



DRAFT ACTION PLAN

FOR THE STATE OF MICHIGAN
2023 DISASTER EVENTS





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1

Executive Summary



1. Executive Summary

1.1 Overview

The U.S. Department of Housing and Urban Development (HUD) announced that the State of Michigan will receive \$43,570,000 in funding to support long-term recovery efforts following Severe Storms, Tornadoes, and Flooding (DR-4757). The Michigan Strategic Fund (MSF) is the recipient of HUD's Community Development Block Grant - Disaster Recovery (CDBG-DR) funds. The MSF has a Memorandum of Understanding with the Michigan Economic Development Corporation (MEDC) (the "State" or "Grantee") to administer the CDBG-DR funds on behalf of the State of Michigan. The CDBG-DR funding is designed to address the needs that remain after all other assistance has been exhausted. This plan details how funds will be allocated to address the remaining unmet needs in Michigan due to these disasters.

To meet disaster recovery needs, the appropriations act(s) making CDBG-DR funds available have imposed additional requirements and authorized HUD to modify the rules that apply to the annual CDBG-DR program to enhance flexibility and facilitate a quicker recovery. HUD has allocated \$43,570,000 in CDBG-DR funds to the State of Michigan in response to Severe Storms, Tornadoes, and Flooding (DR-4757) through the Allocation Announcement Notice published in the Federal Register Vol. 90, No. 10, [FR-6512-N-01](#). This allocation was made available through Disaster Relief Supplemental Appropriations Act, 2025 (Pub. L. 118-158).

1.2 Disaster Specific Overview

Between August 24 and August 26, 2023, the state of Michigan experienced widespread severe storms, tornadoes, and flooding across the southeastern portion of the state.¹ Severe thunderstorms rapidly developed on the evening of August 24, resulting in a cluster of storm weather that moved south through lower Michigan. Hazardous winds as strong as 60-80 mph downed trees and powerlines, resulting in roughly 500,000 households without power in lower Michigan. These environmental conditions also resulted in multiple tornadoes, with Ingham County experiencing an EF-2 (Significant) rated tornado. This storm tracked into Livingston County prior to weakening and dissipating. In total, this tornado traveled 12 miles and was the strongest and longest in duration of any tornado detected that day, and resulted in a fatality within Ingham County. Other weaker tornadoes were detected in Wayne and Monroe counties; however, these tornadoes still resulted in

¹ FEMA. Michigan Severe Storms, Tornadoes, and Flooding 4757 | [FEMA.gov](#)



80-105 mph winds. In total, 6 tornadoes impacted southeast Michigan during the disaster event.²

Following the federal disaster declaration on February 8, 2024, residents of nine counties (Eaton, Ingham, Ionia, Kent, Livingston, Macomb, Monroe, Oakland, and Wayne) became eligible for FEMA Individual Assistance (IA). The application period for the FEMA IA program closed on May 8, 2024. In total, 116,796 individuals were approved for assistance totaling \$437,488,255.18 FEMA IA.³ The table below from FEMA breaks down the approved IA funding as of June 4, 2025:

Table 1: FEMA Individual Assistance Approved Funding

Individual Assistance	Amount
Total Housing Assistance (HA) - Dollars Approved	\$391,469,358.51
Total Other Needs (ONA) - Dollars Approved	\$46,018,896.67
Total Individuals & Households Program Dollars Approved	\$437,488,255.18
Individual Assistance Applications Approved	116,796

Reference: [4757 | FEMA.gov](#)

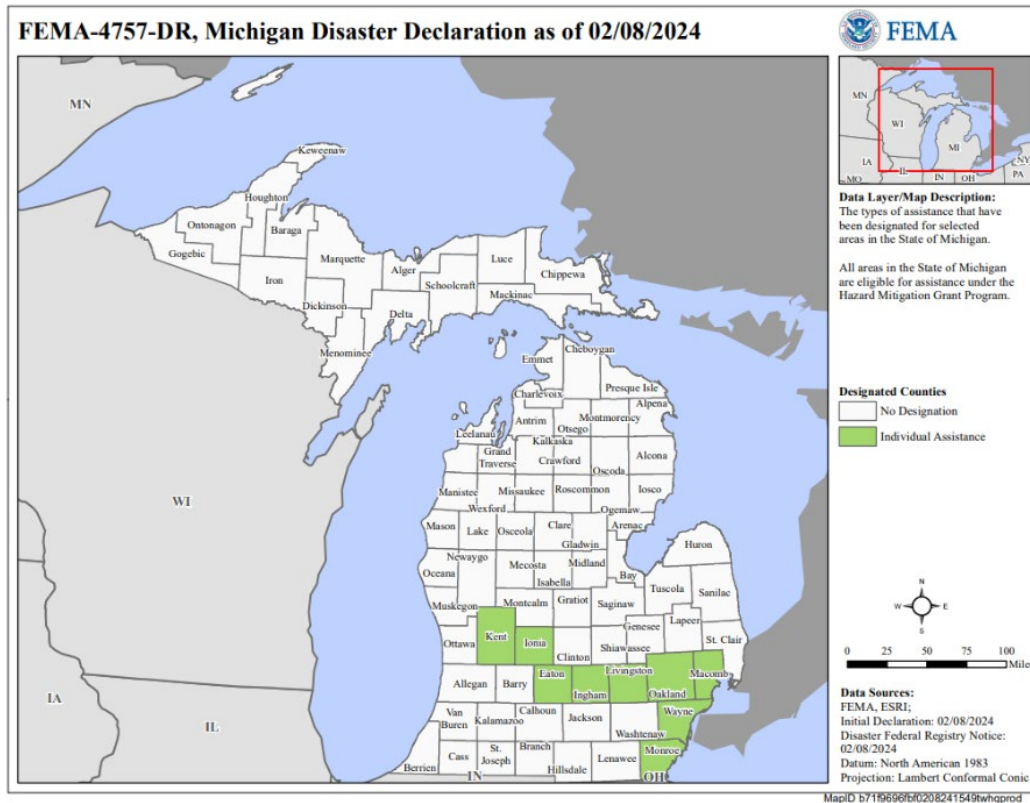
² National Weather Service, August 24, 2023 Evening Tornadoes & Severe Weather Event, [August 24, 2023 Evening Tornadoes & Severe Weather Event](#)

³ FEMA. Michigan Severe Storms, Tornadoes, and Flooding [4757 | FEMA.gov](#)



The image below displays the FEMA-eligible IA counties

Figure 1: FEMA Map, DR-4757 Michigan Disaster Declaration, 02/08/2024



Reference: [Designated Areas | FEMA.gov](https://www.fema.gov/designated-areas)

1.2.1 HUD identified MID Areas

Pursuant to the 2025 Appropriations Act, HUD has identified Most Impacted and Distressed (MID) areas based on the best available data for all eligible affected areas that are least likely to fully recover without additional assistance. The MID areas for DR-4757 in Michigan are limited to Macomb County, Monroe County (ZIP code 48166), and Oakland County. The Federal Register Notice (FRN) states that grantees may expand a HUD-identified MID ZIP code to the whole county. The MEDC proposes expanding the eligibility of the HUD-identified MID ZIP code 48166 to include all of Monroe County. The MEDC will describe the unmet needs in Macomb, Monroe, and Oakland counties within this Action Plan. The MEDC is required to use at least 80 percent of the CDBG-DR award to benefit the three HUD-identified MID areas. Any local government grantees whose HUD-identified MID areas include their entire jurisdiction will be required to use 100 percent of the CDBG-DR award to benefit the HUD-identified MID area.



1.2.2 Grantee-identified MID Areas

The Universal Notice (UN) requires that at least 80% of all allocations address unmet disaster needs or mitigation activities in the HUD-identified MID areas. The UN allows grantees to determine where to use the remaining 20% of the allocation, provided that the funds are used to address unmet needs within areas that received a presidentially declared disaster declaration for DR-4757. The MEDC has identified two additional counties that were also presidentially declared as part of the disaster but were not included in the HUD MIDs. The MEDC has designated both counties as State-identified MIDs. Therefore, in addition to the HUD MIDs identified above, the unmet needs analysis also includes the State MIDs of Eaton County and Ingham County.

1.3 Overview of the Impacts of the Qualifying Disaster

The impacts of the disaster were most severe in the HUD and State-identified MID areas. Macomb County experienced flooding, while Monroe County experienced tornadoes. The images below illustrate the effects of the 2023 disaster event, including flooding and severe wind damage.

Figure 2: Flood and Tornado Damage



Reference: [*Michigan Severe Storms, Tornadoes, and Flooding*](#)

Mobile home parks are particularly vulnerable to tornadoes, with damage often resulting in total home loss. The image below shows the impact of a tornado on a mobile home park in Monroe County during the disaster event period.



Figure 3: Mobile Home Park Tornado Damage



Reference: [Feds sending \\$461M in disaster aid to Michigan for 2023 tornadoes](#)

Other tornadoes and high winds caused downed power lines, leaving 500,000 households without power, and resulting in widespread utility line damage. Intense rainfall, while not high in volume (no more than 3 inches in all areas) resulted in flooding in low-lying areas due to heavy rainfall from the previous day that had not yet fully dissipated. Wayne County experienced major flooding in the Lower River Rouge area, while Macomb County experienced moderate flooding in the Clinton River area.⁴

In total, five fatalities resulted from the disaster event.⁵

⁴ National Weather Service, August 24, 2023 Evening Tornadoes & Severe Weather Event, [August 24, 2023 Evening Tornadoes & Severe Weather Event](#)

⁵ Householder, Mike & Williams, Corey (8/25/2023). "7 tornadoes confirmed as Michigan storms down trees and power lines; 5 people killed" AP News. [7 tornadoes confirmed as Michigan storms down trees and power lines; 5 people killed | AP News](#)

**Table 2: Disaster Overview**

Disaster Summary	
Qualifying Disaster:	DR-4757
HUD-identified MID Areas:	Macomb (County), Monroe (County) (ZIP code 48166), Oakland (County)
Grantee-Identified MID Areas	Eaton County, Ingham County

Table 3: CDBG-DR Allocation Overview

CDBG-DR Allocation Overview:	
CDBG-DR Allocation:	\$37,887,000
CDBG-DR Mitigation Set Aside:	\$5,683,000
Total Allocation:	\$43,570,000



2

Unmet Needs Assessment



2. Unmet Needs Assessment

As required by HUD, the MEDC completed the unmet needs assessment by evaluating the three core aspects of recovery: housing, infrastructure, and the economy. The information collected through the unmet recovery and mitigation needs assessment process serves as the foundation for the MEDC's Community Development Block Grant - Disaster Recovery (CDBG-DR) program funding and prioritization decisions.

To prepare the unmet needs assessment, the MEDC consulted with and drew on data from the following sources:

- U.S. Department of Housing and Urban Development (HUD)
- Federal Emergency Management Agency (FEMA)
- U.S. Army Corps of Engineers (USACE)
- Small Business Administration (SBA)
- U.S. Census Bureau
- U.S. National Oceanic and Atmospheric Administration (NOAA)
- Michigan Critical Incident Management System (MI CIMS)
- Local Governments
- Regional Emergency Management and Safety Offices

Table 4: Unmet Needs and Proposed Allocations

Eligible Cost Category	Unmet Need	% of Unmet Need	% of Funding to be Expended in HUD and Grantee Identified MID	CDBG-DR Allocation Amount	% of CDBG-DR Allocation (Excluding the 15% Mitigation Set-Aside)
Housing	\$283,901,961	92.95%	0%	\$0	0%
Infrastructure	\$10,362,507	3.39%	100%	\$34,856,000	80%
Economic Revitalization	\$11,168,971	3.66%	0%	\$0	0%



Eligible Cost Category	Unmet Need	% of Unmet Need	% of Funding to be Expended in HUD and Grantee Identified MID	CDBG-DR Allocation Amount	% of CDBG-DR Allocation (Excluding the 15% Mitigation Set-Aside)
Public Service (15% cap)	\$0	0%	0%	\$0	0%
Exempt Public Service (no cap)	\$0	0%	0%	\$0	0%
Planning (15% cap)			100%	\$6,535,500	15%
Administration (5% cap)				\$2,178,500	5%
Total	\$305,433,439	100%	100%	\$43,570,000	100%

The data gathered allows the MEDC to identify and prioritize critical unmet needs for long-term community recovery of the HUD- and State-identified MID areas. The quality of the assessment is directly tied to the quality and completeness of the available data and responses received from outreach requests. The assessment attempts to consider work already accomplished for the recovery, community goals, and the MEDC's capacity to manage and implement the CDBG-DR program. The assessment allows the MEDC to design recovery programs that are responsive to actual on-the-ground needs.

The table below outlines losses across all categories (housing, economic development, and infrastructure) before and after accounting for identified funding sources. Unmet needs are calculated by subtracting available resources from the total value of damages. The State also evaluated unmet needs for unhoused populations and public services. At the time of this Action Plan's development, there was no data illustrating unmet needs of



homeless populations or shelters. Also, there was no information to support unmet disaster-related needs for public services. Due to infrastructure failures in the HUD- and State-identified MID areas, recovery needs likely exist in these sectors and the State plans to continue updating this information in the future.

Table 5: Quantified Disaster Impacts and exacerbated Pre-Existing needs of Housing, Infrastructure, and Economic Development, Other Financial Assistance, and Remaining Unmet Need

Cost Categories	A Direct and Indirect Need	B Financial Assistance Budgeted and Obligated	A-B Unmet Need
Emergency Shelters, Interim, and Permanent Housing	\$0	\$0	\$0
Rental Housing	\$3,448,642	\$3,151,160	\$297,482
Owner-Occupied Housing	\$375,872,598	\$92,268,119	\$ 283,604,479
Public Housing and Other Affordable Housing	\$0	\$0	\$0
Infrastructure	\$10,362,507	\$0	\$10,362,507
Economic Development	\$20,223,846	\$9,054,875	\$11,168,971
Public Service	\$0	\$0	\$0
Total	\$409,907,593	\$104,474,154	\$305,433,439



2.1 Housing

The housing unmet needs assessment represents the impact on housing that needs to be rehabilitated, reconstructed, or newly built. The impacts from the disaster resulted in damages to homes that experienced structural damage, basement flooding and sewer backup. The MEDC intends to create infrastructure and planning programs to address the unmet housing needs of the public.

According to the U.S. Census Bureau's American Community Survey (ACS) 2019-2023 five-year estimates, around 9.9% of Michigan residents spend 30% or more of their income on housing. Among renter-occupied households, 19.6 percent are considered housing cost-burdened, compared with only 6.5 percent of owner-occupied households. The ACS data also indicates that median rent prices are expected to rise steadily over the next seven years. As housing costs increase, disaster-related impacts on the housing stock exacerbate affordability challenges.

According to the 2023 ACS five-year estimates ([S2503: Financial Characteristics - Census Bureau Table](#)), a large percentage of households in Ingham and Kent Counties pay over 30% of their monthly income on housing costs, creating additional burdens, particularly when storm events occur.

Table 61: Median Home Sales Price Point-In-Time Comparisons Between HUD MID Counties, the State of Michigan, and the U.S.

Location	Point in Time			
	Feb 2023	Feb 2024	Feb 2025	% change from 2023 to 2025
Monroe (HUD MID)	\$208,940	\$245,373	\$249,700	+19.5%
Oakland (HUD MID)	\$295,000	\$325,000	\$335,000	+13.6%
Macomb (HUD MID)	\$223,000	\$240,000	\$250,000	+12.1%
Eaton (State MID)	\$190,000	\$241,500	\$245,175	+22.5%
Ingham (State MID)	\$156,000	\$165,000	\$183,000	+14.7%



Location	Point in Time			
Michigan (Entire State)	\$219,000	\$237,000	\$251,000	+14.6%
National	\$349,249	\$363,543	\$371,017	+6.2%

Source: Counties: Michigan Housing Market, 2025, Redfin.com, <https://www.redfin.com/state/Michigan/housing-market> National: Home Values, United States, Zillow.com, <https://www.zillow.com/home-values/102001/united-states/>

Between February 2023—six months before the disaster—and February 2025—one year after the disaster declaration—median home sale prices in HUD-identified MID areas rose sharply, outpacing the national average growth rate of 6.2%. Monroe County recorded the highest increase at 19.5%, followed by Oakland County at 13.6%, and Macomb County at 12.1%. This post-disaster escalation in housing prices is largely attributed to a contraction in housing supply combined with sustained or heightened demand. These conditions drove prices upward across the region, affecting both damaged and undamaged homes.

This housing needs assessment reveals a complex landscape of unmet housing needs across Michigan, shaped by disaster impacts, affordability challenges, and demographic shifts. While homeownership remains dominant, renters—particularly low- to moderate-income households—face disproportionate cost burdens and limited access to affordable, quality housing. FEMA and HUD disaster data underscores the severity of damage in key MID counties, with a high percentage of homes classified as majorly or severely impacted. Although emergency shelters and federally assisted multifamily housing units reported minimal physical damage, the broader housing ecosystem remains strained. The MEDC aims to address these challenges through targeted infrastructure and planning programs that support rehabilitation, reconstruction, and new development, ensuring equitable access to stable housing for all residents, especially those most vulnerable to economic and environmental disruptions.

