

CHAPTER 16

MITIGATION AND RESILIENCE

Please note, this is not a CDBG Program GAM Chapter. Chapter 16 relates to CDBG-DR Programs having specific mitigation and resilience requirements as appropriate.

INTRODUCTION

HUD expects CDBG-DR recipients to be more proactive in addressing the impacts of climate change and future natural disasters to ensure that federal grant funds are achieving the goal of building long-term community resilience. Mitigation involves analyzing current conditions, identifying risk, and having a plan to reduce the identified risk. Mitigation is one of the best ways to support the health and wellbeing of vulnerable community members before disaster strikes.

For CDBG-DR, mitigation activities are defined as those activities that increase resilience to disasters and reduce or eliminate the long-term risk of loss of life, injury, damage to and loss of property, and suffering and hardship, by lessening the impact of future disasters

Mitigation Set Aside

The Disaster Relief Supplemental Appropriations Act requires HUD to include with any final allocation for the total estimate of unmet need an additional amount of 15 percent of that estimate for mitigation activities that reduce risk in the identified MID areas. The CDBG mitigation set-aside is calculated as 15 percent of the total estimate for unmet needs allocated. MEDC's allocations are:

\$7,813,000 for the 2020 disaster
\$2,596,000 for the 2021 disaster

Unlike recovery activities that must demonstrate "tie-back" to the specific disaster and address a specific unmet recovery need for which the CDBG-DR funds were appropriated, activities funded by the CDBG-DR mitigation set-aside do not require such a "tie-back" to the specific qualified disaster that has served as the basis for the allocation. The CDBG-DR mitigation set-aside will only fund activities that meet the following provisions:¹

1. Meet the definition of mitigation;
2. Address the current and future risks as identified in the mitigation needs assessment in the MID areas;
3. Be CDBG-eligible activities under title I of the HCDA or otherwise eligible pursuant to a waiver or alternative requirement; and
4. Meet a national objective.

HUD encourages CDBG-DR grantees to incorporate mitigation measures when carrying out activities to construct, reconstruct, or rehabilitate residential or non-residential structures with CDBG-DR funds as part of eligible activities and are required to establish resilience performance metrics for those activities.

As such, MEDC and its subrecipients may also meet the requirement of the CDBG-DR mitigation set-aside by including eligible recovery activities that both address the impacts of the disaster (i.e., have "tie-back" to the specific qualified disaster) and incorporate mitigation measures into the recovery activities.

To count those activities as part of the CDBG-DR mitigation set-aside, MEDC and its subrecipients will need to document how those activities and the incorporated mitigation measures will meet the definition of mitigation.

¹ [Community Development Block Grant Disaster Recovery \(CDBG-DR\) Mitigation Set-Aside Funds](#)

Community Lifelines [Community Lifelines Fact Sheet \(fema.gov\)](https://www.fema.gov/community-lifelines)

The lifelines represent “buckets” of the most critical capabilities and services provided to citizens and survivors, regardless of whether they are provided by the public, private, or non-profit sectors.



Safety and Security - Law Enforcement/Security, Fire Service, Search and Rescue, Government Service, Community Safety



Food, Water, Shelter - Food, Water, Shelter, Agriculture



Health and Medical - Medical Care, Public Health, Patient Movement, Medical Supply Chain, Fatality Management



Energy - Power Grid, Fuel



Communications - Infrastructure, Responder Communications, Alerts Warnings and Messages, Finance, 911 and Dispatch



Transportation - Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime



Hazardous Material - Facilities, HAZMAT, Pollutants, Contaminants

FEMA created Community Lifelines to reframe incident information, understand and communicate incident impacts using plain language, and promote unity of effort across the whole community to prioritize efforts to stabilize the lifelines during incident response. While lifelines were developed to support response planning and operations, the concept can be applied across the entire preparedness cycle. Efforts to protect lifelines, prevent and mitigate potential impacts to them, and building back

stronger and smarter during recovery will drive overall resilience of Michigan communities.

Resilience

A community's ability to minimize damage and recover quickly from extreme events and changing conditions, including natural hazard risks. At a minimum, the grantee's action plan must contain a description of how the grantee will:

- Emphasize high quality, durability, energy efficiency, sustainability, and mold resistance;
- Support adoption and enforcement of modern and/or resilient building codes and mitigation of natural hazard risk, including climate-related risks (e.g., sea level rise, high winds, storm surge, flooding, volcanic eruption, and wildfire risk, where appropriate) and provide for accessible building codes and standards, as applicable;
- Establish and support recovery efforts by funding feasible, cost-effective measures that will make communities more resilient against a future disaster;
- Make land-use decisions that reflect responsible and safe standards to reduce future natural hazard risks, including climate-related risks, and remove people and property out of harm's way;
- Increase awareness of the hazards in their communities (including underserved communities) through outreach to the MID areas; and
- Promote sound, sustainable long-term recovery planning informed by a post-disaster evaluation of hazard risk, including climate-related natural hazards.

