



COMMONWEALTH OF KENTUCKY
2022 ACTION PLAN
FOR DISASTER RECOVERY



Submitted to HUD:
Approved by HUD:

November 2023

Contents

1	Executive Summary.....	6
1.1	Overview	6
1.2	Disaster Overview.....	6
1.3	Summary	7
1.4	Unmet Needs and Proposed Allocation	8
2	Unmet Needs Assessment	11
2.1	Overview	11
2.1.1	HUD-Identified Most Impacted and Distressed Areas (MIDs).....	11
2.1.2	Grantee-Identified MIDs.....	12
2.2	Housing Unmet Need	13
2.2.1	Disaster Damage and Impacts	13
2.2.2	Single Family vs. Multifamily Needs; Owner-Occupied vs. Tenant.....	18
2.3	Public Housing and Affordable Housing	22
2.3.1	Multifamily HUD-Assisted Housing	22
2.4	Owners With Unmet Need in a Floodplain.....	23
2.4.1	Insurance Claims and Losses in Disaster-Impacted Areas	23
2.5	Total Home Loans Approved by SBA	24
2.6	Social Equity, Fair Housing, and Civil Rights.....	24
2.6.1	Addressing Impediments to Accessible Housing	24
2.7	Infrastructure Unmet Need.....	63
2.7.1	Disaster Damage and Impacts.....	63
2.7.2	Total Cost and Need by PA Category (FEMA)	65
2.7.3	Approximate Recovery Cost per Agency (FEMA)	67
2.7.4	Hazard Mitigation Needs per County or Known Project.....	67
2.8	Economic Revitalization Unmet Need	68
2.8.1	Disaster Damage and Impacts	68
2.8.2	Total Business Loans Approved by the SBA	69
2.8.3	Estimating Business Operations Losses.....	70
2.8.4	Increased Occupation Demands	71
2.9	Mitigation-Only Activities	72
2.9.1	Introduction	72
2.9.2	State Hazard Mitigation Plan	72

2.9.3 Regional Hazard Mitigation Plans.....	73
2.9.4 Greatest Risk Hazards	76
2.9.5 Indispensable Services	107
2.9.6 Conclusion	108
3 General Requirements	110
3.1 Citizen Participation	110
3.1.1 Outreach and Engagement	110
3.1.2 Public Hearings	114
3.1.3 Complaints	116
3.2 Public Website	117
3.3 Amendments	118
3.3.1 Substantial Amendment	118
3.3.2 Nonsubstantial Amendment	119
3.4 Displacement of Persons and Other Entities	119
3.5 Protection of People and Property	120
3.6 Elevation Standards	120
3.7 Flood Insurance Requirements	121
3.8 Construction Standards	122
3.9 Contractors Standards	123
3.10 Preparedness, Mitigation, and Resilience.....	124
3.10.1 Design Programs That Protect People and Property from Harm	124
3.10.2 Emphasize High Quality, Durability, Energy Efficiency, and Sustainability	125
3.10.3 Enforce Resilient Building Codes	125
3.10.4 Fund Feasible, Cost-Effective Measures.....	125
3.10.5 Make Land Use Decisions to Reduce Future Risks	125
3.10.6 Increase Awareness of Hazards	126
3.10.7 Develop the Risk Assessment	127
3.10.8 Use the Hazard Mitigation Plan.....	128
3.10.9 Ensure Mitigation Efforts Are Cost-Reasonable	128
3.10.10 Support Long-Term Recovery Planning	128
3.11 Broadband Infrastructure in Housing	128
3.12 Cost-Effectiveness.....	129
3.13 Duplication of Benefits	130

4	Grantee Proposed Use of Funds	132
4.1	Overview	132
4.2	Program Budget.....	133
4.3	Connection to Unmet Needs	134
4.4	Leveraging Funds	134
4.4.1	Interchangeability of Disaster Funds	135
4.4.2	Commonwealth Funding	135
4.4.3	Federal Assistance and Private Insurance.....	136
4.5	Program Partners.....	137
4.5.1	Area Development Districts	137
4.5.2	Kentucky Housing Corporation	138
4.5.3	Kentucky Energy and Environment Cabinet	139
4.5.4	Kentucky Association of Mitigation Managers.....	140
4.6	Distribution of Funds	141
4.7	Program Income	142
4.8	Resale or Recapture	142
4.9	Promoting Equity in Recovery and Housing for Vulnerable Populations.....	143
4.10	Program Details	145
4.10.1	Single-Family New Housing Construction.....	145
4.10.2	Owner-Occupied Rehabilitation and Reconstruction	152
4.10.3	Multifamily New Construction	158
4.10.4	Rental Rehabilitation/Reconstruction.....	164
4.10.5	Housing Counseling and Legal Aid.....	171
4.10.6	FEMA Non-Federal Cost Share Buyout Program	174
4.10.7	Small Business Grant Program.....	179
4.10.8	Infrastructure	183
4.10.9	Planning	189
4.10.10	Administrative.....	193
5	Appendix	195
5.1	Certifications	195
5.2	Waivers.....	198
5.3	Summary and Response of Public Comments	211
5.4	Data Sources/Methodologies	212
5.5	Important Definitions and Terms	216



1 Executive Summary

1 Executive Summary

1.1 Overview

In May 2023, the U.S. Department for Housing and Urban Development (HUD) announced that the Commonwealth of Kentucky would receive \$297,994,000 in funding to support long-term recovery and mitigation efforts following the 2022 severe storms, flooding, landslides, and mudslides ([DR-4663](#)) through the Kentucky Department for Local Government (DLG). Community Development Block Grant – Disaster Recovery (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 Kentucky.

To meet disaster recovery needs, enhance flexibility, and allow for quicker recovery, the statutes that make CDBG-DR funds available now have additional requirements and authorize HUD to modify the rules that apply to the annual CDBG program. HUD has allocated \$297,994,000 in CDBG-DR funds to the Commonwealth of Kentucky in response to the 2022 severe storms (DR-4663) through publication in the Federal Register, Volume 88, Number 96, May 18, 2023 (88 FR 6393). This allocation was made available through the Continuing Appropriations Act, 2023 (Pub. L.117-180 Division A) and approved on September 30, 2022 (the Appropriations Act.)

1.2 Disaster Overview

A disaster was presidentially declared on July 29, 2022, (DR-4663). In total, 20 out of Kentucky's 120 counties were included in the disaster declaration under DR-4663. These counties were eligible for different Federal Emergency Management Agency (FEMA) programs based on the impacts of the disaster as demonstrated in Figure 1.

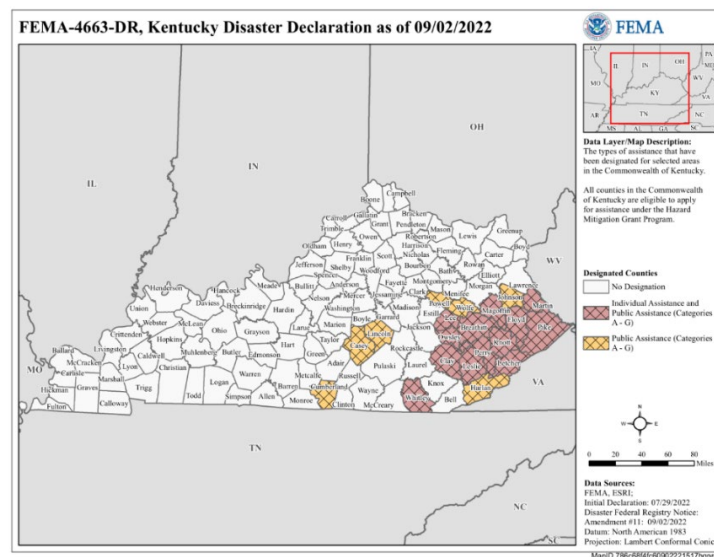


Figure 1. FEMA DR-4663 Presidentially Declared Disasters, by County

Heavy rain moved across southern and eastern Kentucky from July 26, 2022 through August 11, 2022. The heavy rainfall led to significant flooding across southern and eastern Kentucky. For some counties, this was the most significant flooding in the last 60 years and for others they experienced similar flooding in 2021 (DR-4595). The periods of heavy rain and flooding led to mudslides and rockslides. Many areas were cut off or blocked due to the flooding, with major roadways across the Commonwealth becoming inaccessible. Officials, including the Kentucky National Guard, conducted [water rescues](#) across disaster-declared counties. Power outages were also noted. As many as [23,500](#) customers were impacted during the peak of the flash flooding in July, 2022. Initial FEMA damage assessments indicated that 542 homes were destroyed, and 4,585 residential structures suffered [major damage](#).

1.3 Summary

To develop the CDBG-DR Action Plan, the Kentucky Department for Local Government (DLG) engaged State and federal agencies, local governments, nonprofit organizations, community-based organizations, and other ad hoc work groups focused on recovery. Coordinated efforts from some of these organizations resulted in the development of a housing assessment that has been valuable to better understand the impacts of the 2022 storms and assess the remaining needs. The assessment includes data collected immediately after the disaster from FEMA, U.S. Small Business Administration (SBA), the American Red Cross, and other agencies. When applicable, this Action Plan makes use of this assessment to ensure that housing recovery efforts advance equity and support underserved and marginalized communities.

The Commonwealth of Kentucky has been gathering data for the unmet needs assessment and engaging local communities since the disasters. To fulfill the requirements of this allocation, the Commonwealth must submit to HUD an Action Plan for Disaster Recovery that identifies its unmet recovery and resilience needs. This Action Plan outlines the proposed use of the CDBG-DR funds and eligible activities available to assist impacted counties meet unmet housing, infrastructure, planning, and other needs that have resulted from the 2022 storms. Specifically, this plan aims to promote and ensure fair access to housing for all residents, expand sustainable home ownership opportunities for low- to moderate-income (LMI) persons, and strengthen neighborhoods impacted by the disaster by investing in infrastructure.

As part of the development of the Action Plan, there are opportunities for communities to review and provide feedback on program design and comment on how the Commonwealth and municipalities implement the CDBG-DR funds.

The Commonwealth will convene at least one public hearing in the HUD-identified most impacted and distressed (MID) areas 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. The Commonwealth has published this draft CDBG-DR Action Plan in a manner that affords citizens, units of general local governments (UGLGs), public agencies, and other

interested parties a reasonable opportunity to examine its contents and to submit comments. The plan will remain available on the DLG website throughout the 30-day comment period. The Commonwealth will review all public comments and will make modifications to the draft Action Plan as necessary.

1.4 Unmet Needs and Proposed Allocation

The Federal Register Notice requires grantees to demonstrate a reasonably proportionate allocation of resources relative to areas and categories (e.g., housing, economic revitalization, and infrastructure) of greatest need as identified in the impact and unmet needs assessment or provide an acceptable justification for a disproportionate allocation.

DLG worked with multiple agencies to collect the best available data to calculate the remaining needs from the 2022 disaster. However, the data collected may not represent the entire impact and need across the HUD-identified MID and other presidentially declared disaster areas. To address this gap, DLG will continue to work with the public to refine program policies and procedures to ensure that CDBG-DR programs are accessible to and benefit households and individuals who have not yet been included in the needs assessment and who may be marginalized from accessing resources.

Based on the unmet needs assessment presented in this document, the Commonwealth has calculated total unmet needs of \$371,217,399.52 attributable to the 2022 severe storms. The Commonwealth used available data sources to perform the analyses of demographic characteristics of the areas of impact, the losses sustained, and the available resources in response to housing, infrastructure, and economic revitalization. To adequately distribute CDBG-DR funding, the Commonwealth will manage a competitive process for municipalities to submit applications for funding. The Commonwealth will allocate 80% to the HUD-designated MID areas and the remaining 20% to the Commonwealth's identified MID counties.

The notice also includes the following expenditure requirements:

- Program administration costs: Limited to 5%—or \$14,899,700—of the total allocation.
- HUD-identified Most Impacted and Distressed (MID) areas: At least 80%—or \$238,395,200—of the total allocation must benefit the HUD-identified areas. This includes 80% of expenditures for program administration.
- Benefit to Low to Moderate Income (LMI) persons: At least 70%—or \$208,595,800— of the allocation (less planning and administration costs) must be used for activities that benefit LMI persons.

The table below summarizes how the Commonwealth estimates it will meet or exceed HUD's expenditure requirements. Actual expenditures will be tracked and reported publicly on the CDBG-DR website. Descriptions of how these funding decisions reflect the unmet and mitigation needs assessments are included within each of the program

descriptions further below in the Action Plan. The table below considers losses across all categories (housing, planning, economic revitalization, and infrastructure) before and after adjusting for identified funding sources. The unmet needs are calculated by subtracting the resources available from the value of the total damages. The housing unmet needs number represents the impact on housing that requires rehabilitation, reconstruction, or a new build. This Action Plan includes new housing initiatives for both rental properties and owner-occupied properties. To increase the housing stock of the disaster-affected areas, DLG intends to initiate programs that will result in building new homes and rental properties that will address the unmet housing needs of the public. These new housing programs, along with the existing home rehabilitation and reconstruction programs, will address the entirety of the housing unmet needs.

DLG is allocating funds to programs to align with the need. The discrepancies between the need and the funding are the result of the increased need for affordable housing. DLG has identified existing programs and resources for mitigation and economic revitalization to supplement the recovery. For example, DLG will work with its partner agencies that conduct mitigation activities to determine which projects should be pursued and what funding is available for those projects.

Table 1. Unmet Need and Program Allocation

Category	Remaining Unmet Need (\$)	Unmet Need (%)	Program Allocation Amount (\$)	Program Allocation (%)
Administration	N/A	N/A	\$14,899,700	5%
Planning	N/A	N/A	\$1,500,000	1%
Housing	\$201,395,059	59.62%	\$129,905,300	44%
Infrastructure	\$131,916,764	39.05%	\$ 134,389,000	45%
Economic Revitalization	\$4,483,077	1.33%	\$3,000,000	1.0%
Buyout	N/A	N/A	\$11,300,000	4%
TOTAL	\$337,794,900	100%	\$297,994,000	100%

2

Unmet Needs Assessment

2 Unmet Needs Assessment

2.1 Overview

HUD requires the Commonwealth to detail the losses and needs resulting from the impacts of the 2022 severe storms. The unmet needs categories that HUD will review include housing, infrastructure, economic revitalization, public services, and mitigation needs. Data were collected from multiple sources and used to assess unmet recovery and mitigation needs; this information will assist the Commonwealth to design and fund impactful CDBG-DR programs.

To prepare the unmet needs assessment, Kentucky consulted with the following agencies:

- U.S. Department of Housing and Urban Development (HUD)
- Federal Emergency Management Agency (FEMA)
- U.S. Small Business Administration (SBA)
- U.S. Department of Agriculture
- Economic Development Administration
- Kentucky Housing Corporation (KHC)
- Kentucky Division of Emergency Management
- Kentucky Public Protection Cabinet
- Kentucky Department of Insurance
- Kentucky Cabinet for Health and Family Services
- Kentucky Division of Water
- Local Public Housing Authorities
- Local Section 8 Housing Programs
- Local Area Development Districts

2.1.1 HUD-Identified Most Impacted and Distressed Areas (MIDs)

HUD requires funds to be used for costs related to unmet needs in the MID areas resulting from qualifying disasters. Kentucky is required to spend at least 80% of all CDBG-DR funds, or \$238,395,200, to benefit the HUD-identified MID areas. HUD provided Kentucky with the following HUD-identified MID areas in the Allocation Announcement Notice:

- Breathitt County
- Knott County
- Letcher County
- Perry County
- (41572) in Pike County

Kentucky has decided to expand the HUD-identified MID area in ZIP codes 41572 to include the entire county of Pike.

2.1.2 Grantee-Identified MIDs

The Consolidated Notice allows Kentucky to determine where to use up to 20% of the remaining amount of the CDBG-DR grant. The funds must be used to address unmet needs within areas that received a presidential disaster declaration. In addition to HUD's identified MIDs, Kentucky has identified the following counties that will receive CDBG-DR funding:

- Casey
- Clay
- Cumberland
- Floyd
- Harlan
- Johnson
- Lee
- Leslie
- Lincoln
- Magoffin
- Martin
- Owsley
- Powell
- Whitley
- Wolfe

2.2 Housing Unmet Need

2.2.1 Disaster Damage and Impacts

Pre-disaster housing conditions: The disaster took place in a Commonwealth that was already suffering from an outdated and shrinking housing stock. Many Kentuckians were already facing health and economic difficulties from the ongoing COVID-19 pandemic. Illness and lost jobs have severely impacted many families' ability to pay rent and mortgages. While the Centers for Disease Control and Prevention (CDC) did issue an order to temporarily prevent evictions, renters have still struggled more than homeowners to cover rising housing costs.¹⁶ Additionally, the pandemic imposed significant strains on the supply chain for housing construction. This has made it difficult for the Commonwealth to replenish its diminished housing stock.

Prior to the 2022 disasters, Kentucky's housing stock was primarily concentrated in the Commonwealth's western counties. Kentucky counties in the eastern geographical region of the state experienced a very similar flooding disaster a year earlier in June of 2021 (DR-4595). The 2021 and 2022 federally declared disasters brought to the forefront the need for more affordable housing located outside of the flood zone. Low levels of pre-disaster stock in rural areas are particularly relevant to survivors displaced from rural counties who need to be rehoused within a reasonable commuting distance to maintain a connection to employment, healthcare, and school networks.

This stands in contrast to survivors displaced from counties located within the metropolitan areas who would be in closer proximity to a larger housing market and may have greater access to permanent rehousing options.

In 2018, the Kentucky Housing Corporation conducted a statewide housing needs assessment. The assessment found that only 2.44% of Kentucky's housing stock was built after 2010, with 45% of the housing being constructed between 1980 and 2009, and 52% being constructed before 1979. Statewide, there was only a 0.82% increase in total housing units in the Commonwealth from 2010 to 2020. An older housing stock is typically associated with issues related to energy efficiency, deferred maintenance, required repairs, health violations, and the preservation of affordable housing. This also means that no recent construction has taken place to meet increasing national demands for new affordable housing options.

In 2021, the Commonwealth created the Healthy at Home Eviction Relief Fund. The purpose of these funds was to follow similar efforts to keep Kentuckians safe and housed during the pandemic, with an emphasis on protecting renters from possible eviction. This program helped renters by covering rent and offering utility assistance via direct payments to landlords and utility providers. More recently, the Commonwealth launched the Team Kentucky Homeowner Assistance Fund in partnership with the

¹⁶ University of Kentucky Center for Business and Economic Research. *Impact of the Coronavirus Pandemic on Housing*. Retrieved from https://cber.uky.edu/sites/cber/files/publications/COVID%20Housing_Final.pdf

Kentucky Housing Corporation. This program aims to help homeowners impacted by the pandemic avoid foreclosure of their homes.

The table below shows homeowner and renter vacancy rates for impacted communities. Statewide, census data indicate that there is a total housing stock of 1,994,554, with an average 2016–2020 rental vacancy rate of approximately 5.6% and an owner-occupied vacancy rate of approximately 1.4%. This is compared with national averages of 6.7% and 1.4%, respectively.

Table 2. Pre-Disaster Residential Percentages

(a) Pre-Disaster Vacancy Rates of Renter and Owner-Occupied Housing, by County

County	Renter-Occupied Vacancy Rate (%)	Owner-Occupied Vacancy Rate (%)
HUD and Grantee MIDs	5.44	2.38
Breathitt	3.3	0.8
Knott	2.2	3.2
Letcher	7.7	1.7
Perry	8.8	4.2
Pike	5.2	2.0
Impacted Counties	4.95	1.55
Casey	2.6	0.7
Clay	7.5	1.4
Cumberland	7.0	1.4
Floyd	2.6	1.7
Harlan	5.5	2.5
Johnson	6.8	3.8
Lee	6.4	0.6
Leslie	3.6	0.7
Lincoln	9.3	0.8
Magoffin	3.7	0.6
Martin	9.1	1.2
Owsley	1.3	1.4
Powell	2.5	5.3
Whitley	5.4	0.8
Wolfe	0.9	0.4
Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates		

The table below shows the distribution of housing units across the impacted counties. In total, there are approximately 1,983,949 housing units across the Commonwealth. Of these units, 88% are occupied by either renters or owners. Thirty-three percent of occupied housing units are occupied by renters. The majority of impacted counties consist of owner-occupied housing units, with Perry County having the highest percentage of owner-occupied units (77.5%) among HUD MIDs. Breathitt County is the MID with the highest percentage of renter-occupied units (28.3%).

(b) Pre-Disaster Renter and Owner-Occupied Housing, by County

County	Owner Occupied (#)	Owner Occupied (%)	Renter Occupied (#)	Renter Occupied (%)
HUD and Grantee MIDs				
Breathitt	3789	71.7	1492	28.3
Knott	4623	73.2	1696	26.8
Letcher	7096	73.9	2503	26.1
Perry	8783	77.5	2551	22.5
Pike	18448	72.3	7058	27.7
Impacted Counties				
Casey	4632	76.6	1416	23.4
Clay	5122	68.9	2310	31.1
Cumberland	1910	72.3	732	27.7
Floyd	10497	71.4	4203	28.6
Harlan	7460	69.4	3285	30.6
Johnson	6044	70.9	2484	29.1
Lee	1981	68.7	903	31.3
Leslie	3544	85.3	612	14.7
Lincoln	7573	78.3	2104	21.7
Magoffin	3706	74.3	1283	25.7
Martin	3121	77.2	924	22.8
Owsley	1051	63.5	604	36.5
Powell	3292	70.1	1406	29.9
Whitley	8680	68.4	4005	31.6
Wolfe	1879	62.8	1112	37.2
<i>Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates</i>				

The median home value for homeowners in Kentucky is \$155,100.¹⁷ Across Kentucky, there is a shortage of rental homes that are affordable and available to extremely low-income households whose incomes are at or below the poverty guideline or 30% of their area median income (AMI). Many of these households (62%) are severely cost-burdened, spending more than half of their income on housing. Severely cost-burdened households are more likely than other renters to sacrifice other necessities such as

healthy food and healthcare to pay the rent, and they are more likely to experience unstable housing situations and eviction. According to Kentucky's 2020–2024 consolidated plan, the high cost of housing is the “most frequently documented housing problem reported by all Kentucky households.”¹⁸ The data from the plan show that renter households are “disproportionately severely cost-burdened,”¹⁹ with about 60% of all severely cost-burdened households being renters. A study conducted by Surgo Ventures, a nonprofit based in Washington, D.C., analyzed U.S. Census Bureau Household Pulse Survey data and found that roughly 48,325 households owed more than \$110 million in rent.²⁰ According to Kentucky's most recent Asset Limited, Income Constrained, Employed (ALICE) report, 24.5% of Kentuckians are in households that do not earn enough to afford basic necessities.

