

## 2.14 Chicago 2021 MJ-HMP Jurisdictional Annual Report

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**Annual Reporting Year:** 2021

**Background:** Cook County and participating municipalities in the county developed a hazard mitigation plan to reduce risk from all hazards by identifying resources, information, and strategies for risk reduction. The federal Disaster Mitigation Act of 2000 requires state and local governments to develop hazard mitigation plans as a condition for federal disaster grant assistance. To prepare the plan, the participating partners organized resources, assessed risks from natural hazards within the county, developed planning goals and objectives, reviewed mitigation alternatives, and developed an action plan to address probable impacts from natural hazards. By completing this process, these jurisdictions maintained compliance with the Disaster Mitigation Act, achieving eligibility for mitigation grant funding opportunities afforded under the Robert T. Stafford Act.

**Purpose:** The purpose of this report is to provide an annual update on the implementation of the action plan identified in the Cook County Multi-Jurisdictional Hazard Mitigation Plan. The objective is to ensure that there is a continuing and responsive planning process that will keep the Hazard Mitigation Plan dynamic and responsive to the needs and capabilities of the partner jurisdictions. This report discusses the following:

- Natural hazard events that have occurred within the last year
- Changes in risk exposure within the planning area (all of Cook County) Mitigation success stories
- Review of the action plan
- Changes in capabilities that could impact plan implementation
- Recommendations for changes/enhancement.

### Hazard Analysis

#### [Jurisdiction-Specific Hazards and Impacts - Chicago Dept. of Aviation](#)

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.

- **Dam/Levee Failure:** Dam failure concerns at Touhy Ave.
- **Flood:** Tunnels and I-90 are susceptible to flooding.

The following capabilities may be needed to further mitigate the impacts of these hazards:

- **Lightning:** Lightning detection system
- **Hail:** Emergency notifications
- **Extreme Cold:** Back up of all heating systems
- **Tornado:** Siren system updates. P.A. system upgrade. Visual alert system.

#### [Jurisdiction-Specific Hazards and Impacts - CDPH](#)

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:** Limitations with sewer system size and capacity for water runoff. Lakefront erosion, and potential loss of East N/S evacuation road (LSD).
- **Extreme Heat:** Long-term care and senior living facilities lack electric panel conversions to receive external power source/generator power.
- **Drought:** There may be a need to enhance water distribution networks.
- **Extreme Cold:** Lack of overnight housing for the homeless population or sustained sheltering.
- **Disease Transmission:** Chicago has a very transient visitor population. There is a greater need for a global early warning system to mitigate/prevent infectious disease transfer (Aviation, Rail, etc). Lack of isolation/quarantine housing for patients under investigation (PUI) for high consequence disease exposures (SARS, Pandemic, Ebola, etc.).

#### [Jurisdiction-Specific Hazards and Impacts - DWM](#)

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:** Flooding certainly has been a problem and most likely will continue in the future. DWM resources have been maximized to provide mitigation for communities that are flooded.
- **Extreme Heat:** Historically, prolonged extreme heat incidents has severely impacted the senior/elderly population in the City.
- **High Winds:** High winds have made many households vulnerable to power outages.
- **Snow** and extreme cold have historically affected the City; and depending on the severity, has even shut down the City.
- **Extreme Cold:** Extreme cold incidents uniquely impact the City. Recent extreme cold incidents resulted in water services being frozen throughout the City. DWM and private contractors continued to abate the problem.

