



# **CITY OF DETROIT PUBLIC ACTION PLAN FOR COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR)**



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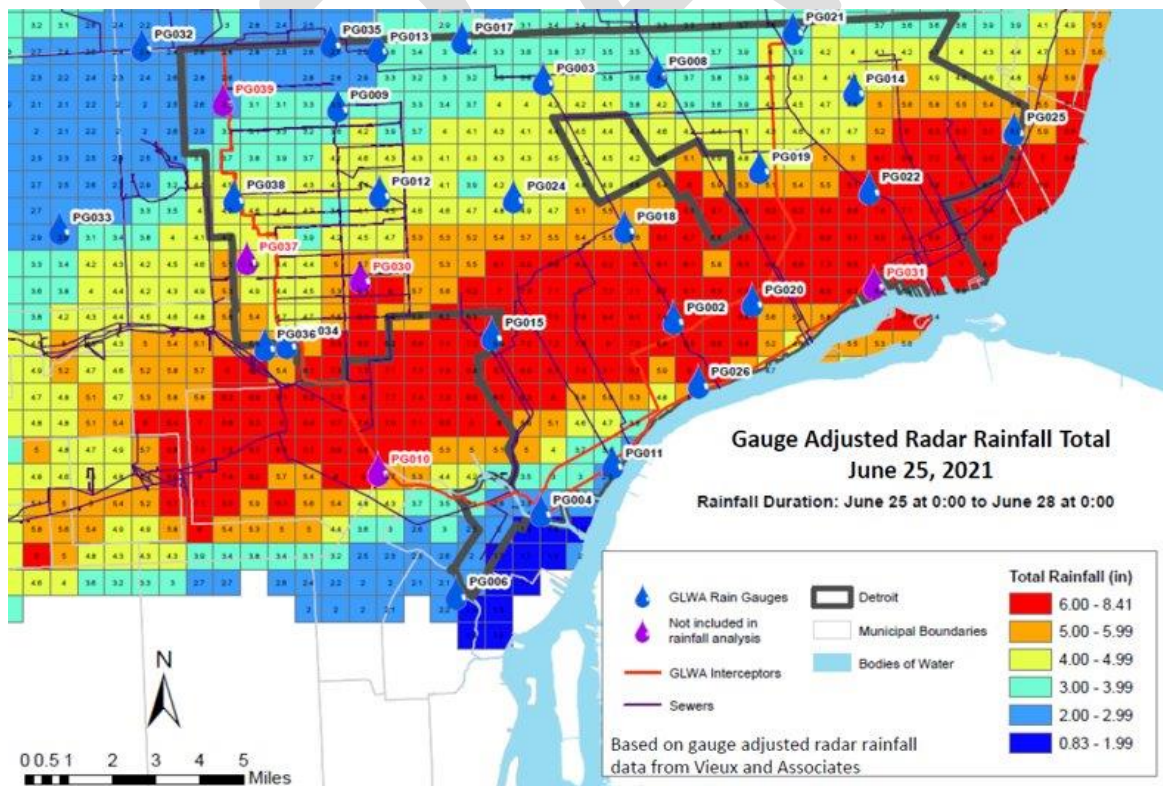
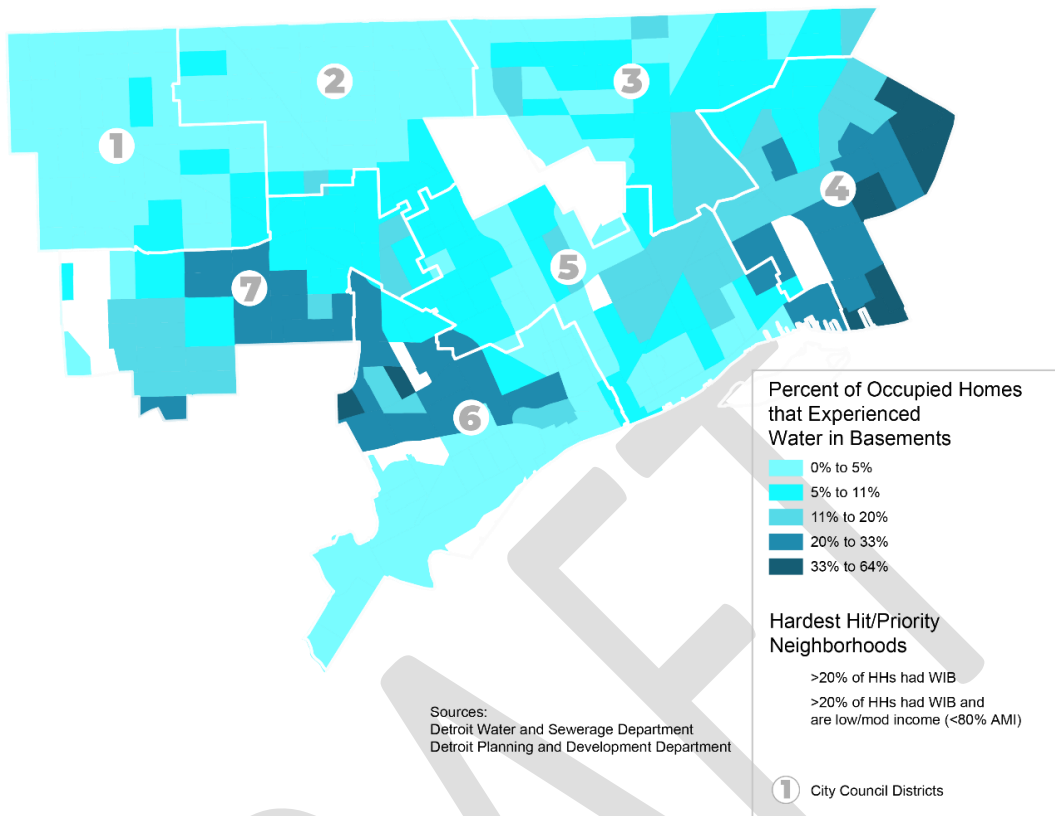
## I. Executive Summary

The U.S. Department of Housing and Urban Development (HUD) announced in March 2022 that the City of Detroit was awarded \$57,591,000 in Community Development Block Grant – Disaster Recovery (CDBG-DR) funding to support long-term recovery efforts following storm events from presidentially declared disaster 4607 (Michigan Severe Storms, Flooding and Tornadoes) which will be administered through its Housing and Revitalization Department (HRD). CDBG-DR funding is designed to address needs that remain after all other assistance has been exhausted. This plan details how funds will be allocated to address remaining unmet need in the City of Detroit. To meet disaster recovery needs, the statutes making CDBG-DR funds available have imposed additional requirements and authorized HUD to modify the rules that apply to the annual CDBG program to enhance flexibility and allow for a quicker recovery.

HUD has allocated \$57,591,000 in CDBG-DR funds to the City of Detroit in response to Michigan Severe Storms, Flooding and Tornadoes, FEMA disaster #4607, through the publication of the Federal Register, Vol. 87, No. 100, May 24, 2022. This allocation was made available through the Disaster Relief Supplemental Appropriations Act Public Law 117-43.