In 2020, Kentucky published the 2019 Analysis of Impediments to Fair Housing Choice. The report found that the poverty rate in Kentucky was 18.3% in 2017—up from 17.7% in 2010—and six percentage points higher than the national rate. The only racial groups with below-average poverty rates were White and Asian. In 2017, the poverty rates among Black and Hispanic persons were 29.2% and 29.5%, respectively. A lack of income severely restricts housing choices. Kentucky's consolidated plan finds that African American and American Indian/Alaskan Native households are disproportionately affected by housing costs that exceed 30% of their income. Data from Kentucky's consolidated plan show that “very low-income elderly households are more affected by high housing costs” due to fixed incomes²¹. These circumstances increase the risk of housing instability.

¹⁷ U.S. Census Bureau. *QuickFacts, Kentucky*. Retrieved from <https://www.census.gov/quickfacts/fact/table/KY,US/PST045221>

¹⁸ Kentucky Housing Corporation. Kentucky Consolidated Plan 2020–2024. Retrieved from <https://www.kyhousing.org/Planning-Documents/Documents/Updated%202020%20Consolidated%20Plan%20Needs%20Assessment.pdf>

¹⁹ Kentucky Housing Corp. **NO** ration. Kentucky Consolidated Plan 2020–2024. Retrieved from <https://www.kyhousing.org/Planning-Documents/Documents/Updated%202020%20Consolidated%20Plan%20Needs%20Assessment.pdf>

²⁰ Surgo Ventures, *U.S. County-Level Rental Arrears Estimates – Kentucky*. Retrieved from https://precisionforcovid.org/rental_arrears

The table below shows the median home value, median gross rent, and building permits issued in the various impacted counties. While the median home values in impacted counties are significantly lower than the average U.S. home value (\$281,400), the average income for those living in counties impacted by the 2022 flooding disaster is significantly lower than the rest of the nation.

Table 3. Evidence of Cost Burden by County

County	Median Home Value	Median Gross Rent (in \$ per month)	Building Permits Issued (2022)
HUD MIDs			
Breathitt	\$52,700	\$476	1
Knott	\$57,900	\$537	N/A
Letcher	\$61,300	\$567	0
Perry	\$77,500	\$694	0
Pike	\$86,200	\$734	20
Grantee MIDs			
Casey	\$110,700	\$564	0
Clay	\$67,500	\$577	0
Cumberland	\$108,400	\$485	1
Floyd	\$79,100	\$681	3
Harlan	\$65,000	\$589	0
Johnson	\$118,400	\$654	0
Lee	\$73,900	\$572	N/A
Leslie	\$69,000	\$491	-
Lincoln	\$114,600	\$643	66
Magoffin	\$77,900	\$609	N/A
Martin	\$67,600	\$629	N/A
Owsley	\$69,600	\$343	N/A
Powell	\$103,800	\$711	2
Whitley	\$110,700	\$648	37
Wolfe	\$60,900	\$386	N/A

Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates and Measuring America's People, Places, and Economy

²¹Same as #18

Prior to the 2022 disasters, rural areas in the Commonwealth suffered from pandemic-related impacts that greatly affected economic and health conditions. Both renters and homeowners experienced severe levels of cost-burden that has now worsened following the most recent series of disasters. For impacted counties to fully recover, further assistance is needed to reconstruct, replace, and build affordable housing that is stronger and more resilient against future disasters.

2.2.2 Single Family vs. Multifamily Needs; Owner-Occupied vs. Tenant

Of all the housing units in Kentucky, 88% are occupied by either renters or owners. Of the occupied housing, 67% of occupied housing units are occupied by homeowners, and 33% are occupied by renters.²² Post-disaster, the availability of adequate rental units has been reduced due to the number impacted individuals and families needing units and the number of available rentals not being livable.

More rental housing units are needed to support potential growth in impacted counties and to assist individuals and families who need stable housing. As such, the CDBG-DR program is allocating nearly half of the funding to rental rehabilitation, reconstruction, or new construction. More housing is also needed to increase the stock of owner-occupied housing lost during the disasters. Single family homes, duplexes, and mobile homes accounted for the higher percentage of residences destroyed.

DLG will work with other State agencies to ensure that these programs address needs and can provide residents with access to housing opportunities.

The following tables outline information related FEMA Individual Assistance (IA) for owner-occupied housing units and tenant occupied housing units for each disaster in the counties eligible to receive the assistance. The number of applications and unit inspections including those with damage is tabulated along with the number of households that received assistance. The total FEMA verified loss is also calculated. The information is further broken down into types of housing and type of damage per unit.

²²DR-4630 Draft Housing Impact Assessment 05-31-2022

2.2.2.1 FEMA Individual Assistance (IA) Owner-Occupied Units

Table 4. Owner-Occupied Unit Applications, DR-4663

County	Applicants	Inspections	Inspected With Damage	Received Assistance	Total FEMA Verified Loss	Average FEMA Verified Loss
Breathitt	1647	1253	1186	927	\$68,367,149.91	\$41,510.11
Clay	514	331	276	211	\$2,696,452.22	\$5,246.02
Floyd	1145	743	689	579	\$15,479,959.92	\$13,519.62
Knott	1907	1540	1449	1108	\$39,804,106.93	\$20,872.63
Lee	67	13	11	8	\$363,002.13	\$5,417.94
Leslie	207	125	104	78	\$792,046.74	\$3,826.31
Letcher	2395	1797	1673	1355	\$45,140,024.49	\$18,847.61
Magoffin	201	114	82	56	\$740,123.74	\$3,682.21
Martin	251	177	146	109	\$1,411,311.54	\$5,622.76
Owsley	68	34	30	21	\$791,362.48	\$11,637.68
Perry	1744	1259	1116	800	\$40,061,668.38	\$22,971.14
Pike	1155	624	525	374	\$6,327,494.24	\$5,478.35
Whitley	267	24	22	17	\$200,113.96	\$749.49

Source: FEMA data for owners impacted by DR-4663

2.2.2.2 FEMA IA Tenant Applications

Table 5. Tenant Applications, DR-4663

County	Applicants	Inspections	Inspected With Damage	Received Assistance	Total FEMA Verified Loss	Average FEMA Verified Loss
Breathitt	500	260	229	4	\$2,949,205.23	\$5,898.41
Clay	336	75	44		\$472,971.71	\$1,407.65
Floyd	592	173	151	2	\$968,133.20	\$1,635.36
Knott	458	249	197	2	\$1,580,577.42	\$3,451.04
Lee	22	3	3		\$3,483.30	\$158.33
Leslie	77	22	14		\$63,912.90	\$830.04
Letcher	771	444	387		\$2,749,585.00	\$3,566.26
Magoffin	108	12	7		\$19,627.80	\$181.74
Martin	75	17	12		\$17,803.57	\$237.38
Owsley	38	8	6		\$9,402.24	\$247.43
Perry	660	268	206	1	\$1,309,743.46	\$1,984.46
Pike	605	83	58		\$200,262.90	\$331.01
Whitley	222	6	5		\$25,086.26	\$113.00

Source: FEMA data for renters impacted by DR-4663

2.2.2.3 FEMA IA Applications by Housing Type

Table 6. Applications by Housing Type

Residence Type	Applicants
Apartment	536
Assisted Living Facility	11
Boat	4
College Dorm	1
Condominium	58
Correctional Facility	3
House/Duplex	9,990
Military Housing	2
Mobile Home	4,599

Other	603
Townhouse	203
Travel Trailer	255
<i>Source: FEMA IA data for DR-4663</i>	

2.2.2.4 FEMA Real Property Damage Owner-Occupied Units

Table 7. Destroyed Residences from ARC (American Red Cross) Assessment

County	Assessments Completed	Damaged	% with Damage	Destroyed	% Destroyed	Major Damage	%Major Damage	Minor Damage	%Minor Damage
Breathitt	2012	983	49%	137	7%	694	34%	152	8%
Casey	3	0	0%	0	0%	0	0%	0	0%
Clay	92	20	22%	1	1%	11	12%	8	9%
Cumberland									
Floyd	737	177	24%	4	1%	93	13%	80	11%
Harlan	1	0	0%	0	0%	0	0%	0	0%
Johnson	12	1	8%	0	0%	0	0%	1	8%
Knott	1763	534	30%	75	4%	336	19%	123	7%
Lee									
Leslie	34	1	3%	0	0%	1	3%	0	0%
Letcher	2240	763	34%	67	3%	505	23%	191	9%
Lincoln									
Magoffin	137	1	1%	0	0%	0	0%	1	1%
Martin	50	2	4%	0	0%	2	4%	0	0%
Owsley	29	2	7%	2	7%	0	0%	0	0%
Perry	1537	403	26%	89	6%	223	15%	91	6%
Pike	466	105	23%	5	1%	57	12%	43	9%
Powell									
Whitley	41	10	24%	1	2%	4	10%	5	12%
Wolfe	49	1	2%	0	0%	0	0%	1	2%
Total	9203	3003	33%	381	4%	1926	21%	696	8%

Source: HUD DR-4663-KY Housing Impact Assessment – American Red Cross

2.3 Public Housing and Affordable Housing

DLG was able to collect limited data on multifamily HUD-assisted housing. The table below shows the number of properties, number of units assisted, and unmet needs as related to disaster DR-4663 (2022 severe storms, flooding, landslides, and mudslides). DLG made use of the best available data through the Kentucky Housing Corporation. DLG attempted to get more information by reaching out to the HUD local office, but additional data was not available. DLG will ensure that any updates to data from the Kentucky Housing Corporation will be adequately analyzed and be taken into account when developing programs to respond to the disaster.

2.3.1 Multifamily HUD-Assisted Housing

Table 8. Multifamily HUD-Assisted Housing, DR-4663

Type of Damage	Properties	Units	Units Assisted	Units Awaiting Assistance	Remaining Unmet Need
No Damage	26	1,296	1,156	-	-
Minor Damage	2	115	115	-	-
Severe Damage – Red Tagged	1	98	97	-	-
<i>Source: Kentucky Housing Corporation</i>					

2.3.1.1 Public Housing Authorities Damaged

Data for damaged Public Housing Authorities (PHAs) came directly from impacted housing authorities in the HUD-designated MID areas. Again, DLG reached out to the HUD local office, but better data was not available. If the Commonwealth can access better data on PHAs, the table below will be updated.

Table 9. Public Housing Authorities Damaged

County/ Municipality	Total PHAs	Total PHAs Damaged	Units Damaged	Remaining Unmet Need
Knott County	1	0	0	0
Pikeville (Pike County)	1	0	0	0
<i>Source: Kentucky Public Housing Authorities (Pikeville and Knott County PHAs)</i>				

2.4 Owners With Unmet Need in a Floodplain

Below is a table with information about participants in the National Flood Insurance Program. The table includes counties that were impacted by the disasters.

Table 10. Owners and Homeowners and Renters Flood Insurance Coverage

	Total	With Flood Insurance	% of Total	Without Flood Insurance	% of Total
Owners	11,483	509	4.4%	10,974	95.6%
Renters	4,420	77	1.7%	4,343	98.3%
Blank	127	4	3.1%	123	96.9%
TOTAL	16,030	590	3.7%	15,440	96.32%
FEMA FIDA Report 34761, November 28, 2022					

2.4.1 Insurance Claims and Losses in Disaster-Impacted Areas

The following tables show the number of individuals whose property was damaged by disasters DR-4663 and were eligible to apply for insurance claims.

Insurance companies typically categorize claims differently and/or do not report them to a central database. The Commonwealth worked with the Kentucky Public Protection Cabinet to collect information on insurance claims (individual homeowners, renters, commercial, and farm claims) through a data call to insurance providers.

2.4.1.1 Insurance Claims and Losses DR-4663

Table 11. Insurance Claims and Losses, DR-4663

County	Claims (#)	Claims Resulting in Loss (#)	Direct Incurred Losses (\$)
Breathitt	1,260	402	\$11,288,945.00
Clay	91	35	\$374,543.00
Floyd	315	172	\$1,275,366.00
Knott	1,669	800	\$5,438,633.00
Lee	4	4	\$8,347.00
Leslie	81	46	\$378,803.00
Letcher	4,657	2,455	\$21,520,869.00
Magoffin	22	8	\$53,370.00
Martin	36	10	\$65,150.00
Owsley	43	29	\$295,700.00
Perry	2,089	601	\$9,392,391.00
Pike	403	142	\$1,841,311.00
Whitley	34	24	\$183,421.00
TOTAL	10,704	4,728	\$52,116,849.00

2.5 Total Home Loans Approved by SBA

The SBA provides low-interest, long-term disaster loans to homeowners and renters to repair or replace uninsured or underinsured disaster-damaged property. As part of the loan process, SBA conducts a credit review. For home loans, SBA regulations limit home loans to \$200,000 for the repair or replacement of real estate and \$40,000 to repair or replace personal property. Subject to these maximums, loan amounts cannot exceed the verified uninsured disaster loss. Interest rates for the term of the loan are determined by formulas set by law and vary from disaster to disaster. Interest rates will not exceed 4%, and the maximum term is 30 years.

The table below shows how many home loans were applied for and approved by SBA for 2022 severe storms. The data show that of the HUD MIDs, Knott and Letcher Counties had the highest number of home loans approved.

Table 12. Total Home Loans Approved by SBA

County	Home Loans	County	Home Loan
Breathitt	1,158	Letcher	1,524
Casey		Lincoln	
Clay	386	Magoffin	115
Cumberland		Martin	155
Floyd	753	Owsley	39
Harlan		Perry	1,097
Johnson		Pike	572
Knott	1,227	Powell	
Lee	22	Whitley	66
Leslie	132	Wolfe	
	TOTAL	7,246	
<i>Source: SBA Statistics for KY Declarations #17546 & #17547 (KY-00093/FEMA 4663)</i>			

2.6 Social Equity, Fair Housing, and Civil Rights

2.6.1 Addressing Impediments to Accessible Housing

An impediment to fair housing choice is defined by HUD as any action, omission, or decision that restricts or has the effect of restricting the availability of housing choices to members of the protected classes. Discriminatory housing practices essentially deny equal access to or benefit of a housing opportunity. Section 109 of Title I of the Housing and Community Development Act of 1974 prohibits discrimination on the basis of race, color, national origin, sex, or religion in programs and activities receiving financial assistance from HUD's CDBG program. In addition, the affirmatively furthering fair housing (AFFH) goals include analyzing and eliminating housing discrimination,

promoting fair housing choice for all persons, providing opportunities for inclusive patterns of housing occupancy, promoting housing that is structurally accessible, and fostering compliance with the nondiscrimination provisions of the Fair Housing Act.

The Commonwealth of Kentucky understands that access to fair housing correlates to access to affordable housing. DLG and the Kentucky Housing Corporation conducted a 2019 Analysis of Impediments to Fair Housing Choice that examined how a jurisdiction's laws, regulations, and administrative policies, procedures, and practices affect the location, availability, and accessibility of housing.²³ The study was also an assessment of conditions, both public and private, that affect fair housing choice.

The data utilized were primarily from the U.S. Census Bureau's American Community Survey for 2013–2017. Some of the study's results concluded that:

- Kentucky's rate of new housing (2%) has not kept pace with the national average (5%).
- Between 2010 and 2017, incomes have declined or stagnated for all racial/ethnic groups except those selecting multiracial and Other Race identities.
- By 2017, the State homeownership rate decreased slightly by 1.7 percentage points.
- Non-White households tend to be larger than White households and are in the rental market at higher rates.
- Even in the absence of discrimination, persons with disabilities often experience greater obstacles in securing affordable housing that is accessible due to the potential for lower wages and rates of employment.

²³ [2019 Analysis of Impediments to Fair Housing Choice, April 2020](#)

Some of the barriers identified in the study that still exist and can prevent impacted communities from obtaining housing include:

- Inadequate or inaccessible housing exists for families with children, the elderly, refugees and immigrants, and individuals with disabilities.
- Emphasis on credit scores that negatively impacts minorities and protected classes.
- Appraisal processes that contribute to increased devaluation of minority neighborhoods.
- Education on homeownership and renters' rights often remains available only in English, such that persons with limited English proficiency (LEP) may encounter obstacles to fair housing by virtue of language and cultural barriers. Providing language access, will be essential to ensure that all citizens have the same opportunity.

Figure 2. Percent of LEP Residents, HUD and Grantee MID Areas

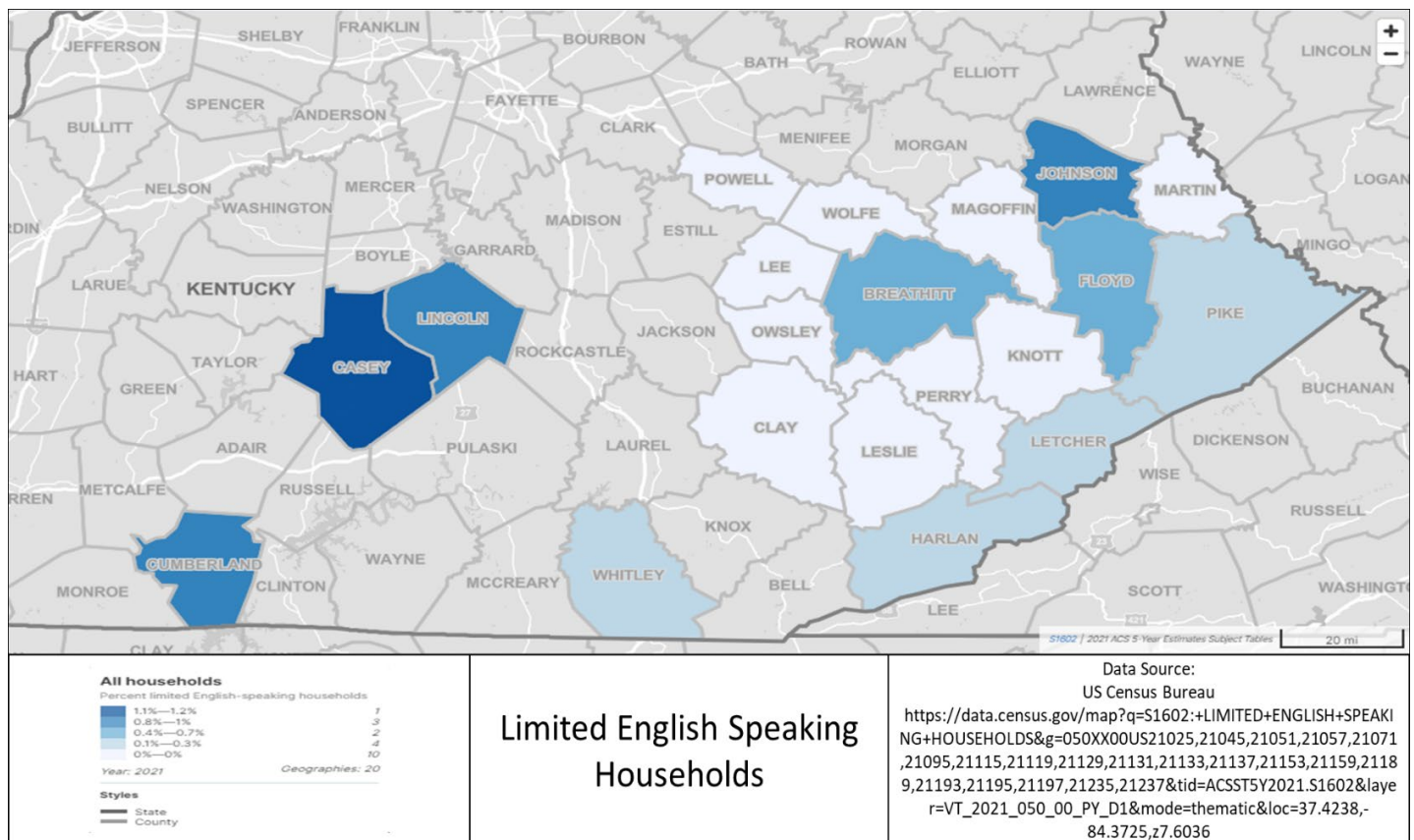
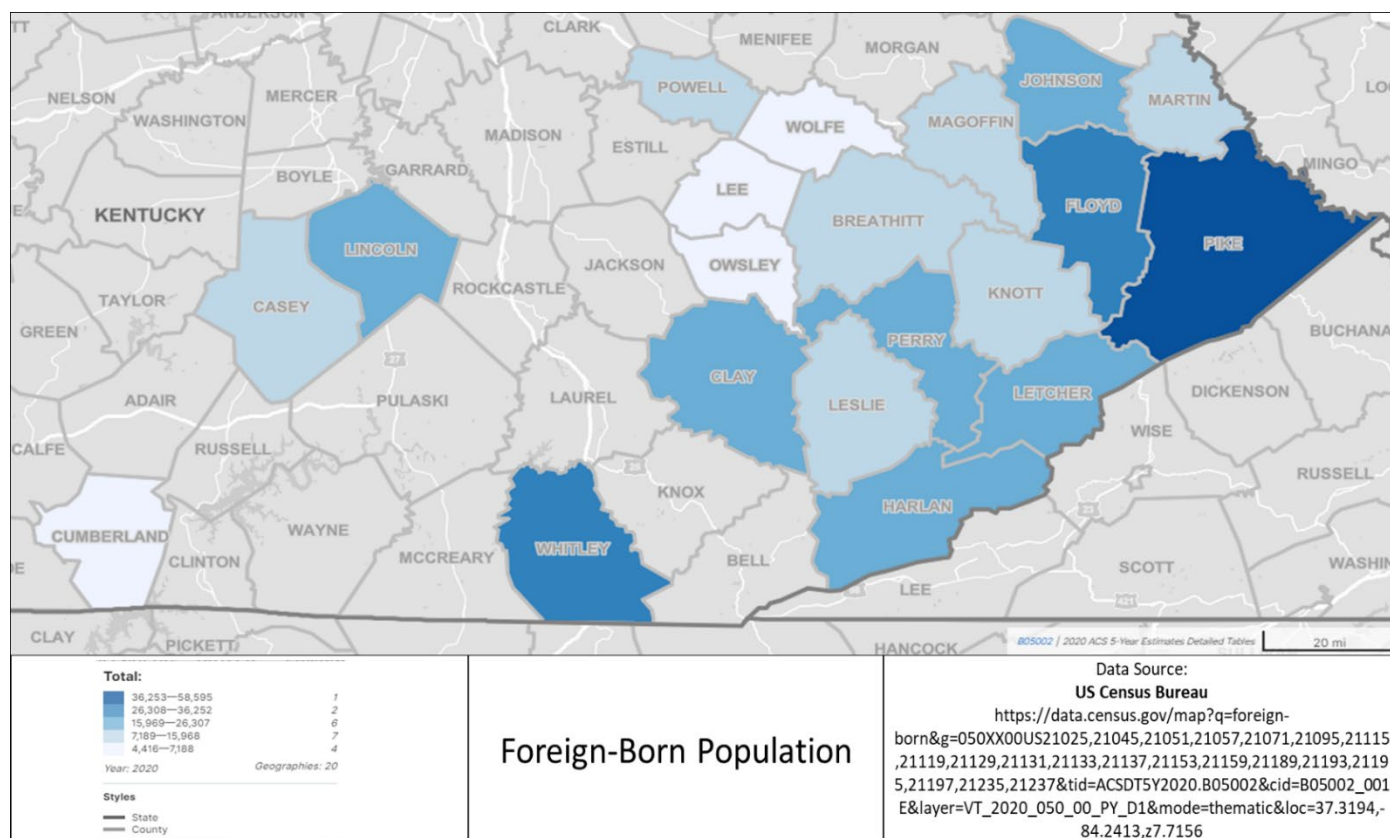


Figure 3. Foreign-Born Population, HUD and Grantee MID Areas



In accordance with federal and State laws, Kentucky defines the following characteristics as federally protected against housing discrimination: race, color, religion, sex, gender, national origin, familial status, and disability status. Through this funding, the Commonwealth will respond to the needs of impacted residents and communities, with a particular emphasis on vulnerable populations. Vulnerable populations are defined as a group or community whose circumstances present barriers to obtaining or understanding information or accessing resources. Vulnerable populations can include LEP persons, persons experiencing homelessness, elderly, persons with disabilities, victims of domestic violence, and public housing residents.