Table 7: ACS 5-Year 2019-2023 Housing Tenure by County

County	# of Owners	%	# of Renters	%	Total
Monroe	50,882	80.8%	12,054	19.2%	62,936
Oakland	388,282	72.8%	145,251	27.2%	533,533
Macomb	273,209	73.7%	86,255	24.0%	359,464



County	# of Owners	%	# of Renters	%	Total
Ingham	71,007	60.6%	46,190	39.4%	117,197
Eaton	33,940	75.1%	11,241	24.9%	45,181
Michigan (Entire State)	3,028,591	73.7%	1,079,218	26.3%	4,107,809
National	85,685,869	65.2%	45,646,491	37.6%	131,332,360

Source: U.S. Census Bureau ACS 5-year 2019-2023,

[https://data.census.gov/table/ACSDT1Y2023.B25003?t=Owner/Renter+\(Tenure\)&g=010XX00US_040XX00US26_050XX00US26_099,26115,26125](https://data.census.gov/table/ACSDT1Y2023.B25003?t=Owner/Renter+(Tenure)&g=010XX00US_040XX00US26_050XX00US26_099,26115,26125)

Housing tenure in Michigan is heavily weighted toward homeownership, with 73.7% of housing units owner-occupied and 26.3% renter-occupied. This reflects a strong culture of homeownership, but also points to the need for a balanced housing ecosystem that includes adequate, quality rental options. Renters—including students, young professionals, lower-income households, and seniors—should have access to stable and affordable housing that meets their specific needs.

2.1.1 Emergency Shelters, Interim, and Permanent Housing

The data in the table below is based on point-in-time information provided to HUD by Continuums of Care (CoCs) as part of their CoC Program application process. CoCs are required to provide an unduplicated count of homeless persons according to HUD standards, and HUD annually publishes reports that detail the CoC geographic areas, geographic coverage, changes from the previous program year, information on each CoC's awards by award amount, project component type, and project application type. No reported damage occurred to shelters or interim housing. Continuum of Care entities located in MID areas reported no impact due to the federally declared disaster. The Point-in-Time (PIT) count showed 144 unsheltered individuals across all three MID counties at the time of the eligible event.

**Table 8: Point-in-Time Count - Type of Shelter**

Geography	Emergency Shelter	Transitional Housing	Total Known Homeless	Unsheltered Homeless
Michigan (Entire State)	6,449	1,667	9,739	1,623
Michigan Balance of State	927	357	1,937	653
Pontiac, Royal Oak/Oakland County (MID)	249	78	357	30
Eaton County (MID)	30	20	55	5
Monroe City & County (MID)	101	20	121	0
Grand Rapids, Wyoming/Kent County	796	183	1,089	110
Lansing, East Lansing/Ingham County (MID)	526	32	648	90
Livingston County	25	41	69	3
St. Clair Shores, Warren/Macomb County (MID)	327	90	436	19

2.1.2 Rental and Owner-Occupied Single Family and Multifamily Housing

Owner-Occupied Single-Family: According to FEMA IA data, residents in the five MID counties (Eaton, Ingham, Macomb, Monroe, and Oakland) experienced mostly major and severe levels of both flood and wind damage to their properties. As displayed in Table 9, Oakland had the highest number of individual damage claims (6,095), with Macomb reporting marginally less (5,851), and Eaton, Ingham and Monroe reporting a significantly



lower number (156, 298, and 771 respectively) of FEMA IA recipients. In Macomb, over 77% of damage fell into the Major-High to Severe damage classifications. Oakland had slightly less, but still an overwhelming majority of damage (71%) within the Major-High and Severe categories. Monroe had slightly less than 71% of damage fall into the Major-High and Severe categories, but a higher proportion of Severe damage, which accounted for 59% of all damage within the county. Ingham County reported 298 damaged housing units, with 167 classified as severely impacted and 47 as majorly impacted. This means nearly 72% of all damage in the county fell into the Severe or Major categories. Eaton County, though smaller in total claims with 156 units affected, had an even higher proportion of serious damage: 100 units were severely impacted and 22 majorly impacted, totaling over 78% in the top two damage categories. These figures suggest that while fewer households were affected in Eaton and Ingham compared to the larger MID counties, the intensity of damage was strikingly similar.

Table 9: FEMA Real Property Damage Owner-Occupied Units

County	Minor - Low	Minor - High	Major - Low	Major - High	Severe
Macomb (HUD MID)	1,834	68	364	883	2,702
Oakland (HUD MID)	1,429	32	570	1,106	2,958
Eaton (State MID)	29	5	2	20	100
Monroe (HUD MID)	93	10	41	173	454
Kent	49	1	0	7	70
Ingham (State MID)	83	1	6	41	167
Ionia	10	2	0	4	15



County	Minor - Low	Minor - High	Major - Low	Major - High	Severe
Livingston	24	2	6	9	52
Total	3,551	121	989	2,243	6,518

Reference: FEMA Individual Assistance Dataset, Received February 2025

Table 10: FEMA IA Application by Housing Type

County	# of Applicants	% Owner Occupied	% Tenants	% Unknown	%Type
Apartment	916	0.3%	99.3%	0.3%	3.4%
Assisted Living Facility	4	50.0%	50.0%	0.0%	0.0%
Boat	7	100.0%	0.0%	0.0%	0.0%
College Dorm	1	0.0%	100.0%	0.0%	0.0%
Condo	1,123	62.1%	37.9%	0.0%	4.2%
Correctional Facility	0	0.0%	0.0%	0.0%	0.0%
House/Duplex	22,850	71.6%	28.2%	0.2%	85.5%
Military Housing	1	0.0%	100.0%	0.0%	0.0%
Mobile Home	621	71.7%	28.3%	0.0%	2.3%
Other	376	51.3%	48.1%	0.5%	1.4%



County	# of Applicants	% Owner Occupied	% Tenants	% Unknown	%Type
Townhouse	832	17.5%	82.3%	0.1%	3.1%
Travel Trailer	7	71.4%	28.6%	0.0%	0.0%
Total	26,738	67%	33%	0%	100%

Reference: FEMA Individual Assistance Dataset, Received February 2025

The data represented in Table 10, FEMA IA Application by Housing Type, reveals that the vast majority of FEMA Individual Assistance (IA) applications—85.5%—came from residents of houses or duplexes, with 71.6% of those applicants being homeowners. Condos (4.2%) and apartments (3.4%) followed, though apartment applicants were overwhelmingly tenants (99.3%). Mobile homes accounted for 2.3% of applications, with a similar ownership pattern to houses. Less common housing types like townhouses, boats, and assisted living facilities made up small fractions of the total, while college dorms, military housing, and travel trailers had minimal representation. Overall, 67% of applicants were homeowners, while 33% were tenants, highlighting a strong owner-occupancy trend among those seeking FEMA assistance.

Table 11: FEMA IA Renter Occupied

County	# of Applicants	# of Inspections	# of Inspections With Damage	# Received IHP	Total FEMA Verified Loss	Avg FEMA Verified Loss
Macomb (County)	4,176	3,962	2,721	2,612	\$1,834,926	\$674
Oakland (County)	3,581	3,401	2,119	2,015	\$1,400,446	\$661
Eaton (County)	99	80	17	16	\$8,369	\$492



Monroe (County)	193	168	84	81	\$90,410	\$1,076
Kent (County)	309	278	31	29	\$22,609	\$729
Ingham (County)	376	336	149	146	\$91,282	\$613
Ionia (County)	28	24	-	-	\$0	\$0
Livingston (County)	56	46	2	2	\$600	\$300
Total	8,818	8,295	5,123	4,901	\$3,448,642	\$4,546

Reference: FEMA Individual Assistance Dataset, Received February 2025

Following recent disaster events, 8,818 applicants across eight Michigan counties sought FEMA Individual Assistance. Of the 8,295 inspections conducted, 5,123 revealed damage, resulting in 4,901 households receiving aid. The total FEMA Verified Loss amounted to \$3.45 million, with an average verified loss of \$674 per recipient. Macomb and Oakland counties accounted for the majority of assistance, while smaller counties like Ionia and Livingston saw minimal impact and aid distribution.

In dollar values, as displayed in Table 12, this equated to \$14,325,081 in payments to Oakland County residents, with Macomb County residents receiving \$12,217,057. Monroe County residents had a relatively lower total amount of FEMA verified loss as compared to the other two counties with \$3,409,509. However, when taken as an average of verified loss, Eaton, Ingham and Monroe residents had roughly twice the average amount of FEMA verified loss (\$4,721, \$4,575 and \$4,422) in comparison to Oakland (\$2,350) and Macomb (\$2,088).

Table 12: FEMA IA Owner-Occupied Verified Loss

County	# of Applicants	Total FEMA Verified Loss	Avg FEMA Verified Loss
--------	-----------------	--------------------------	------------------------



Macomb (HUD MID)	7,036	\$12,217,057	\$2,088
Oakland (HUD MID)	7,662	\$14,325,081	\$2,350
Eaton (State MID)	568	\$736,530	\$4,721
Monroe (HUD MID)	1,061	\$3,409,509	\$4,422
Kent	461	\$625,258	\$4,923
Ingham (State MID)	684	\$1,363,450	\$4,575
Ionia	106	\$115,849	\$3,737
Livingston	291	\$412,382	\$4,434
Total	17,869	\$33,205,116.00	\$31,251.77

Reference: FEMA Individual Assistance Dataset, Received February 2025

Renter-Occupied: In contrast to the damage sustained by owner-occupied properties, renter-occupied applicants experienced mostly Minor-Low damage. Macomb County reported 2,202 instances out of 2,721 total, Oakland County reported 1,723 out of 2,119 total, Ingham County reported 125 out of 149, Monroe County reported 56 out of 84 total, and Eaton County reported 15 out of 17 total. Only Macomb County reported units 2 that experienced Severe damage.

Table 13: FEMA Real Property Damage Renter-Occupied Units



County	Units with Minor-Low	Units with Minor-High	Units with Major-Low	Units with Major-High	Units With Severe
Macomb (HUD MID)	2,202	397	101	19	2
Oakland (HUD MID)	1,723	327	53	16	0
Eaton (State MID)	15	2	0	0	0
Monroe (HUD MID)	56	14	9	5	0
Kent	21	8	2	0	0
Ingham (State MID)	125	18	6	0	0
Livingston	2	0	0	0	0
Total	4,144	766	171	40	2

Reference: FEMA Individual Assistance Dataset, Received February 2025

Table 14 displays the total and average verified loss for renters across the affected counties. Much like Table 10: FEMA IA Owner-Occupied Verified Loss, the data shows that despite the lower amount of total FEMA verified loss in Monroe County (\$90,410) in contrast to Oakland County (\$1,400,446) and Macomb County (\$1,834,926), the average loss per claim (\$1,076) was nearly twice that of the other MID counties (Oakland County with \$661 and Macomb County with \$674). In Eaton County, the total FEMA verified loss amounted to just \$8,369 across 99 applicants, resulting in an average loss of \$492 per claim. Ingham County, with 376 applicants, reported a total verified loss of \$91,282 – yielding a higher average of \$613 per claim. These figures suggest that while Eaton had fewer applicants and a lower overall payout, the financial impact per household was only modestly lower than Ingham's.

**Table 14: FEMA IA Renter-Occupied Verified Loss**

County	# of Applicants	Total FEMA Verified Loss	Avg FEMA Verified Loss
Macomb (HUD MID)	4,176	\$1,834,926	\$674
Oakland (HUD MID)	3,581	\$1,400,446	\$661
Eaton (State MID)	99	\$8,369	\$492
Monroe (HUD MID)	193	\$90,410	\$1,076
Kent	309	\$22,609	\$729
Ingham (State MID)	376	\$91,282	\$613
Ionia	28	\$0	\$0
Livingston	56	\$600	\$300
Total	8,818	\$3,448,642	\$4,546

In the aftermath of the disaster, data revealed a gap in flood insurance coverage among households impacted by flood. Of the 1,123 affected residences, only 0.6% carried flood insurance—slightly above the Michigan state average of just 0.4%, yet still well below the national average of 3.3% of households covered by the National Flood Insurance Program



(NFIP).^{6,7} This disparity underscores a vulnerability within the impacted area, where even marginally higher coverage rates than the state benchmark fail to approach national standards. Further, many impacted homes were in areas outside of the regulatory flood plain, suggesting many households may not have anticipated flooding resulting from weather that overwhelmed flood management infrastructure. The limited insurance protection available to homeowners not only impedes recovery efforts but also highlights the need for targeted support and resources to aid long-term recovery and resilience within these communities.

2.1.3 Public Housing and Other Affordable Housing

HUD's Multifamily Housing property portfolio consists primarily of rental housing properties with five or more dwelling units such as apartments or townhouses, but can also include nursing homes, hospitals, elderly housing, mobile home parks, retirement service centers, and occasionally vacant land. HUD provides subsidies and grants to property owners and developers in an effort to promote the development and preservation of affordable rental units for low- and moderate-income populations, and those with special needs such as the elderly and disabled.

The portfolio can be broken down into two basic categories: insured and assisted. The three largest assistance programs for Multifamily Housing are Section 8 Project Based Assistance, Section 202 Supportive Housing for the Elderly, and Section 811 Supportive Housing for Persons with Disabilities. At the time this Action Plan was developed, no landlords participating in any of these programs reported any damages, and no program participants were displaced as a result of the storm(s). There is no data at this time indicating any physical damage to Housing Choice Voucher or Low-Income Housing Tax Credit (LIHTC) properties. There were also no reports of impacts to Public Housing Authorities (PHAs) in the MID-designated counties.

⁶ Preliminary Damage Assessment, FEMA, 2024,

https://www.fema.gov/sites/default/files/documents/PDARReport_FEMA4757DR-MI.pdf

⁷ Flood Insurance Policies Study, Valuepenguin.com, February 24, 2025,

<https://www.valuepenguin.com/flood-insurance-policies-study#:~:text=Unsurprisingly%2C%20coastal%20states%20have%20the,homeowners%20in%20thes%20states%20believe.>

**Table 15: HUD-Assisted Housing Impacted by the Disaster**

County	Total Housing Choice Vouchers	Total Impacted Housing Choice Voucher Units	Total LIHTC Units	Total Impacted LIHTC Units	Total Public Housing Dwelling Units	Total Impacted Public Housing Dwelling Units
Macomb	3,050	0	3,309	0	1,141	0
Oakland	4,072	0	1,801	0	294	0
Eaton	442	0	531	0	26	0
Monroe	609	0	259	0	535	0
Ingham	3,000	0	4,363	0	156	0

Reference: HUD LIHTC Database [huduser.gov]

Table 162: Disaster Impacted PHAs with Available and Occupied Units

Housing Authority Name	Place	Total Units	Section 8 (Occupied)	Public Housing Occupied	Total Occupied
Michigan State Housing Development Authority	Detroit, MI	32,568	28,364	0	28,365
Roseville Housing Commission	Roseville, MI	413	192	95	287



Housing Authority Name	Place	Total Units	Section 8 (Occupied)	Public Housing Occupied	Total Occupied
South Lyon Housing Commission	South Lyon, MI	0	0	0	0
Eastpointe Housing Commission	Eastpointe, MI	339	130	159	289

Reference: Public Housing Authorities: HUD Open Data Site, https://hudgis-hud.opendata.arcgis.com/datasets/3d6ef39026b94eb59ddb7ce28eb0b692_0/explore?filters=eyJGT1JNQXxfUEFSVEIDSVBBTIRfTkFNRSI6WyJNaWNoaWdhbiBTdGF0ZSBib3VzaW5nIERldmVsb3BtZW50IEF1dGhvcml0eSJdfQ%3D%3D&location=17.868313%2C-75.612412%2C4.24&showTable=true

Among the disaster-impacted PHAs in Michigan, the Michigan State Housing Development Authority in Detroit stands out with the largest inventory—32,568 units, of which 28,364 are occupied through Section 8, and no public housing units are reported occupied. Smaller PHAs like Eastpointe and Roseville show a mix of Section 8 and public housing occupancy, with 289 and 287 total occupied units respectively. The South Lyon Housing Commission reported no available or occupied units, indicating either a lack of inventory or complete vacancy. Overall, Section 8 dominates occupancy across these PHAs, especially in Detroit.

2.2 Infrastructure

Although the impacted areas experienced damage to public facilities and infrastructure, the State did not receive FEMA Public Assistance (PA) for the 2023 disaster. The State was approved for FEMA Individual Assistance (IA) to support residents but did not reach the impact thresholds required for PA eligibility. FEMA PA funds the repair and replacement of public facilities and infrastructure, as well as emergency response activities. PA is commonly distributed to states and local jurisdictions after major disasters; in this instance, the State did not receive this assistance following the disaster declaration, which has increased the demands on the State to address infrastructure needs.

The State of Michigan has a state-level disaster impact assessment protocol that is organized by FEMA PA Categories. The Michigan Critical Incident Management System (MI CIMS) is a statewide, secure system which provides specialized tools for managing crisis information and emergency response, as well as non-emergency events. MI CIMS provides real-time information and is capable of managing multiple incidents



simultaneously yet separately. The table below details the MI CIMS Damage Assessment to Public Facilities during DR-4757.