### Disaster Specific Overview

On June 25-26, 2021, Detroit experienced a 1 in 1,000-year rainstorm (0.01% probability), resulting in 6-8 inches of rain in a 12-hour period in some areas of the city. This amount of rain far exceeded the capacity of the city's infrastructure, which was designed to withstand 1.5-3 inches of rain in a 24hr period and was the root cause of flooding. Between 32,000 - 47,000 households (majority (82%) low-to-moderate income) were directly impacted by the disaster, majority of those located in Districts 4, 6, 7.





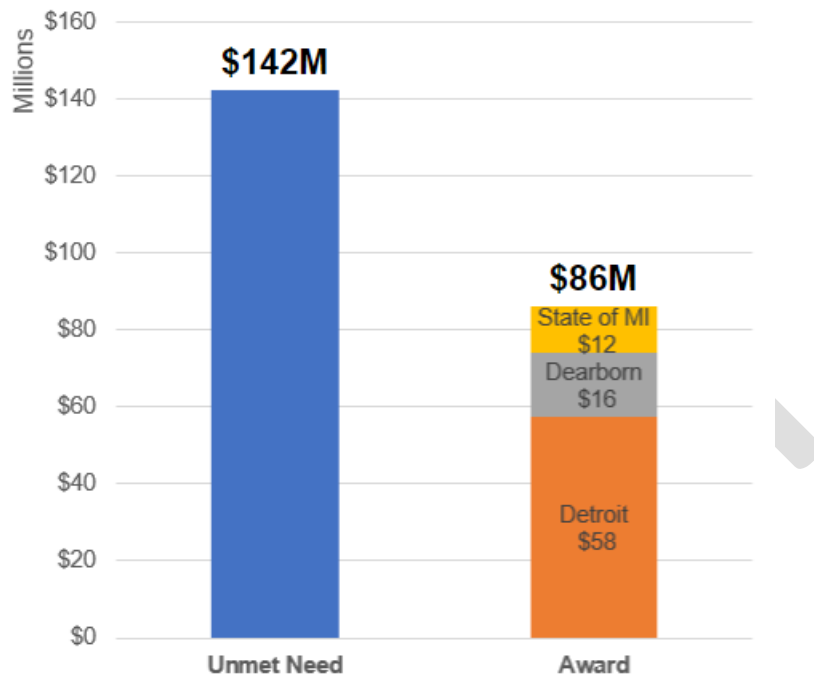
The storm led to flooding on streets and freeways, as well as flooding in residential and commercial basements. In addition, there were power supply disruptions at the Freud and Connor pump stations, as well as collapsed sewer lateral service lines coming from single-family residences and capacity issues with the city's combined storm water and sewer system.

- The City's combined storm water and sewer system was only designed to handle a 10-year storm and the city was impacted by a 1 in 1,000-year storm.
- Four (4) of Twelve (12) pumps at Connor Creek and Freud pump stations lost power and stopped working, and a cable was severed on June 23 by a contractor.
- Freud Pump station had weak power supply and dipped in sustained voltage and was unreliable throughout the storm.
- The city has limited green storm water infrastructure, and the infrastructure in place was also not designed for this level of rainfall:
- The Detroit River overflowed due to the storm and as a result of high fluctuating lake levels.



## Summary

The U.S. Department of Housing and Urban Development (HUD) estimated that the total unmet needs for FEMA Disaster #4607 were approx. \$124MM. However, only \$86MM was available in the congressional appropriation, and the City of Detroit was awarded approximately 60% of the \$86MM.



75% of the total unmet need for Detroit for the disaster equated to unmet Housing needs. That assessment correlated to the amount of FEMA Individual Assistance Claims and SBA Claims received as a result of the disaster, as well as logged complaints from the City of Detroit Water and Sewerage Department. The City of Detroit has identified Housing as its key unmet need, followed by Infrastructure that supports that Housing and its impacts to flooding.

The number of unmet needs is significantly higher than the amount of funding available. Therefore, the city proposed activities that aligned with accessible funding and activities closest to the impacts of the disaster. The city held three meetings with residents and stakeholders, two of which were held virtually and promoted City-wide and to District 4 (a most impacted district) and the third held in person directly on the border of District 6 & 7, two of the most impacted districts. This assisted the city with aligning the proposed funding with resident needs. The City of Detroit has proposed using the CDBG-DR funding to address the following unmet needs: Housing and Protective Infrastructure.

According to the HUD, the value of the unmet need across disaster impact areas in Michigan was: \$92.3 million housing, \$29.1 million business, and \$2.1 million in public assistance for total of \$124 million + \$18.5 million for mitigation. The City of Detroit estimates that approximately 30,000 households experienced water in basements or other storm-related impact.

The city, through its Housing and Revitalization Department (HRD), anticipates delivering the proposed activities in a hybrid approach, including administering internally and partnering with the City of Detroit of Water and Sewerage Department (DWSD). The primary objectives of this plan are to directly serve income eligible homeowners in most impacted neighborhoods by assisting with eligible home repairs that were impacted by the flooding, either directly or indirectly. In addition, the city will invest in infrastructure activities both for recovery and mitigation, to provide flood protection to neighborhoods in the flood plain impacted by the disaster and prevent such impacts from happening again in the future. Investing in Housing and Infrastructure improvements will strengthen the city's impacts from future storms.

While the disaster led to many unforeseen circumstances for Detroit residents, the housing unmet needs predate the date of the disaster. 25% (roughly 68,000) of Detroit households were cost burdened prior to the disaster. Consequently, disaster recovery expenses fell on homeowners already experiencing economic hardships. The proposed activities will improve access to safe and healthy housing for low-to-moderate (LMI) people who otherwise do not have access to the resources to prevent the impacts of disasters such as these. LMI Detroit residents can face unique challenges and have more difficulty responding to disaster events than the general population due to physical and financial capabilities, health concerns, and location and quality of their housing, among other factors.

#### Grantee Proposed Use of Funds

The City of Detroit is the lead agency and responsible entity for administering \$57,591,000.00 in CDBG-DR funds allocated for disaster recovery. As required by the FR Vol. 87 No. 100, the City of Detroit will allocate at least 80 percent of the funds to address unmet needs with HUD-identified "most impacted and distressed" areas. The remaining 20 percent of the allocation may be used to address unmet needs that received a storm presidential major disaster declaration. At least 70 percent of all program funds will benefit LMI persons or households. The City of Detroit anticipates leveraging CDBG-DR funds with American Rescue Plan Act (ARPA) Funds and U.S Army Corps of Engineers (USACE) to generate the most effective and comprehensive recovery.