From the study results, DLG and its subrecipients will increase efforts in outreach and fair housing education to municipalities and institutions across Kentucky, focusing on the expansion and preservation of affordable housing across Kentucky, enforcement of design and construction standards, and updates to the Language Access Plan to ensure that LEP populations are made aware of housing opportunities. The combination of these efforts should address unmet recovery needs in impacted communities, reduce any unjustified discriminatory effects on vulnerable populations, and increase participation in Kentucky's housing and infrastructure programs.

DLG will ensure that the proposed housing programs not only address the disaster recovery needs of the community but are also consistent with the goals of AFFH and

remove barriers to building inclusive communities. The Commonwealth will implement the following strategies to reduce barriers that individuals may face when enrolling in and accessing CDBG-DR assistance. These strategies will also prevent the CDBG-DR housing programs from having an unjust discriminatory effect on individuals with disabilities and racial and ethnic minorities in proportion to their communities' needs. The Commonwealth will:

- Provide a Housing Counseling and Legal Aid program. The program will provide funds to subrecipients to help guide housing applicants through the program implementation and complement the proposed housing activities. With outreach and promotion, DLG and subrecipients will ensure access for individuals with disabilities including but not limited to mobility, sensory, developmental, emotional, cognitive, and other impairments.
- Coordinate with the Kentucky Commission on Human Rights, Lexington Fair Housing Council, and other organizations (e.g., Bowling Green Human Rights Commission, Kentucky Housing Corporation) to address or eliminate any discriminatory practices against persons based on race, skin color, national origin, religion, sex, gender, gender identity, sexual orientation, disability, and familial status.
- Develop a network of points of contact for organizations and programs that serve minority, elderly, women, disabled persons, and ethnic groups and make sure that program information is given to these groups for dissemination beyond standard newspaper and public notice channels.
- Maximize choice within the community's total housing supply by ensuring that administrative practices do not have a discriminatory effect.
- Lessen racial, ethnic, and economic concentrations of housing by developing a nondiscrimination checklist to review policies, plans and actions, and documented reviews.
- Provide regular technical assistance to subrecipients who need support related to adhering to AFFH regulations and provide support to subrecipients who are struggling with a lack of outreach to their community.

As part of its ongoing effort to monitor subrecipients, DLG will determine if additional steps are needed to address fair housing requirements. DLG will evaluate whether subrecipients have (1) designated a fair housing and equal opportunity coordinator to be the prime liaison with DLG, (2) passed a fair housing resolution prior to release of grant funds, and (3) conducted one or more AFFH activities, depending on local conditions and needs to ensure that all citizens in the community are aware that AFFH is a priority (e.g., launched counseling services, provided assistance to fair housing groups).

If substantial efforts are not being made to support AFFH, DLG may determine that additional technical assistance to subrecipients is necessary or may provide more outreach to all residents in a community to ensure that housing needs are being addressed.

Program homeowners and renters will be informed that if they believe their rights may have been violated, they can [file a complaint with FHEO](#) by online submission, email, phone, or mail.

HUD Form 903 [Online Complaint](#)
Atlanta Regional Office of FHEO
U.S. Department of Housing and Urban Development
Five Points Plaza
40 Marietta Street, 16th Floor
Atlanta, GA 30303-2806
Phone: 678-732-2493
Email: ComplaintsOffice04@hud.gov

2.6.1.1 The Use of Data to Make Funding Decisions to Advance Equity and Reduce Barriers

DLG is committed to using data, performance metrics, and qualitative and quantitative information to ensure programs help advance equity and reduce barriers. This section outlines DLG's analysis of impacts to vulnerable populations,²⁴ including analysis of members of protected classes under fair housing and civil rights laws, racially and ethnically concentrated areas of poverty, socially vulnerable areas, and historically underserved communities.²⁵

This information provides a foundation for understanding the additional needs of survivors and for ensuring programs are implemented equitably or in a manner that understands and addresses disparities and additional needs across race, ability, class, age, ethnicity, gender, and other characteristics.

²⁴ HUD defined vulnerable populations as: "A group or community whose circumstances present barriers to obtaining or understanding information or accessing resources."

²⁵ HUD defines underserved communities as: "Refers to populations sharing a particular characteristic,

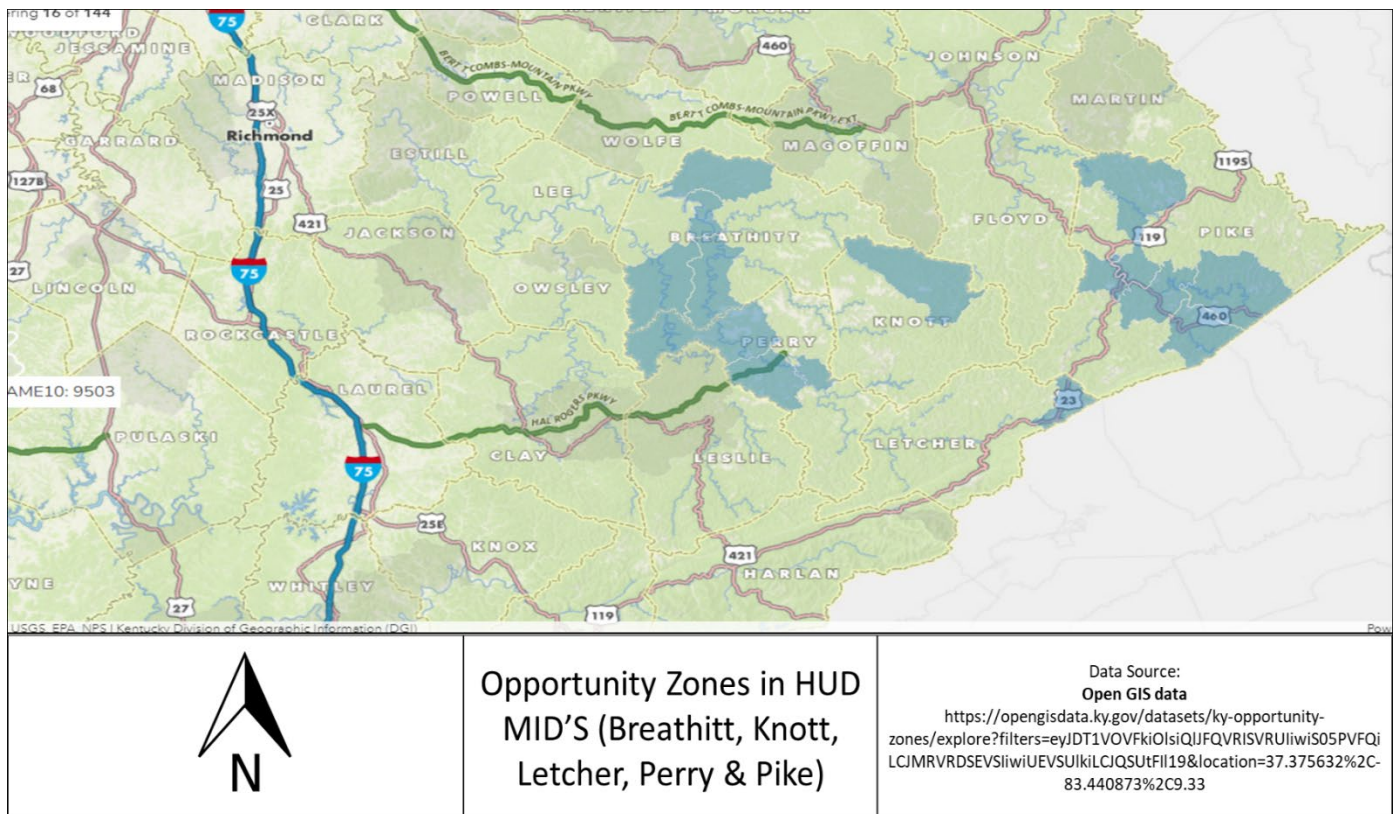
2.6.1.2 Underserved Communities

The Commonwealth has mapped the MID areas with the geographic boundaries of Opportunity Zones. These maps delineate areas that HUD has identified as underserved communities at the census tract level (“Opportunity Zones”). DLG has researched the diverse impacts from the two declared disasters across the Commonwealth, identifying disparate challenges both across communities and stemming from different hazards. DLG will use a more refined and focused method of data analysis, mapping, and examination of community data gathered through the Action Plan and the program-designed stakeholder consultation process to understand which neighborhoods and communities have been historically underserved. In this way, DLG can better identify and target unmet needs in underserved communities. The Commonwealth will also review other information that may indicate whether a community is underserved, including reviewing census tracts that were eligible for Opportunity Zone designation and areas eligible for New Market Tax Credits.

as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life. Underserved communities that were economically distressed before the disaster include, but are not limited to, those areas that were designated as a Promise Zone,

Opportunity Zone, a Neighborhood Revitalization Strategy Area, a tribal area, or those areas that meet at least one of the distress criteria established for the designation of an investment area of Community Development Financial Institution at 12 CFR 1805.201(b)(3)(ii)(D)”

Figure 4. Opportunity Zones



2.6.1.3 Opportunity Zones

Opportunity Zones were created under the Tax Cuts and Jobs Act of 2017. They are low-income communities and certain neighboring areas that are first defined by population census tract, then nominated by states for the Opportunity Zone designation and certified by the U.S. Department of the Treasury. Their purpose is to spur economic growth and job creation in low-income communities while providing tax benefits to investors.²⁶

As demonstrated in the map above, the 2022 disaster-impacted areas that are either within or border Opportunity Zones fall in the following counties:

- Breathitt County
- Knott County
- Letcher County
- Perry County
- Pike County

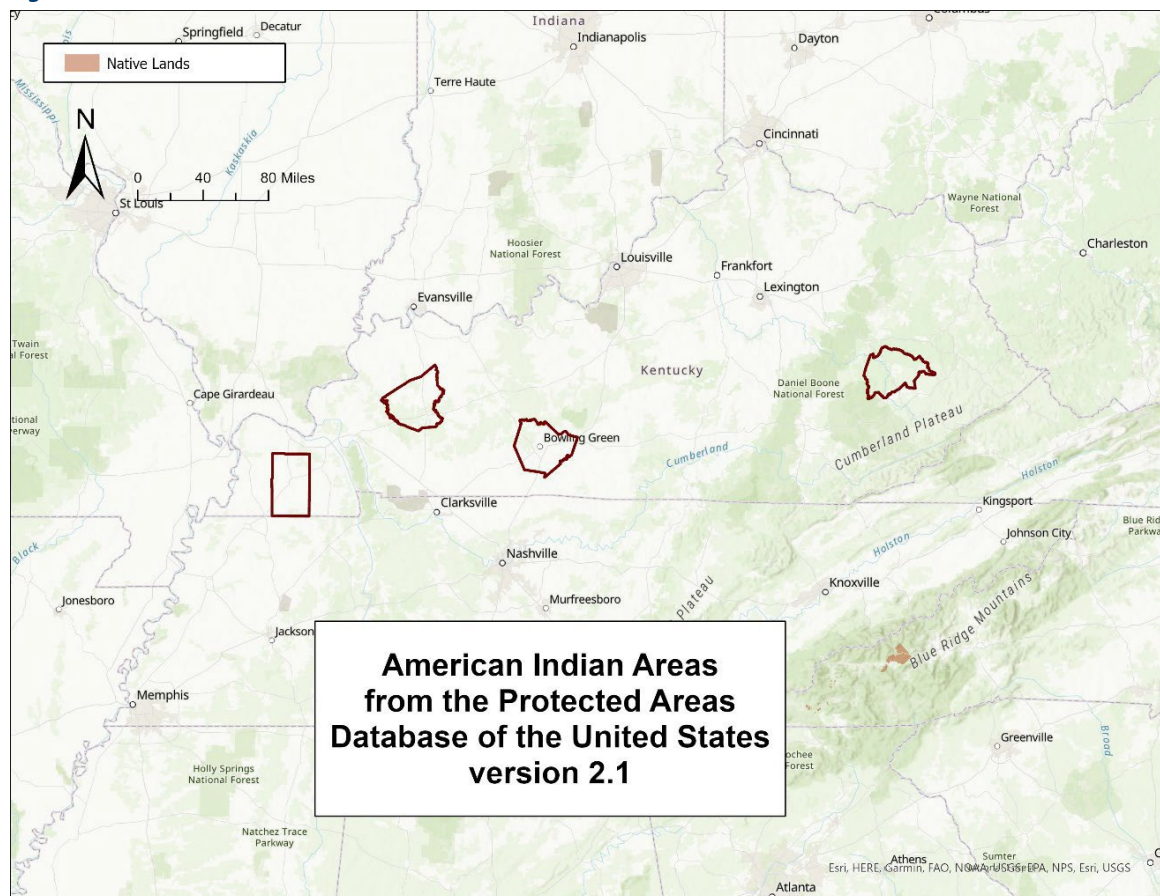
²⁶ <https://www.irs.gov/credits-deductions/businesses/opportunity-zones>

2.6.1.4 Tribal Areas

Tribal lands representing seven American Indian Tribes are located within the impacted areas. They are the Cherokee Nation, the Chickasaw Nation, the Delaware Nation (Oklahoma), the Eastern Band of Cherokee Indians, the Eastern Shawnee Tribe of Oklahoma, the Osage Nation, and the Quapaw Tribe of Indians.²⁷

None of these seven tribes that are in or near the severe storm, flooding, landslides, or mudslide disaster areas have large reservations or tracts of native-owned lands or housing that sustained damage by the 2022 severe weather disasters. Rather, their enrolled tribal members live throughout the Commonwealth and nationally. The figure below, from the U.S. Geological Survey (USGS), shows that there are no defined tribal areas for the American Indian population in Kentucky.

Figure 5. Native Lands



²⁷ [HUD's Tribal Directory Assessment Tool \(TDAT\)](#)

2.6.1.5 R/ECAPs

Racially/ethnically concentrated areas of poverty (R/ECAPs) are census tracts determined by HUD to have a non-White population of 50% or more and where more than 40% of the population live in poverty. There are no HUD MID areas that fall within a census tract that are identified as R/ECAP areas.

2.6.1.6 Social Vulnerability Index and Disadvantaged Communities

In 2021, President Joe Biden signed Executive Order 14008 “Tackling the Climate Crisis at Home and Abroad.” The executive order states that “40 percent of the overall benefits” of federal investments from covered programs should flow to disadvantaged communities.²⁸ This ensures that any federal funds directed toward climate mitigation and adaptation largely benefit historically underserved communities. One way that agencies and covered programs benefit disadvantaged communities is by identifying target populations with the CDC’s Social Vulnerability Index (SVI).

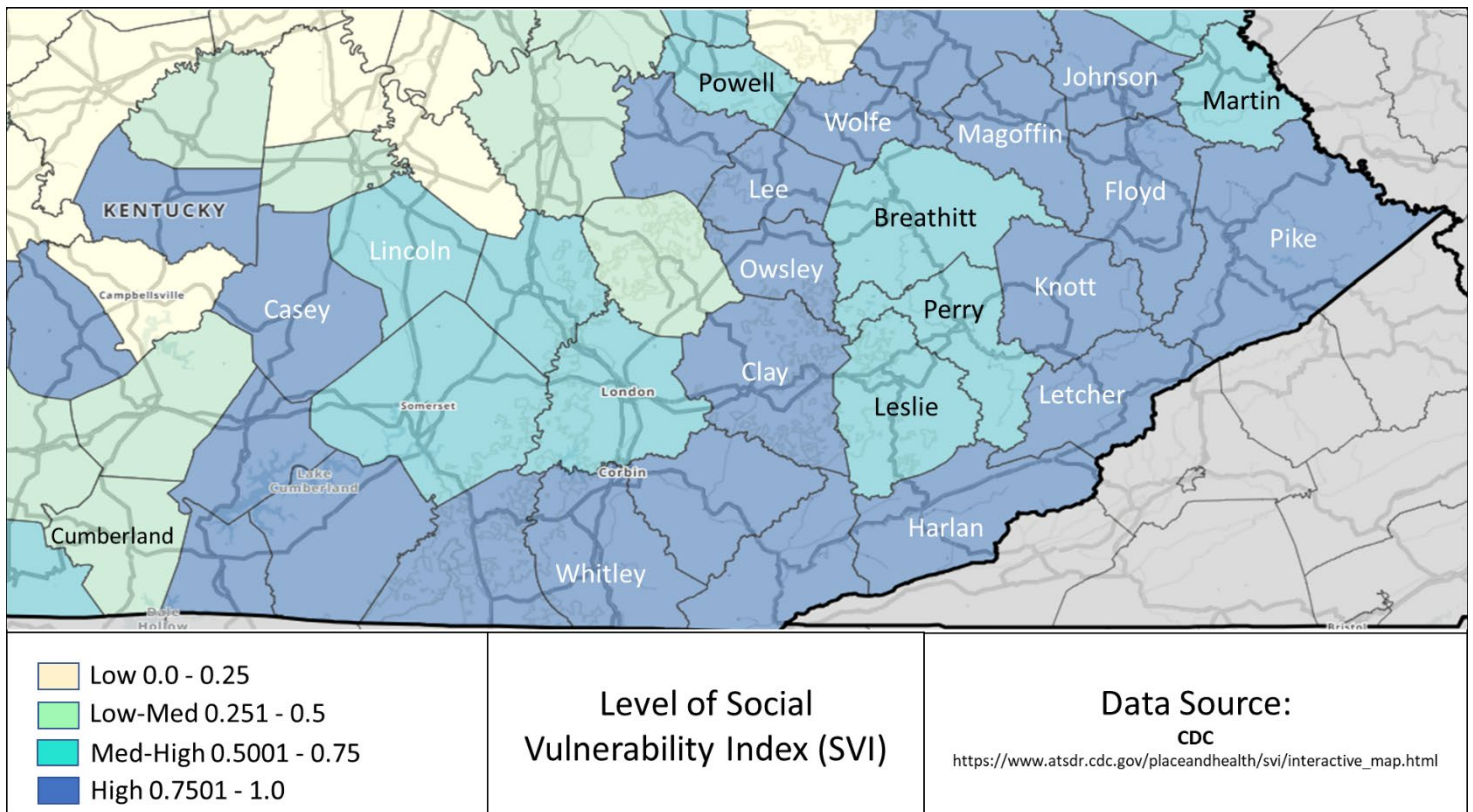
The CDC’s Agency for Toxic Substances and Disease Registry’s (ATSDR) SVI ranks counties and census tracts on 15 social factors, including unemployment, minority status, and disability, and then further groups them into four related themes. The SVI ranking variables for the four themes include socioeconomic status, household composition and disability, minority status and language, and housing type and transportation. These indicators help support analysis of the relative vulnerability of a given census tract and help identify communities that will need continued support to recover following an emergency or natural disaster. Table 21 Census Tracts in MID Areas with SVI Percentile >0.90 shows the overall ranking, which is a percentile ranking that represents the proportion of tracts that are equal to or lower than a tract of interest in terms of social vulnerability. For example, a CDC/ATSDR SVI ranking of 0.60 signifies that 60% of tracts in the State or nation are less vulnerable than the tract of interest, and 40% of tracts in the Commonwealth or nation are more vulnerable.

The overall SVI percentile for census tracts in the MID areas is 0.56, indicating that 56% of tracts in the Commonwealth or nation are less vulnerable. The 4 census tracts with the highest SVI percentiles (above 0.90) are included in the table below. The county with census tracts having the highest overall SVI percentile is Pike County, with an overall SVI percentile of 0.9583 (see figure 6 for further details).

²⁸ <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>

Table 13. Census Tracts in HUD MID Areas with SVI Percentile >0.90

Census Tract	County	Overall SVI Percentile
Census Tract 21195931700	Pike	0.9583
Census Tract 21119960300	Knott	0.9189
Census Tract 21133950100	Letcher	0.9429
Census Tract 21193970700	Perry	0.929

Figure 6. Overall SVI Percentile in HUD and Grantee MID Areas

2.6.1.7 Race and Ethnicity

2.6.1.7.1 Black or African American Residents

The largest minority population group in the MID areas are residents who identify as Black or African American. The 2020 Decennial Census redistricting data, from the U.S. Census Bureau, indicates that 6.74% of residents in the MID areas identify as Black or African American. The MID area containing census tracts with the highest percentage of residents who identify as Black or African American is the 42101 ZIP code in Warren County. Census tract 112 in Warren County has the highest concentration of Black or African American residents within the MID area, with 1,685 residents (34.73%) identifying as Black or African American.

Using data with mapping, DLG can start to address the disproportionate impact of poverty on housing ownership and maintenance. Knowing which areas are impacted and have greater proportions of Black or African American residents will allow DLG and its subrecipients to target outreach for the CDBG-DR programs to ensure that residents in those areas are able to participate and receive the help they need. This will be a step forward in making sure that the programs do not have an unjustified discriminatory effect on or failure to benefit racial and ethnic minorities in proportion to their communities' needs.