#### [Jurisdiction-Specific Hazards and Impacts - Dept. of Water Management 1](#)



<b>Action C.1</b> —Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structural damage. Give priority to properties with exposure to repetitive losses.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	7, 13	Dept. of Buildings	Low	FEMA Haz Mitigation Grants	Long-term
<b>Action C.2</b> —Continue to support the countrywide actions identified in this plan.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	All	City of Chicago	Low	General Fund	Short- and long-term
<b>Action C.3</b> —Actively participate in the plan maintenance strategy identified in this plan.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	3, 4, 6	Chicago OEMC	Low	General Fund	Short-term
<b>Action C.4</b> —Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	3, 4, 5, 6, 7, 9, 10, 11, 13	City of Chicago	Low	General Fund	Long-term
<b>Action C.5</b> —Continue to maintain the minimum National Flood Insurance Program participation requirement for communities with no mapped Special Flood Hazard Area.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding	4, 6, 9	Dept. of Buildings	Low	General Fund	Short-term and Ongoing
<b>Action C.6</b> —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.								
<b>Status Description:</b>								
O	O	Ongoing	All	3, 4, 6, 10, 13	City of Chicago	Low	General Fund	Short-term
<b>Action C.7</b> —Complete construction and implementation of the Albany Park Stormwater Diversion Tunnel.								
<b>Status Description:</b>								
C	Complete	Complete	Flooding	3, 4, 9	CDOT	Medium		Complete
<b>Action C.8</b> —Implement the Green Infrastructure Project: Barbara Vick Outdoor Classrooms								
<b>Status Description:</b>								
C	Complete	New	Flood	13	MWRD	TBD	TBD	TBD
<b>Action C.9</b> —Continue implementation of the Chicago Sustainable Development Policy, which enhances the sustainable performance of projects receiving City assistance.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding, Severe Weather	3, 4, 7, 10, 13	Buildings, Planning & Development	Low	Grants/General Fund	Long-term and Ongoing
<b>Action C.10</b> —Continue implementation of the Green Stormwater Infrastructure Policy, which guides City's efforts in renewing water infrastructure, conserving water, greening water operations, and sustainably managing stormwater.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding	2, 4, 10, 13	Buildings, Water Management	Low	N/A	Long-term/Ongoing
<b>Action C.11</b> — Continue implementation of the Inlet Control System (Rainblocker) program, which installs restrictors to slow the flow of stormwater into the sewer system.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding	4, 9, 13	Dept. of Water Management	Low		Long-term/Ongoing
<b>Action C.12</b> —Continue implementation of the Chicago Shoreline Protection Project, which provides storm damage protection to the Lake Michigan shoreline and Lake Shore Drive.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding	2, 3, 4, 8, 9, 13	USACE, Park District	Medium	USCAE, IL Dept of Natural Resources	Long-term/Ongoing
<b>Action C.13</b> —Continue implementation of the RainReady Program, which provides individualized services to help homes and communities reduce their flood risks.								
<b>Status Description:</b>								