Program	Program Description	Program Budget	%	Estimated Reach (Households)	Activity Type	CDBG Eligible Activity	CDBG National Objective
Housing Recovery & Protection Program	Repair or replace sewer service lines and install backwater valves at eligible households (at or below 80% AMI) and emergency housing needs (e.g. Furnace) caused by the flood on a case by case basis.	\$43,211,450	75%	Up to \$30,000/HH  Approx. 1,500-2,000 HH	Recovery	Housing Activities - 24 CFR 570.202	24 CFR 270.208(a)(3) –Activities benefitting Low-to moderate income persons (Housing LMH)
Jefferson Chalmers Flood Protection	Construct Protective Infrastructure in response to flooding	\$2, 488,000	4%	Up to \$4300/HH  Approx. 2500 HH	Recovery	Public Facilities and improvements- 24 CFR 570.201(c)	24 CFR 570.208 (a)(1) – Activities benefitting low-to - moderate income persons (Area LMA)
Jefferson Chalmers Flood Protection	Construct Protective Infrastructure to prevent future flooding	\$7, 512,000	13%	Up to \$4300/HH  Approx. 2500 HH	Mitigation	Public Facilities and improvements- 24 CFR 570.201(c)	24 CFR 570.208 (a)(1) – Activities benefitting low-to - moderate income persons (Area LMA)
Planning		\$1,500,000	3%	N/A	Planning		
Admin		\$2,879,550	5%	N/A	Admin		
<b>TOTAL</b>		<b>\$57,591,000</b>					

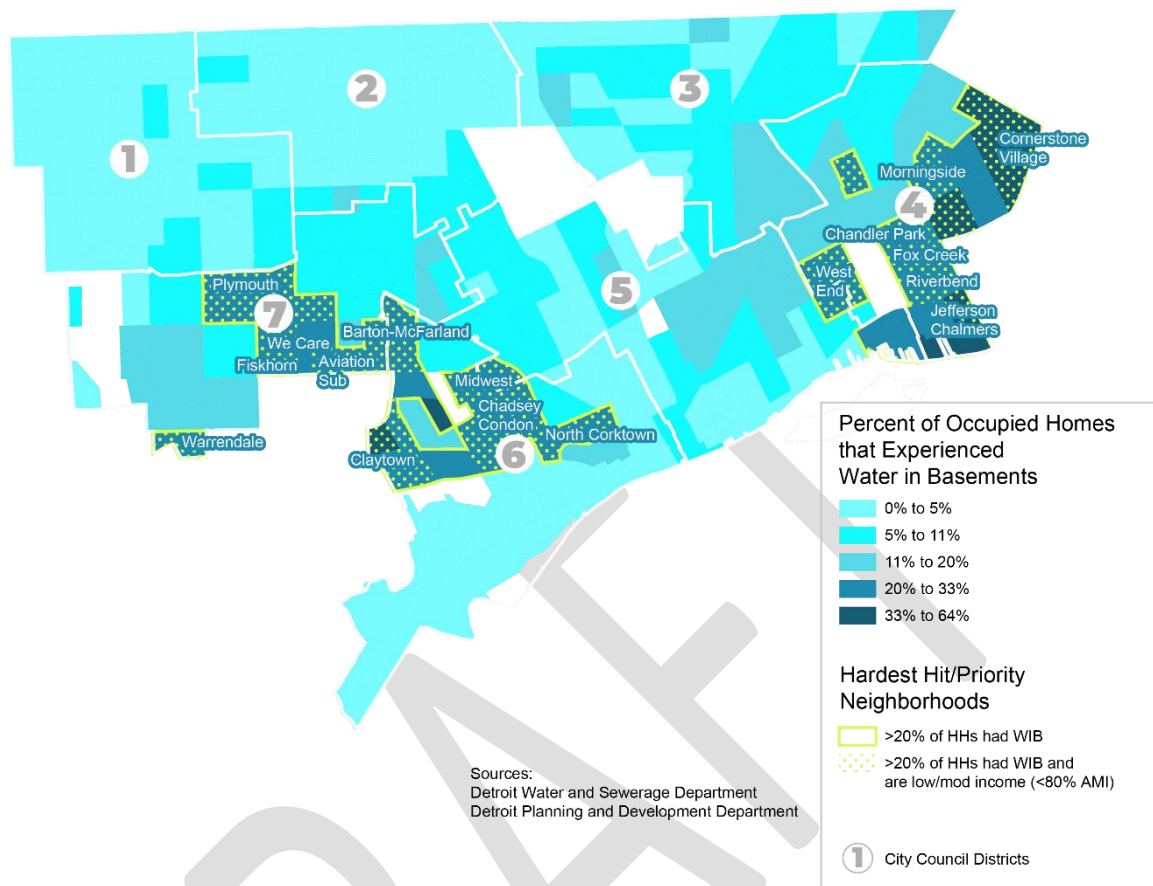
## II. Unmet Needs Assessment

### Overview

In accordance with HUD guidance, the City of Detroit analyzed the impacts of the disaster to identify the level of citywide damage, which will be used as the basis for an unmet needs assessment and identification of priorities for CDBG-DR funding. During the storms on June 25-26, 2021, more than 8 inches of rain fell in a 12-hour period in some areas of the city, causing flooding of homes, businesses, streets, and highways. While the entire City of Detroit was impacted by the storms, there were areas in the city that experienced more impact due to being in lower lying areas. This includes the following neighborhoods:

- District 4: Cornerstone Village, Morningside, Chandler Park, Fox Creek, Riverbend, Jefferson Chalmers, West End
- District 6: Midwest, Chadsey-Condon, Claytown, North Corktown, Michigan-Martin
- District 7: Aviation Sub, Garden View, Plymouth-I96, Plymouth-Hubell, Paveway, We Care Community, Fiskhorn, Joy-Schaefer, Warrendale, Warren Ave Community, Barton-McFarland





The City of Detroit, through its unmet needs assessment, identified there were various unmet needs, especially related to Housing and Infrastructure. Many residential neighborhoods experience basement backups due to a variety of factors including but not limited to rain events beyond the capacity of the existing public sewer system, power failures that impact pumping stations, and private infrastructure such as collapsed or cracked sewer lateral service lines attached to houses. These issues can exacerbate a significant rain event that causes basement backups. In addition, the city experiences flooding of highways and streets due to aging infrastructure and climate change.

During the June 25-26, 2021 rain event, the 5.77 inches of rain took several days before it receded from basements and streets, and it took more than two months to remove debris and clean and sanitize basements of our most vulnerable population, and some residents due to lack of resources had to wait even longer. Detroit Department of Public Works and General Services Division removed and picked up debris in all impacted neighborhoods. The Detroit Water & Sewerage Department not only cleaned public sewers and street catch basins, DWSD also contracted to have several hundred basements cleaned and sanitized for seniors, persons with disabilities and those with young children in the home.

In Michigan, specifically in Detroit, most families use their basements as family rooms or recreation areas and for storage, including for some of their most cherished belongings. Not only did the homes have basement backups in June 2021, two lower eastside neighborhoods had backups in June 2016 after a heavy rainstorm, and several neighborhoods across the city experienced basement backups and flooding in August 2014, with a rainfall of 4.57 inches. Those few homeowners that were able to take measures such as installing backwater valves on their own after the 2014 or 2016 rain events, did not experience basement backups and in-home flooding during the June 25,-26, 2021 storm. However, due to the city's poverty level and 49% rental rate of single-family homes most residents that continue to have basement backups are unable to install a backwater valve and maintain their sewer lines, which is why the City launched the Basement Backup Protection Program in May 2022 and seeking the HUD funding to add sewer lateral service line replacement.

## Housing Unmet Need

### Disaster Damage and Impacts – Housing

While the disaster led to many unforeseen circumstances for Detroit residents, the housing unmet needs predate the date of the disaster. 25% (roughly 68,000) of Detroit households were cost burdened prior to the disaster. Consequently, disaster recovery expenses fell on homeowners already experiencing economic hardships. The proposed activities will improve access to safe and healthy housing for low-to-moderate (LMI) people who otherwise do not have access to the resources to prevent the impacts of disasters such as these. LMI Detroit residents can face unique challenges and have more difficulty responding to disaster events than the general population due to physical and financial capabilities, health concerns, and location and quality of their housing, among other factors.