Figure 7. Percentage of Population That is Black or African American HUD and Grantee MID Areas

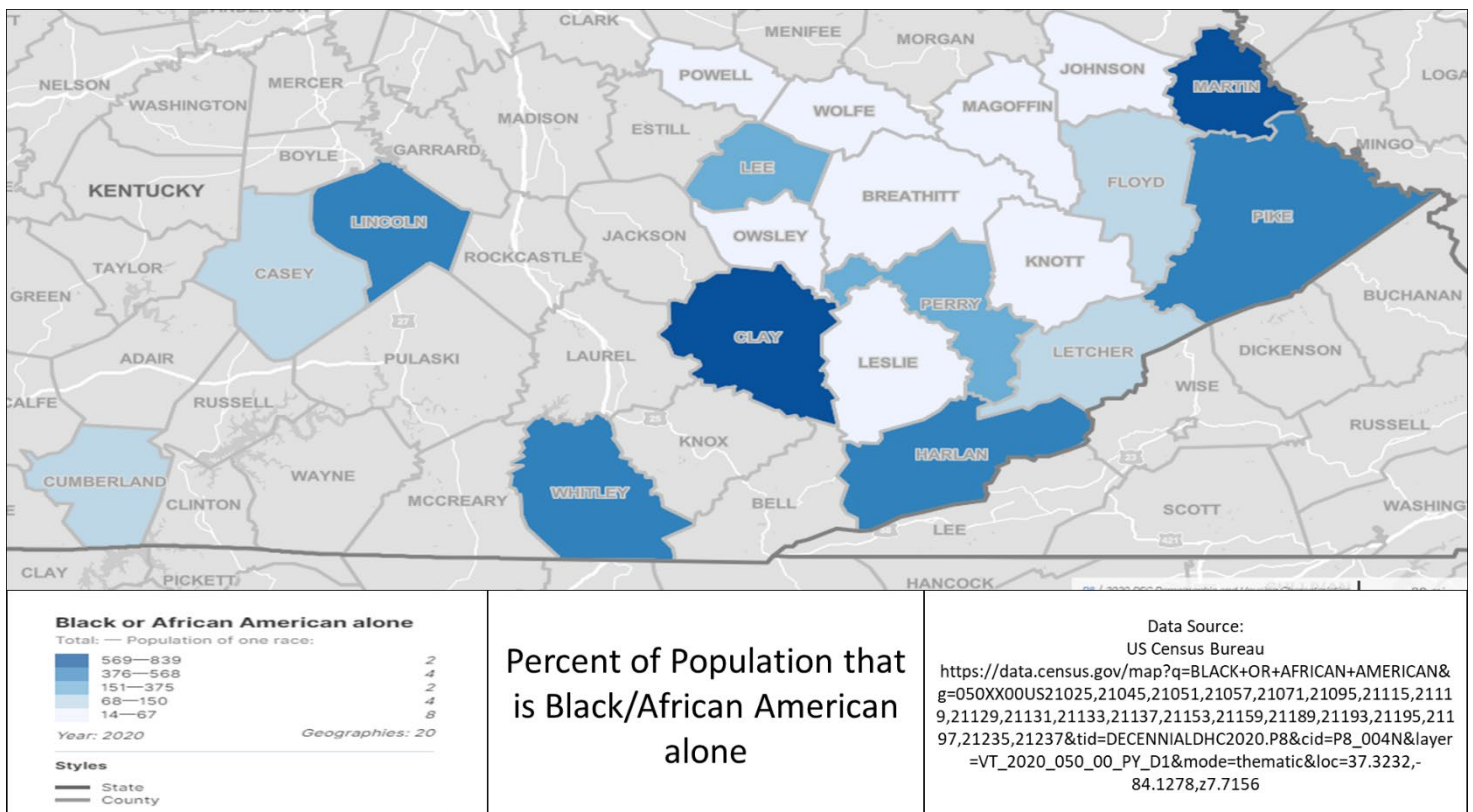


Table 14. Percentage of Population that is Black or African American, HUD MID Areas

County	Census Tract Number	Total Population (#)	White Alone (#)	White Alone (%)	Black or African American Alone (#)	Black or African American Alone (%)
Breathitt	9202	2,084	2,011	96.50%	73	3.50%
Breathitt	9203.01	2,162	2,138	98.88%	0	0.00%
Breathitt	9203.02	1,256	1,215	96.74%	21	1.67%
Breathitt	9205	1,702	1,628	95.65%	0	0.00%
Breathitt	9206	1,686	1,619	96.03%	34	2.02%
Breathitt	9207	2,089	2,068	98.99%	0	0.00%
Breathitt	9208	2,673	2,579	96.48%	15	0.56%
Knott	9601	2,374	2,364	99.59%	0	0.00%
Knott	9602	3,132	3,065	97.86%	0	0.00%
Knott	9603	3,753	3,601	95.95%	62	1.65%
Knott	9604	2,045	1,976	96.63%	12	0.59%
Knott	9605	3,202	3,079	96.16%	70	2.19%
Letcher	9501	2,719	2,467	90.73%	30	1.10%
Letcher	9502.01	2,606	2,606	100.00%	0	0.00%
Letcher	9502.02	1,910	1,854	97.07%	54	2.83%
Letcher	9503	1,515	1,515	100.00%	0	0.00%
Letcher	9504.01	2,913	2,882	96.88%	6	0.21%
Letcher	9504.03	2,066	2,026	98.06%	0	0.00%
Letcher	9504.04	2,758	2,707	98.15%	0	0.00%
Letcher	9505	989	894	90.39%	0	0.00%
Letcher	9506.01	1,991	1,988	99.84%	0	0.00%
Letcher	9506.02	2,317	2,299	99.22%	0	0.00%
Perry	9703	3,069	3,069	100.00%	0	0.00%
Perry	9704	3,932	3,679	93.57%	13	0.33%
Perry	9705.01	3,258	3,189	97.88%	16	0.49%
Perry	9705.02	2,146	1,999	93.15%	54	2.52%
Perry	9706.01	2,483	2,483	100.00%	0	0.00%
Perry	9706.02	2,561	2,160	84.34%	30	1.17%
Perry	9707	2,186	1,951	89.25%	185	8.46%
Perry	9708	2,653	2,525	95.18%	0	0.00%
Perry	9709	1,465	1,465	100.00%	0	0.00%
Perry	9710	4,668	4,468	100.00%	13	0.00%

County	Census Tract Number	Total Population (#)	White Alone (#)	White Alone (%)	Black or African American Alone (#)	Black or African American Alone (%)
Pike	9301	3,092	3,092	100.00%	0	0.00%
Pike	9302.01	3,400	3,334	98.06%	37	1.09%
Pike	9302.02	3,333	3,156	94.69%	0	0.00%
Pike	9303.01	1,612	1,447	89.76%	96	5.96%
Pike	9303.02	1,601	1,449	90.51%	64	4.00%
Pike	9304	2,846	2,693	94.62%	0	0.00%
Pike	9305	2,869	2,853	99.44%	0	0.00%
Pike	9306	3,757	3,573	95.10%	0	0.16%
Pike	9307	1,947	1,947	100.00%	0	0.00%
Pike	9308	2,385	2,385	100.00%	0	0.00%
Pike	9309	1,685	1,593	94.54%	54	3.20%
Pike	9310	2,289	2,274	99.34%	0	0.00%
Pike	9311.01	1,780	1,701	95.56%	0	0.00%
Pike	9311.02	2,066	2,066	100.00%	0	0.00%
Pike	9313	2,240	2,236	99.82%	0	0.00%
Pike	9314	2,585	2,443	94.51%	4	0.15%
Pike	9315	3,718	3,584	96.40%	0	0.00%
Pike	9316	1,415	1,343	94.91%	0	0.00%
Pike	9317	4,055	4,051	99.90%	4	0.10%
Pike	9318	3,668	3,498	95.37%	79	2.15%
Pike	9319	3,014	2,835	94.06%	142	4.71%
Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates						

2.6.1.7.2 Some Other Race

Another minority population group in the MID areas are residents who identify as “Some Other Race” according to the 2020 Decennial Census, from the U.S. Census Bureau. The 2020 Decennial Census redistricting data indicate there are a percentage of residents in the MID areas that identify as Some Other Race. Both Pike and Lincoln counties have the highest concentration of residents that identify as Some Other Race.

Using mapping data, DLG will ensure that outreach occurs in these areas and that programs do not have an unjustified discriminatory effect on or failure to benefit racial and ethnic minorities in proportion to their communities' needs.

Figure 8. Percent of Population Identifying as Some Other Race, HUD and Grantee MID Areas

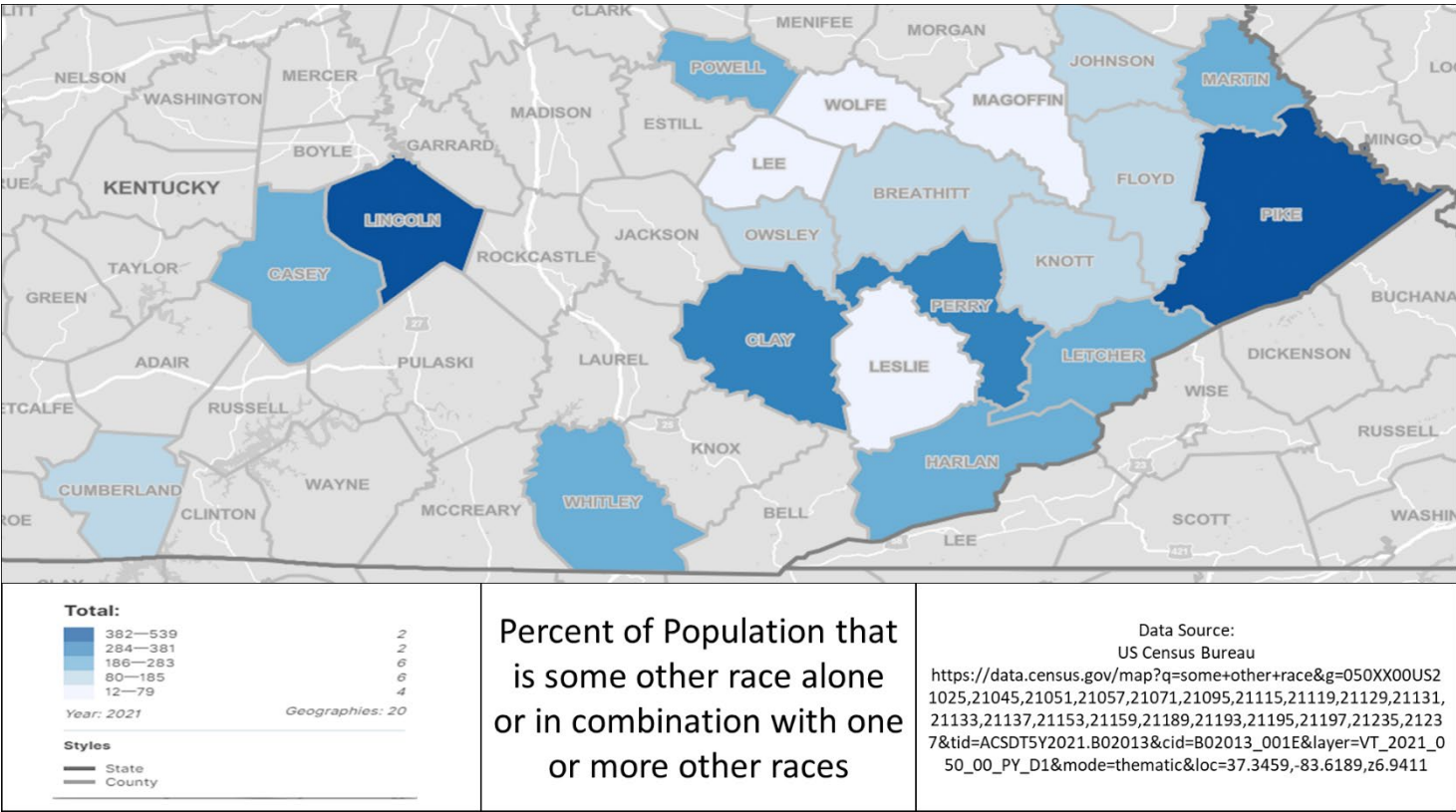


Table 15. Some Other Race, HUD MID Areas

County	Census Tract Number	Some Other Race (#)	Some Other Race (%)
Breathitt	9202	0	0.00%
Breathitt	9203.01	17	0.79%
Breathitt	9203.02	34	2.71%
Breathitt	9205	114	6.70%
Breathitt	9206	0	0.00%
Breathitt	9207	0	0.00%
Breathitt	9208	13	0.49%
Knott	9601	7	0.29%
Knott	9602	67	2.14%
Knott	9603	23	0.61%
Knott	9604	7	0.34%
Knott	9605	12	0.37%
Letcher	9501	113	4.16%
Letcher	9502.01	0	0.00%
Letcher	9502.02	0	0.00%
Letcher	9503	0	0.00%
Letcher	9504.01	0	0.00%
Letcher	9504.03	34	1.66%
Letcher	9504.04	0	0.00%
Letcher	9505	77	7.79%
Letcher	9506.01	0	0.00%
Letcher	9506.02	18	0.77%
Perry	9703	0	0.00%
Perry	9704	178	4.53%
Perry	9705.01	0	0.00%
Perry	9705.02	0	0.00%
Perry	9706.01	0	0.00%
Perry	9706.02	0	0.00%
Perry	9707	17	0.78%
Perry	9708	72	2.71%
Perry	9709	0	0.00%
Perry	9710	84	1.80%
Pike	9301	0	0.00%
Pike	9302.01	0	0.00%
Pike	9302.02	140	4.20%
Pike	9303.01	35	2.17%

County	Census Tract Number	Some Other Race (#)	Some Other Race (%)
Pike	9303.02	0	0.00%
Pike	9304	34	1.19%
Pike	9305	9	0.32%
Pike	9306	69	1.84%
Pike	9307	0	0.00%
Pike	9308	0	0.00%
Pike	9309	37	2.20%
Pike	9310	0	0.00%
Pike	9311.01	35	1.97%
Pike	9311.02	0	0.00%
Pike	9312	19	0.53%
Pike	9313	0	0.00%
Pike	9314	34	1.32%
Pike	9315	0	0.00%
Pike	9316	53	3.75%
Pike	9317	0	0.00%
Pike	9318	37	1.01%
Pike	9319	37	1.23%
Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates			

2.6.1.7.3 Hispanic or Latino

The U.S. Census Bureau's 2020 Decennial Census redistricting data indicate that 4.53% of residents in the MID areas identify as Hispanic or Latino. The MID area containing the census tract with the highest percentage of residents who identify as Hispanic or Latino is the 9205 census tract in Breathitt County with a 6.70%. The second highest census tract is in Pike County, census tract 9302.02 with 6.48%.

Using mapping data, DLG will ensure that outreach occurs in these areas and that programs do not have an unjustified discriminatory effect on or failure to benefit racial and ethnic minorities in proportion to their communities' needs.

Figure 9. Percentage of Population That is Hispanic or Latino, HUD and Grantee MID Areas

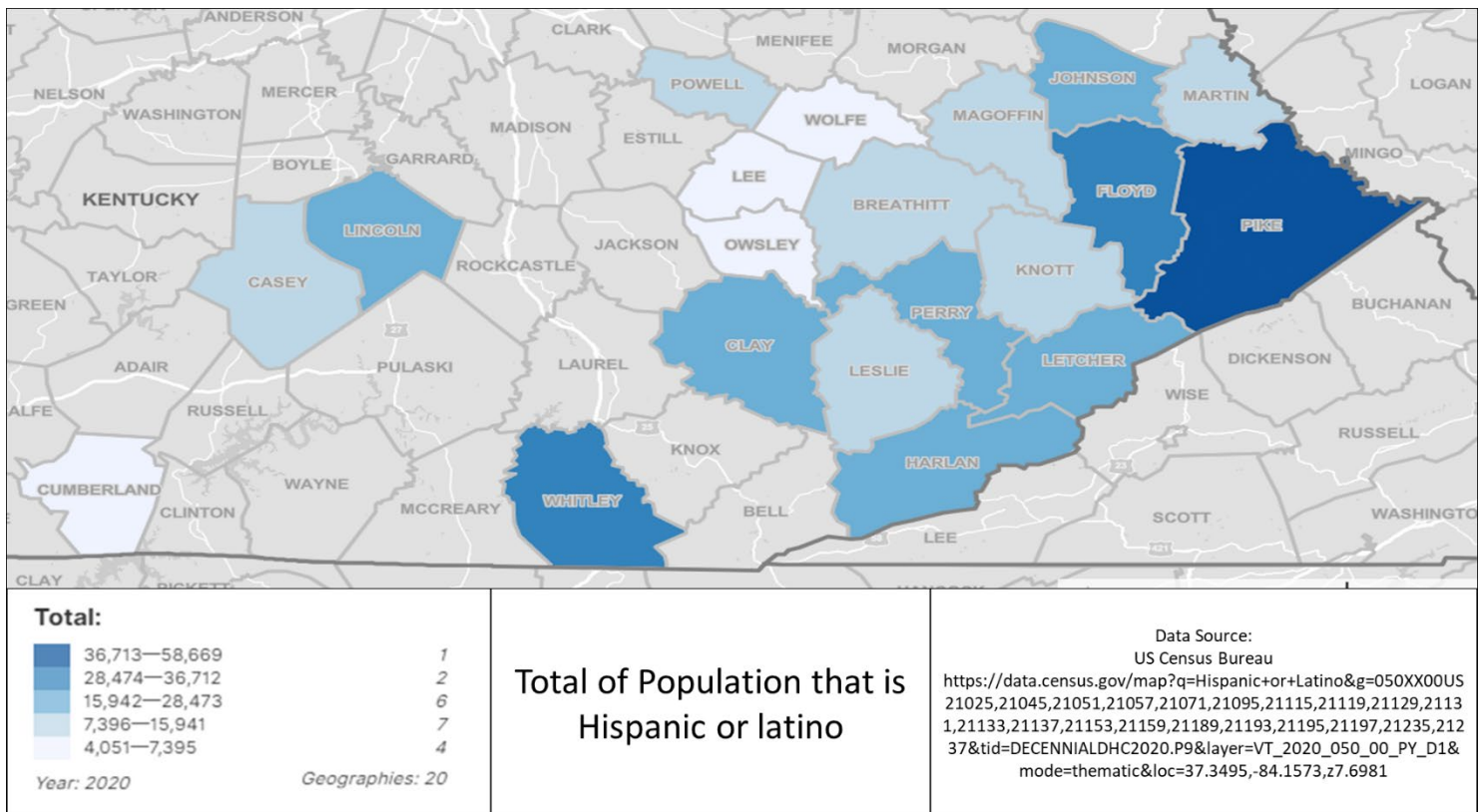


Table 16. Percentage of Population That is Hispanic or Latino, HUD MID Areas

County	Census Tract Number	Total (#)	Hispanic or Latino (#)	Hispanic or Latino (%)	Not Hispanic or Latino (#)	Not Hispanic or Latino (%)
Breathitt	9202	2,084	0	0.00%	2,084	100.00%
Breathitt	9203.01	2,162	32	1.48%	2,130	98.52%
Breathitt	9203.02	1,256	0	0.00%	1,256	100.00%
Breathitt	9205	1,702	114	6.70%	1,588	93.30%
Breathitt	9206	1,686	0	0.00%	1,686	100.00%
Breathitt	9207	2,089	0	0.00%	2,089	100.00%
Breathitt	9208	2,673	0	0.00%	2,673	100.00%
Knott	9601	2,374	41	1.73%	2,333	98.27%
Knott	9602	3,132	43	1.37%	3,089	98.63%
Knott	9603	3,753	47	1.25%	3,706	98.75%
Knott	9604	2,045	0	0.00%	2,045	100.00%
Knott	9605	3,202	12	0.37%	3,190	99.63%
Letcher	9501	2,719	63	2.32%	2,656	97.68%
Letcher	9502.01	2,606	0	0.00%	2,606	100.00%
Letcher	9502.02	1,910	0	0.00%	1,910	100.00%
Letcher	9503	1,515	6	0.40%	1,509	99.60%
Letcher	9504.01	2,913	0	0.00%	2,913	100.00%
Letcher	9504.03	2,066	57	2.76%	2,009	97.24%
Letcher	9504.04	2,758	56	2.03%	2,702	97.97%
Letcher	9505	989	0	0.00%	989	100.00%
Letcher	9506.01	1,991	2	0.10%	1,989	99.90%
Letcher	9506.02	2,317	17	0.73%	2,300	99.27%
Perry	9703	3,069	0	0.00%	3,069	100.00%
Perry	9704	3,932	5	0.13%	3,927	99.87%
Perry	9705.01	3,258	130	3.99%	3,128	96.01%
Perry	9705.02	2,146	0	0.00%	2,146	100.00%
Perry	9706.01	2,483	0	0.00%	2,483	100.00%
Perry	9706.02	2,561	0	0.00%	2,561	100.00%
Perry	9707	2,186	17	0.78%	2,169	99.22%
Perry	9708	2,653	72	2.71%	2,581	97.29%
Perry	9709	1,465	15	1.02%	1,450	98.98%
Perry	9710	4,668	78	1.67%	4,590	98.33%
Pike	9301	3,092	48	1.55%	3,044	98.45%
Pike	9302.01	3,400	0	0.00%	3,400	100.00%
Pike	9302.02	3,333	216	6.48%	3,117	93.52%
Pike	9303.01	1,612	36	2.23%	1,576	97.77%

County	Census Tract Number	Total (#)	Hispanic or Latino (#)	Hispanic or Latino (%)	Not Hispanic or Latino (#)	Not Hispanic or Latino (%)
Pike	9303.02	1,601	29	1.81%	1,572	98.19%
Pike	9304	2,846	12	0.42%	2,834	99.58%
Pike	9305	2,869	9	0.31%	2,860	99.69%

County	Census Tract Number	Total (#)	Hispanic or Latino (#)	Hispanic or Latino (%)	Not Hispanic or Latino (#)	Not Hispanic or Latino (%)
Pike	9306	3,757	0	0.00%	3,757	100.00%
Pike	9307	1,947	0	0.00%	1,947	100.00%
Pike	9308	2,385	0	0.00%	2,385	100.00%
Pike	9309	1,685	12	0.71%	1,673	99.29%
Pike	9310	2,289	0	0.00%	2,289	100.00%
Pike	9311.01	1,780	14	0.79%	1,766	99.21%
Pike	9311.02	2,066	0	0.00%	2,066	100.00%
Pike	9312	3,557	15	0.42%	3,542	99.58%
Pike	9313	2,240	9	0.40%	2,231	99.60%
Pike	9314	2,585	34	1.32%	2,551	98.68%
Pike	9315	3,718	33	0.89%	3,685	99.11%
Pike	9316	1,415	0	0.00%	1,415	100.00%
Pike	9317	4,055	77	1.90%	3,978	98.10%
Pike	9318	3,668	25	0.68%	3,643	99.32%
Pike	9319	3,014	4	0.13%	3,010	99.87%

Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates

2.6.1.7.4 Poverty and LMI Status

2.6.1.7.4.1 Poverty

Data from the U.S. Census Bureau's 2020 American Community Survey indicate that 25.96% of residents in the HUD MID areas are below the federal poverty level. The county within the MID area with the highest percentage of residents living in poverty is Breathitt County, where 4,184 residents (30.65%) have incomes below the federal poverty level. The county with the greatest number of residents living in poverty is Perry County, with 1,430 residents (31.1% of the county's population) living in poverty.