As a reminder when planning for resilience, grantee's activities should know the appropriate fair housing and civil rights related state and local land use laws and practices. For example, see HUD and DOJ's joint statement: State and Local Land Use Laws and Practices and the Application of the Fair Housing Act (this document can be viewed [here](#)).

The term "resilient community" is building on the foundation of hazard mitigation, which focuses on reducing or eliminating loss by incorporating mitigation measures into critical infrastructure and reducing the vulnerabilities a community faces when natural disasters occur (this information comes from NIST Community Resilience toolkit which can be found [here](#)). Resilient communities take hazard mitigation a step further by actively incorporating resiliency measures when rebuilding or recovery from disaster.

Resilience planning must consider construction standards and land-use decisions that reflect responsible floodplain and wetland management and take into account continued sea level rise, if applicable; and coordinate with other local and regional planning efforts to ensure consistency. This information should be based on the history of FEMA flood mitigation efforts and take into account the projected increase in sea level (if applicable) and the frequency and intensity of precipitation events. CDBG-DR grantees must use the FEMA-approved Hazard Mitigation Plan (HMP) to inform the evaluation of hazard risk, and the HMP should be referenced in the action plan. To further inform resilience planning, FEMA also has a [Resilience Analysis and Planning tool](#).

Resilience and Hazard Mitigation

There are several forms of mitigation actions that can be taken to reduce or eliminate risk. FEMA lists the following primary mitigation actions to be used to reduce long-term vulnerability:

- Local plans and regulations,
- Structure and infrastructure projects,
- Natural system protections, and
- Education and awareness programs (pg. 71) ([FEMA Local Mitigation Planning Handbook](#))

For more information about the types of mitigation actions, including the parties involved in each action, a grantee should refer to [FEMA's Local Hazard Mitigation Planning Handbook](#). This handbook provides mitigation ideas, best practices, and types of hazard mitigation assistance.

Because of the timing of CDBG-DR funds, grantees are strongly encouraged to consult with the applicable agency(ies) administering FEMA's hazard mitigation grants and other regional mitigation grants. This is critical to understand and align its CDBG-DR program with FEMA's mitigation efforts, when feasible, to create a consistent recovery and mitigation approach.

Mitigation Needs Assessment

HUD required MEDC to assess the mitigation needs that resulted from the covered disasters in the Action Plan. The mitigation needs identified in the assessment informed the activities funded by the CDBG-DR mitigation set-aside. The Action Plan can be found on the MEDC website at [Disaster Relief | MiPlace](#).

The mitigation needs assessment discuss the characteristics and impacts of current and future hazards identified through previously declared disasters. The assessment also addresses risks to indispensable services that enable continuous operation of critical business and government functions and are critical to human health and safety or economic security. Lastly, the assessment considers the costs and benefits of incorporating hazard mitigation measures to protect against the specific identified impacts of future extreme weather events and other natural hazards using historical and projected data on risk that incorporates best available and science tools. Mitigation needs evolve over time and MEDC will amend the mitigation needs assessment and Action Plan as conditions change, additional mitigation needs are identified, and additional resources become available.

The CDBG-DR Action Plan’s mitigation needs assessment states there are at least 10 natural hazards that pose a considerable risk to the MID areas impacted by the 2021 flooding and tornado/straight-line winds events. Those hazards include droughts, earthquakes, extreme temperatures, floods, karst/sinkholes, landslides, severe weather, severe winter storms, tornados, and wildfires.

The mitigation needs assessment goes into detail of each hazard by characterizing them in terms of their frequency and each county’s vulnerability. MEDC and its subrecipients can draw on the mitigation needs assessment to identify current and future hazards in these communities and target CDBG-DR funds toward cost-effective solutions to mitigate them over the long term.

Mitigation Framework

When pursuing mitigation activities, MEDC and its subrecipients can evaluate projects based on the following key resilience factors.