### Single Family v. Multi-family Needs; Owner Occupied v. Tenant

Single Family units are defined as structures that have 4 or less units. Multi-Family units are defined as those with 5 or more units.

The City of Detroit defines affordable rents as housing costs that do not exceed 30% of a household's monthly income. For renters, these costs include rent and basic utilities (electric, gas and water). There are two basic types of affordable rental housing in Detroit:

- Naturally occurring: This type of housing is not government regulated but is considered affordable to households at market rate because costs amount to less than 30% of their monthly income.

- Regulated: This type of housing is subsidized by government programs to ensure that low-income households do not pay more than 30% of their income on rent, or that rents are restricted at a level that is affordable for low-income households.

There are two broad categories of regulated affordable housing:

- Public Housing: Owned and operated by Detroit Housing Commission.
- Other regulated housing: Privately owned but offer affordable rents for low-income tenants.

While there were multi-family structures impacted by the disaster, the number of single-family structures impacted was much higher. Due to lack of available funding, the City of Detroit is not proposing using CDBG-DR to serve multi-Family units at this time. Only units defined as Single-Family will be eligible for CDBG-DR Housing Recovery and Protection Programs.

### Social Equity, Fair Housing and Civil Rights

The City of Detroit understands that undertaking several activities with CDBG-DR funds may impact various populations directly or indirectly. Therefore, The City of Detroit will continue to combat issues with impediments to Fair Housing from the assessment by efforts from the Civil Rights, Inclusion and Opportunity Department's (CRIO) complaint procedures. CRIO will assist in meeting the City of Detroit statutory obligation to affirmatively further the purposes and policies of the Fair Housing Act.

### LMI Analysis – Overall

Same as below.

### LMI Analysis – Federally Declared Disaster Areas

Municipality	Non-MID Total LMI Persons	Non-MID total Population	Non – MID Percentage LMI	MID – Total LMI Person	MID Total Population	MID – Percentage LMI
Detroit	*	*	*	546,653	639,111	85.5%

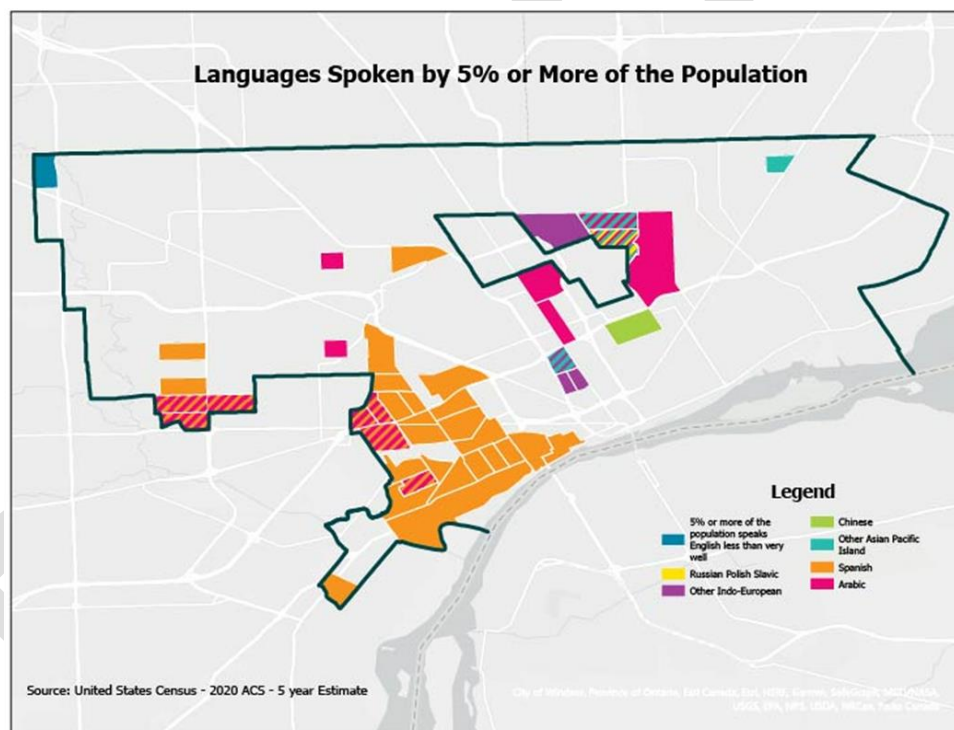
**\*The entire City of Detroit has been declared a MID, therefore there is no Non-MID population.**

### Limited English Proficiency Breakdown of Disaster – Related Areas

	Number of Speakers in MID Area	Percent of Population in MID Area
Limited English Proficiency	89,882	5.5%
Arabic	88,792	5.4%
Spanish	66,811	4.1%

<b>Other Indo-European Language</b>	41,331	2.5%
<b>Other Asian Pacific Island Language</b>	9,061	0.6%
<b>Russian, Polish, Slavic</b>	8,583	0.5%
<b>Chinese</b>	4,992	0.3%

In Detroit, 89,882 people speak English with limited proficiency. The main languages spoken at home are Arabic, Spanish, and Bengali. There are 88,792 Arabic speakers, 66,811 Spanish speakers, and 41,331 speakers of other Indo-European languages. The map below shows census tracts where 5% or more of the population has limited English proficiency and where 5% or more of the population speak another language at home.



## Infrastructure Unmet Need

### Disaster Damage and Impact – Infrastructure

The City of Detroit experienced a 1000-year storm in June of 2021. The City's infrastructure is built for a ten-year flood, and the disaster pushed existing systems over their capacity. Leading up to the storm, Detroit Water and Sewage Department (DWSD) routinely maintained sewer-catch basin cleanout throughout the city. This is important because there is a combined sewer system where all sewage from residential, commercial, and industrial sources flow to the same place. Fluctuating lake levels add pressure on the sewer system. If there is a rise in lake or river levels, that water also flows to the sewer system. Lower lying areas like Jefferson – Chalmers,

are in the 100-year flood plain zone, and are greatly impacted by fluctuating lake levels. Historically, Detroit has impervious, highly paved surfaces. This puts stress on the sewer system by funneling stormwater into sewers instead of absorbing it into the ground. In addition, much of the surrounding counties drain through the City of Detroit, making Detroit the bottom of the water shed. Approximately 30,000 broken lateral tie ins and inconsistent, weak power supply at pumping stations preceded the disaster. Consequently, heavy rain events, like the storm in June, can cause all combined sewage and rainwater to overflow into basements, residential streets, and local highways.