DLG is required to meet LMI requirements, meaning that programs need to serve primarily persons who are classified as LMI. The maps below are helpful in determining how DLG and subrecipients can address remaining unmet needs and target funds to ensure that people who lack resources are provided the opportunity to recover.

Table 17. Percentage of Population Living in Poverty

County	Census Tract Number	Total (#)	Below Poverty Level (#)	Below Poverty Level (%)
Breathitt	9202	2,084	601	29.1%
Breathitt	9203.01	2,162	589	28.5%
Breathitt	9203.02	1,256	352	29.2%
Breathitt	9205	1,702	491	28.8%
Breathitt	9206	1,686	729	44.6%
Breathitt	9207	2,089	758	36.3%
Breathitt	9208	2,673	664	25.5%
Knott	9601	2,374	722	30.7%
Knott	9602	3,132	699	22.5%
Knott	9603	3,753	869	27.6%
Knott	9604	2,045	763	37.3%
Knott	9605	3,202	1,038	32.5%
Letcher	9501	2,719	1,081	39.8%
Letcher	9502.01	2,606	900	34.5%
Letcher	9502.02	1,910	392	21.0%
Letcher	9503	1,515	570	37.6%
Letcher	9504.01	2,913	828	29.6%
Letcher	9504.03	2,066	474	22.9%
Letcher	9504.04	2,758	967	36.1%
Letcher	9505	989	249	25.2%
Letcher	9506.01	1,991	623	32.0%
Letcher	9506.02	2,317	589	26.9%
Perry	9703	3,069	267	8.7%
Perry	9704	3,932	619	17.5%
Perry	9705.01	3,258	777	24.4%
Perry	9705.02	2,146	459	23.4%
Perry	9706.01	2,483	387	15.6%
Perry	9706.02	2,561	724	28.7%
Perry	9707	2,186	630	28.8%
Perry	9708	2,653	355	13.7%
Perry	9709	1,465	292	20.2%
Perry	9710	4,668	1,430	31.1%
Pike	9301	3,092	842	27.5%
Pike	9302.01	3,400	861	25.6%
Pike	9302.02	3,333	1,308	39.3%
Pike	9303.01	1,612	329	26.2%

County	Census Tract Number	Total (#)	Below Poverty Level (#)	Below Poverty Level (%)
Pike	9303.02	1,601	461	39.9%
Pike	9304	2,846	494	17.4%
Pike	9305	2,869	376	13.1%
Pike	9306	3,757	904	24.7%
Pike	9307	1,947	299	15.4%
Pike	9308	2,385	676	28.3%
Pike	9309	1,685	381	22.8%
Pike	9310	2,289	571	24.9%
Pike	9311.01	1,780	532	29.9%
Pike	9311.02	2,066	485	23.5%
Pike	9312	3,557	1,163	32.7%
Pike	9313	2,240	518	23.1%
Pike	9314	2,585	411	16.0%
Pike	9315	3,718	807	21.7%
Pike	9316	1,415	198	14.0%
Pike	9317	4,055	881	22.2%
Pike	9318	3,668	1,206	33.0%
Pike	9319	3,014	1,052	35.9%
Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates				

2.6.1.7.5 Familial Status

2.6.1.7.5.1 Household Composition

Families need an income equal to about twice the federal poverty threshold to meet the most basic needs, and many households are one financial emergency away from taking on costly credit card debt. The more children in a family, the more income is needed. Looking at data on households with children can be a proxy for highlighting areas of potential economic insecurity if there is an economic downturn and median household incomes fall. Using available data from the U.S. Census Bureau's 2020 American Community Survey, the number of households with one or more children is dispersed across Kentucky but slightly overrepresented in eastern Kentucky (see Figure 31).

Figure 10. Households With One or More People Under 18, HUD and Grantee MID Areas

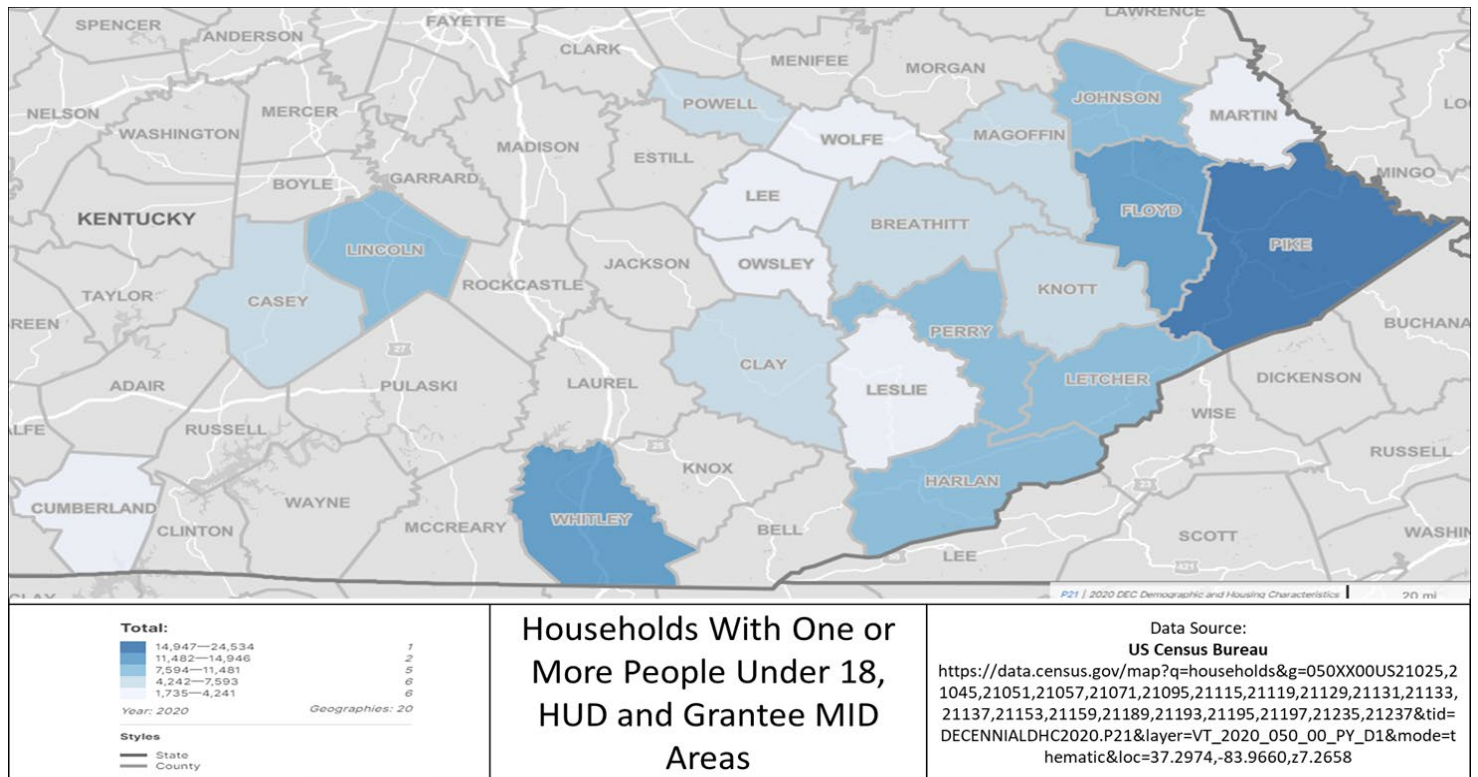


Table 18. Same- and Opposite Sex Partners in MID Areas

Same- and opposite-sex partners	Breathitt Co.	Knott Co.	Letcher Co.	Perry Co.	Pike Co.
Opposite-sex spouse	2,504	2,522	4,091	5,190	11,936
Same-sex spouse	34	15	87	17	21
Opposite-sex unmarried partner	201	254	413	923	1,052
Same-sex unmarried partner	7	14	70	27	96

Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates

Table 19. Religious Diversity in Kentucky

MID Areas	% of White Christians	% of Hispanic Protestants	% of Black Protestants	% of Religiously Unaffiliated
Breathitt County	73%	0%	2%	22%
Casey County	82%	0%	1%	14%
Clay County	76%	0%	4%	18%
Cumberland Co.	76%	1%	2%	19%
Floyd County	75%	0%	2%	20%
Harlan County	76%	0%	3%	17%
Johnson County	74%	1%	2%	21%
Knott County	74%	0%	1%	24%
Lee County	74%	0%	2%	20%
Leslie County	78%	0%	1%	18%
Letcher County	77%	1%	1%	18%
Lincoln County	77%	0%	3%	17%
Magoffin County	75%	0%	2%	22%
Martin County	75%	0%	4%	19%
Owsley County	78%	0%	4%	14%
Perry County	68%	0%	2%	28%
Pike County	77%	0%	2%	17%
Powell County	73%	0%	1%	22%
Whitley County	72%	1%	2%	21%
Wolfe County	73%	0%	1%	22%

Source: PRRI 2020 Census of American Religion

2.6.1.7.6 Environmental Justice

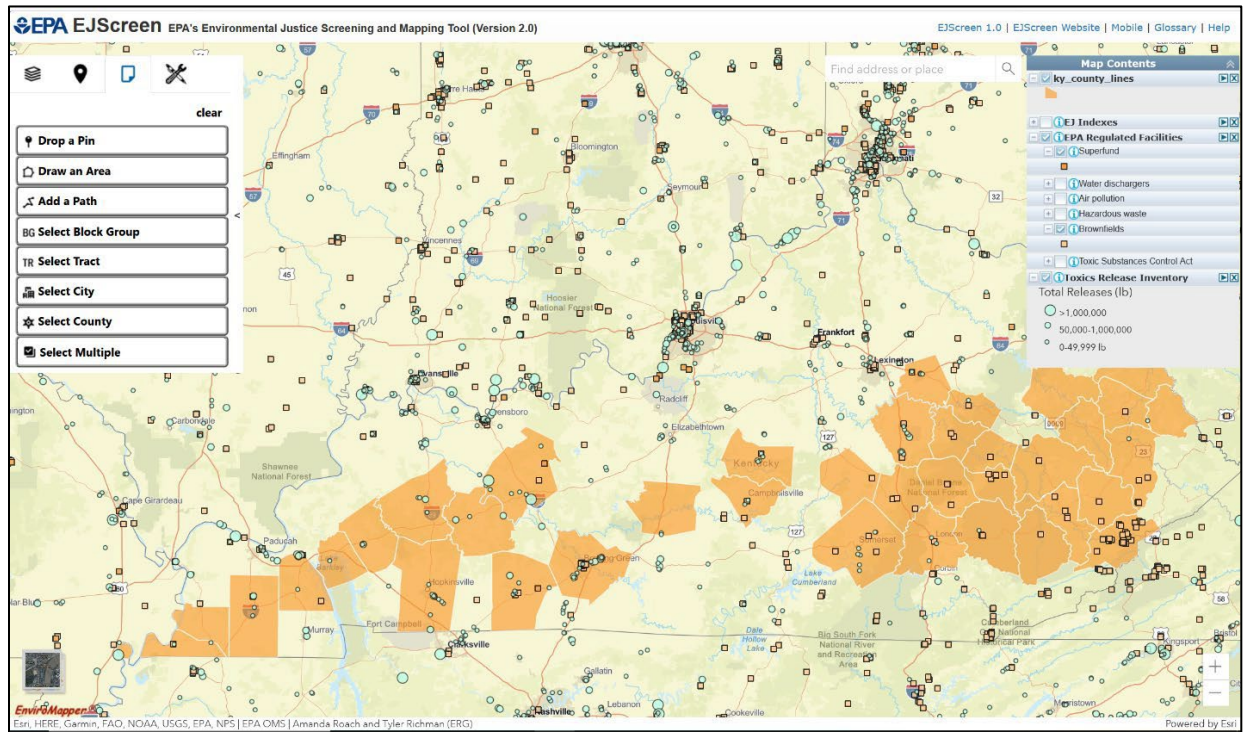
EPA's environmental justice screening and mapping tool provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. The EJScreen evaluates 12 environmental and seven demographic indicators and consolidates the two indicators into 12 environmental justice (EJ) indicators. Each EJ index combines demographic indicators with a single environmental indicator.

Figure 32 shows where the superfund, brownfield, and toxic release sites are in the Commonwealth. Eastern Kentucky has primarily superfund and brownfield sites, and western Kentucky has mostly sites that release toxic chemicals.

- Superfunds: Contaminated sites due to hazardous waste being dumped, left out in the open, or otherwise improperly managed. These sites include manufacturing facilities, processing plants, landfills, and mining sites.
- Brownfields: Properties for which expansion, redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.
- Toxic Releases: Sites that release toxic chemicals into the environment or sites otherwise managed as waste by certain industrial and federal facilities.

Using the scoring criteria, DLG will evaluate scope in the applications to consider the specific location of projects and plan accordingly for the specific hazards and natural features that would affect impacted and vulnerable populations. For the housing programs, DLG will aim to mitigate the negative impact of sites by limiting the proximity of new housing to these sites and informing homeowners or renters about proximity to sites. DLG may also work with the Superfund Branch of the [Kentucky Energy and Environmental Cabinet](#) to assist with the management of specific sites, providing oversight and working with contractors on remediation of properties.

Figure 11. EPA's EJ Concerns (Superfunds, Brownfields, Toxic Releases) for MID Areas



2.6.1.8 Statewide Demographics and Disaster-Impacted Populations

The table below demonstrates that in the MID areas, Black or African American individuals represent 7% of the total population, Hispanic or Latino individuals represent 6% of the total population, and minorities represent 15% of the population. This information allows Kentucky to design programs that help minority populations overcome barriers that may exclude them from housing opportunities.

Table 20. Race and Ethnicity

Demographic	State Estimates	State Percentage	Disaster Declaration Estimates	Disaster Declaration Percentage	MID Estimates	MID Percentage
Total Population	4,505,836	100.00%	389,847	100.00%	136,659	100.00%
Single Race	4,260,996	94.57%	379,430	97.33%	133,057	97.36%
White or Caucasian	3,711,254	86.25%	370,324	94.99%	130,579	95.55%
Minority	613,647	13.75%		12.16%	34,374	15.22%
Black or African American	362,417	8.10%	5,147	1.32%	1,087	0.79%
American Indian and/or Alaska Native	12,801	0.19%	667	0.17%	192	0.14%
Asian	74,426	1.53%	1,450	0.37%	742	0.54%
Native Hawaiian and Other Pacific Islander	3,681	0.07%	82	0.02%	27	0.29%
Some Other Race	96,417	1.08%	1,760	0.45%	430	0.02%
Two or More Races	244,840	2.80%	10,417	2.67%	3,602	2.63%
Hispanic or Latino	207,854	4.66%	61,577	4.30%	13,433	5.95%
<i>Source: 2020 Decennial Census redistricting data</i>						

The table below shows the number of children and seniors living in the disaster-impacted counties. There are more than 50,000 children under the age of 18 and more than 30,000 seniors living in MID areas.

Table 21. Age and Sex

Demographic	State Estimates	State Percentage	Disaster Declaration Estimates	Disaster Declaration Percentage	MID Estimates	MID Percentage
Total Population	4,494,141	100.00%	1,432,689	100.00%	123,625	100.00%
Under Age 5	270,859	6.0%	72,160	5.04%	6,835	5.52%
Under Age 18	1,021,909	22.7%	316,104	22.06%	26,684	21.58%
Age 65 & Over	734,851	16.4%	235,922	16.47%	22,685	18.35%
Male	2,223,783	49.48%	706,645	49.32%	110,719	49.03%
Female	2,270,358	50.52%	726,044	50.68%	115,088	50.97%
<i>Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates</i>						

The table below illustrates the number and percentages of socially vulnerable persons living in MID areas within the disaster-declared counties. People with disabilities represent 17.7% of the population, single-parent households represent 45.2% of the population, and foreign-born residents represent 4% of the population. The data inform the design of programs to make communities more resilient for any future disasters. Table 22 below also shows that the MID counties contain a higher percentage of persons with disabilities compared to the overall state percentage.

Tables 22 and 23. Social Vulnerability and Protected Classes

Demographic	State Estimates	State Percentage	Disaster Declaration Estimates	Disaster Declaration Percentage	MID Estimates	MID Percentage
Total Households	1,785,682	100.00%	153,763	100.00%	59,697	100.00%
Persons with Disabilities	798,678	17.7%	267,832	18.69%	38,227	16.93%
Single-Parent Households	807,128	45.2%	38,502	6.42%	6,187	7.15%
Foreign-Born	180,492	4.00%	1,126	0.85%	1,126	0.85%
<i>Source: U.S. Census Bureau's American Community Survey 5-Year Estimates (2019 and 2020)</i>						

Protected Class Characteristic	Statewide Estimates	State Percentage
Gender		
Cisgender male	315,190	39.4%
Cisgender female	397,455	49.7%
Transgender	67,137	8.4%
None of these	18,633	2.3%
Did not report	1,674	0.2%
Sexual Orientation		
Gay or lesbian	18,704	2.3%
Straight	642,452	80.3%
Bisexual	112,867	14.1%
Something else	18,534	2.3%
I don't know	7,531	0.9%

Source: US Census Bureau Week 48 Household Pulse Survey

The table above provides additional data on the breakdown of additional protected class characteristics in The Commonwealth of Kentucky. DLG will use the information gathered to ensure that all programs, materials, and outreach is designed in a manner that benefits protected groups.

2.6.1.9 Education Demographics

The table below illustrates the educational levels for individuals aged 25 and older in the disaster-declared counties. In these counties, roughly 26% of individuals 25 and older have a high school graduate or equivalent education, and approximately 16% have some college education but no degree. More than 35% have an associate's degree or higher living in MID areas compared to 29% of individuals with a bachelor's degree or higher within the State.

Table 23. Education Demographics

Education (population age 25 and older)	State Estimates	State Percentage	Disaster Declaration Estimates	Disaster Declaration Percentage	MID Estimates	MID Percentage
High School Graduate or Equivalent	1,007,954	87.99%	105,291	36.84%	37,929	36.7%
Some College, No Degree	594,071	19.30%	43,261	15.14%	16,058	15.54%
Associate's Degree	275,708	8.96%	13,934	4.87%	5,556	5.38%
Bachelor's Degree or Higher	830,414	26.98%	30,653	10.73%	12,207	11.81%

Source: U.S. Census Bureau's American Community Survey 1-Year Estimate (2021)

2.6.1.10 Income Demographics

The table below shows a comparison of the median household income and the per capita income (mean income calculated for all individuals in a specific area), demonstrating that more than 200,000 persons living in the disaster-declared counties have incomes below the poverty level. Persons living in poverty have a difficult time

finding affordable housing that meets the needs of their families and tend to live on meager means. The proposed programs prioritize low-income persons to improve their access to affordable housing.

Table 24. Income

Income/Economic Demographics	Statewide	Counties Impacted by Disaster	MID Areas
Median Household Income	\$55,454	\$35,822	\$36,121.40
Per Capita Income	\$30,634	\$25,099	\$21,440.20
Persons With Income Below the Poverty Level in the Past 12 Months	744,531	227,143	46,031
Source: U.S. Census Bureau's American Community Survey 5-Year Estimates (2021)			

2.6.1.11 LMI Analysis - Statewide

Table 25 and Table 26 below illustrate the number of LMI persons living in disaster- and non disaster-impacted counties. The information will inform how funds are used to benefit LMI households through the housing, infrastructure, and planning programs.

Table 25. Statewide LMI

	Total LMI Persons	Total Population	Percentage of LMI
Statewide	1,813,568	4,512,310	42.50%
Breathitt County	7,405	13,351	55.90%
Knott County	4,440	13,874	32.0%
Letcher County	6,080	20,893	29.1%
Perry County	8,181	27,361	29.9%
Pike County	16,942	56,286	30.1%
Source: U.S. Census Bureau's American Community Survey 5-Year Estimates (2015–2019)			

2.6.1.12 LMI Analysis – Federally Declared Disaster Areas

Table 26. LMI by County (HUD and Grantee MID Areas)

County	Non-MID Total LMI Persons	Non-MID Total Population	Non-MID Percentage LMI	MID Total LMI Persons	MID Total Population	MID Percentage LMI
HUD and Grantee MIDs						
Breathitt	–	–	–	7,405	13,250	55.89%
Knott	–	–	–	7,375	15,350	48.05%
Letcher	-	-	-	10,730	23,420	45.82%
Perry	–	–	–	12,145	27,345	44.41%
Pike	–	–	–	26,930	62,295	43.23%
Other Impacted Counties						
Casey	6,890	15,580	44.22%	–	–	–
Clay	11,395	19,535	58.33	–	–	–
Cumberland	3,210	6,715	47.8%	–	–	–
Floyd	18,645	37,785	49.34%	–	–	–
Harlan	15,005	27,710	54.15%	–	–	–
Johnson	9,905	22,830	43.39%	–	–	–
Lee	3,515	6,275	56.02%	–	–	–
Leslie	5,265	10,750	48.98%	–	–	–
Lincoln	10,674	24,275	43.97%	–	–	–
Magoffin	6,715	12,830	52.34%	–	–	–
Martin	5,725	11,115	51.51%	–	–	–
Owsley	2,290	4,530	50.55%	–	–	–
Powell	5,680	12,225	46.46%	–	–	–
Whitley	15,580	34,110	48.61	–	–	–
Wolfe	4,415	7,140	61.83%	–	–	–
Source: U.S. Census Bureau's American Community Survey 5-Year Estimates (2011–2015)						

2.6.1.13 Manufactured Housing Units Impacted by Disaster

The table below shows the manufactured home inventory for the disaster-impacted HUD and grantee-identified MID counties. Several of the MID counties, such as Breathitt, Floyd, Graves, and Hopkins, have more than 100 manufactured homes units and have substantial remaining unmet needs.