Table 173: MI CIMS Damage Assessment to Public Facilities during DR-4757

Geography	CatA_DL Debris Removal	CatB_DL Emergency Measures	CatC_DL Roads and Bridges	CatD_DL Water Control Facilities	CatE_DL Public Buildings and Equipment	CatF_DL Public Utilities	CatG_DL Parks and Recreation Facilities	Total (Excluding A and B) *
City of Lansing	\$81,456	\$26,291	-	0	\$0	\$9,780,668	\$0	\$9,790,253
County of Eaton (State MID)	\$326,566	\$189,021	-	\$13,752	\$2,915,208	\$179,000	\$0	\$3,107,960
County of Ingham (State MID)	\$386,800	\$51,500	-	\$,523,8450	\$23,300	\$32,200	\$28,100	\$5,322,050
County of Ionia	\$108,505	-	-	0	\$194,312	\$274,671	\$0	\$468,983
City of Grand Rapids	\$135,700	\$165,000	-	0	\$0	\$0	\$0	-
County of Kent	\$252,843	\$95,116	-	0	\$82,500	\$0	\$0	\$82,500
County of Livingston	\$35,000	\$30,000	-	0	\$50,000	\$0	\$0	\$50,000
County of Macomb (HUD MID)	\$100,000	-	-	0	\$0	\$0	\$0	-
County of Monroe (HUD MID)	-	\$3,000,000	-	\$250,000	\$0	\$0	\$0	\$250,000



Geography	CatA_DL Debris Removal	CatB_DL Emergency Measures	CatC_DL Roads and Bridges	CatD_DL Water Control Facilities	CatE_DL Public Buildings and Equipment	CatF_DL Public Utilities	CatG_DL Parks and Recreation Facilities	Total (Excluding A and B) *
County of Oakland (HUD MID)	\$22,133	\$2,443	-	0	\$1,250	\$0	\$0	\$1,250
County of Wayne	-	-	-	0	\$394,748	\$0	\$0	\$394,748
Township of Canton	\$25,000	\$31,619	-	0	\$143,736	\$0	\$646,293	\$790,029
*Cat A Debris Removal and Cat B Emergency Measures are typically excluded from a CDBG-DR needs assessment								

Source: [MI CIMS Overview](#)

Table 184: MI CIMS Damage Assessment Categories

PA Category	Sum of Approx. Cost
• Debris Removal	\$1,231,847
• Protective Measures	\$668,080
• Roads and Bridges	\$0
• Water Control Facilities	\$5,502,202
• Public Buildings	\$3,661,318
• Public Utilities	\$485,871
• Recreational or Other	\$28,100

Source: 2023 MI-CIMS Disaster Assessment



According to the table above, the categories with the highest approximate cost are water control facilities, followed by public buildings and debris removal. Based on the MI CIMS Disaster Assessment, there is a remaining infrastructure unmet need of \$13,240,575. Several communities reported that the loss and damages to certain public facilities will require a significant investment. The financial costs are a significant barrier, and even with assistance from FEMA and other sources, the repair and mitigation costs for the community will be overwhelming and unaffordable for residents, a majority of whom are low to moderate income. Per the data and community feedback, infrastructure repair and mitigation of future disasters has to be addressed as a critical need and will support both the construction of new housing and the overall resilience of the communities. Water control facilities, and support of residential lateral sewer projects needs are of critical importance, as flooding in urban areas is a growing problem with intense rainstorms become more frequent. The nature of flood impacts on these communities—as documented through the [Michigan 2024 State Hazard Mitigation Plan](#)—points to inadequate stormwater infrastructure as a driver of damage to houses, businesses, and the communities. Repairing and strengthening infrastructure in the impacted areas addresses not only infrastructure needs, but also the needs of homes and local businesses. Repairing and strengthening infrastructure in the impacted areas addresses not only infrastructure needs, but also the needs of homes and local businesses.

In summary, while FEMA Public Assistance funding was not allocated and no immediate infrastructure issues were reported post-storm, Michigan’s state-level disaster assessment identified a substantial unmet infrastructure need totaling over \$13 million. This gap, particularly in water control facilities and residential sewer systems, poses a significant challenge for communities already burdened by limited financial resources and recurring flood damage. The data and community input underscore the urgency of investing in infrastructure repair and mitigation—not only to support future housing development but also to enhance long-term resilience against increasingly severe weather events. Addressing these infrastructure vulnerabilities is essential to safeguarding homes, businesses, and the well-being of Michigan’s most vulnerable populations.

2.3 Economic Revitalization

All three MID-designated counties were eligible for Small Business Administration (SBA) loans as a result of the disaster event. In Oakland County and Macomb County, 572 and 551 loans were issued to individuals/businesses respectively, with a total value of loans issued being \$8,189,952. Monroe County had markedly less loans issued—only 38 in total, with a total value of: \$138,200. In addition to home loans, SBA also provides disaster loans to businesses to cover losses not covered by insurance or funding from FEMA, and to cover business operating expenses that could have been met had the disaster not occurred. The tables below show the dollar amounts associated with businesses in their respective



counties, and a breakdown by business type and count. The MEDC does not anticipate funding activities for businesses or economic revitalization at this time. However, funding for infrastructure work can help maintain foot traffic to these businesses and mitigate future flooding.

SBA's Economic Injury Disaster Loan (EIDL) program is available to small businesses, small agricultural cooperatives, nurseries and Private Non-Profit Organizations (PNPs) with financial losses directly related to the disaster. EIDLs are available for working capital needs caused by the disaster and are available even if the business or PNP did not suffer any physical damage. These loans may be used to pay fixed debts, payroll, accounts payable, and other bills that could not be paid due to the disaster.

Table 195: Total Business Loans Disbursed by the SBA

County	# of EIDLs Disbursed	Total Approved
Eaton	15	\$0
Ingham	89	\$177,923
Ionia	8	\$0
Kent	84	\$424,000
Livingston	22	\$124,800
Macomb	551	\$5,113,600
Monroe	38	\$138,200
Oakland	572	\$3,076,352
Total	1379	\$9,054,875

Reference: SBA Data on Disaster Business Loan Applications: May 2025

**Table 206: Total Business Loans Approved by the SBA by Business Category**

Business Sector	No. of Business Applicants	Total Verified Loss	Total Approved Loan Amount	Difference
Accommodation and Food Services	6	\$660,482.19	\$325,300.00	\$335,182.19
Administrative and Support, Waste Management and Remediation Services	7	\$454,864.79	\$387,300.00	\$67,564.79
Arts, Entertainment and Recreation	2	\$235,132.00	\$144,800.00	\$90,332.00
Construction	8	\$340,199.06	\$331,700.00	\$8,499.06
Educational Services	6	\$1,865,541.61	\$1,720,900.00	\$144,641.61
Health Care and Social Assistance	10	\$848,126.95	\$973,900.00	-\$125,773.05
Information	1	\$5,945.00	\$10,100.00	-\$4,155.00
Manufacturing	14	\$3,985,220.15	\$2,957,500.00	\$1,027,720.15
Other Services	30	\$5,395,910.30	\$5,027,600.00	\$368,310.30



Business Sector	No. of Business Applicants	Total Verified Loss	Total Approved Loan Amount	Difference
Professional, Scientific and Technical Services	12	\$346,465.65	\$358,400.00	-\$11,934.35
Real Estate and Rental and Leasing	216	\$44,054,042.03	\$32,530,000.00	\$11,524,042.03
Retail Trade	26	\$5,906,027.88	\$4,400,400.00	\$1,505,627.88
Transportation and Warehousing	10	\$193,540.00	\$828,000.00	-\$634,460.00
Wholesale Trade	15	\$5,664,122.80	\$5,919,200.00	-\$255,077.20
Grand Total	363	\$69,955,620.41	\$55,915,100.00	\$14,040,520.41

Reference: SBA Data on Disaster Business Loan Applications: May 2025

The table below demonstrates the increased occupation demands in Michigan as well as employment projections and expected job sector growth.

Table 217: Statewide Increased Occupation Demands

Occupation Group	Currently Employed	Projected Employment	Num. Chg.	Perc. Chg.
Total, All Occupations	4,524,490	4,549,520	25,030	0.6%
Management Occupations	303,930	317,620	13,690	4.5%



Occupation Group	Currently Employed	Projected Employment	Num. Chg.	Perc. Chg.
Business and Financial Operations Occupations	267,270	276,810	9,540	3.6%
Computer and Mathematical Occupations	122,140	135,890	13,750	11.3%
Architecture and Engineering Occupations	130,360	137,150	6,790	5.2%
Life, Physical, and Social Science Occupations	31,700	33,490	1,790	5.6%
Community and Social Service Occupations	68,150	73,320	5,170	7.6%
Legal Occupations	30,430	31,430	1,000	3.3%
Education, Training, and Library Occupations	216,090	220,910	4,820	2.2%



Occupation Group	Currently Employed	Projected Employment	Num. Chg.	Perc. Chg.
Arts, Design, Entertainment, Sports, and Media Occ	66,710	67,470	760	1.1%
Healthcare Practitioners and Technical Occupations	294,870	310,890	16,020	5.4%
Healthcare Support Occupations	190,280	212,090	21,810	11.5%
Protective Service Occupations	75,360	72,260	-3,100	-4.1%
Food Preparation and Serving Related Occupations	346,710	350,700	3,990	1.2%
Building and Grounds Cleaning and Maintenance Occupations	135,980	134,130	-1,850	-1.4%
Personal Care and Service Occupations	94,660	96,760	2,100	2.2%



Occupation Group	Currently Employed	Projected Employment	Num. Chg.	Perc. Chg.
Sales and Related Occupations	385,450	366,800	-18,650	-4.8%
Office and Administrative Support Occupations	528,110	488,090	-40,020	-7.6%
Farming, Fishing, and Forestry Occupations	23,630	23,570	-60	-0.3%
Construction and Extraction Occupations	187,940	188,850	910	0.5%
Installation, Maintenance, and Repair Occupations	177,940	182,030	4,090	2.3%
Production Occupations	452,390	425,350	-27,040	-6%
Transportation and Material Moving Occupations	394,400	403,940	9,540	2.4%

Reference: *Employment Projections for Occupation Groups 2022-2032, Michigan Labor Market Information, Michigan Department for Technology, Management, and Budget*, <https://milmi.org/datasearch/Employment-Projections>

While SBA disaster loans provided critical financial relief to individuals and businesses across the MID-designated counties—particularly in Oakland County and Macomb County—the overall economic impact in Monroe County was significantly lower. Although



the MEDC does anticipate funding activities directly toward business recovery or economic revitalization at this time, infrastructure improvements remain a strategic priority. Enhancing stormwater systems and mitigating flood risks will not only protect residential areas but also sustain commercial activity by preserving access and reducing future disruptions. Supporting infrastructure resilience is therefore a vital component of long-term economic stability for affected communities.

2.4 Public Service

The MEDC does not plan to fund any Public Service activities for this disaster.



3

Mitigation Needs Assessment



3. Mitigation Needs Assessment

3.1 Overview

In accordance with HUD guidance, the MEDC completed the following Mitigation Needs Assessment. The Michigan Hazard Mitigation Plan (MHMP) was developed with the involvement of various agencies and organizations. Key state agencies that played significant roles in the development and coordination of the MHMP include the Emergency Management and Homeland Security Division (EMHSD) of the Michigan Department of State Police, the Michigan Citizen-Community Emergency Response Coordinating Council (MCCERCC), and the Michigan Department of Environment, Great Lakes, and Energy (EGLE). These agencies, along with other contributors, worked collaboratively to enhance Michigan's preparedness and response strategies for potential hazards to reduce risks for residents, businesses, and visitors.

3.2 Current and Future Hazard Risks

The MHMP evaluated the complete spectrum of natural hazards that could affect the entire State of Michigan. The process included a review of federal, state, and local hazard mitigation planning documents, along with data on the frequency, magnitude, and costs of hazards that have impacted or could impact the planning area.

When analyzing disaster events from natural hazards over a 27-year period (1996-2023), the majority of property damage was due to flooding. Loss of life and injuries were primarily attributed to high winds, extreme cold, lightning, and flooding.

Between 1996 and 2023, the State of Michigan experienced 15 federally declared disasters: nine severe storms (flooding, tornadoes, landslides, and mudslides), four floods, and two dam or levee breaks. Reviewing declared disaster events and loss-causing hazard incidents helps pinpoint targets for risk reduction and enhances a community's ability to prevent and/or mitigate the damaging effects of large-scale events in the future.

**Table 22: Extent of Natural Hazards and Hazard Rankings**

TABLE: SUMMARY OF EXTENT OF NATURAL HAZARDS				
Hazard	Total Damaging Events 1996-2023	Total Property Damage	Total Deaths	Total Injuries
Floods	1,413	\$3,140,642,000	12	8
High Winds	10,415	\$1,163,454,097	42	282
Tornadoes	458	\$445,697,030	9	210
Hail	4,508	\$394,128,300	0	5
Freezing Rain	432	\$316,774,000	2	5
Snow	9,549	\$62,306,500	2	10
Wildfire	28	\$19,686,000	0	4
Lightning	318	\$18,343,000	18	117
Total	27,121	\$5,561,030,927	85	633

April 2024 Michigan Hazard Mitigation Plan

The MHMP used several methodologies to rank hazards. The most notable method is to rank by estimated damages. Flooding is the highest-ranked hazard category based on property damages, with high winds (non-tornadic) coming in second. On a per-incident basis, tornadoes are more damaging than wind events but happen much less frequently. See Table 23, which provides a hazard analysis based on injury ranking. A hazard's injury ranking refers to its severity rating, which evaluates the extent of potential harm, damage, or negative health impacts that may result from exposure to the hazard.



Table 23: Reported Damaging Events

Hazards, Ranked by # of Injuries	Reported Events 1996-2023	Significant Injuries	Deaths	Injuries Per Event	Deaths Per Event
Extreme Heat	318	882	8	2.773	0.0252
High Winds	10,415	282	42	0.0271	0.0040
Tornadoes	458	210	9	0.4585	0.0197
Extreme Cold	915	200	29	0.2186	0.0317
Lightning	318	117	18	0.3679	0.0566
Snow	9,549	10	2	0.0010	0.0002
Floods	1,413	8	12	0.0057	0.0085
Freezing Rain	432	5	2	0.0116	0.0046
Hail	4,508	5	0	0.0011	0.0000
Wildfire	28	4	0	0.1429	0.0000
Ranked by Injury Ratio					
Extreme Heat	318	882	8	2.7736	0.0252
Tornadoes	458	210	9	0.4585	0.0197
Lightning	318	117	18	0.3679	0.0566
Extreme Cold	915	200	29	0.2186	0.0317
Wildfire	28	4	0	0.1429	0.0000



High Winds	10,415	282	42	0.0271	0.0040
Freezing Rain	432	5	2	0.0116	0.0046
Floods	1,413	8	12	0.0057	0.0085
Hail	4,508	5	0	0.0011	0.0000
Snow	9,549	10	2	0.0010	0.0002

April 2024 Michigan Hazard Analysis (Natural Hazards): [2024-Michigan-Hazard-Analysis.pdf](#)

Table 24: Hazard Category, Relative Michigan Risk Priority

Hazard Category	Relative Priority	Hazard Category	Relative Priority
Floods: fluvial/pluvial	Top	Extreme cold	High
High winds	Top	Drought	High
Tornadoes	Top	Great Lakes shoreline	High
Public health emergencies	Top	Invasive species	High
Energy failures and shortages	Top	Lightning	Medium
Extreme heat	Top	Snowstorms	Medium
Cyberattacks and major network disruptions	High	Civil disturbances	Medium
Terrorism and similar incidents	High	Structure fires (general)	Medium
Freezing rain / sleet	High	Major transportation incidents	Medium
Pipeline and wellhead incidents	High	Space weather	Medium
Hazardous materials: fixed site	High	Earthquake	Lower
Dam and levee failure	High	Nuclear power plants	Lower
Hazardous materials: transportation related	High	Subsidence	Lower
Built infrastructure failure (road/bridge/water)	High	Nuclear attack	Lower
Hail	High	Meteorites/impacting objects	Lower
Wildfire	High		

April 2024 Michigan Hazard Mitigation Plan: Table 24 describes the prioritization of the identified hazards based on the risk assessment data analysis.

3.2.1 Lightning

Lightning is included in thunderstorm analysis as thunderstorms are relatively simply to understand but difficult to analyze because of the range of variable hazards that are



associated with thunderstorms. The range of hazards associated with thunderstorms can include: hail, tornadoes, high winds, and flooding. Thunderstorm frequency in Michigan is generally highest in the southwest Lower Peninsula and decreases as a storm cell moves northeast. However, the southeastern part of Michigan has had a noticeably greater rate of damaging lightning events than other areas, which may correlate with urbanized land uses and higher rates of reported lightning events. This may be partly due to urban areas having more people and vulnerable property to damage.

One concern is the impact lightning may have on the electrical infrastructure, causing localized power outages and damage to computers, phone lines and other electronics. Examples of impacts include data from the Insurance Information Institute, which has estimated lightning damage at roughly 5% of all paid insurance claims. Nationwide electric utility companies have estimated over \$1 billion per year in damaged equipment and lost revenue, and the Federal Aviation Administration reported approximately \$2 billion per year in airline industry and passenger-related costs. Specific impacts by lightning include:

- Impact on the Public, Private and Public Property, Private and Public Facilities, and Infrastructure
- In addition to casualties and damage, lightning has a discouraging effect on outdoor activities, power outages, effects on cell phone coverage, and disruption of internet services.
- Impact on the Economic Condition of the State due to potential power outages, particularly in business districts, could significantly impact state's economic condition by disrupting commercial activity, reducing tourism revenue due to unsafe conditions, and halting outdoor events that generate income
- While unlikely, it is possible that lightning strikes could affect production facilities or infrastructure, thus adversely affecting the economic sector of the State.
- Impact on First Responders, Continuity of Operations and continued delivery of Services
- Adverse safety conditions for electrical line workers, and first responders working outside.
- Trees damaged by lightning strikes that down power lines and possibly igniting wildfires.

According to the NCEI database, between January of 1996 to April of 2023 there have been 318 reported events, with 117 significant injuries, and 18 deaths attributed to lightning.



3.2.2 Hail

Hail is included as a part of the thunderstorm analysis and is typically produced when strong updrafts carry water droplets above the atmospheric freezing level and lead to the formation of ice. Hail typically occurs during severe thunderstorms that produce large amounts of precipitation. The likelihood of hailstorms in Michigan counties is determined by a function of how many thunderstorms they have. Below is a map which highlights hailstorms throughout the State of Michigan from 1995-2021.