O	Ongoing	Ongoing	Flooding	2, 3, 6, 8, 9, 10	Center for Neighborhood Technology	Low	CNT	Long-term/Ongoing
<b>Action C.14</b> —Continue construction and implementation of the Metropolitan Water Reclamation District of Greater Chicago’s Tunnel and Reservoir Plan (TARP).								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding	1, 2, 3, 6, 9, 12, 13	MWRDGC	Medium	MWRDGC, ACOE	Long-term/Ongoing
<b>Action C.15</b> —Continue to expand the usage and capabilities of the City’s NotifyChicago public notification system.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	4, 5, 6, 12	OEMC	Low	Corporate	Long-term/Ongoing
<b>Action C.16</b> —Continue to expand the usage and capabilities of the City’s Reverse 9-1-1 public notification system.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	4, 5, 6, 12	OEMC	Low	Corporate	Long-term/Ongoing
<b>Action C.17</b> —Continue to expand the usage and capabilities of the City’s Digital Sign Network public notification system.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	4, 5, 6, 12	OEMC	Low	Corporate	Long-term/Ongoing
<b>Action C.18</b> —Develop local capabilities for implementation of FEMA’s Integrated Public Alert & Warning System (IPAWS).								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	4, 5, 6, 12	OEMC	Low	Corporate	Long-term/Ongoing
<b>Action C.19</b> —Continue the installation and maintenance of Green Alleys, which results in rainwater being allowed to infiltrate into the soils through permeable pavement or infiltration basins.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding	2, 3, 4, 9, 12, 13	CDOT	Low	General Obligation Bond	Long-term/Ongoing
<b>Action C.20</b> —Continue the installation and maintenance of biofiltration systems and rain gardens throughout the city, which promote the absorption and infiltration of stormwater runoff.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding	2, 3, 4, 9, 12, 13	DMW/CDOT	Low	Corporate	Long-term/Ongoing
<b>Action C.21</b> —Continue development and maintenance of the City of Chicago Flood Operations Guidance Document.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	2, 4, 8, 12	OEMC	Low	Corporate	Long-term/Ongoing
<b>Action C.22</b> —Chicago Ward Green Alley Project.								
<b>Status Description:</b>								
O	Ongoing	New	Flooding	9	MWRD	TBD	TBD	TBD
<b>Action C.23</b> —Continue implementation of Chicago’s Basement Flooding Partnership, where the Dept of Water Management works with neighborhoods to reduce flooding impacts.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding	2, 3, 6, 8, 9, 10	DWM	Low	Corporate	Long-term/Ongoing
<b>Action C.24</b> —Encourage the development of continuity planning for Chicago departments and the Chicago area’s largest employers and companies headquartered in Chicago.								
<b>Status Description:</b>								
O	Ongoing	Ongoing	All	1	OEMC	Low	Corporate	Long-term/Ongoing
<b>Action C.25</b> —Ensure continued compliance with the National Flood Insurance Program (NFIP).								
<b>Status Description:</b>								
O	Ongoing	Ongoing	Flooding	2, 3, 4, 9, 10, 11, 12	Buildings	Low	Corporate	Long-term/Ongoing
<b>Action C.26</b> —Evaluate existing notification systems for airport coverage and integrate all systems into single deployment method.								
<b>Status Description:</b>								
	Ongoing	New	All	5	Aviation	\$250,000 per year; Low	Aviation Funding	2021
<b>Action C.27</b> —Implement Long-term Care and Senior Housing Retrofits to Electric Panels to Allow for Exterior Power Connection/Generators.								

Status Description:								
O	Ongoing	New	Extreme heat, lightning, fog, high wind, widespread power outage	13	City of Chicago, Chicago Department of Public Health	High	Grants	TBD
<b>Action C.28</b> —Utilize ILWARN utility-to-utility network for flooding emergencies.								
Status Description:								
O	Ongoing	New	Flood	8	Illinois Section AWWA	Low	Existing budget, TBD	Ongoing
<b>Action C.29</b> —Build a new backup generator facility for Jardine Water Plant.								
Status Description:								
C	Complete	New	Widespread Power Outage	2	DWM	Low	Capital funding	2019/2020
<b>Action C.30</b> —Enhance Storm Water Management through the installation of bioinfiltration systems.								
Status Description:								
O	Ongoing	New	Flooding	2	Chicago Housing Authority	Varies per project; Low	Grants, capital budget	2020
<b>Action C.31</b> —Install a solar PV system connected to ComEd's Bronzeville Microgrid.								
Status Description:								
C	Complete	New	Widespread power outage	1, 2, 12	Chicago Housing Authority	\$3,000,000; Low	Grants	2019
<b>Action C.32</b> —Implement a Green Infrastructure program for the County as a whole.								
Status Description:								
O	Ongoing	New	Flood	9, 13	DHSEM	TBD; Medium	Grant Funds	TBD
<b>Action C.33</b> —Purchase deployable portable generators that could provide power to firehouses that fall victim to long-term power outages. Should include quick connect hookups at each fire house.								
Status Description:								
R	Ongoing	New	All	1, 2, 12	Chicago Fire Department	\$250,000 or more; High	Grants	2021
<b>Action C.34</b> —Purchase Portable High Capacity Air Conditioners.								
Status Description:								
R	Ongoing	New	Extreme Heat, Widespread Power Outage	12	Chicago Fire Department	Less than \$100,000; High	Grants	Unsure
<b>Action C.35</b> —Purchase high capacity portable heaters.								
Status Description:								
R	Ongoing	New	Hail, High Wind, Snow, Blizzard, Extreme Cold, Ice Storms, Widespread Power Outage	12	Chicago Fire Department	Above \$100,000; High	Grants	2021
<b>Action C.36</b> —Purchase Mass Decontamination Apparatus.								
Status Description:								
C	Completed	New	All	1, 2	Chicago Fire Department	Greater than \$300,000; High	Grants	2019
<b>Action C.37</b> —Implement Albany Park Stormwater Diversion Tunnel.								
Status Description:								
C	Completed	Completed	Flood	9	MWRD	\$70,655,320	MWRD Contribution: \$25,920,000	Completed 4/25/18
<b>Action C.38</b> —Implement Green Infrastructure at Chicago Public Schools, Space 2 Grow.								
Status Description:								