Recognizing the City's long and well-documented infrastructure challenges, as well as its ongoing efforts to mitigate future flooding in our most vulnerable areas, the City of Detroit is committed to rebuilding resiliently. In assessing unmet needs, it is important to consider the additional costs of safeguarding housing and community development investments from future disasters. As such, City of Detroit will not only be assessing applications and consider programs that replace, or repair Housing but will also be seeking to invest resources in efforts that mitigate damage from future disasters. Although initially costlier, these efforts prevent future damages that quickly exceed initial investments. Mitigation options include the following:

- Protective Infrastructure as one of the City's recovery and mitigation projects will be developed in a manner that considers an integrated approach to housing, infrastructure, economic revitalization, and overall community recovery. The City of Detroit will continue to work with Federal, State and local jurisdictions to provide guidance on promoting a sound short-and-long term recovery plan in the affected areas by

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<sup>1</sup> <https://www.npr.org/2021/11/23/1037540261/detroit-homes-are-being-overwhelmed-by-flooding-and-its-not-just-water-coming-in>



coordinating available resources to help in the restoration and recovery of damaged communities. Disaster recovery presents affected communities with unique opportunities to examine a wide range of issues such as housing quality and availability, environmental issues, and the adequacy of existing infrastructure. The City of Detroit will support long-term plans put in place by local and regional communities that promote the future well-being of these damaged areas by the hardening of homes and infrastructure so that communities withstand future disasters. The City of Detroit will coordinate with other local and regional planning efforts to leverage those efforts as much as possible.

## Economic Revitalization Unmet Needs

### Disaster Damager and Impact – Economic Revitalization

Since the City's bankruptcy in 2013, the City of Detroit has seen many economic improvements, but not enough to overshadow economic instability for Detroit residents.<sup>2</sup> According to the State of Economic Equity in Detroit for May 2021, "Economic growth in Detroit region was steadily improving prior to COVID-19. Jobs in the region grew by 21% between 2010 and 2019. The increase in jobs has caused wage income per capita to grow, as accessible but low-wage jobs have grown by 32% and middle-wage jobs have grown by 23%. Unfortunately, the uprise in employment in Detroit is only 12%. Compared to the Metro Detroit region, Detroit's employment rate is 8% lower making the unemployment rate 2x higher than that of the region.

Furthermore, as of 2019, only 27% of Detroit households are middle class. The median Detroit household income is slightly under \$34,000. In the six-county Detroit-Warren-Dearborn Metropolitan Statistical Area (MSA), the median household income is \$63,000, making Detroit barely half of that<sup>3</sup>. Although nearly 85% Detroit residents are black and Hispanic, the median income for white Detroiters is over \$16,000 more than Black Detroiters and \$12,000 more than Hispanic Detroiters. Low income for Detroit residents is the main cause for Detroit residents being cost burdened. Detroit Future City states that "More than 62% of renters and 40% of homeowners in Detroit are cost-burdened". Renters see a significant decreases in cost burden when their income is greater than \$50,000.

## III. Mitigation Needs Assessment

As required by HUD, the City of Detroit developed a mitigation needs assessment based in part on the FEMA approved<sup>4</sup> City of Detroit Hazard Mitigation Plan. This assessment addresses current and future risks, including hazards, vulnerability, and impacts of disasters and identifies appropriate mitigation actions to reduce the highest risks that Detroit faces.

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<sup>2</sup> <https://detroitfuturecity.com/wp-content/uploads/2021/05/The-State-of-Economic-Equity-in-Detroit.pdf>

<sup>3</sup> <https://detroitfuturecity.com/wp-content/uploads/2021/05/The-State-of-Economic-Equity-in-Detroit.pdf>

<sup>4</sup> [https://detroitmi.gov/sites/detroitmi.localhost/files/2022-02/Detroit%20HMP2021%20FullPlan\\_FINALDraftPublicPost\\_2.3\\_0.pdf](https://detroitmi.gov/sites/detroitmi.localhost/files/2022-02/Detroit%20HMP2021%20FullPlan_FINALDraftPublicPost_2.3_0.pdf)

## Overview of City of Detroit Hazard Mitigation Plan

The goal of the Hazard Mitigation Plan (HMP) is to minimize or eliminate long-term risks to human life and property from known hazards by identifying and implementing cost-effective hazard mitigation actions. The City of Detroit's HMP extensively reviews alternatives and designed strategies that would work best for the City. The plan provides carefully considered directions to City government by studying the overall damage potential and ensuring that funds are well spent.

Hazard mitigation does not mean that all hazards are stopped or prevented. It does not suggest complete elimination of the damage or disruption caused by such incidents. Natural forces are powerful, and most natural hazards are well beyond our ability to control. According to the Federal Emergency Management Agency (FEMA), hazard mitigation includes any sustained action taken to reduce or eliminate long-term risk to life and property from future disasters. Every community, including Detroit, faces different hazards and has different interests and resources to bring to bear to address its problems. As there are many ways to deal with natural hazards and many agencies that can help, there is no one solution to managing or mitigating their effects.

## Risk Landscape – Current and Future Hazard

Located in southeastern Michigan, Detroit is the largest city in Michigan, and the 26th largest city in the United States in 2020. Founded in 1701, the city was named the Ville d'Etoit or "City of the Straight" because of its position on the Detroit River. The Detroit River separates the City of Detroit from the City of Windsor, Ontario and serves as an international boundary between the United States and Canada.

Detroit is on the northern banks of the Detroit River and south of Lake St. Clair. The land area of Detroit comprises 138.7 square miles and has an altitude of 581 feet, as measured at the Detroit River.

Due to the increase in developments across the City of Detroit, the floodplains are impacted which contributes to flooding being a major hazard in Detroit. Prior to the developments, rainfall would simply soak into the ground, or slowly find its way to the river. With impervious surfaces the rainfall runs off quickly to the streets and man-made channels and pipes. Floods cause significant damage to public and private property, disable utilities, make roads and bridges impassable, destroy crops and agricultural lands, cause disruption to emergency services, and result in fatalities.

The Detroit MHP developed a risk assessment to rate the likelihood of any disaster harming Detroit. Below charts 1, 2, and 3 at illustrate Flooding as the greatest hazard risk for the City of Detroit.

Hazard	Potential for Causing Death	Population Affected	Property and Economic Damage	Local Response Capability
Flooding	2	4	4	5
Infrastructure Failure – Energy Emergency	1	4	3	3
Structural Fires	4	2	3	4
Extreme Winter Weather	3	5	1	2
Extreme Summer Weather	2	2	2	2
Hazardous Materials Releases	4	2	2	3
Public Health Emergencies	3	2	1	2
Civil Disturbance	2	2	3	2
Public Transportation Accidents	3	2	1	3
Petroleum and Natural Gas Pipeline Accidents	2	3	2	2
Drought	2	2	0	2
Nuclear Power Plant Accidents	1	2	3	2
Oil/Natural Gas Well Accidents	0	1	3	2
Earthquake	1	1	1	2

Chart 1

Hazard	Likelihood of Occurrence (25%)	Potential for Causing Death (25%)	Population Impacted (20%)	Physical and Economic Damage (20%)	Local Response Capability (10%)	Total	2015 Rank	2021 Rank
Civil Disturbance	2 (.50)	2 (.50)	2 (.50)	3 (.60)	2 (.20)	2.30	5	8
Drought	2 (.50)	2 (.50)	2 (.40)	0 (.0)	2 (.20)	1.70	11	11
Earthquake	1 (.25)	1 (0.25)	1 (.20)	1 (0.20)	2 (.20)	1.1	10	14
Infrastructure Failure	5 (1.25)	1 (0.25)	4 (.80)	3 (.60)	3 (.30)	3.20	3	2
Extreme Summer Weather	4 (1)	2 (.50)	2 (.50)	2 (.40)	2 (.20)	2.60	6	5
Extreme Winter Weather	4 (1)	3 (.75)	5 (1)	1 (.20)	2 (.20)	3.15	1	4
Structural Fires	3 (.75)	4 (1)	2 (.40)	3 (.60)	4 (.40)	3.15	2	3
Flooding	3 (.75)	2 (.50)	4 (.80)	4 (.80)	5 (.50)	3.35	6	1
Hazmat Releases	2 (.50)	4 (1)	2 (.40)	2 (.40)	3 (.30)	2.60	7	6
Nuclear Power Plant Accident	1 (.25)	1 (.25)	2 (.40)	3 (0.60)	2 (.20)	1.70	9	12
Oil/Natural Gas Well Accident	1 (.25)	0 (.0)	1 (.20)	3 (.60)	2 (.20)	1.25	9	13
Pipeline Accident	1	2	3	2	2	1.75	12	10