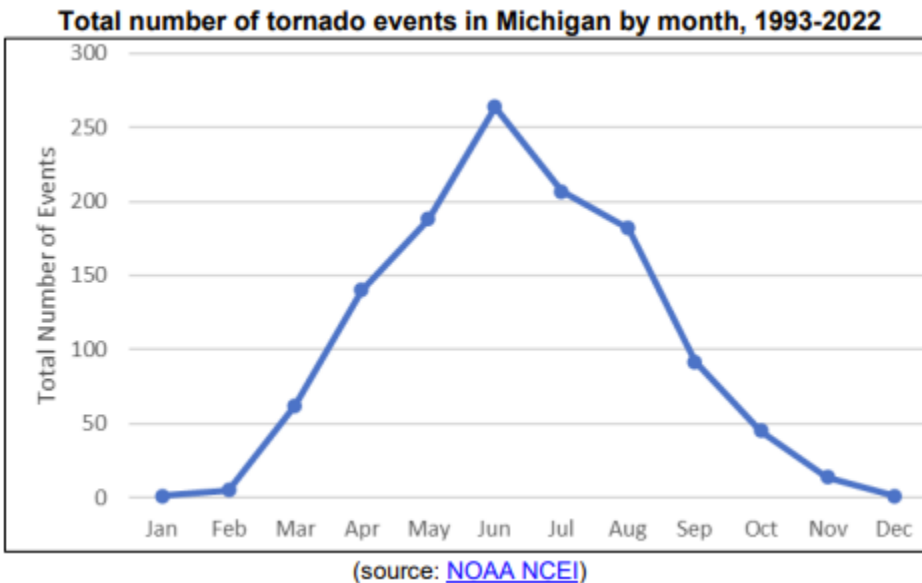
Figure 4: Severe Hail Report Historical Map



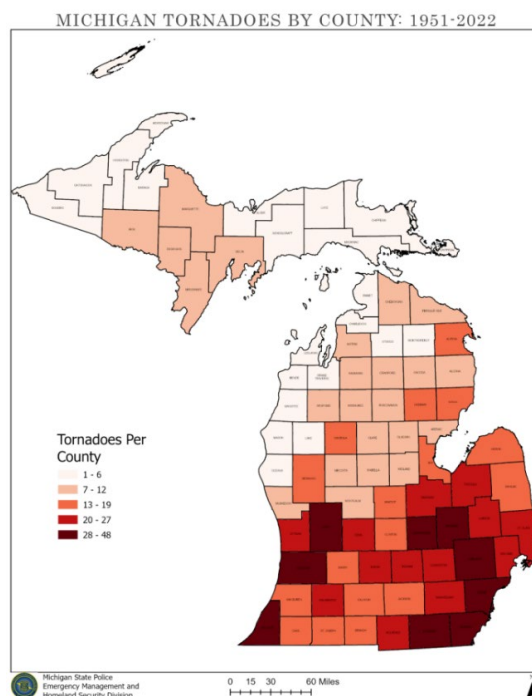
Most hail is frequently small and relatively non-threatening to people. However, larger hailstones may damage structures, vehicles, and in some cases cause injury. In Michigan, hailstones generally range in size from a pea ($\frac{1}{4}$ inch diameter) to a golf ball ($1\frac{3}{4}$ inch diameter), however hailstones larger than a baseball ($2\frac{3}{4}$ inch diameter) are possible. Events producing the largest-sized hail are not always the most destructive, while events with (relatively) smaller-sized hail may sometimes result in greater damage. Even pea-sized hail has the potential to damage crops.

3.2.3 Tornadoes

Michigan lies at the northeastern edge of the nation's tornado belt, which extends from the southern Great Plains and interior Gulf region northward to the Midwest. Tornadoes typically follow the path of their parent thunderstorms, with most Michigan tornadoes moving from southwest to northeast, though a significant amount of tornadoes also move from northwest to southeast. Tornadoes can occur in any month of the year in Michigan, but they are most frequent in late spring and early summer, when air temperature and humidity are relatively high and atmospheric instability is greatest. The table below shows the total number of tornado events in Michigan by month.

**Figure 5: Tornado Events Historical Graph**

The map below shows that tornadoes occur more frequently in the southern half of the Lower Peninsula than in any other area of the state, which is closer to the tornado belt. This area is typically referred to as Michigan's "tornado alley."

Figure 6: Tornado by County Historical Map



Most of the counties south of Kent and Genessee have had two to three times the number of tornadoes touching down in their boundaries than other parts of Michigan. From a risk analysis basis, and on a per-incident basis, tornadoes are more damaging than high wind events but occur much less frequently.

3.2.4 High Winds

High winds are non-tornadic winds, also known as ‘straight line winds,’ which are defined as those exceeding 40 mph for at least one hour. Terms such as damaging winds (those exceeding 50-60 mph) may also be used, while other datasets focus exclusively on winds exceeding 58 mph regardless of duration. For simplicity, this plan will focus on ‘high winds’ and analyze them based on whether they are related to thunderstorm activity or related to a larger wind producing system. High wind events from singular thunderstorms are generally smaller in size to synoptic systems, which may be as large as one or more states. Non-tornadic high wind events occur more frequently in the southern half of the Lower Peninsula than in any other area of the state. Based on the evaluation of the risk analysis, which draws on historical data for this specific hazard, it is estimated that high wind events occur, on average, three times per year in the Upper Peninsula, twice per year in the Lower Peninsula, and between four to twelve times annually in the Southern Lower Peninsula. Microbursts and Derechos have also occurred in Michigan.

A microburst, which is a type of downburst, is a localized but powerful wind gust which occurs from air rapidly descending from a single thunderstorm. Microbursts may cause non-tornadic wind damage that are comparable to weak thunderstorms. Typical damage includes widespread downed trees and power lines, as well as minor structural damage.

Derechos occur when clusters of individual thunderstorms (typically in a single line) form larger and longer-lived storm systems. In a derecho, wind speeds can exceed 100 mph and often result in damage that is more widespread than most Michigan tornadoes. Damage paths can extend up to 250 miles in length.

High winds have had significant effects in Michigan, resulting in 42 deaths, 282 injuries, and over \$1.2 billion in property and crop damages since 1996. Between January 1996 to April 2023, there were 10,415 reported damaging events attributed to high winds. This figure does not include damage from tornadoes.

3.2.5 Snow (blizzards, squalls, lake effect)

Snow includes blizzards and squalls but does not include freezing rain, which is a significant but distinct statewide hazard. Given Michigan’s location in the mid-latitudes and the occurrence of subfreezing air temperatures for at least eight months out of the calendar year, snow is a frequent statewide hazard. Snowfall is highest in the Upper Peninsula and near many edges of the Lake Michigan shoreline (due to lake-effect snow), however, every

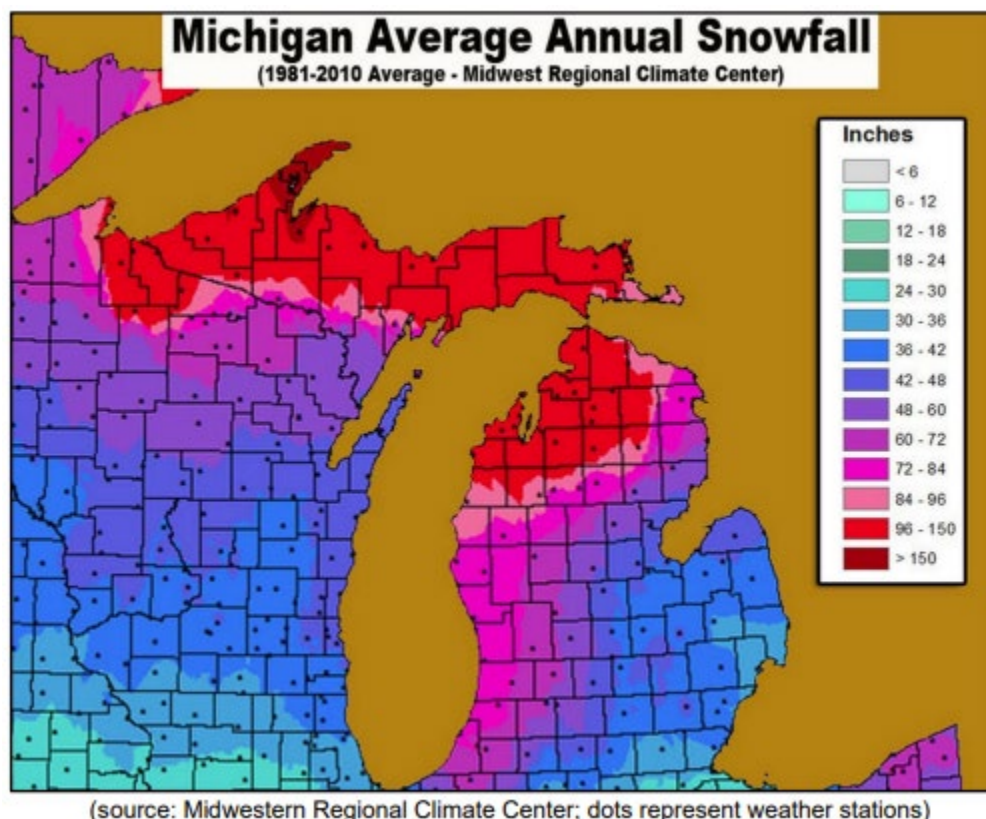


county in Michigan can experience severe winter weather. While most light snowfall is relatively harmless, severe snowstorms can impact communities over a period of days or weeks. This is especially true with heavy accumulations or snow that is difficult to clear. Blizzards are the most dangerous form of snowstorms and are characterized by low temperatures and strong winds, which contain large amounts of falling or blowing snow.

Michigan has experience with this type of weather and has the NWS Storm Prediction Center and other public warning systems in place to ensure that the public is informed of impending hazards and follows safety instructions. Due to its proximity to the Great Lakes, the western part of Michigan experiences lake-effect snow. This type of snow is typically associated with shallow convective clouds and is much more localized in geographic coverage. While Michigan is not particularly mountainous, topography plays a significant role in snowfall climatology. This helps to explain the heavy seasonal snowfall totals seen in the higher elevation sites in the Upper Peninsula and northern Lower Peninsula (i.e., along the spine of the Keweenaw Peninsula).

Snow has caused 9,549 reported damaging events between January 1996 and April 2023, which caused \$62,306,500 in property damage, 2 deaths, and 10 injuries. Snow can have significant impacts on the public, private and public property, private and public facilities, and infrastructure of the state.

Figure 7: Average Annual Snowfall Historical Map





3.2.6 Freezing Rain (ice storms, freezing fog)

The risk of ice storms and freezing rain events is greater in the southern part of the state, where temperature cycles are close to the freezing mark for a greater number of days out of the year. Freezing rain can cover trees, power lines, and roads with a thick coating of ice and may last for extended periods. These longer lasting events are called ice storms and can have significant impacts on the community. Exposed roadways become slippery and hazardous for walking and driving, and the accumulated weight of the ice can cause coated objects to break or collapse. An additional hazard is freezing fog. While less common than freezing rain, freezing fog does occur in the state. Freezing rain occurs more frequently in the southern part of the state (where warm air intrusions are more common). Similar to snowstorm-related events, greater economic impacts and injuries tend to occur in counties with more infrastructure and higher populations.

Major ice storm events have caused over \$316 million in property damage since 1996 (NCEI records). A particularly severe storm in April 2003 caused a significant portion of these damages.

The following table highlights the monthly distribution of these types of events for the period of 1970-2021:

Figure 8: Ice, Sleet, and Freezing Fog Event Summaries Historical Graph by Month

Michigan's Ice and Sleet Storms, and Freezing Fog, Event Summaries by Month (1970-2021)

AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	TOTAL
0	0	0	4	13	19	15	14	8	0	0	0	73
0%	0%	0%	5%	18%	26%	21%	19%	11%	0%	0%	0%	100%

(source: NCEI. Each listed date of occurrence (rather than each of the county event listings) was counted as one event)

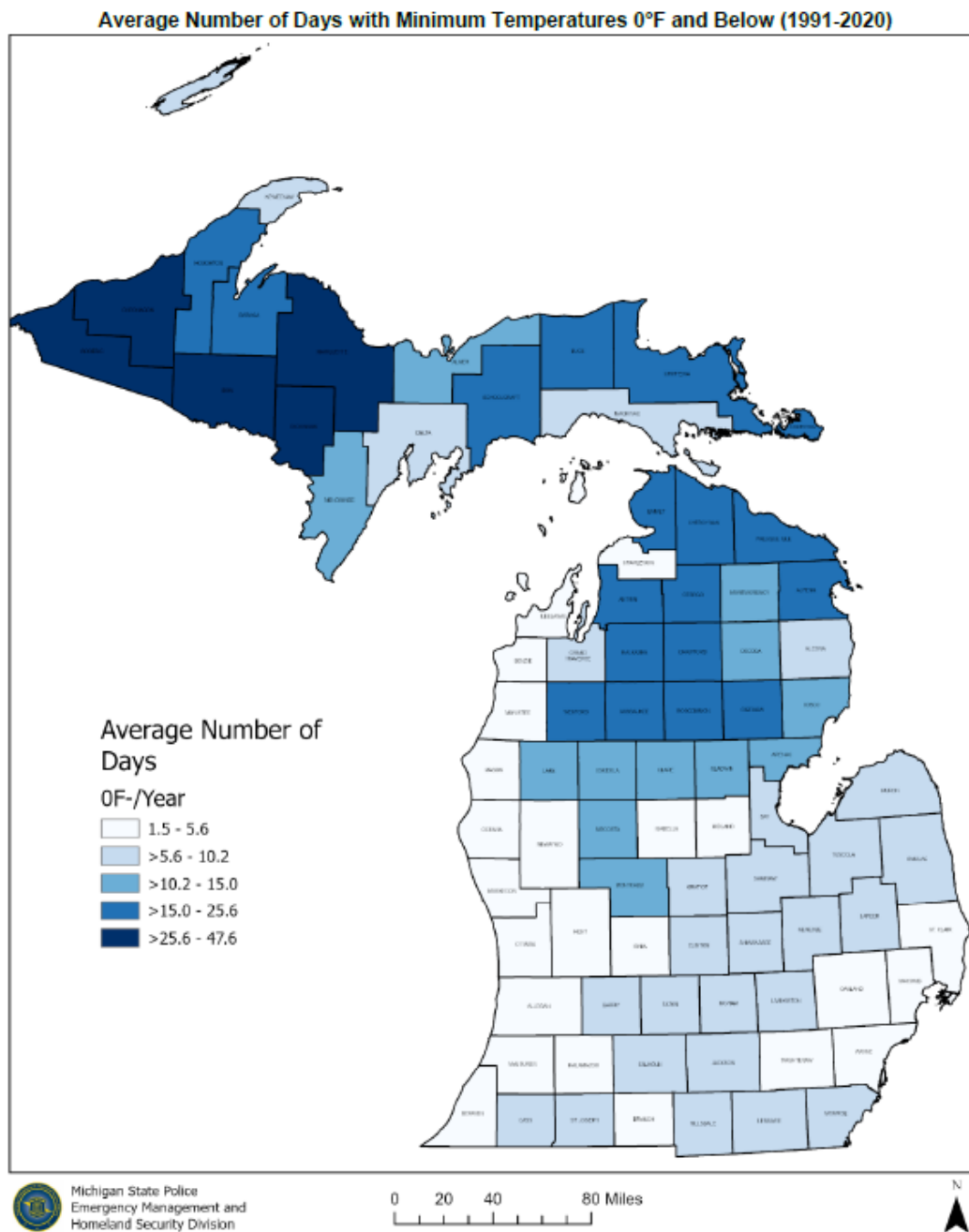
3.2.7 Extreme Cold

Extreme cold in Michigan typically occurs from November to early April and is marked by air temperatures near or below 0°F. Extreme cold frequently strains heating resources and may lead to utility outages or shortages, which can magnify the impacts of extreme cold temperatures.

There have been observed changes in the frequency of extreme low temperature events in recent decades associated with a trend towards a warmer climate. For example, annual extreme low temperatures (the coldest individual recorded temperature at a location in a given year) across much of the state have increased from 2°F to more than 8°F since 1950. Of the 31 extreme low temperature records for the 24 sites across the state listed in the records table, only five have occurred during the past 30 years.



Figure 9: Average Number of Days with Minimum Temperatures Map



While latitude has an obvious impact on temperatures, proximity to the Great Lakes is another important consideration: water acts to reduce heating and cooling rates for land surfaces, resulting in relatively lesser extremes compared to inland areas. For example, Ironwood (inland Gogebic County) has colder average winter temperatures than more northerly cities such as Houghton because it does not benefit from the tempering effects of Lake Superior.



Cold temperatures may occur during blizzards and other storms, but extreme cold often occurs during relatively calm winter weather, which allows maximum overnight heat loss from snow-covered surfaces. The colder, denser air near the surface collects and flows downhill to lower-lying areas.

More than 1,300 people die each year in the US from cold-related causes. This is substantially higher than the average of 175 heat-related deaths each year. It should be noted that a significant number of cold-related deaths are not the direct result of freezing conditions. Many are due to illnesses or diseases that are exacerbated by severe cold, such as heart attacks, strokes, and pneumonia. Approximately 70% of weather-related fatalities in Michigan are attributed to exposure to the cold (according to the NWS).

3.2.8 Flooding (fluvial, pluvial, and shoreline)

On average, water inundation causes more documented natural disaster damage in Michigan than any other factor. Inland flooding is typically classified as either fluvial or pluvial. Fluvial flooding refers to floods associated with rivers and water bodies overflowing. Early flood analysis often focused on floodplain mapping of major rivers or their tributaries, which are known to flood with predictable seasonal water fluctuations. Shoreline flooding along the Great Lakes, which is caused by either persistent high-water levels or sudden storm surges, will also be addressed.

Pluvial flooding, on the other hand, generally refers to flooding not associated with river or water bodies and is often driven by rain collecting in low-lying areas faster than it can soak into the ground. While this can occur in rural areas, pluvial flooding is frequently linked to overwhelmed stormwater systems in cities. Pluvial worsened by failures in man-made water systems, including inadequate or leaky pipes, missing backflow preventers, clogged drains, or poor planning and design standards.

