Drainage Improvements Project - In November of 2020, voters approved a General Obligation Bond referendum in the amount of \$10M. Approximately half of this bond will be used towards the Flossmoor Road Viaduct Drainage Improvements Project.

(2) Evans Rd. & Douglas Ave. Drainage Improvements Project - The village was approved for participation in the MWRD's Stormwater Partnership Program for the Evans Rd. & Douglas Ave. Drainage Improvements Project. This program will provide funding for 95.2% of the construction costs for the project up to a not-to-exceed amount of \$754,000.

(3) Berry Lane Drainage Improvements Project - The village entered into a project agreement with the Army Corps of Engineers Section 219 Grant Program (\$1M) for the construction of the Berry Lane Drainage Improvements Project. The village also received grants from the MWRD Green Infrastructure Program and the IEPA Green Infrastructure Grant Opportunities Program for the green infrastructure (permeable street pavers and storage) portion of the project on Berry Lane.

Franklin Park: In 2021, The village completed the reconstruction of the infrastructure in the Reuter's Subdivision, Phase III & IV areas. This included the construction of additional, relief storm sewers and a local detention pond to reduce the risk of urban flooding in this residential area.

Hillside: Purchased vacant property to the south of the fire station for parking and egress during flooding events and purchased/installed a new emergency back-up generator for the fire station, which replaced an over 50-year-old generator that did not power the entire fire station.

Hodgkins: Village upgraded, and continues to upgrade, potable water monitoring system.

Justice: The Village of Justice worked in conjunction with the Roberts Park Fire Protection District and received a grant from Cook County through the UASI program to remove an old Emergency Warning Siren and to place two (2) new Emergency Warning Sirens to cover the full Village of Justice and parts of the surrounding areas. The village was capable of leveraging grant funding through the State of Illinois and Cook County to make roadway improvements that included storm water management improvements.

Lemont: IDOT reshaped and cleaned the ditch from Kotlin to 4th Street, which relieved a lot of the flooding issues. Culverts were also cleaned, which helped with the flooding issues.

Markham: The Village of Markham completed the Streambank Stabilization along the Calumet Union Drainage Ditch in Q4 as well as the (2) two village lift stations.

Merrionette Park:

(1) A salt storage facility has been constructed at the village public works facility. With the completion of this project, the following MJ-HMP objectives were met:

- Objective 2: increase resilience of (or protect and maintain) infrastructure and critical facilities and
- Objective 7: Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged.

(2) Water main replacement along Meadow Lane has been completed. With the completion of this project, the following MJ-HMP objectives were met:

- Objective 2: increase resilience of (or protect and maintain) infrastructure and critical facilities,
- Objective 7: Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged,
- Objective 12: Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area, and
- Objective 13: Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.

Midlothian: The village was successful in securing a CDBGDR grant from Cook County/FEMA for over \$500,000.00 for phase 1 engineering for the Jolly Homes 151st street flood mitigation project.

Mount Prospect:

(1) The Aspen Trails Park Drainage Improvement Project was constructed in 2021 and provides stormwater detention storage. The project reduces the risk of flooding for numerous properties in the area tributary to Levee 37 Pump Station #2. The River Trails Park District provided the land and MWRD provided funding assistance.

(2) The village had a CRS reverification visit in 2021 and expects to maintain a Class 6 CRS rating or advance to a Class 5 rating. Through the village's involvement in the CRS Program since 1991, we continue to implement flood protection and prevention measures above the minimum standards of the National Flood Insurance Program, providing a higher level of flood protection for the village's property owners and discounted flood insurance premiums.

(3) The Army Corps awarded a contract for upgrades to the Levee 37 Pump Station #2 which will increase the pumping capacity and reduce the risk of flooding to the tributary area. IDNR and Mount Prospect are partnering with the Army Corps and participating in the cost of the project. Construction started in 2021 and is expected to be completed in summer 2022.

(4) Mount Prospect awarded a contract for the Levee 37 Backup Emergency Generator Project that will result in the purchase and installation of backup generators for Levee 37 pump stations #1 and #2. Construction is planned for 2022. Funding assistance is from a DCEO Grant.

Northlake: The city received a private grant from Microsoft for the installation of a bioswale to mitigate storm runoff from a large city owned parking lot into Addison Creek.

Palos Heights: With the assistance of MWRD, a \$1.6-million project increased flood storage and removed (rezoned) roughly 70 homes from the FEMA Zone A flood plain in Palos Heights. The existing dam and outlet culvert was demolished and replaced with a new concrete dam, outlet culvert and spillway. As part of the project, a multi-use pedestrian path was resurfaced and an eroded bank at the south side of Arrowhead Lake was regraded and restored with native seeds, plant plugs and trees.

Park Forest: Public Works completed Action P1.3 to improve local storm water management, drainage, and conveyance along public streets. Public Works completed Design Engineering for Action P1.2 and is planning for a bid opening on Nov. 16, 2021. Construction is expected to begin and be completed in 2022. The village purchased 3 UV blue lights to help combat COVID 19. The UV lamps were used in village ambulances and office spaces. The fire department purchased a zodiac boat and ice rescue suits for water rescues. The fire department purchased a 4X4 ambulance which enables response through various terrain. Public Works replaced and added storm sewer infrastructure along Well Street. The intention is to improve local storm sewer water management, drainage, and conveyance along public streets.