Hazard	Likelihood of Occurrence (25%)	Potential for Causing Death (25%)	Population Impacted (20%)	Physical and Economic Damage (20%)	Local Response Capability (10%)	Total	2015 Rank	2021 Rank
	(.25)	(.50)	(.60)	40	(.20)			
Public Health Emergency	4 (1)	3 (.75)	2 (.40)	1 (.20)	2 (.20)	2.55	4	7
Public Transportation Accident	2 (.50)	3 (.75)	2 (.40)	1 (.20)	3 (.30)	2.15	8	9

Chart 2

<sup>5</sup> [https://detroitmi.gov/sites/detroitmi.localhost/files/2022-02/Detroit%20HMP2021%20FullPlan\\_FINALDraftPublicPost\\_2.3\\_0.pdf](https://detroitmi.gov/sites/detroitmi.localhost/files/2022-02/Detroit%20HMP2021%20FullPlan_FINALDraftPublicPost_2.3_0.pdf)

Significant Natural Hazards						
Natural Hazard	Time of Potential Occurrence				Last Major Event	
	Spring	Summer	Fall	Winter	Year	Location
Energy Emergency	X	X	X	X	2021	City-Wide
Extreme Summer Weather	X	X			2020	City-Wide
Extreme Winter Weather			X	X	2021	City-Wide
Structural Fires	X	X	X	X	2021	City-Wide
Hazardous Materials Release	X	X	X	X	2019	SW Detroit
Public Health Emergency	X	X	X	X	2020	Nationwide
Floods	X	X	X	X	2021	City-Wide

Chart 3

As the risk assessment tables demonstrate, flooding is at the forefront of Detroit's hazard risks. Consequently, mitigation activities will be geared towards reducing the potential losses and preventing Detroit's vulnerability to flood disaster events.

### Hazard & Vulnerability Risk Analysis

#### <sup>6</sup>Flood Insurance History

The City of Detroit has been a part of the National Flood Insurance Program (NFIP) since 1974 with an initial Flood Insurance Rate Map (FIRM) identified in 1981. In 2017, the City joined the Community Rating System (CRS) and maintains a Class 8 rating.

According to NFIP, there are 403 policies in force in Detroit. These policies provide insurance worth \$82,121,200 as of 2021. The NFIP Repetitive Loss/Severe Repetitive Loss data provided indicates a total of 64 RL/SRL properties with a net total claim of \$1,437,151.30. The National Center for Environmental Information (NCEI) estimates total property losses for a 15-year period to be \$169,600,000 for an average loss of \$11.3 million per year. These figures would suggest that adequate coverage is provided to those who would be most impacted by river flooding in Detroit. According to NOAA, the River Rouge crested above flood stage in Detroit on 41 occasions between 1968 and 2021. When combined with other flooding events recorded through NCEI records, such as heavy rain or snow melt, the city has experienced 2.96 flooding events per year since 1978.

#### <sup>7</sup>Most Recent Disaster

Prior to the June 2021 event, in August 2014, the City of Detroit had an unusually extreme amount of rainfall that created flood conditions in the Metropolitan Detroit area. The National Weather Service say that the total of 4.57 inches of rain that fell for the day is the second

<sup>6</sup> [https://detroitmi.gov/sites/detroitmi.localhost/files/2022-02/Detroit%20HMP2021%20FullPlan\\_FINALDraftPublicPost\\_2.3\\_0.pdf](https://detroitmi.gov/sites/detroitmi.localhost/files/2022-02/Detroit%20HMP2021%20FullPlan_FINALDraftPublicPost_2.3_0.pdf)

<sup>7</sup> [https://detroitmi.gov/sites/detroitmi.localhost/files/2022-02/Detroit%20HMP2021%20FullPlan\\_FINALDraftPublicPost\\_2.3\\_0.pdf](https://detroitmi.gov/sites/detroitmi.localhost/files/2022-02/Detroit%20HMP2021%20FullPlan_FINALDraftPublicPost_2.3_0.pdf)

heaviest calendar-day rainfall on record in Detroit, after the 4.74-inch rainfall of July 31, 1925. The flooding closed major freeways, hospitals, businesses, schools and government offices. This storm has been categorized by some weather experts as a 100-year type of event. Almost 10 billion gallons of sewer overflows poured into southeast Michigan's waters in the historic August flooding, according to a Detroit Free Press review of data from the Michigan Department of Environmental, Great Lakes and Energy.

#### Conclusion of Mitigation Needs Assessment

This Mitigation Needs Assessment makes it clear that historically, flooding has been a major hazard for the City of Detroit. By characterizing the hazard in terms of its frequency and the City's vulnerability, the City can draw on this needs assessment and the HMP to identify current and future flood hazards throughout the City of Detroit and target CDBG-DR funds toward cost-effective solutions to mitigate flooding over the long term. In addition, this assessment further supports proposed CDBG-DR mitigation activities undertaken as part of this allocation so that, at a minimum, they do not exacerbate hazards but rather serve to lessen their impacts.

#### Mitigation Activities

The City of Detroit's mitigation project will 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. Incorporation of these measures also reduces costs in recovering from future disasters. Mitigation measures that are not incorporated into those rebuilding activities must be a necessary expense related to disaster relief, long-term recovery, and restoration of infrastructure, housing, or economic revitalization that responds to declared disaster FEMA-4607-DR-MI. The City of Detroit is proposing to construct protective infrastructure in the Jefferson Chalmers neighborhood as the mitigation activity. This activity will reduce the amount of homes in the floodplain zone, preventing future impacts from flooding and lake fluctuation levels and allow homeowners to be eligible for federal funding without needing flood insurance. Regular homeowners' insurance already presents a cost burden to many Detroit residents, flood insurance requirements present an even larger cost burden, creating additional barriers to federal assistance for low-to moderate income households.

## IV. General Requirements

#### Outreach and Engagement

The City of Detroit will hold three public meetings, two virtually (one city-wide and one for district 4) and one in each most impacted area, (districts 6 and 7). Citizens will be notified through the Housing and Revitalization Department's GovDelivery email, social media public notice, media advertisements and through the City of Detroit's Department of Neighborhoods. The city will work with Civil Rights Inclusion Opportunity (CRIO) to provide LEP services, including ASL and translation services at all meetings.



In the development of this disaster recovery action plan, the City of Detroit consulted with disaster-affected citizens in the most impacted areas in Districts 4,6,7, stakeholders like Jefferson East Inc., Midwest Council, and Chadsey Condon, local governments such as the City of Dearborn and the State of Michigan, and other affected parties in the surrounding geographic area to ensure consistency of disaster impacts identified in the plan, and that the plan and planning process was comprehensive and inclusive.