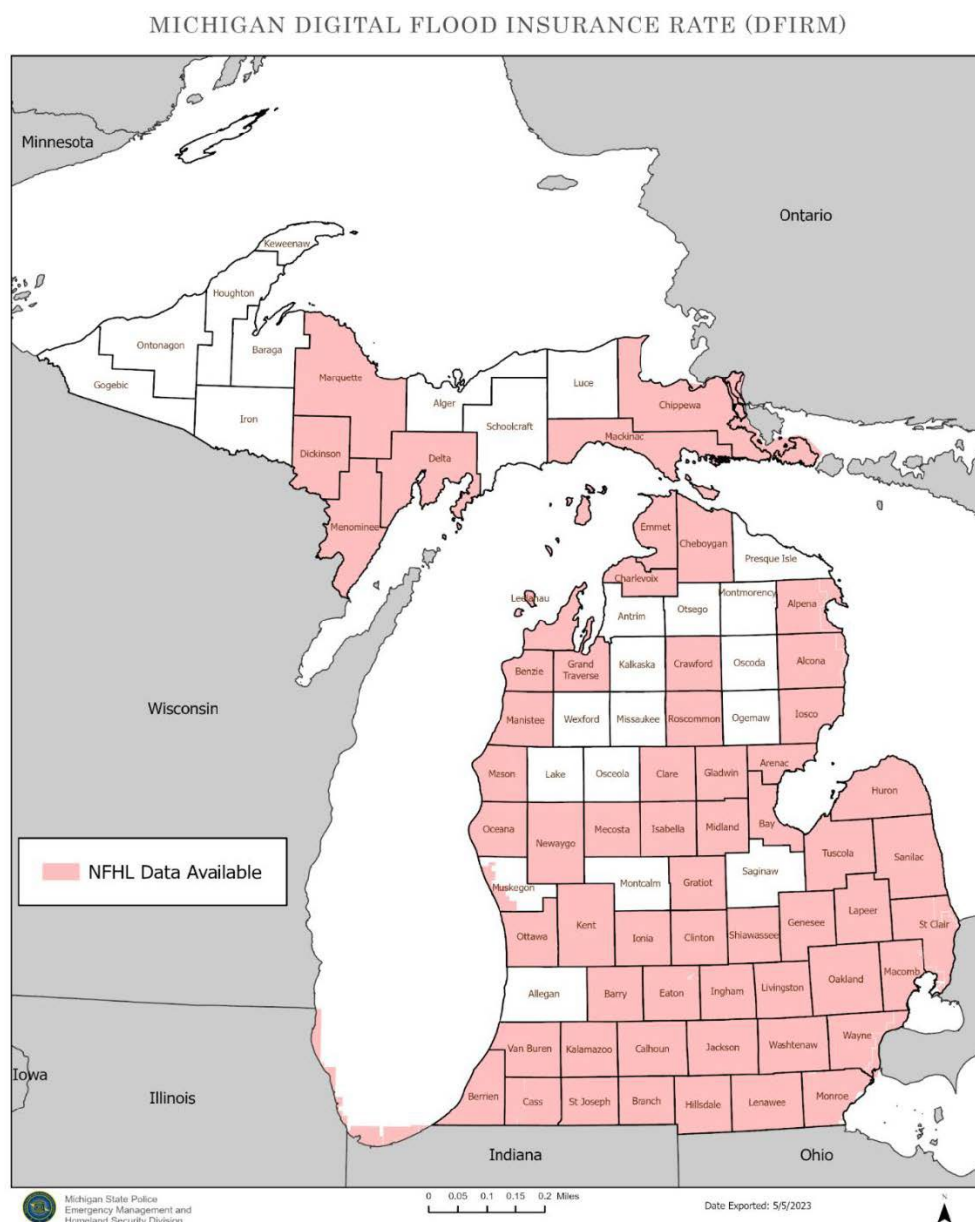
Floods may damage key facilities, either due to the physical impacts of water or debris hitting buildings or from water inundation (including into basements). Bridges and roads may be washed out. Electrical power may be directly affected or turned off for safety reasons. Sewer pumping and lift stations may go offline during a power or generator failure. Associated mudslides, erosion, and subsidence may temporarily or permanently alter land characteristics in a manner that injures people or damages infrastructure. Floodwaters in urban or polluted areas tend to be contaminated with hazards such as chemicals and roadway residues. Agricultural areas contain fertilizers and pesticides. The bodies of drowned livestock or other animals may rot. Public health emergencies may result from stagnant or contaminated water due to diseases (including from vector proliferation, such as mosquitoes) or hazardous materials.

The following map highlights areas where digitized Flood Insurance Rate Maps (FIRM) are available. Many map products use data from FEMA's National Flood Hazard Layer (NFHL)



and legends associated with the principles of Base Flood Elevation (BFE). A given BFE associated with a 100-year flood carries a 1% chance per year of flooding to the designated BFE level. For example, if a BFE is 365 feet and a structure's first floor is 363 feet above sea level, then a 100-year flood would be expected to create floodwaters that are two feet over the ground floor of that structure. The FEMA models for flooding divide these events into different degrees of severity based on their likelihood of annual occurrence. A few inches of water may be a "10-year" event in one area, but a "100-year" event somewhere else. Other time horizons exist, such as a 500-year floodplain. Please note, some flood studies were done decades ago and may no longer be accurate.

Figure 10: Michigan Digital Flood Insurance Rate Map (DFIRM)

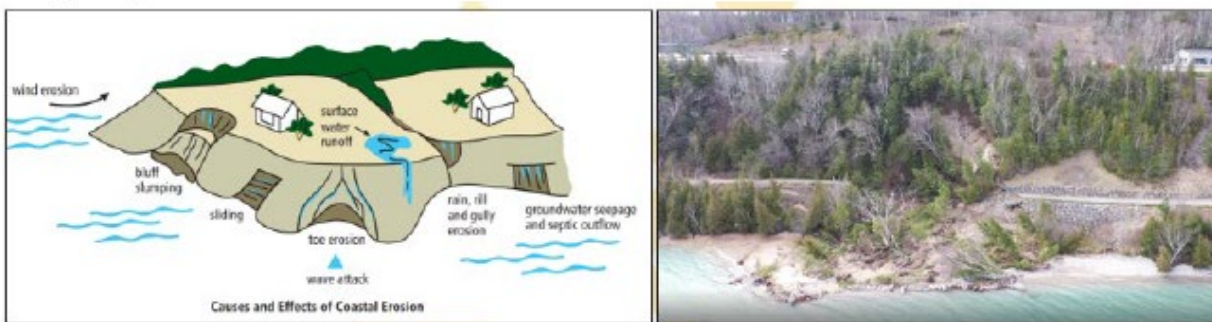




Surrounded by the Great Lakes, Michigan has the longest freshwater coastline in the world. Fluctuating water levels and waves constantly affect its shoreline communities. Storm surges and coastal erosion can devastate buildings, roads, and other infrastructure during severe weather or more slowly over longer periods of time. Rough waters may damage property and put human life at risk, capsizing boats and creating rip currents.

According to data from the Storm Event Database, a total of 46 significant and impactful flood events were observed on the shores of the Great Lakes between 1996 and 2022 (averaging slightly less than two per year). While such flooding events occur every month, they are most common during the spring, early summer (April, May, June), and fall (October and November).

Figure 11: Slope Failure in Petoskev, MI



(source: USACE Living on the Coast booklet; picture: slope failure in Petoskev, MI)

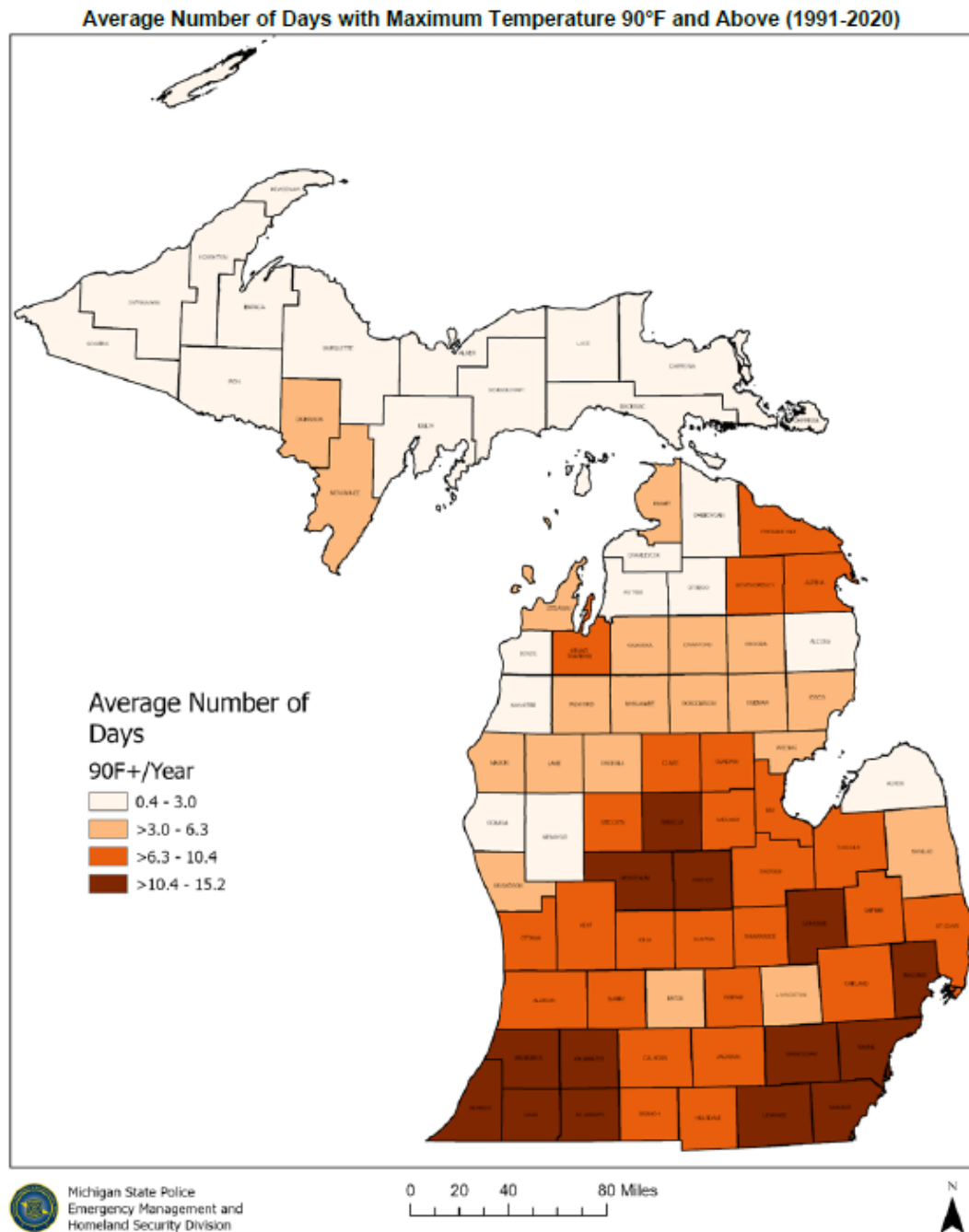
3.2.9 Extreme Heat

Extreme heat typically occurs in Michigan from May to September and is generally marked by temperatures above 90°F. These high temperatures are usually well forecasted but can sometimes be so extreme or prolonged that they still jeopardize human life.

Prolonged high temperatures, often called “heat waves,” occur in every part of the state. Counties in the southern half generally have a higher frequency for these events, with urban areas often seeing relatively higher temperatures due to heat-absorbing materials (e.g., concrete, asphalt, tar, and glass). Record temperatures generally range from 101°F to 111°F and fall within NWS “Extreme Caution” (90-104°F) and “Danger” (105-129°F) categories. There are some regional patterns within the state, with latitude having an obvious impact. The proximity to the Great Lakes is another consideration, with lower record temperatures being observed in areas within a mile or two of shorelines. For most areas of the Lower Peninsula more than a few miles inland, the extreme temperatures are in the 115-120°F range. Upper Michigan is generally lower (100-110°F).



Figure 12: Average Number of Days with Maximum Temperatures Map



According to the NWS, an average of 168 deaths per year in the US were attributable to extreme heat over the 30-year period from 1993 to 2022. The Michigan Department of Health and Human Services (MDHHS) estimates between one and five deaths annually due to extreme heat.



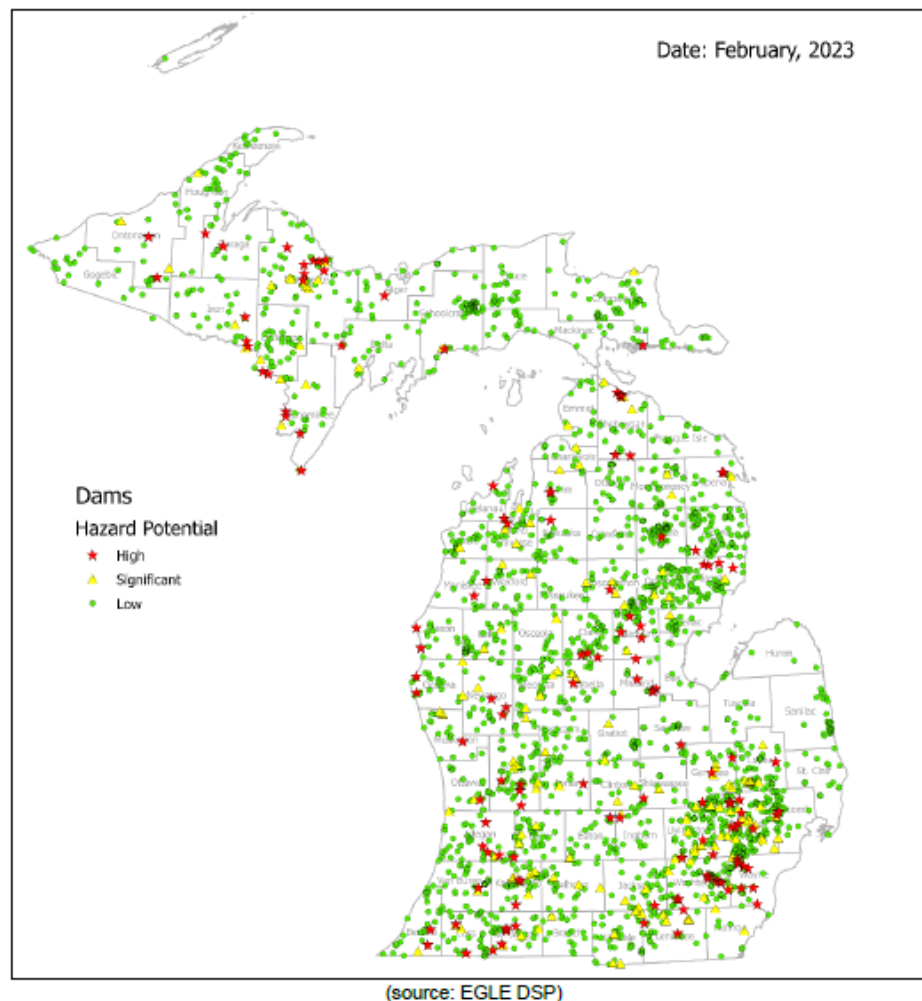
3.2.10 Dam and Levee Failure

Many of Michigan's first dams were relatively small structures related to gristmills and older industries, remnants of which may still exist. The late 19th Century also saw private hydroelectric efforts upon waterways. As many dams aged, changing economics led to some being abandoned. Rebuilding aged dams is not economically feasible for many owners, even if they still generate income. The costs and consequences of removing any dam can be substantial.

The National Inventory of Dams has roughly 92,000 dams in its database with an average age of 61 years. The majority of these dams are "low hazard" (see below), but about 17% are "high hazard". EGLE has documented approximately 304 dam failures in Michigan between 1888 and 2020.

The locations and categories of Michigan-regulated dams are shown below. High-hazard potential dams are listed by county later in this chapter.

Figure 13: Hazard Levels for Dams Map



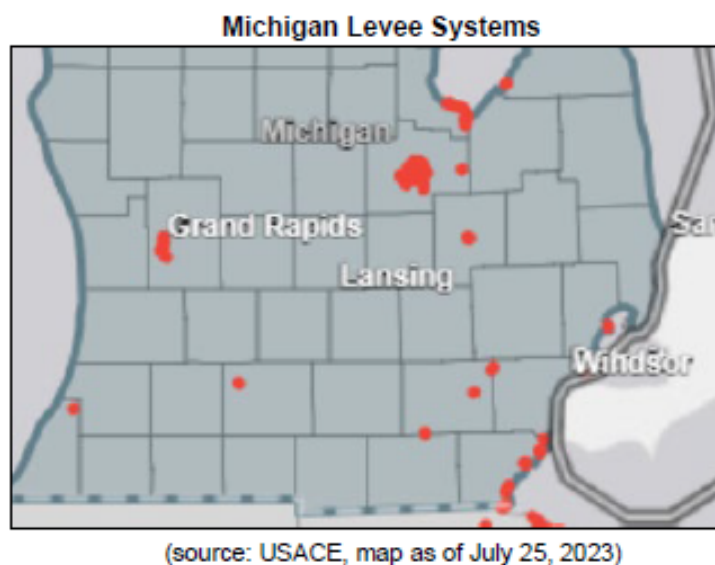


Dam risks in Michigan vary widely, with an average of two failures per year, mostly involving small impacts to rural areas. While none of the 304 recorded dam failures in Michigan resulted in massive loss of life, property damage from larger events can still be significant. The 2018 and 2023 Michigan Infrastructure Report Cards from the American Society of Civil Engineers rated Michigan's dams a C-, highlighting over \$225 million needed to address aging dams. Approximately 12% of Michigan dams have a high or significant hazard potential rating. About 67% of its dams are over 50 years old, and 271 dams are over 100 years old. As of July 2023, the average age of all Michigan dams in the NID database is 79 years.