Phoenix: Received grant funds to repair water valves and sidewalks.

Prospects Heights:

(1) P9.9 Arlington Countryside - Flooding Areas: City secured approximately \$2M in State and Federal grant funding for this project. Completed design for pumping station and force main. Secured an easement with a homeowner in the affected area to construct the lift station. Project to be bid Q1 of 2022 with construction is scheduled to begin in Q4 of 2022.

(2) Secured MWRDGC funding to purchase and demolish a repetitive loss house at 214 S. Wheeling Rd. Property will be incorporated into an existing Prospect Heights Park District and will provide better access to the park.

(3) Finalizing IGA with MWRDGC and Cook County DOTD to raise E. Willow Road to prevent road closures due to rain event flooding.

(4) Following the 2021 verification cycle Prospect Heights improved to a Class 6 CRS rating.

Rolling Meadows: The city has completed the spillway at Kennedy Brothers Pond to reduce the amount of water flow into the creek as well as mitigate the amount of water that caused flooding in surrounding areas. The city has also completed upgrades to our outdoor warning systems to be utilized in emergency situations.

South Holland: We were able to replace all storm sewers on 160th Place in South Holland and improve storm water removal from the area.

Willow Springs: Action projects at Prospect Street area, Rosmere Court area, and School Street area have been high benefit projects that have immediately reduced flood loss to the properties in the area.

Wilmette: The village has invested \$32M in storm/sewer capacity improvements and \$20M in sanitary capacity improvements. This has reduced the incidents of localized flooding and sewer backups.

Winnetka: Received MWRD flood prone property acquisition grant for one structure in the flood plain.

Worth: Village of Worth performed sanitary sewer cleaning and televising in 2021. The results include the removal of debris and tree roots and restoring sewage conveyance in the system.

Completed the Normandy Avenue Storm Sewer Improvements that improved the conveyance of storm water from 111th Street to 115th Street.

Mitigation Future Needs

The *Future Needs* section was added to the 2021 Annual Report for municipalities to identify their needs so the County can work together regionally to increase resilience.

Arlington Heights: Training on the NFIP.

Barrington: Receiving training to better understand the mitigation grant application process, studies that may be needed to better understand hazards/risks, etc. Continued training regarding hazards/risks along with damage assessment would be beneficial to village staff.

Bartlett: Training for ICS position responsibilities.

Brookfield: Interested in future education and training on mitigation grants.

Cicero: Would like to request assistance in performing a tabletop training exercise to familiarize all pertinent personnel with the Emergency Operations Plan and Coordination with County and State Emergency Management Agencies.

Evanston: Additional needs include grant funding to help address lakefront erosion, environmental preservation, and property conservation; grant funding to support training for all levels of city staff related to hazard awareness and hazard management during the prevention, protection, prevention, mitigation, response, and recovery phases of the disaster management cycle; grant funding to support the purchase of a communications vehicle and meridian barriers for event management; additional funding to support development and training of CERT members; etc.

Franklin Park: Increased training and education and sewer lining and reconstruction.

Hanover Park: The Village of Hanover Park is looking into projects that promote renewable energy/green energy, reduction of power loss with fiber optic options and burying power lines throughout the municipality. Hanover Park Fire Department is also investing in a new station that will include severe weather mitigation improvements that reduce hail damage, power loss, and improve communications. This could also include a Lightning protection system and surge protection system. The village is also looking into improving the current storm water infrastructure and upgrading the quality of its roads. All these projects are dependent on possible grant funding to complete.

Hickory Hills: The future needs are to continue the path of upkeep to the existing drainage systems and look at how to improve/add new ways to expand storm water containment.

Hazel Crest: More education on the mitigation process and grant opportunities.

Hodgkins: Continued training regarding hazard and risk mitigation.

Inverness: As a small, staffed community, scheduling emergency training without impacting day-to-day operation is challenging. Utilizing on-line training and exercises options would benefit our community, including providing training and educational material for our private contractors.

Justice: The Village of Justice will need training to better understand funding opportunities for hazard mitigation grant programs, and more importantly will be seeking funding that will assist with flood mitigation in the village.

Markham: More training, technical assistance, etc.

Merrionette Park: Training for village staff on the implementation of the HMP as well as the grant application process.

MWRD: Coordinate with local jurisdictions to work to amend the Technical Scoring Criteria for the FEMA BRIC Grant so that applicants in Illinois are no longer penalized and prevented from receiving funding due to lack of a state-wide building code.

Riverdale: Education and equipment.

Rolling Meadows: The city would like to receive further training to better understand the mitigation grant application process, as well as the studies that may be needed to better understand hazards/risks, etc.

Wilmette: Expansion of the Federal grant programs to allow the Village of Wilmette to qualify for funding based on its needs.

Worth: Funding for additional capital improvement projects, i.e., sewer lining, water system improvements, storm water improvements.

Plan Evaluation

Since the adoption of the 2019 update, no changes have been made to the Cook County Multi-Jurisdictional Hazard Mitigation Plan. The City of Chicago joined the Cook County Hazard Mitigation Plan on August 3, 2018. The current HMP is due for evaluation, update, and re-submission to the State of Illinois and the Federal Emergency Management Agency (FEMA) on September 26, 2024. Items identified in annual reports may be used to update the HMP.