In addition to the activities above, the City of Detroit will publish the action plan on the City of Detroit's Disaster Recovery website for a 30-day public comment period. Citizens will be encouraged to present their comments and opinions on the proposed plan at the public hearing, or by mail, email, or telephone directed to the offices of the Housing and Revitalization Department. Citizens will be notified via email blast at GovDelivery and Department of Neighborhoods list serves, social media outlets, and public service announcements. The City of Detroit will ensure that all citizens have equal access to information, including persons with disabilities and limited English proficiency (LEP).

Comments and opinions on the proposed action plan will be considered by the city when preparing the final action plan. A summary of comments and views received will be attached to the final plan. A summary of the reasons for not accepting opinions or views not included in the plan will also be attached to the final plan. A draft will be available on the City's website. Citizens can provide comments via email at **[disasterrecovery@detroitmi.gov](mailto:disasterrecovery@detroitmi.gov)**. For more information, citizens can refer to the City of Detroit's Citizen Participation plan at: <https://detroitmi.gov/departments/housing-and-revitalization-department/disaster-recovery>

### Public Hearings

The City of Detroit will hold three public hearings: One in person meeting in for District 6 and 7 most impacted neighborhoods and two virtual meetings, one targeted city-wide and the other targeted for District 4. The most impacted and distressed neighborhoods from the June 2021 disaster are Districts, 4,6, and 7 based on the number of DWSD basement flooding claims.

### Complaints

The city will respond to written complaints related to the CDBG-DR Action plan and substantial amendments in a timely manner. Complaints are encouraged to be submitted via email at [disasterrecovery@detroitmi.gov](mailto:disasterrecovery@detroitmi.gov) but may also be submitted via telephone at 313-224-6380 or by mail to:

City of Detroit  
2 Woodward Ave.  
Suite 908. Housing and Revitalization Department (HRD)  
Detroit, MI 48237.

Formal complaints may be made in person at public meetings and hearings, by mail, email and by telephone to the offices of the Housing and Revitalization Department (HRD). Response to

written complaints will be made in writing within 30 days, where practical. Persons with complaints will be encouraged to put such complaints in writing with appropriate documentation. Informal complaints may be oral complaints at public hearings, meetings, and by telephone. When possible, City staff will try to respond orally to such complaints immediately. In some instances, persons making oral complaints will be asked to put the complaint in writing with appropriate documentation. In other instances, the City has and will respond within 30 working days either orally or in writing as appropriate and convenient.

Owners of property assisted with CDBG-DR funds will also be provided with opportunities to appeal the quality of work on their properties. The CDBG-DR Program Manager or their designee will review the appeal, and then either approve or deny the appeal. The owner will be notified in writing of the decision made within 30 days of the appeal. If the owner is not satisfied with the decision, the appeal is escalated to the Director of the Housing and Revitalization Department, where the Director has the final say. There's a limited time to respond to the appeal and all responses are provided in writing.

A record of each filed complaint or appeal is kept in an information file. When a complaint or appeal is filed, HRD will respond to the complainant or appellant within 30 business days where practicable. For expediency, HRD will utilize telephone communication as the primary method of contact, email and postmarked letters will be used as necessary to document conversations and transmit documentation. Information about the right and how to file a complaint shall be printed on all program applications, guidelines, and HRD's public website for CDBG-DR in all local languages, as appropriate and reasonable. Procedures for appealing an HRD decision on a complaint shall be provided to complainants in writing as part of the complaint response.

#### **Public Website**

In accordance with Federal Register Vol. 87, No. 100, the City of Detroit must have procedures to maintain a comprehensive public website that permits individuals and entities awaiting assistance and the general public to see how all grant funds are used and administered. As a result of CDBG-DR funds being appropriated, the city has created a separate CDBG-DR webpage <https://detroitmi.gov/departments/housing-and-revitalization-department/disaster-recovery>.

The City's CDBG-DR webpage will be updated on a regular basis (at minimum, quarterly) in accordance with established procedures and standards so that it will contain links to information regarding the use and management of grant funds. Links to all action plans and action plan amendments, performance reports, citizen participation notices, and program information for activities described in the action plan. Contracts and procurement actions that do not exceed the federal micro-purchase threshold, as defined in 2 CFR 200.1, are not required to be posted to the City's website.

To ensure meaningful access to the CDBG-DR programs and activities by LEP persons, including individuals from underserved communities, the City will make all documents accessible to

persons with disabilities and those with limited English proficiency (LEP) available to the public upon request.

### Amendments

A substantial amendment to the Action Plan will follow the same procedures for publication as the original Action Plan in accordance with the city's Citizen Participation Plan. All amendments, both substantial and non-substantial, will be posted on the city's CDBG-DR website. The beginning of every amendment will include a section that identifies the content that is being added, deleted, or changed. In addition, this section will include a revised budget allocation table that reflects the entirety of all funds and will clearly illustrate the movement or reallocation of program funding. The city's most recent version of the entire Action Plan will be accessible for reviewing as a single document at any given time.

### Substantial Amendment

When a substantial amendment to the action plan is being considered, a notice will be published on the City's website and distributed via GovDelivery and Department of Neighborhoods list serves and social media outlets, in adherence with ADA and LEP requirements, that the city intends to amend the action plan. This notice will describe the amendment and indicate how citizens may comment on it. A period of at least 30 days of the posting will be provided for citizens to comment on the amendment before it is an implemented substantial amendment. The City will consider, review, and respond to all public comments and views received on proposed substantial amendments and submit to HUD for approval. A summary of these comments and views will be attached to the to the substantial amendment. If comments and views are not accepted, the reasons for not accepting them will be summarized and attached to the substantial amendment.

At a minimum, the following modifications will constitute a substantial amendment:

- A change in program benefit or eligibility criteria.
- the addition or deletion of an activity.
- a proposed reduction in the overall benefit requirement, or
- the allocation or reallocation of more than \$3 million from one major program area to another (the four major program areas are Housing, Infrastructure, Economic Development and Planning)

### Non-Substantial Amendment

Although non substantial amendments do not require HUD's approval or seek public comment to become effective, the City will notify HUD of any plans to make an amendment that is not substantial. The City will notify HUD five (5) business days before the change is effective.

The city understands that the DRGR system must approve the amendment to change the status of the Public Action Plan to “reviewed and approved.” The DRGR system will automatically approve the amendment by the fifth day, if not completed by HUD sooner.

#### **Displacements of Persons and Other Entities**

The City of Detroit will minimize displacement of persons or entities as a result of the implementation of CDBG-DR projects by ensuring that all CDBG-DR programs are administered in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA) of 1970, as amended (49 CFR Part 24) and the implementing regulations at 24 CFR Part 570.496(a). All subrecipients will be required to demonstrate that they have adopted policies and procedures to minimize displacement in accordance with these regulations and will be monitored by the city to ensure compliance with URA.

Per Federal Register 87, Vol. 100, section II. D.7: 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 a public use. For purposes of this paragraph, public use shall not be construed to include economic development that primarily benefits private entities. 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 a public use for purposes of eminent domain.