The National Levee Database indicates thirteen Michigan counties with levee systems (including floodwalls): Bay (7), Berrien (1), Calhoun (2), Genesee (3), Huron (2), Kent (5), Lenawee (1), Macomb (1), Monroe (5), Saginaw (21), Tuscola (1), Washtenaw (2), and Wayne (7). Some levee systems share political borders, leaving the official state count at 56 with an average age of 36 years.

Some of these are USACE levee systems, with the remaining locations indicating non-federal ownership locally constructed, operated, and maintained. A downtown Grand Rapids floodwall has the largest estimated consequences from failure. The database continues to be updated, and information should be confirmed when used for local planning purposes.

Figure 14: Michigan Levee Systems Map



3.2.11 Wildfire

Wildfire is commonly associated with forests but can be broadly defined as any unplanned or uncontrolled fire in areas dominated by combustible vegetation. This includes grasslands, bushlands, and mixed ecosystems, although swamps and rocky areas may act

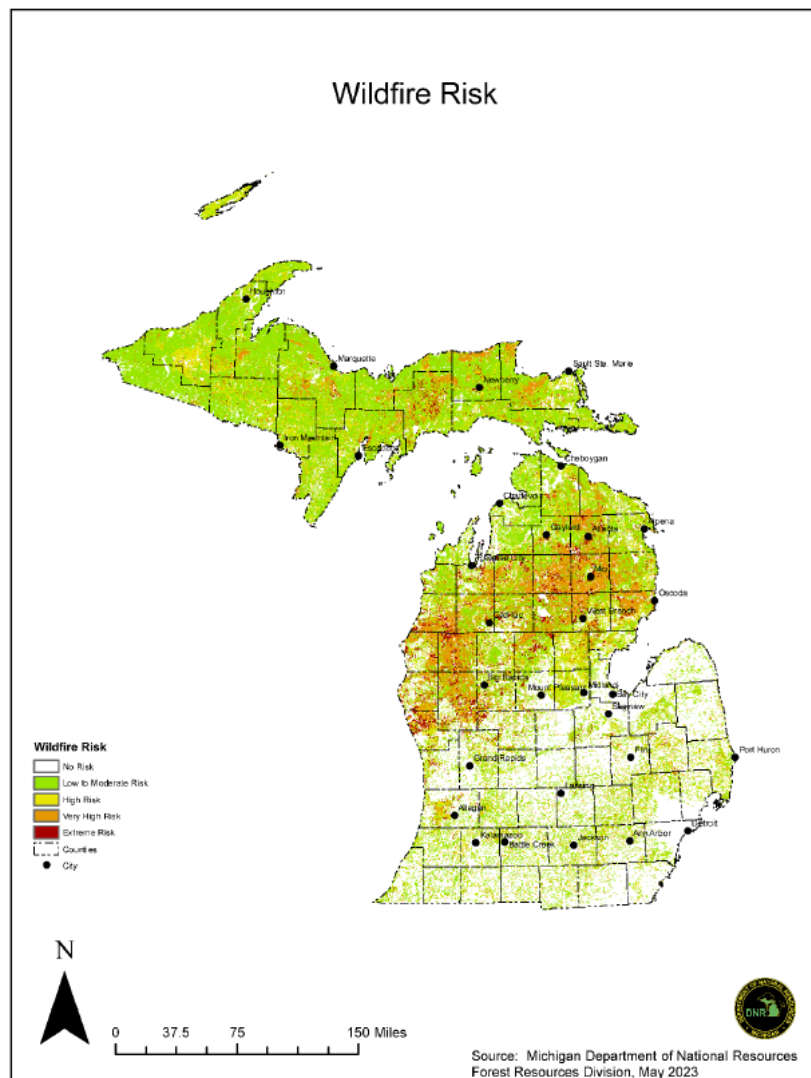


as natural firebreaks depending on seasonal and other conditions. Factors such as timber type, drought, dead wood, and high winds or temperatures contribute to wildfire risk. Croplands and structures may be affected depending on the fire's spread. While wildfires can be a natural phenomenon (e.g., caused by lightning), human activity may also ignite them directly or indirectly.

Michigan has nearly 4 million acres of official state forest land that sees management practices such as harvesting and replanting. Forests cover roughly 53% of Michigan's total land area (roughly 20 million acres).

A statewide wildfire risk map from the Department of Natural Resources (DNR) is included below.

Figure 15: Wildfire Hazard Risk Map





3.3 Mission, Goals, and Objectives Defined in the HMP

3.3.1 Mission

The mission of the Michigan State Hazard Mitigation Plan is to reduce or eliminate long-term risks to people and property from natural disasters. This involves identifying risks and vulnerabilities associated with natural disasters and developing strategies to mitigate these risks. The plan aims to enhance community resilience through education, planning, physical improvements, early warning systems, and coordination of resources.

3.3.2 Goals

The MHMP has four broad thematic goals that drive the objectives of the plan. The goals are as follows:

- Goal #1: Prioritize Life Safety
- Goal #2: Reduce Property Damage
- Goal #3: Collaborate with Increased Stakeholder Knowledge
- Goal #4: Execute Mitigation-Related Programs and Administrative Duties

3.3.3 Objectives

The MHMP uses state capabilities to address the risks and vulnerabilities as identified and prioritized throughout the plan. These have resulted in a list of specific mitigation objectives for the 2024 MHMP. The objectives are as follows:

- Goal #1: Prioritize Life Safety
 - 1.1 Resilient health and safety in the face of climate change, including in anticipation of an increased frequency of extreme heat.
 - 1.2 Promote and develop public alert and early warning capabilities as part of integrated safety systems (including safe room facilities).
 - 1.3 Mitigate the risk and consequences of dam failure through the assessment, review, and updating of high hazard potential dams (HHPD) and associated maps, plans, and programs.
 - 1.4 Provide the owners and operators of Critical Infrastructure/Key Resources (CIKR) with data so that they and other stakeholders can take appropriate mitigative measures.
- Goal #2: Reduce Property Damage



- 2.1 Acquire/remove, relocate, or elevate structures that currently occupy floodplains or that have otherwise suffered from repetitive flood losses.
 - 2.2 Position the state to take proactive climate-related mitigation measures prior to facing significant property loss.
 - 2.3 Assist local communities and fire departments with education efforts, wildfire planning, and mitigation projects statewide.
 - 2.4 Ensure building requirements are consistent with minimum National Flood Insurance Program (NFIP) standards.
 - 2.5 Implement agricultural and environmental assurance programs to reduce onsite environmental risks and to mitigate against potential runoff.
 - 2.6 Collaborate with the United States Army Corp. of Engineers (USACE) on a southeast Michigan Pluvial Flood Study, done in conjunction with the Great Lakes Water Authority (GLWA).
- Goal #3: Collaborate with Increased Stakeholder Knowledge
 - 3.1 Collaborate with and increase the knowledge of emergency managers, urban/regional planning organizations, and other relevant stakeholders about hazard mitigation planning principles, projects, and opportunities.
 - 3.2 Utilize a FEMA Integration Team (FIT) position to partner with MSP/EMHSD to increase the knowledge of emergency managers, urban/regional planners, and the general public in accordance with objective 3.1.
 - 3.3 Promote community resilience by advancing mitigation education and resource partnerships.
 - Goal #4: Execute Mitigation-Related Programs and Administrative Duties
 - 4.1 Maintain and strengthen partnerships with state agencies and other stakeholders as appropriate as it relates to collaboration with the Michigan Hazard Mitigation Plan (MHMP).
 - 4.2 Continually revise and enhance the MHMP to ensure it remains current, effective, and in compliance with the federal Disaster Mitigation Act of 2000 and the Emergency Management Accreditation Program (EMAP).
 - 4.3 Encourage participation in mitigation grant programs throughout the state.
 - 4.4 Strengthen local hazard mitigation planning throughout the state.
 - 4.5 Participate in new FEMA grants, loan programs, and initiatives as introduced.
 - 4.6 Work to establish a new, state-funded hazard mitigation grant program, administered by MSP/EMHSD.



3.4 Overview

Table 25: CDBG-DR Mitigation Set-Aside Needs Assessment

CDBG-DR Mitigation Set-Aside Needs Assessment			
Categories Affected	A Total Need	B Financial Assistance Budgeted and Obligated	A-B Unmet Need
Housing	\$379,321,240	\$95,419,279	\$283,901,961
Infrastructure	\$10,362,507	\$0	\$10,362,507
Economic Development	\$20,223,846	\$9,054,875	\$11,168,971
Total	\$409,907,593	\$104,474,154	\$305,433,439



4

Connection of Proposed Programs and Projects to Unmet Needs and Mitigation Needs



4. Connection of Proposed Programs and Projects to Unmet Needs and Mitigation Needs.

4.1 CDBG-DR Program Allocation and Funding Thresholds

Table 26: CDBG-DR Program Allocation and Funding Thresholds

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation	Estimated % to CDBG-DR Mitigation Set-aside	Estimated % to Expended in HUD and Grantee MID Areas	Estimated % to LMI
Administration	\$ 2,178,500	5%	N/A	N/A	N/A
Planning	\$ 6,535,500	15%	100%	80%	N/A
Housing	\$0	0%	0%	0%	0%
Infrastructure	\$34,856,000	80%	15%	100%	70%
Economic Revitalization	\$0	0%	0%	0%	0%
Public Service (15% cap)	\$0	0%	0%	0%	0%
Exempt Public Service (no cap)	\$0	0%	0%	0%	0%



CDBG-DR Mitigation Set-Aside	\$ 0	0%	0%	0%	0%
Total	\$43,570,000	100%	15%	100%	70%
% of Total	100%	100%	100%	90%	70%

A comprehensive needs assessment has been completed to identify the impacts, long-term priorities, and recovery goals for the \$43,570,000 in CDBG-DR funding awarded in response to the 2023 Severe Storm and Tornado. The assessment incorporates housing, infrastructure, and economic recovery data across eligible counties.

Key findings include:

- Housing accounts for approximately 74% of all unmet needs.
- 65% of water-related damage affected residential properties.
- Basement flooding emerged as a critical issue, linked to mold growth, electrical hazards, and health risks, particularly in LMI households.

To address these issues, the MEDC proposes investing in infrastructure improvements on both public and private property. Under HCDA Section 105(a)(2), the plan supports connecting homeowners to newly constructed or repaired sewer, wastewater, and water systems through infrastructure activities connected to public infrastructure. These upgrades are essential to prevent future flooding and enhance overall resilience.

Historical data reinforces this approach: the Great Lakes Water Authority's 2021 Independent Investigative Team Report, following the floods of 2020 (DR-4547), concluded that infrastructure upgrades are key to solving flooding and sewage backup challenges. However, lateral cleaning and upgrades ranging from \$20,000 to \$30,000 per property can be cost-prohibitive for individual property owners, especially for LMI Households.

By targeting the root causes of flooding and increasing access to infrastructure support, this plan addresses damage to the sewer system caused by the disaster event while also offering long-term mitigation benefits for communities, cost-effective recovery, and improved quality of life for affected residents. Upgraded systems enhance overall community resiliency, ensuring that all area residents are left better prepared in the face of future disasters. The Great Lakes Water Authority's report indicates that homeowners who want to access storm water improvements to decrease repeat flooding events might



be unable to afford the costs, especially those who are LMI. Ultimately, greater homeowner participation will lead to stronger community resiliency and provide a pathway for individual recovery. The MEDC remains committed to updating the needs assessment, engaging with disaster-impacted communities, and reassessing assistance requirements as recovery efforts evolve.

4.2 Displacement of Persons and Other Entities

To minimize the displacement of persons and other entities that may be affected by the activities outlined in this Action Plan, the MEDC and its subrecipients will coordinate with applicable agencies and entities to ensure that all programs are administered in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act (URA) of 1970, as amended (49 CFR Part 24) and Section 104(d) of the Housing and Community Development Act of 1974, as amended, and implementing regulations at 24 CFR Part 570.496(a).

These regulations and requirements apply to both property owners and tenants if proposed projects cause the displacement of persons or other entities. The MEDC will include detailed policies and procedures for when proposed programs or projects could potentially cause the displacement of people or other entities. The MEDC will also budget to cover the costs involved in implementing those policies and procedures. Currently, it is not anticipated that the proposed programs will cause displacement.

The MEDC will draw on existing Residential Anti displacement and Relocation Assistance Plans (RARAPs) and will adapt them to meet the URA, Section 104(d), and related waivers and the alternative requirements specified in the Consolidated Notice. The adapted RARAP also will be updated prior to implementing any activity with CDBG-DR grant funds.

CDBG-DR funds may not be used to support any federal, State, or local projects that seek to use the power of eminent domain, unless eminent domain is employed only for public use. None of the currently planned projects under this Action Plan contemplate the use of eminent domain.

Any use of funds for mass transit, railroad, airport, seaport or highway projects, as well as utility projects which benefit or serve the general public (including energy-related, communication-related, water-related, and wastewater-related infrastructure), other structures designated for use by the general public or which have other common-carrier or public-utility functions that serve the general public and are subject to regulation and oversight by the government, and projects for the removal of an immediate threat to public health and safety or brownfields as defined in the Small Business Liability Relief and Brownfields Revitalization Act (Pub. L. 107-118), shall be considered public use for purposes of eminent domain.



5

Allocation and Award Caps



5. VI. Allocation and Award Caps

5.1 General Exception Criteria

Maximum awards amounts, where applicable, are identified by programs in the sections below. The MEDC will make exceptions to the maximum award amounts when necessary to comply with federal accessibility standards or to reasonably accommodate a person with disabilities.

At the time of submission, maximum award amounts were established for all required programs, and the MEDC does not anticipate any changes. Should data or program circumstances warrant a future change in the maximum award amount, the MEDC will follow the process for completing a substantial amendment outlined in the Michigan Economic Development Corporation's CDBG-DR Citizen Participation Plan and as required by HUD before awarding funds using the revised amount.

5.2 Administration

Five percent of the overall grant will be used for administration of the grant, including compliance monitoring, performance tracking, grant reporting, and general administrative activities.

Table 27: Grantee Administration Activity Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation
Administration Total:	\$2,178,500	5%
Total	\$43,570,000	100%



5.3 Planning

Table 28: Grantee Planning Activities Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation
2023 Planning	\$6,535,500	15%
Planning Program Total:	\$6,535,500	15%

5.3.1.1 Eligible Activities:

HCDA Section 105(a) 8,9,12,16 and 21; applicable waivers identified in the Allocation Announcement Notice (90 FR 4759), Universal Notice (90 FR 1754) and Memorandum 2025-02

Program eligible activities will be divided into two categories: Hazard Mitigation Planning and Resilience Planning.

Examples of eligible Hazard Mitigation planning activities are inclusive of, but not limited to the following:

- Updating or amending the state hazard mitigation plan
- Updating, developing, and providing cost share for hazard mitigation plans to those entities identified by FEMA as eligible applicants as defined by 44 CFR 201.2.

The state and local hazard mitigation plans must meet all the criteria and requirements set forth in 44 CFR 201.4 and 44 CFR 201.6, respectively.

Examples of eligible Resilience Planning activities are inclusive of, but not limited to the following:

- Development of statewide and local mitigation studies
- Development of Long-Term Recovery Plans
- Development of Community Wildfire Protection Plans (CWPP)
- Cost sharing for FEMA-approved mitigation projects, such as CWPP, Flood Mitigation Assistance (FMA) Plans, and mitigation studies, including Hydrologic and Hydraulic studies
- Development and adoption of comprehensive plans that integrate hazard mitigation plans and other mitigation concepts



- Development and approval of housing studies and housing plans that integrate hazard mitigation plans and other mitigation concepts
- Development and adoption of land use plans and/or studies that integrate hazard mitigation plans and other mitigation concepts
- Development and approval of site development plans and/or studies that integrate hazard mitigation plans and other mitigation concepts
- Development and approval of economic development plans and/or studies that integrate hazard mitigation plans and other mitigation concepts
- Development, adoption, and implementation of zoning ordinances based on comprehensive plans, land use plans, and site development plans
- Development, adoption, and implementation of flood damage prevention ordinances
- Development, adoption, and implementation of building codes that meet or exceed the 2021 Michigan Building Codes which are based on the 2021 International Building Codes (IBC)
- Development, adoption, and implementation of energy codes that meet or exceed Michigan's current Energy Code Standards which are based on the 2021 International Conservation Code (IECC)

The MEDC reserves the right to review and potentially approve any proposed activity that is not explicitly listed under either of the two Planning categories. However, the proposed activity must incorporate a mitigation measure(s).

5.3.1.2 National Objective:

Not applicable to planning programs.

5.3.1.3 Lead Agency and Distribution Model:

This program will be administered by the MEDC. Funds for hazard mitigation plans will be distributed to eligible county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a non-profit under State law), regional or interstate government entity, or agency or instrumentality of a local government, authorized Tribal organization, and any rural community, unincorporated town or village, or other public entity through a competitive process. Funds for resiliency plans will be distributed to eligible counties, municipalities, cities, towns, townships, and villages.

The applicant may submit an application to the MEDC for any activity which they are eligible for. Selected project applications will be funded in the form of a grant for eligible applicants only. Payments will be made on a reimbursement basis, and program policies and procedures will detail reimbursement requirements.



5.3.1.4 Program Description

The MEDC will partner with the Michigan State Police Office of Emergency Management and Homeland Security (OEMHS) to provide CDBG-DR funds to assist with updating or amending the State of Michigan Hazard Mitigation Plan, statewide planning studies, and to provide funds for the development, updating, and cost sharing of local hazard mitigation plans. Additionally, the MEDC may partner with other state agencies and organizations to ensure priorities relating to eligible planning activities align properly with the parameters established by the governing authorities responsible for administering and regulating those programs. The Planning Program will provide non-competitive grants to communities within the designated HUD MID and State MID areas.