Table 27. Manufactured Housing Units Impacted

Disaster	County/ Municipality	Number of Units	Percent of Total Units in County/Municipality	Remaining Unmet Need
DR-4663	Breathitt	2,119	38.5%	\$15,398,555.36
DR-4663	Casey	1,394	23.8%	-
DR-4663	Clay	1,837	26.2%	\$480,527.37
DR-4663	Cumberland	451	18.4%	-
DR-4663	Floyd	4,153	29.6%	\$419,031.49
DR-4663	Harlan	2,076	20.0%	-
DR-4663	Johnson	2,101	25.0%	-
DR-4663	Knott	1,917	35.1%	\$3,311,356.94
DR-4663	Lee	562	21.5%	\$13,168.19
DR-4663	Leslie	1,012	27.4%	-
DR-4663	Letcher	2,358	28.1%	\$4,952,830.92
DR-4663	Lincoln	1,723	18.1%	-
DR-4663	Magoffin	2,001	44.2%	\$52,534.13
DR-4663	Martin	1,084	29.8%	\$67,787.76
DR-4663	Owsley	311	21.3%	\$102,778.85
DR-4663	Perry	3,262	29.0%	\$7,890,904.26
DR-4663	Pike	8,475	35.5%	-
DR-4663	Powell	1,036	22.2%	-
DR-4663	Whitley	2,795	21.9%	\$8,119.04
DR-4663	Wolfe	612	24.8%	-
<i>Source: FEMA IA data, ACS data (S2504) – Physical Housing Characteristics for Occupied Housing Units</i>				

2.6.1.14 SNAP and D-SNAP Applicants Impacted by the Disaster

The SNAP program offers food benefits to low-income individuals and families. When a disaster occurs, individuals and families may be eligible for additional nutrition assistance through the Disaster Supplemental Nutrition Assistance Program (D-SNAP). The table below shows that in the disaster-declared counties, more than 4,000 households received additional food benefits

Table 28. SNAP and D-SNAP Applicants Impacted

County	SNAP Households Impacted	SNAP Individuals Impacted	Households Issued D-SNAP Benefits	Individuals Issued D-SNAP Benefits
Breathitt	1,952	3,880	566	1,299
Clay	2,976	6,154	61	161
Floyd	4,254	8,991	359	891
Knott	1,838	3,800	827	1,952
Lee	823	1,865	0	0
Leslie	1,228	2,572	65	159
Letcher	2,439	4,971	1,355	3,327
Magoffin	1,624	3,417	17	25
Martin	1,272	2,618	9	19
Owsley	802	1,536	11	20
Perry	3,342	6,943	767	1,958
Pike	5,818	11,595	247	605
Whitley	3,747	8,345	5	16
TOTAL	32,115	66,687	4,289	10,432
Source: Cabinet for Health & Family Services; Data from July 2022				

2.6.1.15 Limited English Proficiency Breakdown

[Tables 34](#) and [35](#) show the languages spoken by LEP persons who are living in the disaster-declared HUD MID counties; Spanish-speaking persons represent the highest percentage. The State uses this information for its Citizen Participation Plan and will consider it in the implementation of its recovery programs to ensure that any language barrier is removed. Public information is translated into Spanish, and interpreters are available to assist with communication. For all other languages, translation and interpreters will be made available as needed.

Table 29. Breakdown of LEP Persons

County	Estimate of Persons Who Speak English Less Than “Very Well”	Percentage of Persons Who Speak English Less Than “Very Well”
Breathitt	58	0.50%
Knott	50	0.40%
Letcher	72	0.30%
Perry	192	0.70%
Pike	232	0.40%
<i>Source: U.S. Census Bureau’s American Community Survey 5-Year Estimates (2014–2018)</i>		

2.6.1.16 Languages Spoken Within the State

Table 30. Languages Spoken Within the State

County	Languages Spoken	Estimate Number Population	Percentage of Population
Breathitt	Speak only English	12,707	99.0%
	Speak Spanish	34	0.3%
	Speak other Indo-European languages	29	0.2%
	Speak Asian and Pacific Island languages	49	0.4%
	Speak other languages	12	0.1%
Casey	Speak only English	14,080	95.0%
	Speak Spanish	193	1.3%
	Speak other Indo-European languages	517	3.5%
	Speak Asian and Pacific Island languages	10	0.1%
	Speak other languages	24	0.2%
Clay	Speak only English	19,125	99.2%
	Speak Spanish	123	0.6%
	Speak other Indo-European languages	24	0.1%
	Speak Asian and Pacific Island languages	0	0.0%
	Speak other languages	0	0.0%
Cumberland	Speak only English	5,335	94.2%
	Speak Spanish	160	2.8%

County	Languages Spoken	Estimate Number Population	Percentage of Population
	Speak other Indo-European languages	167	2.9%
	Speak Asian and Pacific Island languages	0	0.0%
	Speak other languages	0	0.0%
Floyd	Speak only English	33,808	99.3%
	Speak Spanish	34	0.1%
	Speak other Indo-European languages	102	0.3%
	Speak Asian and Pacific Island languages	90	0.3%
	Speak other languages	23	0.1%
Harlan	Speak only English	25,028	98.9%
	Speak Spanish	93	0.4%
	Speak other Indo-European languages	77	0.3%
	Speak Asian and Pacific Island languages	96	0.4%
	Speak other languages	0	0.0%
Johnson	Speak only English	21,160	98.2%
	Speak Spanish	130	0.6%
	Speak other Indo-European languages	170	0.8%
	Speak Asian and Pacific Island languages	74	0.1%
	Speak other languages	19	0.1%
Knott	Speak only English	13,626	99.0%
	Speak Spanish	79	0.6%
	Speak other Indo-European languages	5	0.0%
	Speak Asian and Pacific Island languages	30	0.2%
	Speak other languages	17	0.1%
Lee	Speak only English	6,816	99.0%
	Speak Spanish	38	0.6%
	Speak other Indo-European languages	34	0.5%
	Speak Asian and Pacific Island languages	0	0.0%
	Speak other languages	0	0.0%
Leslie	Speak only English	9,954	99.0%
	Speak Spanish	48	0.5%
	Speak other Indo-European languages	16	0.2%
	Speak Asian and Pacific Island languages	32	0.3%
	Speak other languages	0	0.00%

County	Languages Spoken	Estimate Number Population	Percentage of Population
Letcher	Speak only English	20,302	98.5%
	Speak Spanish	168	0.8%
	Speak other Indo-European languages	104	0.5%
	Speak Asian and Pacific Island languages	28	0.1%
	Speak other languages	0	0.0%
Lincoln	Speak only English	21,977	96.7%
	Speak Spanish	237	1.0%
	Speak other Indo-European languages	518	2.3%
	Speak Asian and Pacific Island languages	1	0.0%
	Speak other languages	0	0.0%
Magoffin	Speak only English	10,947	98.7%
	Speak Spanish	87	0.8%
	Speak other Indo-European languages	4	0.0%
	Speak Asian and Pacific Island languages	52	0.5%
	Speak other languages	0	0.0%
Martin	Speak only English	10,633	98.0%
	Speak Spanish	154	1.4%
	Speak other Indo-European languages	22	0.2%
	Speak Asian and Pacific Island languages	9	0.1%
	Speak other languages	29	0.3%
Owsley	Speak only English	3,826	100.0%
	Speak Spanish	0	0.0%
	Speak other Indo-European languages	0	0.0%
	Speak Asian and Pacific Island languages	0	0.0%
	Speak other languages	0	0.0%
Perry	Speak only English	25,802	96.8%
	Speak Spanish	316	1.2%
	Speak other Indo-European languages	24	0.1%
	Speak Asian and Pacific Island languages	323	1.2%
	Speak other languages	198	0.7%
Pike	Speak only English	55,235	99.0%
	Speak Spanish	186	0.3%

County	Languages Spoken	Estimate Number Population	Percentage of Population
	Speak other Indo-European languages	144	0.3%
	Speak Asian and Pacific Island languages	180	0.3%
	Speak other languages	23	0.0%
Powell	Speak only English	11,866	97.6%
	Speak Spanish	184	1.5%
	Speak other Indo-European languages	15	0.1%
	Speak Asian and Pacific Island languages	50	0.4%
	Speak other languages	38	0.3%
Whitley	Speak only English	33,557	98.8%
	Speak Spanish	118	0.3%
	Speak other Indo-European languages	213	0.6%
	Speak Asian and Pacific Island languages	64	0.2%
	Speak other languages	20	0.1%
Wolfe	Speak only English	6,111	97.6%
	Speak Spanish	93	1.5%
	Speak other Indo-European languages	13	0.2%
	Speak Asian and Pacific Island languages	42	0.7%
	Speak other languages	0	0.0%
Source: U.S. Census Bureau's 2021 American Community Survey 5-Year Estimates			

2.6.1.17 Affected Continuum of Care Entities

Tables 31, 32, and 33 illustrate the number of persons experiencing homelessness by Continuum of Care regions and county. This information is used to effectively target nontraditional outreach methods to ensure persons experiencing homelessness are connected to the right resources for recovery.

Table 31. Affected Continuum of Care Entities

CoC Number	CoC Entity	Impacted County	Homeless Count
KY-500	KY-500 Kentucky Balance of State CoC	Breathitt	0
KY-500	KY-500 Kentucky Balance of State CoC	Casey	0
KY-500	KY-500 Kentucky Balance of State CoC	Clay	1
KY-500	KY-500 Kentucky Balance of State CoC	Cumberland	108
KY-500	KY-500 Kentucky Balance of State CoC	Floyd	13
KY-500	KY-500 Kentucky Balance of State CoC	Harlan	1

CoC Number	CoC Entity	Impacted County	Homeless Count
KY-500	KY-500 Kentucky Balance of State CoC	Johnson	1
KY-500	KY-500 Kentucky Balance of State CoC	Knott	0
KY-500	KY-500 Kentucky Balance of State CoC	Lee	0
KY-500	KY-500 Kentucky Balance of State CoC	Leslie	92
KY-500	KY-500 Kentucky Balance of State CoC	Letcher	80
KY-500	KY-500 Kentucky Balance of State CoC	Lincoln	4
KY-500	KY-500 Kentucky Balance of State CoC	Magoffin	0
KY-500	KY-500 Kentucky Balance of State CoC	Martin	0
KY-500	KY-500 Kentucky Balance of State CoC	Owsley	0
KY-500	KY-500 Kentucky Balance of State CoC	Perry	0
KY-500	KY-500 Kentucky Balance of State CoC	Pike	21
KY-500	KY-500 Kentucky Balance of State CoC	Powell	57
KY-500	KY-500 Kentucky Balance of State CoC	Whitley	0
KY-500	KY-500 Kentucky Balance of State CoC	Wolfe	0

Source: HUD Exchange, Kentucky COCs for 2020 (updated July 2021)

2.6.1.18 Point-in-Time Count – Type of Shelter

Table 32. Point-in-Time Count – Type of Shelter (HUD and Grantee MID Areas)

2022 Disaster Counties	Emergency Shelter	Transitional Housing	Unsheltered	Total Known Homeless
Breathitt	13	0	0	13
Casey	0	0	0	0
Clay	0	0	4	4
Cumberland	0	0	0	0
Floyd	11	0	10	21
Harlan	3	0	68	71
Johnson	0	0	21	21
Knott	0	0	0	0
Lee	0	0	3	3
Leslie	0	0	0	0
Letcher	0	2	0	2
Lincoln	0	0	0	0
Magoffin	0	0	0	0
Martin	0	0	68	68
Owsley	0	0	0	0
Perry	20	2	10	32

2022 Disaster Counties	Emergency Shelter	Transitional Housing	Unsheltered	Total Known Homeless
Pike	11	16	6	33
Powell	0	17	12	29
Whitley	0	0	9	9
Wolfe	0	0	0	0
<i>Source: Kentucky Balance of State Continuum of Care</i>				

2.6.1.19 Point-in-Time Count – Impacted by Disaster

Table 33 demonstrates the point-in-time count of shelters impacted by the disasters. The breakdown in the table shows the differences in the extent that shelters were impacted.

Table 33. Point-in-Time Count – Impacted by Disaster

Geography	Emergency Shelter	Transitional Housing	Unsheltered Homeless	Total Known Homeless
Statewide	2410	490	1084	3984
FEMA-Declared	58	37	211	306
MIDs	44	20	16	80
<i>Source: HUD 2022 CoC Homeless Populations and Subpopulations Reports</i>				

2.6.1.20 HUD Assisted Housing Impacted by Disaster

DLG contacted KHC for data to assess damages to LIHTC properties and information on housing choice vouchers. The data was not received.

Table 34. HUD Assisted Housing Impacted by Disaster (HUD and Grantee MID Areas)

County	Total Housing Choice Vouchers	Total Impacted Housing Choice Voucher Units	Total LIHTC Units	Total Impacted LIHTC Units
All counties affected	No data	No data	No data	No data

2.7 Infrastructure Unmet Need

2.7.1 Disaster Damage and Impacts

2.7.1.1 Impact on Flood Resiliency and Mitigation

The 2022 storms caused damage throughout the region. The flooding left much of the Commonwealth's infrastructure either inoperable or inaccessible to the public. Because

of Kentucky's changing topography, there is an increased vulnerability to flooding. There is an opportunity to use the CDBG-DR funding to consider strategic flood management solutions.

2.7.1.2 Impact on Power Sources and Utilities

The heavy rains that caused the flooding left several thousand customers without power. Many homes and buildings could not withstand the flooding and collapsed, and the debris was widespread. Though funding from FEMA was available, there is more work that can be done to mitigate against future flooding events by updating the, in some cases, outdated public infrastructure that is designed to deal with storm and wastewater in these communities.

2.7.1.3 Impact on Roads and Bridges

With increased precipitation, the roads and critical infrastructure in various areas of Kentucky have a higher probability of flooding.

2.7.1.4 Impact on Buildings, Equipment, Parks and Recreation Areas, and Other Facilities

Buildings and equipment had the highest dollar amount of damage across the affected counties.

Parks and recreation areas were damaged, but because these areas have fewer structures, recovery is often much quicker.

2.7.1.5 FEMA Public Assistance Program (FEMA)

FEMA's Public Assistance (PA) program provides grants to state, tribal, territorial, and local governments, as well as certain types of private nonprofits so that communities can respond to and recover from major disasters quickly. Sections 403 and 407 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act allow FEMA to assist with debris removal and emergency response immediately following a disaster. Section 406 allows FEMA to fund the repair of damaged facilities and provide funding to mitigate damage from future events.

To access FEMA PA funds, eligible applicants must submit a request for grant funds to the Commonwealth. Together with FEMA, the Kentucky Division of Emergency Management (KYEM) manages the PA program on behalf of the Commonwealth.

The following table shows FEMA PA categories under DR-4663, the number of eligible project sites, and the amount of damage that FEMA recorded. Based on current analysis, FEMA has determined that more than \$94 million in damages is eligible under its PA program.

Table 35. PA-Eligible Project Sites

PA Category	Damaged Sites	Sum of Approximate Cost	Sum of Federal Share	Sum of Nonfederal Share
A – Debris Removal	29	\$1,225,622.62	\$1,118,828.13	\$106,794.49
B – Emergency Protective Measures	86	\$53,022,588.31	\$45,825,366.46	\$7,197,221.85
C – Roads and Bridges	2,987	\$32,283,357.33	\$24,212,518.46	\$8,070,838.87
D – Water Control Facilities	1	\$116,107.21	\$87,080.41	\$29,026.80
E – Buildings and Equipment	28	\$1,212,870.04	\$909,652.57	\$303,217.47
F – Utilities	56	\$4,775,221.50	\$3,581,416.16	\$1,193,805.34
G – Parks, Recreational Facilities, and Other	23	\$2,008,905.98	\$1,506,679.49	\$502,226.49
TOTAL	4,482	\$94,644,672.99	\$77,241,541.68	\$17,403,131.31
<i>Source: FEMA PA program data</i>				

Cost Estimates by Damage Category

Table 36. Cost Estimates by Damage Category

Declaration	Damage Category	Sum of Approximate Cost	Sum of Federal Share	Sum of Nonfederal Share
DR-4663	A – Debris Removal	\$3,795,219.40	\$3,415,697.46	\$379,521
DR-4663	B – Emergency Protective Measures	\$1,731,475.84	\$1,558,328.26	\$173,147
DR-4663	C – Roads and Bridges	\$112,753,786.40	\$101,478,407.76	\$11,275,378
DR-4663	D – Water Control Facilities	\$8,185,260.00	\$7,366,734.00	\$818,526
DR-4663	E – Buildings and Equipment	\$6,293,830.73	\$5,664,447.66	\$629,383
DR-4663	F – Utilities	\$25,959,061.38	\$23,363,155.24	\$2,595,906
DR-4663	G – Parks, Recreational Facilities, and Other	\$6,127,389.22	\$5,514,650.30	\$612,738
DR-4663	Z – Management Costs	\$1,992,731.46	\$1,793,458.31	\$199,273
DR-4663	TOTAL	\$166,838,754.43	\$150,154,878.99	\$16,683,875
<i>Source: FEMA PA program data</i>				

2.7.2 Total Cost and Need by PA Category (FEMA)

Table 37. Total Cost and Need by PA Category

PA Category	Estimated PA Cost	Local Match	Resiliency	Total Need (Match + Resiliency)
-------------	-------------------	-------------	------------	---------------------------------

A – Debris Removal	\$49,273,013.33	\$4,927,301.33	\$7,390,952.00	\$12,318,253
B – Emergency Protective Measures	\$54,487,093.43	\$5,448,709.34	\$8,173,064.01	\$13,621,773
C – Roads and Bridges	\$126,014,798.31	\$12,601,479.83	\$18,902,219.75	\$31,503,699
D – Water Control Facilities	\$8,185,260.00	\$818,526.00	\$1,227,789.00	\$2,046,315
E – Building and Equipment	\$178,294,794.93	\$17,829,479.49	\$26,744,219.24	\$44,573,698
F – Utilities	\$67,596,244.23	\$6,759,624.42	\$10,139,436.63	\$16,899,061
G – Parks, Recreational Facilities, and Other	\$16,648,444.44	\$1,664,844.44	\$2,497,266.67	\$4,162,111
TOTAL	\$500,499,648.67	\$50,049,964.87	\$75,074,947.30	\$125,124,912

Source: FEMA PA program data

2.7.3 Approximate Recovery Cost per Agency (FEMA)

Table 38. Approximate Recovery Cost per Agency

Agency	Approximate Cost
Kentucky Department of Transportation	\$34,382,999.47
Kentucky Department of Parks	\$122,561.64
Kentucky Division of Emergency Management	\$4,210,934.28
TOTAL	\$38,757,235.75
<i>Source: FEMA PA program data</i>	

2.7.4 Hazard Mitigation Needs per County or Known Project

Kentucky Division of Emergency Management also manages the Hazard Mitigation Assistance program. Currently, the Commonwealth is tracking more than \$174 million in costs that are tied to mitigation work. Work includes the construction of safe rooms, repair and hardening of utilities, dam restoration, elevation of buildings and roads, generator installation, and flood management.

Table 39. Hazard Mitigation Needs per County or Known Project

Project	Cost	FEMA Funding	Unmet Need
Breathitt	\$186,990	\$168,291	\$18,699
Casey	\$3,773,608	\$3,396,247	\$377,361
Clay	\$21,973,808	\$19,776,427	\$2,197,381
Cumberland	\$118,450	\$106,605	\$11,845
Floyd	\$1,390,000	\$1,251,000	\$139,000
Harlan	\$864,903	\$778,413	\$86,490
Johnson	\$222,246	\$200,021	\$22,225
Knott	\$5,790,000	\$5,211,000	\$579,000
Lee	\$91,859	\$82,673	\$9,186
Leslie	\$130,000	\$117,000	\$13,000
Letcher	\$1,541,100	\$1,386,990	\$154,110
Lincoln	\$559,803	\$503,823	\$55,980
Magoffin	\$7,103,210	\$6,392,889	\$710,321
Martin	\$9,654,607	\$8,689,146	\$965,461
Owsley	\$315,748	\$284,173	\$31,575
Perry	\$56,475	\$50,828	\$5,648
Pike	\$2,023,715	\$1,821,344	\$202,372
Whitley	\$100,000	\$90,000	\$10,000
Wolfe	\$1,585,000	\$1,426,500	\$158,500
TOTAL	\$174,429,478	\$156,986,530	\$17,442,948
<i>Source: FEMA's Hazard Mitigation Grant Program data</i>			

2.8 Economic Revitalization Unmet Need

2.8.1 Disaster Damage and Impacts

2.8.1.1 Impact on Businesses and Employment

Many businesses were impacted by the flooding event that occurred in 2022. Damages included external damage to building structures and/or loss of valuable inventory and equipment, and business owners suffered from loss of business for several weeks and/or lack of business insurance. Given the news of the tragic deaths occurring during the disasters, businesses have also helped start a conversation about detailed emergency action plans to keep workers safe during a disaster event and planning for unforeseen risks.

Following the severe storms, SBA made available low-interest disaster loans to businesses in Kentucky. Businesses and private nonprofit organizations of any size are able borrow up to \$2 million to repair or replace disaster-damaged or destroyed real estate, machinery and equipment, inventory, and other business assets. Applicants maybe eligible for a loan amount increase of up to 20% of their physical damages, as verified by the SBA, for mitigation purposes. As reflected in the tables below, data show that Knott and Pike Counties—both HUD MID areas—had the highest number of applications for business loans and cumulative dollars approved by the SBA.

Despite the disasters and the effects of the pandemic, Kentucky is still experiencing a reduction in its unemployment rate and projecting substantial growth across many job sectors in the Commonwealth.³²

³² [Civilian Labor Force Report – Historical Comparison, 2022](#)

2.8.1.2 Impact on Agriculture

Following the 2022 storms, not only were towns and buildings affected but farms and livestock were also damaged or destroyed.³³ Kentucky's agriculture industry was one of the hardest impacted.

The storm events were devastating, and the aftermath of recovering and caring for livestock that survived was a major challenge. Kentucky Department of Agriculture and the Kentucky Farm Bureau Federation joined forces to create the Kentucky Agriculture Relief Fund.