Mitigation Factor	Description
Risk	Evaluate the probability of an event occurring again and how the activity mitigates that risk.
Vulnerability	If funding a facility or project, understand the characteristics (location, size, operations, etc.) of the facility or project.
Criticality	Understand what services a facility or project provides and evaluate the importance of that service. Refer to FEMA Community Lifelines for examples.
Consequence	Understand how substantial or unmitigated damage to the facility or project impacts a community or services provided in the community.
Benefit	Understand what benefit the facility or project is providing to disadvantaged populations.

Coordination on Mitigation

To maximize the impact of all available funds, MEDC and its subrecipients are encouraged to leverage other funds with CDBG-DR and coordinate with other agencies like FEMA, the U.S. Army Corps of Engineers (USACE), and other entities that are also working with communities to build resilience.

Mitigation Measures and Resilience Performance Metrics

To improve long-term community resilience, the Allocation Announcement Notice ([87 FR 31636](#)) requires MEDC and its subrecipients to incorporate mitigation measures into its recovery activities that will protect the public, including members of protected classes, vulnerable populations, and underserved communities, from the risks identified. Mitigation measures also help ensure that communities are more resilient to the impacts of recurring natural disasters and climate change. Examples of mitigation measure include:

- ☐ Incorporating resilient construction standards
- ☐ Using resilient building materials and technology
- ☐ Elevating facilities above the Base Flood Elevation (BFE)
- ☐ Buyout/Acquisition of properties in high-risk areas
- ☐ Provide aid to relocate residents or businesses to lower-risk areas

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- ☐ Restoration of trees in the urban landscapes
- ☐ Use of more renewable energy technologies
- ☐ Utilization of backup power for critical facilities

When determining which mitigation measures to incorporate, grantees should design and construct structures to withstand existing and future climate impacts expected to occur over the service life of the project.

Before carrying out CDBG–DR funded activities to construct, reconstruct, or rehabilitate residential or non-residential structures that meet HUD’s mitigation set-aside requirement, MEDC and its subrecipients must establish resilience performance metrics for the activity. The process for developing resilience performance metrics includes:

1. An estimate of the projected risk to the completed activity from natural hazards, including those hazards that are influenced by climate change (e.g., high winds destroying newly built homes),
2. Identification of the mitigation measures that will address the projected risks (e.g., using building materials that are able to withstand high winds), and
3. An assessment of the benefit of the mitigation measures through verifiable data (e.g., 10 newly built homes will withstand high winds up to 100 mph).

In DRGR, HUD has published specific measures² for mitigation activities such as the number of non-residential buildings constructed, number of fewer outages of critical facilities and utilities, number of linear feet of public improvement, number of public facilities, number of residents protected from future flooding, and number of plans or planning products developed.

Examples of other resilience performance metrics include:

- ☐ Number of acres no longer vulnerable to flood events
- ☐ Number of floodplain design standards updated
- ☐ Number of energy plans completed
- ☐ Number of resilience plans created
- ☐ Number of properties with access above 100 year or 500-year flood level
- ☐ Number of homes retrofitted with resiliency measures
- ☐ Number of legislative actions taken to improve resilience

Reporting on Activities

In order to count activities towards the CDBG-DR mitigation set-aside, MEDC must document how those activities and how the incorporated mitigation measures will meet the definition of mitigation. These activities will be reported as a mitigation activity type (“MIT”) in the HUD Disaster Recovery Reporting system called DRGR. By tracking these activity types in DRGR, MEDC can demonstrate to HUD how the 15% mitigation set-aside was expended.

Activity types that are available for “mitigation” in the DRGR system include:

- MIT - Direct Housing Payments
- MIT - Economic Development
- MIT - Planning and Capacity Building
- MIT - Public Facilities and Improvements-Covered Projects Only
- MIT - Public Facilities and Improvements-Non Covered Projects
- MIT - Public Services and Information
- MIT - Rehabilitation/reconstruction of residential structures
- MIT - Residential New Construction

With regard to allocating costs for activities in DRGR, HUD information on how to track mitigation set-aside funding is limited. To properly track mitigation costs tied to actual mitigation investments would depend on how the procurement is done and costs are listed on the invoice submitted to MEDC. If a project includes known mitigation activities, MEDC’s subrecipients should work with vendors to delineate those costs as separate line items in the budget. This will allow MEDC to create separate mitigation activities in DRGR to track those costs under a program.

² DRGR Guidance on Grantee Program Projections - [Adding Grantee Program Projection of Outcomes](#)

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If it is not feasible to separate out the mitigation activities from the larger project, MEDC may treat the entire cost of a project as counting towards the 15 percent mitigation set-aside. Subrecipients should inform MEDC and MEDC will coordinate with HUD on the best approach.