To further enhance the concepts of planning and resiliency, the Planning Program will be divided into two categories: mitigation planning and resiliency planning. Collectively, the Planning Program will not only emphasize the benefits of mitigation planning by integrating with traditional planning such as comprehensive, land use, site development planning, housing studies, and housing plans, but will also incorporate resiliency concepts that align with mitigation measures. This will include the development and integration of mitigation studies (statewide and local) as well as the promotion and funding to develop or update floodplain ordinances, zoning ordinances, building codes, and energy codes.

The MEDC anticipates facilitating a more comprehensive planning program with the inclusion of the following plans as a part of its resiliency planning category:

- Emergency Operations Plans
- Evacuation Plans
- Continuity of Operations Plans (COOP)

Although these plans are by design considered a part of preparedness and response efforts, providing an opportunity for communities to develop or update their current plans will increase their capacity and capability to effectively protect their communities. The MEDC will also provide cost sharing for these plans as well.

5.3.1.5 Lead Agency for Environmental Reviews

The MEDC will complete all environmental responsibilities per 24 CFR 58.4(b)(2) and 24 CFR 58.18.



5.3.1.6 Eligible Geographic Areas

Eligible locations include jurisdictions within:

- HUD-identified MID Counties: Macomb, Monroe, Oakland
- State-identified MID Counties: Eaton, Ingham

In certain cases, projects may need to extend beyond designated geographical boundaries, including areas outside of a defined MID area, to effectively achieve programmatic goals. For instance, flood mitigation and management projects often require Hydrologic and Hydraulic (H&H) studies to analyze and manage water flow. It is critical to assess whether implementing such projects could negatively impact neighboring communities located upstream or downstream of the project site during severe weather events. To ensure comprehensive project execution, it may be necessary to allocate funding to these adjacent non-MID communities.

Per FR-6489-N-01, III.D. Waivers and Alternative Requirements Related to Eligible Activities. D.2. MID areas, those non-MID areas may be eligible. The regulatory requirement for this provision states as follows:

Grantee expenditures for eligible unmet needs outside of the HUD-identified or grantee-identified MID areas are allowable, provided that the grantee can demonstrate how the expenditure of CDBG-DR funds outside of the MID areas will address unmet needs identified within the HUD-identified or grantee-identified MID area (e.g., upstream water retention projects to reduce downstream flooding in the HUD-identified MID area).

5.3.1.7 Other Eligibility Criteria:

The applicant may submit an application for any activity that they are eligible for. If an applicant applies for a mitigation planning activity, the application would be for plan development, plan update or cost sharing. Applications that propose to only update individual sections and/or individual planning participants' sections that are part of a multi-jurisdictional hazard mitigation plan will not be considered.

There are a variety of activities allowed under the resiliency planning category. Applicants are not required to engage in all eligible activities. The applicants can engage in activities they are interested in pursuing. Eligible applicants must be a unit of local government, Indian tribe, or any other entity that has the legal authority to adopt and enforce the code, ordinance, or plan for which funding was requested.

Other eligible criteria are as follows:

- Applicants submitting applications for any activity falling under the hazard mitigation planning activities must be considered a local government as defined by FEMA's definition of a local government per 44 CFR 201.2.
- Applicants submitting applications for any activity falling under the resiliency planning activities must be a unit of local government, Indian tribe, or any other



entity that has the legal authority to adopt and enforce the code, ordinance, or plan for which funding was requested.

- Applicants must demonstrate the capacity to administer grant funds and complete the selected project on time or describe how they will procure assistance to do so.

5.3.1.8 Maximum Amount of Assistance:

The minimum assistance available is \$20,000 and the maximum assistance available is \$500,000. Projects that may exceed the maximum allowable assistance amount will be subject to individual review and evaluation, with consideration given only upon the submission of adequate justification.

5.3.1.9 Maximum Income of Beneficiary:

Beneficiary incomes are not a requirement of planning programs.

5.3.1.10 Mitigation Measures:

Plans and studies will identify hazards, assess community needs, and describe community-wide strategies and solutions for reducing risks associated with natural disasters.

5.3.1.11 Funding Criteria

The MEDC supports the development of local mitigation strategies that align with their goals to reduce long-term disaster risk, promote resilient infrastructure, and enhance community capacity for future hazard events. The MEDC will make available funding opportunities for those designated and recognized as HUD MID and/or State MID. Preference will be given to the eligible entities that necessitate plans or studies required in phased projects (i.e., H & H Study, Housing Study). All other applications will be processed on a first-come, first-served basis.

To be eligible for selection, applicants must also:

- Submit a complete application
- Hazard Mitigation Plans must be two years from their official expiration date
- Must be a local government as described in subsection *1.11.1.7 Other Eligibility Criteria*
- Integrate mitigation measures into all activities

5.3.1.12 Reducing Impediments for Assistance:

The MEDC will coordinate regularly with its state partners to discuss the best course of action for dissemination of program information. Outreach will also be conducted to inform eligible applicants of the established criteria and to extend the opportunity to apply for funding, contingent on the eligibility of their proposed activities.



5.4 Infrastructure Programs Overview

Table 29: Grantee Infrastructure Programs Overview

Eligible Cost Category	CDBG-DR Allocation Amount	% of CDBG-DR Allocation for LMI Benefit
Public Infrastructure and Public Facilities Program	\$34,856,000	70%
Infrastructure Program Total:	\$34,856,000	70%

5.4.1.1 Eligible Activities:

The following activities may be undertaken in accordance with HCDA Section 105(a) 1, 2, 4, 9, and 12, as well as any applicable waivers outlined in the Allocation Announcement Notice, Universal Notice, and other relevant guidance:

- Acquisition, construction, reconstruction, or installation of public works, community facilities, and site or other improvements.
- Infrastructure enhancements that support hazard mitigation and address critical needs such as:
 - Flood protection
 - Drainage system upgrades
 - Sewer and water line repair or replacement

These activities may occur on both public and private property, depending on project scope and eligibility.

Public Assistance (PA) Match

- Local portion of the non-federal share match of FEMA-approved PA Categories C-G; Roads and Bridges, Water Control Facilities, Public Buildings and Contents, Public Utilities, and Parks, Recreational, and other Facilities.
- Hazard Mitigation Grant Program (HMGP) Match
- Must be an infrastructure project
- Local portion of the non-federal share match of FEMA-approved HMGP project



Stand-Alone Projects

- Can fund 100% of project costs
- Denied PA Projects (Categories C-G) and HMGP projects are eligible
- Projects must be consistent with local and regional plans
- Projects generate a measurable resilience benefit

Ineligible activities

- Buildings for government use
- Purchase of construction equipment
- Maintenance and Operation

5.4.1.2 National Objective:

Assistance provided under this program will meet the national objectives of benefiting low- and moderate-income areas (LMA), low- and moderate-income limited clientele (LMC), or addressing an urgent need.

HUD waived the urgent need national objective criteria in section 104(b)(3) of the HCDA and established the following alternative requirement: any CDBG-DR grantee using the urgent need national objective may use it for a period of 36 months after the applicability date of the grantee's Allocation Announcement Notice.

HUD is waiving 24 CFR 570.484 and 24 CFR 570.200(a)(3) solely to establish an alternative requirement for CDBG-DR grantees undertaking infrastructure projects. Under this provision, grantees may calculate the benefit to low- and moderate-income (LMI) persons by applying the percentage of LMI residents in the service area to the total cost of the infrastructure activity (including both CDBG-DR and non-CDBG-DR funds). However, the amount credited toward meeting the overall benefit requirement may not exceed the total amount of CDBG-DR funds committed to the activity.

5.4.1.3 Lead Agency and Distribution Model:

The MEDC will utilize subrecipients (units of local governments and quasi-government entities) for implementation of this program. The MEDC will use competitive funding rounds to award funds to eligible projects being completed by eligible local governments and/or entities. The MEDC will post the funding rounds and publish the awards on: <https://www.miplace.org/cdbg-dr>.

5.4.1.4 Program Description:

The Public Infrastructure and Public Facilities Program will provide funding to eligible projects located within HUD- and State-identified MID counties. The program's purpose is



to address unmet recovery and mitigation needs related to general infrastructure and public facilities resulting from declared disasters.

Grant funds will support the design and construction of infrastructure and community facilities that directly benefit individuals and enhance overall community resilience. Projects must contribute to the revitalization of disaster-affected areas by directly or indirectly reducing the risk of loss of life or property from current and future natural hazards.

The program encompasses a broad range of eligible CDBG-DR infrastructure activities, including but not limited to:

- Streets and roadways
- Water and sewer systems
- Stormwater drainage and flood protection
- Underground utilities
- Public facilities repair/improvement
- Mitigation measures

Program guidelines will further define project eligibility criteria. All funded activities must address the remaining direct and indirect impacts of the disaster within HUD- and State-designated MID areas. Projects are strongly encouraged to include integrated mitigation measures aimed at reducing risks from future hazards.

Given the widespread flooding that primarily affected residential areas, it is expected that many funded projects will focus on the repair, installation, or enhancement of sewer lines, improved stormwater management systems, and related flood mitigation infrastructure.

Additionally, the program will support the installation and/or replacement of sanitary sewer laterals, water service lines, and related mitigation measures that are located on private properties impacted by the flooding. These improvements are essential to the restoration and long-term functionality of community wastewater infrastructure, ensuring continued access to safe drinking water and sanitary living conditions.

All households connected to the main public water and sewer line systems replaced by the program will be eligible for water and sewer lines and lateral replacements. Improvements also include redirecting the water flow of downspouts connected to the sewer system. Although these improvements occur on private property, they are directly connected to public systems and provide benefits that extend to the broader community. As such, these activities mitigate future flooding risks by supporting flood prevention, reducing sewer backup risks, and contributing to improved environmental health outcomes.

This initiative is categorized under infrastructure recovery and satisfies the national objectives of benefiting low- and moderate-income persons or meeting an urgent community need.



5.4.1.5 Lead Agency for Environmental Reviews

Subrecipients will complete all environmental responsibilities per 24 CFR 58.4(b)(2) and 24 CFR 58.18.

5.4.1.6 Eligible Geographic Areas:

Eligible locations include jurisdictions within:

- HUD-identified MID counties: Macomb, Monroe, and Oakland
- State-identified MID counties: Eaton and Ingham

5.4.1.7 Other Eligibility Criteria:

The application process will require applicants to demonstrate how their projects address unmet and/or mitigation needs and how funds will be used equitably in their communities.

Applications for funding may be evaluated on, but not limited to, the following project components:

- Amount of project detail provided and tieback to the disaster and community need
- Project schedule and timeliness of expenditures
- LMI percentage of a project's service area
- Cost reasonableness of the project
- Other funding leveraged for the project
- Project's impact on recovery or mitigation of future disasters
- Project's expanse of benefit that is demonstrated through project service area description, census tract data and coverage map, or computation of LMI percentage benefit
- Plan for long-term operation and maintenance (written agreement)
- Description of how infrastructure investment aligns with other planned federal, state or local capital improvements and infrastructure development efforts

5.4.1.8 Maximum Amount of Assistance Per Subrecipient/Unit of General Government:

The estimated minimum program assistance available is \$1,000,000 and the maximum assistance available is \$5,000,000. Adjustments may be made to the minimum and maximum amounts to ensure completion of projects and implementation of resiliency and mitigation measures.



5.4.1.9 Service Area Determination

In accordance with HUD's waiver permitting a pro rata share approach for service areas with less than 51% LMI residents, grantees must accurately document the percentage of LMI individuals served. Acceptable methods include:

- Utilizing HUD's Low- and Moderate-Income Summary Data (LMISD), or
- Conducting a local income survey based on sound statistical methodology.

A household survey may be necessary if HUD data does not reflect current demographics or if the service area does not align with existing census tract boundaries. When a survey is required, grantees must adhere to guidance outlined in the CDBG Income Survey Toolkit, as well as CPD Notice 24-04 and CPD Notice 14-013.

5.4.1.10 Mitigation Measures:

Eligible projects include those that mitigate, eliminate, or reduce the loss of life or property in the face of current and future natural hazards. Project applications will be required to demonstrate how the projects will be operated and maintained beyond the life of the CDBG-DR grant and how adaptable and reliable technologies are being used to prevent premature failure.

This program is designed to promote sound, sustainable long-term recovery and projects that account for the unique hazards, opportunities, land use restrictions, urban growth boundaries, underserved communities, and disaster impacts within Michigan's impacted areas. Project applications will be required to describe the data and/or planning analysis they will use in their evaluation of hazard risk, including climate-related natural hazards. Projects that are funded with the Mitigation Set-Aside allocation will address a mitigation need, like flooding, identified in the mitigation needs assessment for MID areas. Program policies will provide detailed description of the MIT-set aside process.

5.4.1.11 Funding Criteria

The MEDC has selected funding criteria that best address the disaster-related unmet needs identified in each affected community to ensure timely project completion. A minimum threshold score will be established to ensure high-quality projects are selected. However, an exception to the threshold applies if the applications submitted do not meet the minimum award threshold. In those cases, eligible counties may coordinate with local units of government to aggregate several projects under one application.

The criteria used to evaluate each application and award funds will include, but are not limited to:

- The project will be located in one of the HUD- or State-designated MID areas.
- Projects that meet the LMI national objective criteria.



- There is clear evidence that mechanisms are in place to ensure long-term maintenance of the project.
- The project is ready to proceed.
- The other sources of funding are well documented.
- The budget is comprehensive and reasonable for the project scope.
- Projects that incorporate mitigation activities that address current and future risks.
- The designs and plans demonstrate that future hazards will be mitigated.
- The project is based on engineered plans and cost estimates.

Each project will be evaluated related to the costs and benefits of the infrastructure project. These benefits will not only include recovery but also consider the long-term benefits of protection against future risks.

5.4.1.12 Reducing Impediments for Assistance:

The MEDC will conduct outreach to eligible applicants to ensure they are made aware of the criteria and have the opportunity to apply for funding, provided they have an eligible activity.



6

General Information



6. General Information

6.1 Citizen Participation

The MEDC adhered to the MEDC CDBG Citizens Participation Plan, which meets the federal Citizen Participation Plan requirements. Affected residents were notified of opportunities to participate in the creation of this plan in multiple ways, and public participation was facilitated through an online survey, in-person and virtual meetings and consultations, public hearings, and a public comment period.

6.2 Consultation of Developing the Action Plan

Outreach and Engagement

In the development of this Action Plan, the MEDC consulted with disaster-affected stakeholders, local governments, public housing authorities, State agencies, and other affected parties in the surrounding geographic area. In doing so, the MEDC ensured that the Action Plan was consistent with disaster impacts, comprehensive, inclusive, and reflective of input.

To further understand the impacts of the disaster, the MEDC conducted outreach to impacted local governments and organizations working on recovery efforts in the 2023 impacted areas. The following provides a summary of the responses provided by local officials and emergency managers, collected from the week of April 24, 2025, throughout the drafting of the Action Plan.

Table 30: Consultations

Partners Consulted	Describe Consultation
Federal Partners (FEMA, SBA)	The MEDC reached out to SBA for data pertinent to the disaster to help inform the unmet need analysis.
Local/State Government	51 local governments contacted via email (follow-ups were sent for those who did not respond to the first request). Five local governments met with the MEDC for conversations regarding disaster impacts and the needs of the local communities.
Indian Tribes	N/A



Partners Consulted	Describe Consultation
Nongovernmental organizations	Two non-profits contacted via email (follow-ups sent for those who did not respond to the first request).
State and local emergency management agencies that have primary responsibility for the administration of FEMA funds	Reached out to Michigan State Police Emergency Management & Homeland Security to discuss CDBG-DR funding opportunities.
Agencies that manage local Continuum of Care	Five CoCs contacted via email (follow-ups sent for those who did not respond to the first request).
Public Housing Agencies	13 PHAs contacted via email (follow-ups sent for those who did not respond to the first request).
HUD-approved housing counseling agencies	11 HCAs contacted via email (follow-ups sent for those who did not respond to the first request).

6.2.1.1 Consultation with Local Units of Government

Macomb County

- The most heavily impacted communities were those along the southern border of Macomb County.

Shelby Township

- The Shelby Township Fire Department reported no known damage resulting from the severe weather event in August 2023. According to Werner, who discussed the matter during his emergency management meetings, the only communities identified as being affected were Chesterfield Township and New Baltimore.



Clinton Township

- There is no reported damage related to the 2023 storms.

City of St. Clair Shores

- The City of St. Clair Shores, Michigan experienced some tree damage and instances of basement flooding as a result of the August 2023 storm event. However, no significant costs related to the damage were identified.

City of Warren

- The MEDC staff held two virtual meetings with the City of Warren on June 2, 2025, and June 24, 2025, to discuss the impacts of recent disasters and the city's unmet needs. During these discussions, the City highlighted that the primary remaining unmet needs were related to infrastructure, particularly the sewer systems. These systems frequently experience overcapacity, leading to significant flooding in personal basements and homes during heavy rainfall events.
- The City also expressed interest in flood mitigation planning programs.

City of Eastpointe

- The City reported that they had no remaining unmet needs.

Monroe County

- In the immediate response to post-disaster community needs, countywide municipal teams coordinated essential support services for displaced residents. This included providing emergency shelter, food and emergency food replacement, and clean-up kits for affected homes. Personal care items such as hygiene products and diapers were distributed to families, while gas and transportation assistance helped residents access critical resources. Additionally, support for move-in costs was offered to those unable to return to their homes, ensuring a pathway to recovery and stability. The crisis highlighted gaps in emergency housing support and the urgent need for coordinated and sustained relief efforts.
- The City of Monroe and Frenchtown Township are exploring mitigation efforts.
- Recent consultation with the impacted communities yielded additional information.