2.8.2 Total Business Loans Approved by the SBA

Table 40. Business Loans Approved by SBA

Disaster	County	Business/EIDL Loan Amounts
DR-4663	Breathitt	\$25,000
DR-4663	Casey	\$141,000
DR-4663	Clay	\$2,100
DR-4663	Cumberland	\$2,305,400
DR-4663	Floyd	\$119,200
DR-4663	Harlan	\$25,000
DR-4663	Johnson	\$233,200
DR-4663	Knott	\$234,300
DR-4663	Lee	\$3,500
DR-4663	Leslie	\$458,600
DR-4663	Letcher	\$30,200

³³ [Kentucky Farmers Endure Epic Ruin And Worst Storm Damage In State History As Agriculture Rushes To Rebuild | AgWeb](#)

Disaster	County	Business/EIDL Loan Amounts
DR-4663	Lincoln	\$178,000
DR-4663	Magoffin	\$15,000
DR-4663	Martin	\$5,135,600
DR-4663	Owsley	\$119,200
DR-4663	Perry	\$25,000
DR-4663	Pike	\$233,200
DR-4663	Powell	\$234,300
DR-4663	Whitley	\$3,500
DR-4663	Wolfe	47,000
TOTAL		\$8,913,100
Source: SBA Disaster Loan Statistics, 2022		

2.8.3 Estimating Business Operations Losses

Table 41. Business Operations Losses Estimates

Disaster	County	Businesses With Verified Losses	Average Verified Loss	Estimated Additional Losses to Businesses
DR-4663	Breathitt	2	-	-
DR-4663	Casey	1	-	-
DR-4663	Clay	3	\$1,676	\$5,029
DR-4663	Cumberland	5	\$303,031	\$1,515,153
DR-4663	Floyd	8	\$164,616	\$1,316,924
DR-4663	Harlan	2	\$68,949	\$137,898
DR-4663	Johnson	4	\$10,709	\$42,837
DR-4663	Knott	7	\$67,263	\$470,838
DR-4663	Lee	6	\$14,498	\$86,986
DR-4663	Leslie	1	-	-
DR-4663	Letcher	1	-	-
DR-4663	Lincoln	1	-	-
DR-4663	Magoffin	3	\$26,336	\$79,008
DR-4663	Martin	2	-	-
DR-4663	Owsley	5	\$28,938	\$144,691
DR-4663	Perry	10	\$77,300	\$772,999
DR-4663	Pike	1	-	-
DR-4663	Powell	2	\$17,751	\$35,502

Disaster	County	Businesses With Verified Losses	Average Verified Loss	Estimated Additional Losses to Businesses
DR-4663	Whitley	1	-	-
DR-4663	Wolfe	1	-	-
GRAND TOTAL		511	\$156,889	\$80,170,471
<i>Source: SBA Disaster Loan Statistics, 2022</i>				

2.8.4 Increased Occupation Demands

Table 42. Increased Occupation Demands

Occupation Area	Currently Employed	Projected Employment	Projected Growth (#)	Projected Growth (%)	Total Job Openings
Architecture and Engineering	29,324	31,229	1,905	6.50%	22,455
Arts, Design, Entertainment, Sports, and Media	22,279	22,257	-22	-0.10%	21,513
Building and Grounds Cleaning and Maintenance	58,725	64,047	5,322	9.06%	78,573
Business and Financial Operations	78,721	83,221	4,500	5.72%	71,500
Community and Social Services	28,754	32,981	4,227	14.70%	32,128
Computer and Mathematics	33,873	38,444	4,571	13.49%	27,415
Construction and Extraction	84,260	81,988	-2,272	-2.70%	76,291
Educational Instruction and Library Services	95,297	100,071	4,774	5.01%	81,161
Farming, Fishing, and Forestry	8,061	8,551	490	6.08%	12,373
Food Preparation and Serving	178,641	186,468	7,827	4.38%	306,058
Healthcare Practitioners and Related Technical Occupations	127,447	142,293	14,846	11.65%	84,723
Healthcare Support	73,951	89,649	15,698	21.23%	102,564
Installation, Maintenance, and Repair Services	91,841	96,766	4,925	5.36%	86,436
Legal Services	11,761	12,529	768	6.53%	8,048
Life, Physical, and Social Sciences	11,188	11,784	596	5.33%	9,333
Management Services	104,116	110,844	6,728	6.46%	83,515
Office and Administrative Support	263,265	257,543	-5,722	-2.17%	267,759
Personal Care and Services	53,143	57,140	3,997	7.52%	80,585
Production Services	200,264	201,596	1,332	0.67%	202,751
Protective Service	38,613	40,415	1,802	4.67%	40,186
Sales and Related Occupations	186,590	180,270	-6,320	-3.39%	224,333
Transportation and Material Moving	218,406	234,745	16,339	7.48%	268,545
<i>Source: Kentucky Center for Statistics (KYSTATS) – Labor Market Data</i>					

2.9 Mitigation-Only Activities

2.9.1 Introduction

The Mitigation Needs Assessment is a risk-based assessment that summarizes the natural threats and hazards in the HUD designated Most Impacted and Distressed (HUD-MID) counties (Breathitt, Knott, Letcher, Perry, and Pike Counties) through DR-4663 (2022 severe storms, flooding, landslides, and mudslides). The Mitigation Needs Assessment was undertaken to inform the use of the Commonwealth's 15% Community Development Block Grant-Mitigation (CDBG-MIT) set-aside and to help build resilience and mitigation measures into recovery programs and projects.

It is important to note that while this assessment looked at severe storms, flooding, landslides, and mudslides, it also reviewed any natural hazard likely to threaten HUD- and grantee-identified MIDs, including drought, earthquakes, extreme temperatures, straight-line winds, tornadoes, flood (riverine and flash), karst/sinkholes, severe weather (high winds, severe storms, and hailstorms), severe winter storms, and wildfires. These hazards were identified in Kentucky's FEMA- approved Hazard Mitigation Plan (HMP) as well as the plans for HUD- and grantee- identified MID counties.

In addition to current hazards posed to the MID counties, the Mitigation Needs Assessment considered future threats, particularly as severe weather events become more frequent and severe. In this way, the Commonwealth can ensure it minimizes vulnerabilities to the impacts of future extreme events through its recovery and mitigation projects and programs.

This assessment will inform the proposed programs and projects in this Action Plan that are designed to mitigate current and future hazards. In addition, it will inform all projects undertaken through CDBG-DR such that, at a minimum, they do not exacerbate natural hazard threats and make best use of scarce resources for recovery and mitigation. As part of this assessment, the Commonwealth also sought to identify and address risks to indispensable services; indispensable services are those which enable continuous operation of critical business and government functions and/or are critical to human health and safety and economic security.

2.9.2 State Hazard Mitigation Plan

The risk assessment for the 2018 Kentucky State Hazard Mitigation Plan provides the factual basis for developing a mitigation strategy for the Commonwealth. Kentucky's approach to hazard mitigation is based on a hazard analysis and risk assessment that is comprehensive and multi-hazard. The risk assessment identifies nine hazards of concern based on an analysis of federal risk assessment guidance, past disasters, and other resources.

Each natural hazard profile includes a general description of the hazard; the location of the hazard; the extent of the hazard; previous occurrences and losses; the probability of future occurrences; an impact analysis, including severity and warning time, secondary hazards, and environmental impacts; and a vulnerability assessment. The nine natural hazards are included in Table 43.

Table 43. HMP-Identified Natural Hazards

Hazard
Drought
Earthquake
Extreme Temperatures
Flooding
Karst/Sinkholes
Landslide
Severe Winter Storms
Tornadoes and Severe Thunderstorm Wind
Wildfires

2.9.3 Regional Hazard Mitigation Plans

2.9.3.1 Big Sandy Area Development District Floyd, Johnson, Magoffin, Martin, and Pike Counties

Through the Big Sandy Area Development District (BSADD), Floyd, Johnson, Magoffin, Martin, and Pike Counties are included in the 2016 Big Sandy Multi-Jurisdictional Hazard Mitigation Plan, which profiles the natural hazards that could impact counties within the BSADD.

The risk assessment identifies 10 applicable natural hazards based on an analysis from BSADD staff and Regional Mitigation Committee. The 10 hazards include dam failures, droughts, earthquakes, flooding, hail, landslides, thunderstorms/severe wind, tornadoes, severe winter storms, and wildfires.

2.9.3.2 Bluegrass Area Development District

Lincoln and Powell Counties

Through the Bluegrass Area Development District (BADD), Lincoln and Powell Counties are included in the 2022 Bluegrass Regional Hazard Mitigation Plan, which profiles the natural hazards that could impact counties within the BADD.

Each natural hazard profile includes the period of occurrence, number of events to date, annualized probability, probability of event(s), potential impacts, potency of injury or death, potential duration of facility shutdown, past damages, warning time, and extent.

The Bluegrass Regional Hazard Mitigation Plan risk assessment identifies nine applicable natural hazards based on an analysis from local officials. The ten hazards include dam/levee failures, droughts, earthquakes, flooding, mudslides/landslides, severe storms and tornadoes, subsidence/karst, severe winter storms, and wildfires.

2.9.3.3 Cumberland Valley Area Development District Clay, Harlan, and Whitley Counties

Through the Cumberland Valley Area Development District (CVADD), Clay, Harlan, and Whitley Counties are included in the 2021 Cumberland Valley Regional Hazard Mitigation Plan, which profiles the natural hazards that could impact counties within the CVADD. Each natural hazard profile includes the definition of the hazard, an overview of the region, history of the hazard, and the frequency and probability of the hazard.

The Cumberland Valley Regional Hazard Mitigation Plan risk assessment identifies four applicable natural hazards based on an analysis by CVADD staff; planning committee members (comprising representatives from 8 counties and 17 cities, businesses, community groups, regional and local emergency management offices, and the Department of Transportation); and county workgroup subcommittees made up of local officials and residents. The five hazards include flooding, landslides, severe storms/hail, tornadoes, and winter storms.

2.9.3.4 Kentucky River Area Development District Breathitt, Knott, Lee, Leslie, Letcher, Owsley, Perry, and Wolfe Counties

Through the Kentucky River Area Development District (KRADD), Breathitt, Knott, Lee, Leslie, Letcher, Owsley, Perry, and Wolfe Counties are included in the KRADD Regional Hazard Mitigation Plan: 2017 that profiles the natural and human-caused hazards that could impact each of the counties included in the planning area.

The risk assessment identifies 13 hazards and 7 priority hazards based on an analysis by the Regional Mitigation Planning Committee. Each natural hazard profile includes a description of the hazard, the location of the hazard, the extent of the hazard, previous occurrences and losses, the probability of future occurrences, the potential effects of climate change, and a vulnerability assessment.

The seven priority hazards include flooding (flash floods and riverine), windstorms/snow and ice storms, tornadoes, severe thunderstorms/lightning/hailstorms, wildfires, landslides, and drought/extreme heat.

2.9.3.5 Lake Cumberland Area Development District Casey and Cumberland Counties

Through the Lake Cumberland Area Development District, Casey and Cumberland Counties are included in the 2016 Lake Cumberland Area Development District Regional

Multi-Hazard Mitigation Plan, which profiles the natural and human-caused hazards that could impact counties within the Lake Cumberland Area Development District.

The risk assessment identifies seven applicable natural hazards based on an analysis from Lake Cumberland Area Development District staff. The nine hazards include dam/levee failure, drought, expansive soil, extreme summer weather, floods, forest/wildfires, geologic hazards (including earthquakes, land subsidence/landslides, and sinkholes), tornadoes and thunderstorms, and winter storm events.

2.9.3.6 MID Area Hazard Table

Table 44. MID Area Hazard

Hazard	Big Sandy Area Development District	Bluegrass Area Development District	Cumberland Valley Area Development District	Kentucky River Area Development District	Lake Cumberland Area Development District
Drought	X	X		X	X
Earthquakes	X	X			X
Extreme Temperatures				X	X
Flooding	X	X	X	X	X
Karst/Sinkholes		X			X
Landslides	X	X	X	X	X
Severe Weather	X	X	X	X	X
Severe Winter Storms	X	X	X	X	X
Tornadoes	X	X	X	X	X
Wildfires	X	X		X	X
Dam/Levee Failure	X	X			X

Table 44 lists the natural hazards from the Big Sandy Area Development District (BSADD), the Bluegrass Area Development District (BADD), the Cumberland Valley Area Development District (CVADD), the Kentucky River Area Development District (KRADD), and the Lake Cumberland Area Development District (LCADD). Hazards include drought, earthquakes, extreme temperatures, flooding, levee and dam failures, karst/sinkholes, landslides, severe weather, severe winter storms, tornadoes, and wildfires.

2.9.4 Greatest Risk Hazards

2.9.4.1 Drought

A drought is a prolonged period of lower-than-normal precipitation such that the lack of water causes a serious hydrologic imbalance. Relief from droughts depends on a variety of precipitation factors, including the timing and effectiveness of the rains, temperatures, wind, and low relative humidity, and the balance between precipitation and evapotranspiration, which is the sum of evaporation and transpiration. The release of water from plant leaves are also factors that can intensify a drought.

While droughts are often a normal climatic feature, human water demands and community response can hasten or mitigate droughts and their impact on communities. Common effects of drought include crop failure, water supply shortages, and fish and wildlife mortality. Drought conditions can also make an area more susceptible to wildfires. The agricultural industry is particularly vulnerable to the impacts of drought because the crops depend on stored soil water and surface water.

There are several methods of interpreting drought data and classifying a drought's severity, and no single index is the best in every situation. The Palmer Drought Severity Index (PDSI) is based on a water balance equation that weighs supply and demand, accounting for more than simply a location's precipitation deficits, while the Keetch-Byran Drought Index (KBDI) is merely a reference scale for estimating the dryness of the soil layers that increases for each day without rain. The U.S. Drought Monitor measures droughts and classifies their intensity from D0: Abnormally Dry to D4: Exceptional Drought, as seen in Table 46

Table 46. U.S. Drought Monitor, Drought Classification

Category	Description	Possible Impacts	Palmer Drought Severity Index	CPC Soil Moisture Model (Percentiles)	USGS Weekly Streamflow (Percentiles)	Standardized Precipitation Index (SPI)
D0	Abnormally Dry	Going into drought: short-term dryness, slowing of planting, growth of crops or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered	-1.0 to -1.9	21–30	21–30	-0.5 to -0.7
D1	Moderate Drought	Some damage to crops, pastures; streams, reservoirs, or wells low; some water shortages developing or imminent; voluntary water-use restrictions requested	-2.0 to -2.9	11–20	11–20	-0.8 to -1.2
D2	Severe Drought	Crop or pasture losses likely; water shortages common; water restrictions imposed	-3.0 to -3.9	6–10	6–10	-1.3 to -1.5
D3	Extreme Drought	Major crop/pasture losses; widespread water shortages or restrictions	-4.0 to -4.9	3–5	3–5	-1.6 to -1.9
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams, and wells, creating water emergencies	-5.0 or less	0–2	0–2	-2.0 or less

Table 46 explains U.S. Drought Monitor drought classifications. Category D0: Abnormally Dry includes potential impacts such as going into drought and short-term dryness slowing planting, growth of crops, or pastures. Coming out of drought, D0 may include some lingering water deficits, and pastures or crops may not be fully recovered. Category D1: Moderate Drought includes impacts such as damage to crops and pastures; streams, reservoirs, or wells are low; some water shortages are developing or imminent; and voluntary water-use restrictions are requested. Category D2: Severe Drought includes impacts such as crop or pasture losses, water shortages, and water restrictions. Category D3: Extreme Drought includes potential impacts such as major crop or pasture losses and



widespread water shortages or restrictions. Category D4: Exceptional Drought includes impacts such as exceptional and widespread crop or pasture losses, and shortages of water in reservoirs, streams, and wells creating water emergencies.

Kentucky is perceived as a “water-rich” State with an average annual rainfall of 45–50 inches and abundant groundwater and surface water resources. However, Kentucky can experience extended periods of dry weather ranging from relatively short-duration, single-season events to multiyear events.

Kentucky has experienced five significant drought periods in the past 20 years: 1988, 1999–2000, 2007–2008, 2010, and 2012. Each of these droughts brought hardships and inflicted various types of damage to Kentuckians, especially within the agricultural sector. These droughts also had individual “personalities” in terms of where they struck, how intense they became, how long they lasted, and what damage was done. But these droughts also share common features that distinguish them from normal dry periods, as detailed in the table below.

Table 47. Drought Categories

Drought Distinguisher	Explanation
Intensity	Drought develops only after a significant length of time with abnormally low precipitation, often combined with abnormally high temperatures. This combination of climatic anomalies results in an environment that stresses plants and animals, makes the lives of people living with water shortages uncomfortable, and can sometimes cause structural damage such as shifting foundations and ruptured water lines.
Duration	Kentucky has had some level of dry spells in nearly every year. Dry spells are termed to reflect a short-duration event, most commonly noticed during the hot days of summer or the warming days of spring. Dry spells are not droughts, but they are always a precursor to droughts. Unfortunately, and this is especially true for agriculture, a persistent dry spell may cause substantial damage early on in drought development, long before water shortages and problems with public water supplies emerge. Thus, one of the most difficult aspects of dealing with the drought hazard is the ability to accurately distinguish when a dry spell transitions into drought.
Timing	When a dry spell lingers and tends toward drought, the consequences are determined partly by the timing of drought emergence. Spring droughts can delay the refilling of water supply lakes, accelerate water loss from soils by rapidly growing plants, reduce hay production and storage, and in general make us more vulnerable to even mild summer drought. Summer drought development is most damaging to agricultural interests, reducing crop development and yields and often placing hardships on livestock producers when ponds dry up or pastures fail to keep up with animal grazing demands. Droughts that intensify into the fall generally begin to affect the dependability of drinking water sources, both surface and groundwater. Late fall and winter droughts can affect recharge of groundwater and delay or prevent the filling of lakes that typically draw down during summer, when evaporation and plant water use (evapotranspiration, or "ET") rates exceed rainfall. Severe persistent winter droughts increase vulnerability to droughts that may develop the following spring or summer.

Table 47 outlines the features that distinguish a drought, including intensity, duration, and timing.

Since 2000, the five MID counties have experienced 19 documented drought events.³⁵

The governor of Kentucky sought a federal disaster declaration for agricultural losses incurred by the drought, which was granted the following month. Fire danger was moderate to high, and many counties in western Kentucky banned outdoor burning during the driest part of September 2007. See Figure 12 for a visual representation of the 2007 drought.

³⁵ [NCEI – Storm Events Database](#)

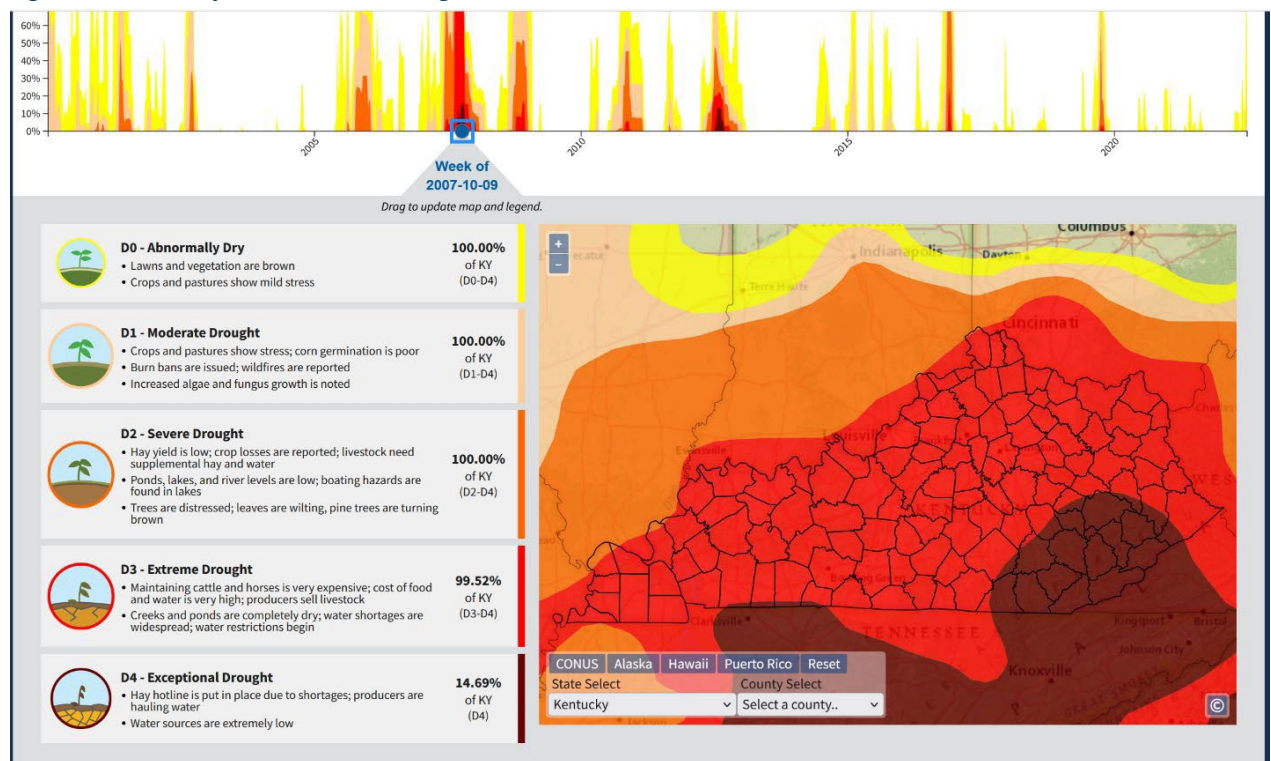
Figure 12. Kentucky October 2007 Drought³⁶

Figure 12 includes a map of Kentucky with drought classifications during the October 2007 drought. The majority of the Commonwealth (99.52%) was in an extreme drought, while several counties in the southeast (14.69% of the Commonwealth) were in exceptional drought. In addition, across the top of the figure is a timeline depicting periods of drought, including drought spikes in 2007, 2008, 2010, 2012, and 2019.

As with other hazards, changes in precipitation and climate are likely to affect the frequency, duration, and severity of drought events. While annual precipitation in Kentucky has increased approximately 5% since the first half of the 20th century, rising temperatures increase evaporation, which dries the soil and decreases the amount of rain that runs off into rivers.³⁷ Although rainfall during spring is likely to increase during the next 40–50 years, the total amount of water running off into rivers or recharging groundwater each year is likely to decline 2.5%–5% as increased evaporation offsets the greater rainfall. Droughts are likely to be more severe because periods without rain will be longer and very hot days will be more frequent. The potential increase in the intensity

³⁶ [NOAA – Historical Drought Information](#)

³⁷ [EPA Report – What Climate Change Means for Kentucky](#)

of droughts will have implications for important sectors of the Commonwealth's economy, including agriculture, industry, tourism, and natural resource management.³⁸

2.9.4.2 Earthquake

An earthquake is a vibration or shaking of the Earth's surface due to an underground release of energy. Earthquakes can be caused by various conditions, such as sudden movements along geological faults or volcanic activity. Earthquake magnitudes, or severity, are recorded on the Richter scale with seismographs. Some earthquakes may be so minor that they are virtually unnoticed, while others can destroy entire cities. Seismology, the study of earthquakes, helps scientists understand what areas are more prone to experiencing earthquakes, such as along active fault lines; however, earthquakes are generally unpredictable.