O		New	Flood	13	MWRD	MWRD Max Contribution (through 2022); \$16,000,000	TBD	TBD
<b>Action C.39</b> —Launch Pilot Study for Investigating Technology to Address Basement Backups.								
<b>Status Description:</b>								
O		New	Widespread Power Outage	8	MWRD	MWRD Contribution; \$400,000	MWRD	TBD
<b>Action C.40</b> —Space to grow partnered schools.								
<b>Status Description:</b>								
O		New	Flood	13	MWRD	TBD; MWRD (Max Contribution: \$16,000,000)	MWRD, Chicago Public Schools, City of Chicago Department of Water Management	2022
<b>Action C.41</b> —Prevent Stormwater Infiltration through the Establishment of Native Habitat at 3 Chicago Parks.								
<b>Status Description:</b>								
O		New	Flood	13	MWRD	TBD	TBD	TBD
<b>Action C.42</b> —Lakefront stabilization (Juneway, Rogers and Howard Beaches)								
<b>Status Description:</b>								
C		New	Flood, Coastal Erosion		CDOT	\$3,000,000; Low	Local Funds	2020
<b>Action C.43</b> —Emergency Revetment Reconstruction (Morgan Shoal)								
<b>Status Description:</b>								
C		New	Flood, Coastal Erosion		CDOT	\$3,000,000; Low	Local Funds, Grants	2021
<b>Action C.44</b> —Emergency revetment reconstruction (Berger Park)								
<b>Status Description:</b>								
C	New (2021)		Flood, Coastal Erosion		CDOT	\$600,000; Low	Local Funds	2021
<b>Action C.45</b> —Emergency revetment reconstruction (Arthur Ashe Beach and Park)								
<b>Status Description:</b>								
C	New		Flood, Coastal Erosion		CDOT	\$1,000,000; Low	Local Funds	2021
<b>Action C.46</b> —Lakefront Stabilization (La Rabida to 67th St Intermediate Lakefront Trail Protection)								
<b>Status Description:</b>								
C		New	Flood, Coastal Erosion		Chicago Park District	\$314,979; Low	Private	2021
<b>Action C.47</b> —Lakefront Stabilization (47th St to 49th St Intermediate Lakefront Trail Protection)								
<b>Status Description:</b>								
C		New	Flood, Coastal Erosion		Chicago Park District	\$513,469; Low	Private	2020
<b>Action C.48</b> —Lakefront Trail Repair and Intermediate Shoreline Protection (Fullerton Ave to North Ave)								
<b>Status Description:</b>								
C	New		Flood, Coastal Erosion		Chicago Park District	\$2,181,295; Low	Private	2021
<b>Action C.49</b> —Jackson Outer Harbor Lake Front Trail Protection								
<b>Status Description:</b>								
C	New		Flood, Coastal Erosion		Chicago Park District	\$572,000; Low	Private	2021

(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.

**Mitigation Success Stories:** Examples of mitigation success stories include, but are not limited to: received a Grant, completed a major mitigation project, etc.

In 2019 CDOT and other partners completed construction on the \$70 million Albany Park Stormwater Diversion Tunnel. The Albany Park area has a history of significant flooding after heavy rains. To date the neighborhood has experienced zero significant flooding events since the completion of the tunnel.

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.

**Future Needs:** Examples of future needs include, but are not limited to: receiving training to better understand the mitigation grant application process, studies that may be needed to better understand hazards/risks, etc.

As climate change continues to increase the severity of flooding events, the City of Chicago needs a long-term strategy to address lakefront flooding as we begin to see higher lake levels on a regular basis.