City of Monroe

- As of June 2025, neither the City Manager nor Economic Development Director reported any remaining unmet needs.
- During a virtual meeting between the MEDC staff and City of Monroe leadership on July 25, 2025, city leaders stated they will be meeting with the city engineering team to identify infrastructure projects. City staff expressed interest in pursuing stormwater/sewer improvements in the affected areas of their community.
- Sterling Point Apartments Flood: In the aftermath of a severe flood, 36 apartment units were impacted, displacing approximately 100 residents. Despite no structural damage found by the American Red Cross (ARC), tenants faced uncertainty regarding their return as management began cleanup. By mid-September, management issued abrupt 5-day lease termination notices. One displaced mother and her children, unable to secure hotel lodging due to Salvation Army check restrictions, were forced to sleep in their car.

Legal Services intervened, drafting a letter to the landlord to halt unlawful evictions and assisting tenants with restraining orders and template letters asserting their property rights. Multiple agencies provided relief: the Salvation Army offered emergency shelter and hotel stays; ARC operated a temporary shelter and provided case management for 33 units before transitioning support to the Salvation Army. MCOP distributed essentials and offered move-in and repair assistance, while DHHS provided emergency food replacement and move-in cost aid through the State Emergency Relief program.

Berlin Township (Newport, 48166)

- Township Supervisor reported that the township and unincorporated Newport had no remaining unmet needs as of June 2025.
- Frenchtown Villa Mobile Home Park Flood: Following a severe flood, 13 homes were damaged. Outreach efforts successfully contacted seven homeowners, while attempts to reach the remaining six continued. The American Red Cross conducted follow-up casework, and approximately \$9,850 was spent on relief efforts in the affected area.

Wayne County

- The most heavily impacted communities were those along the northern border of Wayne County.



City of Flat Rock

- A severe rainstorm dropped approximately six inches of rain over two days, overwhelming the interceptor pipe that channels sewage to the South Huron Valley Utility Authority (SHVUA) plant in Brownstown, MI. From 4:20 AM to 7:10 PM on August 24, 2023, the city exceeded its sewage flow capacity. The SHVUA plant, which typically processes 7-8 million gallons daily, handled about 136 million gallons over three days using only primary treatment. Despite all six pumps and city lift stations operating at full capacity, sewage backups occurred.

In response, the City leveraged prior infrastructure work, including GIS-based cleaning and inspection of the affected sewer section in 2017-2018. As of August 7, 2023, cleaning and televising of lines for root and groundwater infiltration prevention was underway through contractors Pipetek and Innliner Solutions. The Department of Public Services (DPS) deployed a 10-person crew with advanced equipment, including a 2018 Vactor truck and remote camera system. Weekly manhole inspections continue to monitor flow across the city's 60-mile sewer network, composed of clay, asbestos-cement cast, and concrete pipes. All efforts align with the City's Sewer Asset Plan to ensure long-term system resilience.

Oakland County

- The most heavily impacted communities were those along the southern border of Oakland County.

City of Birmingham

- The 2023 disaster primarily affected the city through surface flooding and sewer system surcharging. While no formal damage assessments are currently available, the flooding placed significant strain on the City's infrastructure. Following the disaster, 27 residents filed claims against the City of Birmingham, totaling \$333,029 in reported losses. Investigations revealed no defects in the city sewer lines serving the claimants' properties, suggesting that the storm directly caused the sewer backups.

City of Southfield

- City of Southfield and the MEDC representatives held virtual meetings on May 20, 2025, and June 24, 2025, to discuss the city's needs following a recent disaster. During these meetings, the city identified critical infrastructure projects, specifically addressing sewer capacity and conditions, as well as the installation of underground utility lines. The 2023 flood event caused significant basement flooding and sewer backups in several residential neighborhoods. The issue was



exacerbated by combined sewer overflow, which led to public health concerns as raw sewage entered some basements.

City of Pontiac

- Two virtual meetings (May 20, 2025, and June 23, 2025) were held between the MEDC and City of Pontiac representatives. In both meetings, city officials highlighted the need for storm water infrastructure repair. They expressed particular interest in infrastructure projects that would address undersized storm sewers. The undersized storm sewers led to several areas of flooding throughout the city. There are two major infrastructure projects they would like to pursue. The first project includes underground storm sewer lines, with the potential of increasing the size of piping for greater capacity. The second project would address a culvert issue around Geddings Road.
- The 2023 flood event caused major basement flooding and sewer backup in some of the City's residential neighborhoods. Combined sewer overflow contributed to the problem, resulting in public health concerns as raw sewage flowed into some basements. The lack of properly functioning gutters and downspout systems in the city's low-income neighborhoods further exacerbated the problem.

City of Oak Park

- City officials met virtually with the MEDC staff on July 14, 2025, to discuss impacts to Oak Park and its greatest needs. Areas of Oak Park experience consistent flooding; therefore, infrastructure projects are of greatest interest to the City. The City expressed interest in pursuing resiliency and mitigation planning funds.

6.2.2 HUD-Funded Properties

- There is no available information indicating that Housing Choice Voucher holders were impacted by the 2023 disaster. Data on displaced residents, insurance coverage, or the number of affected households is not available.

6.2.3 Consultation with Public Housing Authorities

- **Roseville Housing Commission (Macomb County)**

The agency was not made aware of any issues affecting Housing Choice Voucher (HCV) participants during the reported disaster. It is assumed that any property-related damages would have been addressed by landlords or management companies through their own insurance providers.



- **Eastpointe Housing Commission (Macomb County)**

The agency was not made aware of any issues affecting Public Housing or the Housing Choice Voucher (HCV) programs.

6.2.4 Consultation with Continuum of Care (CoC) Agencies

- **Macomb County Continuum of Care/Macomb Community Action**

There were no reported impacts to persons experiencing homelessness as a result of the August 2023 storms. The CoC confirmed that the disaster did not directly affect individuals in this population.

6.2.5 Consultation with Non-Profit Agencies

- **United Way of Monroe and Lenawee Counties**

In response to the August 2023 storms, the Monroe County August 2023 Storms Relief Fund was launched to collect donations. The agency observed an increase in individuals seeking services due to the disaster. A representative coordinated with the County's disaster mission agencies (VOAD), noting requests for immediate, short-term, and long-term assistance.

Immediate needs included shelter, food, diapers, cleanup kits, and personal care items, primarily from residents of a severely damaged mobile home park. As recovery progressed, additional needs such as home repairs and financial assistance for rent emerged.

The American Red Cross played a central role in assisting residents of the affected mobile home park. Referrals were made to several organizations, including The Salvation Army for emergency shelter, Monroe County Opportunity Program for food and personal care items, and the Michigan Department of Health and Human Services for food, housing, and repair assistance.

6.2.6 Summary of Unmet Needs Identified through Consultations

A key unmet need identified is the lack of sufficient funding for sewer system upgrades—both public and private. Addressing this gap is essential for both recovery and future resilience.

Based on additional information received, the MEDC has identified several high-priority projects to support recovery and reduce future hazard risks. These include:

- **Infrastructure Improvements:** Upgrades to the sewer system and the implementation of stormwater management features.



- **Transportation and Utilities:** Enhancements to ensure resilience against future disasters.
- **Social and Public Facilities:** Strengthening community-serving infrastructure.
- **Green and Nature-Based Infrastructure:** Incorporating sustainable solutions to manage stormwater and reduce flood risk.

Mitigation and hazard risk reduction measures include residential hardening, retrofits, and elevations; hardening and retrofitting of infrastructure and public facilities; comprehensive planning and hazard risk assessments; development of more resilient building codes; and business hardening and retrofits.

6.3 Public Comments

The MEDC will publish this Action Plan on <https://www.miplace.org/cdbg-dr/> for a 30-day public comment period. Citizens will be notified through postings in select newspapers, social media, and email distributed to cities, counties, and other entities. The MEDC will ensure that all citizens have equal access to information and will adhere to the Americans with Disabilities Act (ADA).

A summary of citizen comments on this Action Plan, along with the MEDC responses, will be included in the Consideration of Public Comments section of this document.

The Public Comment Period for this Action Plan is August 30, 2025 – September 29, 2025. Comments regarding the CDBG-DR Action Plan are accepted via email to cdbg@michigan.org, mail to the MEDC, Attention: CDBG-DR, 300 N. Washington Sq., Lansing, MI 48913, and will be collected during the public hearing.

6.4 Public Hearings

6.4.1.1 Access to Public Hearings

Per the Federal Register's approach for CDBG-DR grantees with allocations under \$100 million, at least one public hearing is required during the 30-day comment period. The process below will be followed for a public hearing regarding use of the CDBG-DR funds or a substantial amendment.

The MEDC will convene three public hearings (including in person and/or virtual hearings) on the draft CDBG-DR Action Plan after being posted on its website for public comment and prior to submission to HUD. Notice of all hearings will be posted a minimum of 10 business days prior to public hearings.



All public hearings will be held at times and locations convenient to potential and actual beneficiaries, and in adherence with the ADA.

The public hearings are scheduled as follows:

- Public Hearing 1: September 8, 2025 | 6:00 p.m. | Pontiac City Hall, Council Chambers, 47450 Woodward Avenue, Pontiac, MI 48342
- Public Hearing 2: September 10, 2025 | 6:00 p.m. | Monroe City Hall, Council Chambers, 120 East First Street, Monroe, MI 48161
- Public Hearing 3: September 11, 2025 | 6:00 p.m. | Warren Community Center, Cafeteria, 5460 Arden Avenue, Warren, MI 48092

The MEDC will prominently post a notice and the proposed Disaster Recovery Action Plan ("Action Plan") on the official MEDC CDBG-DR website.

6.5 Citizen Complaints

The MEDC will provide a written response to each formal complaint within 15 working days of receipt of the complaint or will document why additional time for a response is needed.

Formal complaints are written statements of grievance, including emails, comments posted on the MEDC website, and handwritten complaints. The MEDC shall detail the process and contact information (through the website and email address) for submitting complaints within program guidelines, application documents, and on the MEDC website. The MEDC shall maintain a tracker for collecting and categorizing complaints through resolution.

Informal complaints are verbal complaints. The MEDC will attempt to resolve informal complaints; however, they are not subject to the written response process.

Complaints alleging violation of fair housing laws will be directed to HUD for immediate review. Complaints regarding fraud, waste, or abuse of funds will be forwarded to the HUD Office of the Inspector General Fraud Hotline (phone: 1-800-347-3735 or email: hotline@hudoig.gov).

The MEDC will make available to HUD detailed Fraud, Waste, and Abuse Policies and Procedures on the MEDC CDBG-DR webpage to demonstrate that adequate procedures are in place to prevent fraud, waste, and abuse.



Appeals

The MEDC shall include written appeals processes within each set of program guidelines. The appeals processes will include, but are not limited to, the following:

- The process for submitting, tracking, and resolving a written appeal to the organization administering the program (the MEDC or its subrecipient), including whether an appeals committee will be established to review and/or rule on appeals.
- The documentation required when submitting an appeal.
- The timelines for reviewing and providing a response to the appeal.
- Clarification of what may or may not be appealed. Generally, policies that have been approved and adopted within program guidelines may not be appealed. The MEDC does not have the authority to grant an appeal to a regulatory, statutory, or HUD-specified CDBG-DR requirement.

6.6 Modifications to the Action Plan

Over time, recovery needs may change. Thus, the MEDC may amend the Action Plan as often as is necessary to effectively address long-term recovery goals. Currently, the action plan outlines a wide range of proposed programs and activities that can be developed and implemented over time. However, if new programs or activities are introduced in response to changing recovery needs, an amendment may not be required if they remain consistent with the existing plan.

When there are changes to the sections of this Action Plan that rise to the level of requiring an amendment, the State will do the following:

- Ensure the current version of the Action Plan is accessible for viewing as a single document, with all amendments;
- Identify the amendments by highlighting added or changed content;
- Include tables that clearly illustrate where funds are being moved;
- Include a revised budget table that reflects all funds applicable to the amendment.

6.7 Substantial Amendment

Substantial amendments to the CDBG-DR action plan will require at least 30 days of public notice. The State has defined Substantial Amendments to the Action Plan as those proposed changes that require the following decisions:

- A change in program benefit or eligibility criteria
- The addition or deletion of an activity



- A proposed reduction in the overall benefit requirement
- A reallocation which constitutes a change of 25 percent or greater of a program budget
- An update to the submitted initial Action Plan if the original submission was incomplete (e.g., program award caps or funding criteria)

Those amendments which meet the definition of a Substantial Amendment are subject to public notification and public comment procedures. Citizens and units of local government will be provided with reasonable notice and an opportunity to comment on proposed Substantial Amendments to the Action Plan. A notice and copy of the proposed Substantial Amendment will be posted on the Michigan Economic Development Corporation's official website in adherence with the Americans with Disabilities Act.

6.8 Non-substantial Amendment

A non-substantial amendment is an amendment to the plan that includes technical corrections, clarifications, and budget changes that do not meet the monetary threshold for substantial amendments for public comment. The MEDC will notify HUD five business days before the change is effective.

All amendments (substantial and non-substantial) will be numbered sequentially and posted to the MEDC's CDBG-DR website as one final, consolidated plan.

6.9 Performance Reports

Performance reports will be completed on a quarterly basis using the HUD Disaster Recovery Grant Reporting (DRGR) system. Data will be gathered for performance reports from subrecipients as well as internally at the MEDC. The data will be compiled and entered per activity into DRGR. Financial and progress-based data will be collected. The MEDC will make all performance reports available on their CDBG-DR website within three calendar days of HUD's approval.

6.10 Consideration of Public Comments

Table 31. Summary of Public Comments

Comment Received	MEDC's Response



Comment Received	MEDC's Response



7

Appendix



7. Appendix

Certifications Waiver and Alternative Requirements for Action Plan Submission

Sections 104(b)(4), (c), and (m) of the HCDA (42 U.S.C. 5304(b)(4), (c), and (m)); sections 106(d)(2)(C) and (D) of the HCDA (42 U.S.C. 5306(d)(2)(C) and (D)); section 106 of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 12706); regulations at 24 CFR 91.225(a)(2), (4), (5), and (6); 91.225(b)(1), (2), (3), and (4); 91.325(a)(2), (4), (5), and (6); and 91.325(b)(1), (2), (3), and (4) are waived only to the extent necessary to allow grantees to receive their CDBG-DR allocations. Each grantee receiving an allocation under an AAN must make the following certifications with its action plan, in addition to the certifications at 24 CFR 91.225 and 91.325, as applicable, that are not waived above:

- a. Uniform Relocation Act and Residential Anti-displacement and Relocation Plan - the MEDC certifies that it: (1) will comply with the acquisition and relocation requirements of the Uniform Relocation Act, and implementing regulations at 49 CFR part 24, as such requirements may be modified by waivers or alternative requirements, and (2) has in effect and is following a RARAP in connection with any activity assisted with CDBG-DR grant funds that fulfills the requirements of Section 104(d), 24 CFR part 42, and 24 CFR part 570, as amended by waivers and alternative requirements.
- b. Authority of Grantee: the MEDC certifies that the action plan for disaster recovery is authorized under state and local law (as applicable) and that the MEDC, including any entity or entities designated by the grantee, and any contractor, subrecipient, or designated public agency carrying out an activity with CDBG-DR funds possess(es) the legal authority to carry out the program for which it is seeking funding, in accordance with applicable HUD regulations as modified by waivers and alternative requirements.
- c. Consistency With the Action Plan - the MEDC certifies that activities to be undertaken with CDBG-DR funds are consistent with its action plan.
- d. Citizen Participation - the MEDC certifies that it is following a detailed citizen participation plan that satisfies the requirements of 24 CFR 91.115 or 91.105 (except as provided for in waivers and alternative requirements). Also, each local government receiving assistance from the MEDC must follow a detailed citizen participation plan that satisfies the requirements of 24 CFR 570.486 (except as provided for in waivers and alternative requirements).
- e. Consultation With Local Governments (STATE ONLY) - the MEDC certifies that it has consulted with all disaster-affected local governments (including



any CDBG entitlement grantees), Indian tribes, and any local PHAs in determining the use of funds, including the method of distribution of funding, or activities carried out directly by the state.

- f. Use of Funds - the MEDC certifies that it is complying with each of the following criteria:
 - i. Purpose of the Funding. Funds will be used solely for necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, economic revitalization, and mitigation in the most impacted and distressed areas for which the President declared a major disaster pursuant to the Stafford Act (42 U.S.C. 5121 et seq.).
 - ii. Maximum Feasibility Priority. With respect to activities expected to be assisted with CDBG-DR funds, the action plan has been developed so as to give the maximum feasible priority to activities that will benefit low- and moderate-income families.
 - iii. Overall Benefit. The aggregate use of CDBG-DR funds shall principally benefit low- and moderate-income families in a manner that ensures that at least 70% (or another percentage permitted by HUD in a waiver) of the grant amount is expended for activities that benefit such persons.
 - iv. Special Assessment. The MEDC will not attempt to recover any capital costs of public improvements assisted with CDBG-DR grant funds by assessing any amount against properties owned and occupied by persons of low- or moderate-income, including any fee charged or assessment made as a condition of obtaining access to such public improvements, unless: (a) disaster recovery grant funds are used to pay the proportion of such fee or assessment that relates to the capital costs of such public improvements that are financed from revenue sources other than under this title, or (b) for purposes of assessing any amount against properties owned and occupied by persons of moderate income, the MEDC certifies to the Secretary that it lacks sufficient CDBG funds (in any form) to comply with the requirements of clause A above.
- g. Grant Timeliness - the MEDC certifies that it (and any subrecipient or administering entity) currently has or will develop and maintain the capacity to carry out disaster recovery activities in a timely manner and that the MEDC has reviewed the requirements applicable to the use of grant funds.
- h. Order of Assistance - the MEDC certifies that it will comply with the statutory order of assistance listed in Appendix C paragraph 9 and will verify if FEMA or USACE funds are available for an activity, or if the costs are reimbursable



by FEMA or USACE, before awarding CDBG-DR assistance for the costs of carrying out the same activity.