#### **Protection of People & Property**

The City of Detroit will implement activities that will ensure high quality, durability, energy efficiency, sustainability, and mold resistance. The City will adopt and enforce modern and resilient building codes that mitigate hazard risk from flooding and comply with Green Building standards.

#### **Elevation Standards**

The City of Detroit, where applicable, will adhere to the provisions recognized under the City of Detroit's Specific Flood Elevation Standards and flood hazard reduction (Section 50.14-528-529). Provisions for new construction and substantial improvements of residential and non-residential structures in all flood hazard areas must have the lowest floor, including the basement, elevated to or above the base flood level; or be constructed so that the structure below base flood level together with attendant utility and sanitary facilities, is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. These codes recognize that the most recent base flood elevation data received from Federal

Emergency Management Agency shall take precedence over data from other sources. Mixed-use structures with no dwelling units and no residents must be elevated or floodproofed up to at least two feet above base flood elevation. The average cost associated with elevating structures is:

- To raise an existing home approximately 36" and install a flood proofed and vented foundation would be \$45 per square foot x number of floors, limit 3. No basement.
- To raise an existing home approximately 36" and install a flood proof pier supports with skirting would be \$30 per square foot x number of floors, limit 3. No basement.
- New construction with flood proofing and vented foundation \$6.50 per square foot for each 1 foot of elevation above finish grade. No basement.
- New construction with piers and skirting \$4 per square foot for each 1 foot of elevation above finish grade. No basement.

### Flood Insurance Requirements

The City of Detroit may not provide disaster assistance for the repair, replacement, or restoration of a property to a person who has received federal flood disaster assistance that was conditioned on obtaining flood insurance and then that person failed to obtain or allowed their flood insurance to lapse for the property.

The City of Detroit is prohibited by HUD from providing CDBG-DR assistance for the rehabilitation or reconstruction of a house if:

1. The combined household income is greater than 120% AMI or the national median,
2. The property was in a floodplain at the time of the disaster, and
3. The property owner did not maintain flood insurance on the damaged property.

To ensure adequate recovery resources are available to LMI homeowners who reside in a floodplain but who are unlikely to be able to afford flood insurance may receive CDBG-DR assistance if:

1. the homeowner had flood insurance at the time of the qualifying disaster and still has unmet recovery needs, or
2. The household earns less than 80% AMI or the national median and has unmet recovery needs.

### Construction Standards

The City of Detroit will require quality inspections and code compliance inspections on all projects and places an emphasis on high-quality, durable, sustainable, and energy efficient construction methods and materials. Site inspections will be required on all projects to ensure quality and compliance with building codes.



The City will meet construction standards on all rehabilitation, reconstruction, or new construction activities found in the Consolidated Notice (II.B.2.a through II.B.2.d) as applicable to the proposed activities.

### **Contractor Standards**

The City of Detroit will follow general labor standards provisions when applicable, which indicates that the Contractor shall require and monitor all construction work for compliance with all applicable Federal Labor Standards, as described in the clauses found in the regulations at 2 CFR 200 and shall report any noncompliance to the HRD, as required by Federal regulations.

The City shall require that all necessary contract language required by the regulations at 2 CFR 200 and (2) by City of Detroit Executive Order 2016-1 be included in all construction contracts and subcontracts for construction performed under this Agreement. If the Contractor should directly employ workers on actual construction, the Contractor shall comply with (1) all Federal labor standards applicable to the employment of such workers; and (2) City of Detroit Executive Order 2016-1.

The Contractor shall monitor all construction work performed under their Agreement or performed under the supervision and/or control of the Contractor for compliance with all applicable Federal Labor Standards, including those described at 2 CFR 200 and shall comply and/or require compliance with City of Detroit Executive Order 2016-1, and shall report any noncompliance with said Federal requirements and with said Executive Order 2016-1 to the HRD.

The City of Detroit will require a warranty period post-construction with a formal notification to beneficiaries on a periodic basis. The City intends to issue a notice to homeowners halfway during warranty period (6 months from the date of final inspection) and one month prior to the expiration of the warranty. The City will also provide opportunities to appeal the quality of work on their properties. For the contractor to receive final payment, the property owner will be required to sign off on a completion of work form that states that all work has been performed in accordance with the construction contract to their satisfaction.

The City follows HUD guidelines for cost reasonableness. Costs are considered 'reasonable' if they do not exceed what a prudent person would incur under similar circumstances. All costs must pass the 'rational person' test by meeting all the following criteria:

1. The cost is recognized as ordinary and necessary for the operation of the project
2. The cost is in accordance with market prices for comparable goods or services as evidenced by cost estimates and documentation
3. The individuals responsible for incurring the cost acted with prudence and for the benefit of the organization and its activities
4. The cost has been incurred after following the established practices of the organization, in accordance with the terms and conditions of the award

Contractors selected under the CDBG-DR program will make every effort to provide opportunities to low and very-low-income persons by providing resources and information to notify Section 3 individuals and businesses of opportunities in the community. The City of Detroit will report Section 3 accomplishments in the Disaster Recovery Grant Reporting (DRGR) system.

#### **Preparedness, Mitigation, and Resiliency**

The City of Detroit will implement activities that will ensure high quality, durability, energy efficiency, sustainability, and mold resistance. The City will adopt and enforce modern and resilient building codes that mitigate hazard risk from flooding and comply with Green Building standards. All newly constructed buildings must meet all city building codes, standards, and ordinances. All new construction of residential buildings or replacement and/or reconstruction of substantially damaged buildings will incorporate Green Building Standards.

The City of Detroit will construct protective infrastructure as our mitigation strategy. This mitigation strategy will be an estimated cost of \$10 million, benefiting over 200 households. This strategy will remove several homes from the floodplain zone. This allows the neighborhood to be eligible for federal funding and homeowners won't have to purchase flood insurance.

#### **Broadband Infrastructure in Housing**

In the event that the City of Detroit does substantial rehabilitation or new construction of a building with more than four (4) rental units, they will include installation of broadband infrastructure, except when: the location of the new construction or substantial rehabilitation makes the broadband infrastructure infeasible, the cost of installing broadband infrastructure would result in a fundamental alteration in the nature of its program or activity or in an undue financial burden, or the structure of the housing to be substantially rehabilitated makes installation of broadband infrastructure infeasible.

The City of Detroit does not plan to rehabilitation or construct buildings with 4 or more units with this funding.

#### **Cost Effectiveness**

A demonstrable hardship is a substantial change in an Applicant's situation that prohibits or severely affects their ability to provide a minimal standard of living or the necessities of life including food, housing, clothing, and transportation without causing economic distress well beyond mere inconvenience as shown by objective evidence. The City of Detroit will define "demonstrable hardship" and "not suitable for rehabilitation" as they relate to recovery programs in the policies and procedures associated with the use of the city's CDBG-DR funds as they relate to each program.

The City of Detroit will adopt policies and procedures that communicate how it will analyze the circumstances under which an exception is needed, and the amount of assistance necessary and reasonable.

### Duplication of Benefits

The City of Detroit will comply with Section 312 of Stafford Act ensuring that all activities aid a person or entity only to the extent that the person or entity has a disaster recovery need that has not been fully met. City of Detroit is subject to the requirements of the Federal Register notice(s) explaining the duplication of benefit requirements (84 FR 28836 and 84 FR 28848, published June 20, 2019, or other applicable notices).

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