Most earthquakes occur where the Earth's tectonic plates meet, also known as fault lines. Earthquakes that occur within the plate interiors are much rarer, accounting for less than 10% of total earthquakes. Although most earthquakes, especially large ones (magnitude equal to or greater than 8.0), have occurred along plate boundaries, a few strong earthquakes have occurred in plate interiors. Kentucky is affected by several seismic zones: the New Madrid and Wabash Valley Seismic Zones to the west and the Eastern Tennessee Seismic Zone to the east. The largest recorded earthquake inside Kentucky's borders was the Sharpsburg earthquake on July 27, 1980, in Bath County. Its magnitude was 5.2, and it caused an estimated \$3 million in damage in Maysville. The 2003 Bardwell earthquake in western Kentucky (magnitude 4.0) caused some minor damage in Carlisle County, and the 2012 Perry County earthquake (magnitude 4.2) caused some minor damage in Letcher and Perry Counties in southeastern Kentucky, including at the Letcher County Courthouse. See a compilation of damage in Table 48.

Table 48. Earthquakes in Kentucky Since 1980

Year	Location	Magnitude	Notes
1980	Sharpsburg	5.2	Significant damage in Maysville
1988	Bath County	4.6	Shaking was felt in the area
2003	Bardwell	4.0	Some minor damage in Bardwell
2012	Perry County	4.2	Some minor damage in Letcher and Perry Counties

Table 48 shows earthquakes that have occurred in Kentucky since 1980. In 1980, a 5.2 magnitude earthquake hit Sharpsburg, causing significant damage in Maysville. In 1988, a 4.6 magnitude earthquake in Bath County caused shaking in the area. In 2003, a 4.0 magnitude earthquake caused some minor damage in Bardwell. In 2012, a 4.2

³⁸ [NOAA – State Climate Summaries: Kentucky](#)

magnitude earthquake in Perry County caused some minor damage in Letcher and Perry counties.

2.9.4.3 Extreme Temperatures

Extreme temperature includes both heat and cold events, which can have a significant impact on human health, commercial and agricultural businesses, and primary and secondary effects on infrastructure (e.g., burst pipes and power failures).

Conditions of extreme heat are defined as summertime temperatures that are substantially hotter and/or more humid than average for a location at that time of year. The heat index is a number in degrees Fahrenheit that indicates how hot it feels when relative humidity is factored into actual air temperature. Exposure to full sunshine can increase the heat index by at least 15 degrees. Figure 13 shows the heat index values when both humidity and temperature are considered. It also shows the likelihood of heat disorders with prolonged exposure to or strenuous activity in such conditions.

Figure 13. NWS Heat Index³⁹

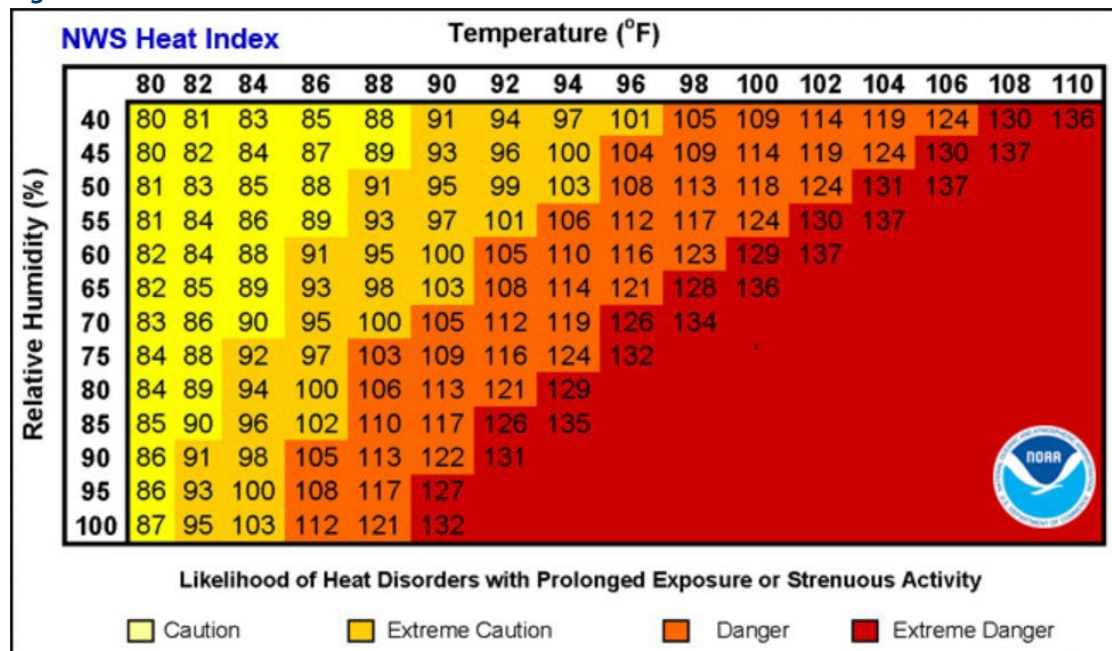


Figure 13 shows a graph of the National Weather Service's (NWS) heat index. The x-axis is temperature, and the y-axis is relative humidity. Based on relative humidity and temperature, the NWS calculated the likelihood of heat disorders with prolonged exposure or strenuous activity, divided into four categories: caution, extreme caution, danger, and extreme danger.

³⁹ [NOAA – What is the Heat Index?](#)

Under extreme heat conditions, the NWS can issue either a heat advisory or an excessive heat warning. A heat advisory is issued when a heat index of 100 degrees or higher is expected for 3 hours or more. An excessive heat warning is used when a heat index of 105 degrees or higher is expected for 3 hours or more.

Extreme heat can impose stress on humans and animals. Exposure to heat can lead to a variety of adverse health impacts, ranging from cramps to death.⁴⁰ Heat exhaustion is a relatively common reaction to excessive heat and can include symptoms such as headaches, dizziness, and fainting. If exposure is prolonged, heatstroke can occur. This reaction is more severe and requires medical attention. Deaths from heat exposure typically occur in individuals with preexisting conditions, frequently those with heart conditions.

Certain demographic groups are particularly vulnerable to adverse health impacts from extreme heat events.⁴¹ Very young children, seniors, and populations with physical and psychiatric medical conditions are more vulnerable to health impacts from heat events than the general population. Additionally, people of color and low-income residents are at greater risk from adverse extreme heat health impacts.

Urban areas are also particularly at risk because of air stagnation and large quantities of heat-absorbing materials such as streets and buildings. Extreme heat can also result in distortion and failure of structures and surfaces such as roadways and railroad tracks.

Extreme cold events are when temperatures drop well below normal in an area. Exposure to cold temperatures, whether indoors or outside, can lead to serious or life-threatening health problems such as hypothermia, cold stress, frostbite, or freezing of the exposed extremities such as fingers, toes, nose, and ear lobes. See Figure 14 for the NWS Wind Chill Chart.

⁴⁰ [Union of Concerned Scientists: Heat Waves and Climate Change](#)

⁴¹ Ibid

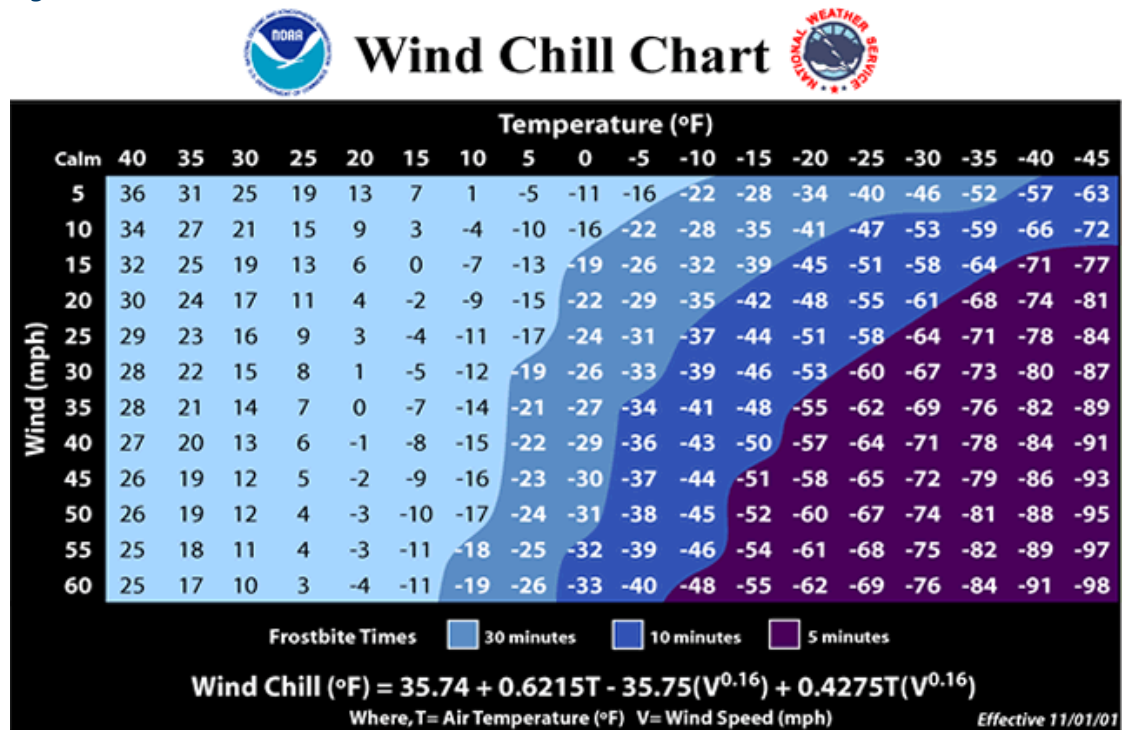
Figure 14. NWS Wind Chill Chart⁴²

Figure 14 shows a graph of the NWS's wind chill chart. The x-axis is temperature in degrees Fahrenheit and the y-axis is wind in miles per hour. Based on wind speed and temperature, the NWS calculated the time to incur frostbite, divided into 3 categories: 30 minutes, 10 minutes, and 5 minutes.

Heatwaves in Kentucky are expected to impact larger areas with more frequency and longer duration by 2050. A higher emissions pathway could lead to unprecedented warming in the 21st century (see Figure 36). Kentucky can expect to experience an average annual temperature that is warmer than any to date (low emissions scenario) and future temperatures could be as much as 11 degrees warmer (high emissions scenario). While heatwaves are predicted to be more intense, extreme cold is predicted to be less intense.

⁴² [NOAA – Wind Chill Chart](#)

Figure 15. Predicted Temperature Change in Kentucky Under Different Emissions Scenarios

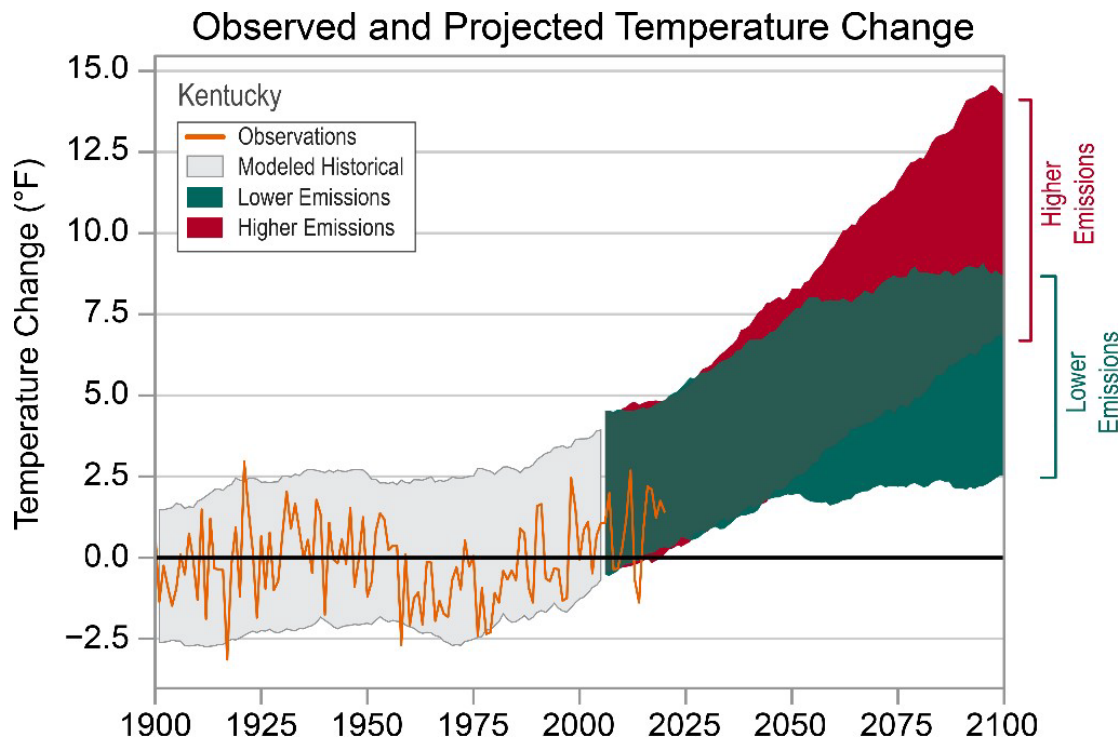


Figure 15 is a graph demonstrating observed and projected temperature change in Kentucky under different emissions scenarios. The graph demonstrates that observed temperatures have risen overall from a baseline temperature since the early 20th century.

2.9.4.4 Flood (Riverine and Flash)

A flood or flooding refers to the general or temporary conditions of partial or complete inundation of normally dry land areas from the overflow of water and surface water runoff from any source. Floodplains are defined as any land areas susceptible to being inundated by water from any flooding source. There are several different types of flooding that impact the MID, PA, and IA counties, including riverine and flash flooding.

FEMA has identified and mapped areas of flood risk on Flood Insurance Rate Maps (FIRMs), with the highest risk zones called the Special Flood Hazard Areas (SFHA).⁴³ The 100-year floodplain is considered a high-risk area and is denoted as Zone A. The 500-year floodplain is denoted as Zone C or Zone X. The areas between the 100- and 500-year floodplains are shown using Zone B and Zone X. Additionally, high-risk coastal areas are denoted as Zone V. This information is shown in Table 49 below.

⁴³ [FEMA Flood Zone - Glossary](#)

Table 49. FEMA-Designated Flood Zones

Zone	Description
Low-to-Moderate Risk Areas	
C and X (Unshaded)	Area of minimal flood hazard is usually depicted on FIRMs as above the 500-year flood level. Zone C may have ponding and local drainage problems that do not warrant a detailed study or designation as a base floodplain. Zone X is the area determined to be outside the 500-year flood and protected by a levee from the 100-year flood.
B and X (Unshaded)	Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. B Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year floods, or shallow flooding areas with average depths of less than 1 foot or drainage areas less than 1 square mile.
High-Risk Areas	
A	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these zones.
AE	The base floodplain where base flood elevations are provided.
AH	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1–3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
High-Risk Coastal Areas	
V	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.
Undetermined Risk Areas	
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

Table 49 contains FEMA-designated flood zones with descriptions and includes low-to-moderate risk areas (C and X unshaded, B and X unshaded), high-risk areas (A, AE, AH, and AO), high-risk coastal areas (V), and undetermined risk areas (D).

Flooding is the most frequent and costly natural hazard within the Commonwealth, with an average annual loss of greater than \$40,000,000. Flood events occur within the Commonwealth every year with several substantial floods occurring annually. Kentucky's topography contains 13 major drainage basins to accommodate 40–50 inches of

average rainfall (maximum during winter and spring, minimum during late summer and fall). The Commonwealth contains 89,431 miles of rivers and streams, 637,000 acres of wetlands, 18 reservoirs greater than 1,000 acres in size, and 228,382 acres of publicly owned lakes and reservoirs.

The primary factors that determine the severity of a flood include:

- Rainfall intensity and duration
 - A large amount of rain over a short time can result in flash flooding.
 - Small amounts may cause flooding where the soil is already saturated.
- Topography
 - Water runoff is greater in areas with steep slopes and little vegetation.

Rainfall and topography vary considerably across the Commonwealth. Eastern Kentucky generally has steep slopes and narrow valleys throughout, making it susceptible to flash flooding events. The speed with which these events develop gives little time for warning and can potentially lead to loss of life. Central Kentucky has rolling hills and several medium-to-large river systems and associated small tributaries. These areas tend to have increased warning times, but the smaller tributaries are still susceptible to flash flooding events. Northern Kentucky along the Ohio River and western Kentucky are generally flatter with larger, well-defined floodplains. These areas tend to have the greatest amount of warning time in the Commonwealth, providing communities and citizens the opportunity to get out of the way. These areas are less vulnerable to loss of life due to flooding but have a higher risk of economic losses.

Other factors that contribute to flood impacts include storm types, soil types, channel slope, karst areas, soil saturation, infrastructure development, impervious surfaces, and emergency response capabilities. Variations in local conditions can cause extreme variability in flood levels, duration, and impacts.

There are a multitude of factors that lead to a flooding event. These factors can lead to a variety of flooding types, with each type of flooding having different effects on communities. Two common types of flooding in Kentucky are described below.

2.9.4.4.1 Riverine Flooding

Riverine floods are the most common flood type. They occur along a channel and include overbank and flash flooding. Channels are defined ground features that carry water through and out of a watershed. These channels may be rivers, creeks, streams, or ditches. When a channel receives too much water, the excess water flows over its banks and inundates low-lying areas.⁴⁴

⁴⁴ [Natural Aspects of Flooding | The Illinois Association for Floodplain and Stormwater Management](#)

2.9.4.4.2 Urban Flooding

The National Oceanic and Atmospheric Administration (NOAA) defines urban flooding as the flooding of streets, underpasses, low-lying areas, or storm drains.⁴⁵ This type of flooding is mainly an inconvenience and is generally not life-threatening.

Urban drainage flooding is caused by increased water runoff due to urban development and drainage systems. Drainage systems are designed to remove surface water from developed areas as quickly as possible to prevent localized flooding on streets and other urban areas. These drainage systems make use of a closed conveyance system that channels water away from an urban area to surrounding streams, bypassing the natural processes of water filtration through the ground, containment, and evaporation of excess water. Since drainage systems reduce the amount of time the surface water takes to reach surrounding streams, flooding in those streams can occur more quickly and reach greater depths than before development in that area.

There have been 304 flood events across the MID counties between 2012 and 2022. These floods caused more than \$700.1 million in property damage. One heavy rainfall event in Breathitt County and across central and east Kentucky on March 1, 2021, led to significant flooding across the Commonwealth. FEMA estimated that the event caused \$350–\$400 million in damage, including damage to both individual and public infrastructure. Major flood events between 2012 and 2022 can be found in Table 50.

Table 50. Major Flood Events With Deaths, Injuries, or Property Damage >\$9,999 in MID Counties, 2012–2022

County	Location	Date	Event Type	Amount of Property Damage
BREATHITT	WILHURST	3/1/2021	Flood	\$400,000,000
PERRY	AVAWAM	6/17/2013	Flash Flood	\$500,000
LETCHER	JENKINS	2/6/2020	Flood	\$350,000
PIKE	DRAFFIN	2/12/2020	Heavy Rain	\$250,000
KNOTT	FISTY	8/18/2014	Flash Flood	\$234,000
PIKE	BELFRY	1/1/2022	Flash Flood	\$200,000
PIKE	SHOCK	8/1/2022	Flash Flood	\$200,000
PIKE	MC COMBS	8/22/2014	Flash Flood	\$100,000
LETCHER	MILLSTONE	5/15/2018	Flash Flood	\$80,000
BREATHITT	WAR CREEK	6/17/2013	Flash Flood	\$78,000
PIKE	PIKEVILLE	2/20/2019	Heavy Rain	\$75,000
KNOTT	CARR CREEK	7/18/2012	Flash Flood	\$70,000
LETCHER	SKYLINE	2/20/2019	Heavy Rain	\$70,000

⁴⁵ [Urban Flooding \(NOAA\)](#)

County	Location	Date	Event Type	Amount of Property Damage
BREATHITT	WHICK	1/1/2022	Flash Flood	\$60,000
PERRY	HAZARD ARPT	2/6/2020	Flood	\$55,000
PIKE	KIMPER	5/19/2017	Flash Flood	\$50,000
BREATHITT	WILHURST	2/28/2021	Flash Flood	\$50,000
PIKE	BELFRY	1/1/2022	Flash Flood	\$50,000
PIKE	META	1/1/2022	Flash Flood	\$50,000
PIKE	ZEBULON	1/1/2022	Flash Flood	\$50,000
PIKE	ELK HORN CITY	5/24/2017	Flash Flood	\$20,000
KNOTT	FISTY	5/24/2020	Flash Flood	\$20,000
PIKE	PAULEY	8/30/2021	Flash Flood	\$20,000
PIKE	BROAD BOTTOM	8/30/2021	Flash Flood	\$20,000
BREATHITT	HARDSHELL	1/1/2022	Flash Flood	\$20,000
PIKE	CANADA	1/1/2022	Flash Flood	\$20,000
PERRY	HAZARD	2/10/2018	Flood	\$15,000
PERRY	KRYPTON	2/28/2021	Flash Flood	\$15,000
LETCHER	NEON	8/1/2022	Flash Flood	\$15,000
LETCHER	COLSON	4/3/2012	Flash Flood	\$10,000
PERRY	COOLIDGE	7/18/2012	Flash Flood	\$10,000
PIKE	ARROW	7/17/2013	Flash Flood	\$10,000
PERRY	BONNYMAN	12/6/2013	Flood	\$10,000
PERRY	CHAVIES	8/20/2014	Flash Flood	\$10,000
KNOTT	HINDMAN	8/20/2014	Flash Flood	\$10,000
BREATHITT	WOLF COAL	5/1/2016	Flash Flood	\$10,000
BREATHITT	WOLVERINE	2/10/2018	Flood	\$10,000
KNOTT	HINDMAN	2/20/2019	Heavy Rain	\$10,000
PERRY	DICE	2/23/2019	Heavy Rain	\$10,000
PIKE	TOLER	3/13/2020	Flood	\$10,000
PIKE	RANSOM	8/30/2021	Flash Flood	\$10,000
PIKE	PINSON	8/30/2021	Flash Flood	\$10,000
BREATHITT	WHICK	1/1/2022	Flash Flood	\$10,000
PIKE	SIDNEY	1/1/2022	Flash Flood	\$10,000

Total annual precipitation in Kentucky exhibits an overall upward trend and has averaged 7.4 inches above the long-term (1895–2020) average since 2011. Winter and spring precipitation and extreme precipitation events are projected to increase during the 21st century (see Figure 37 for precipitation map).⁴⁶ Continuing increases in the frequency and intensity of extreme precipitation events are also projected, potentially increasing the frequency and intensity of floods. The projections of increasing precipitation and heavy precipitation events are true for a large area of the Northern Hemisphere in the northern middle latitudes. Increased flood events will have significant impacts on Kentucky's infrastructure and economy.

Figure 16. Projected Change in Spring Precipitation⁴⁷

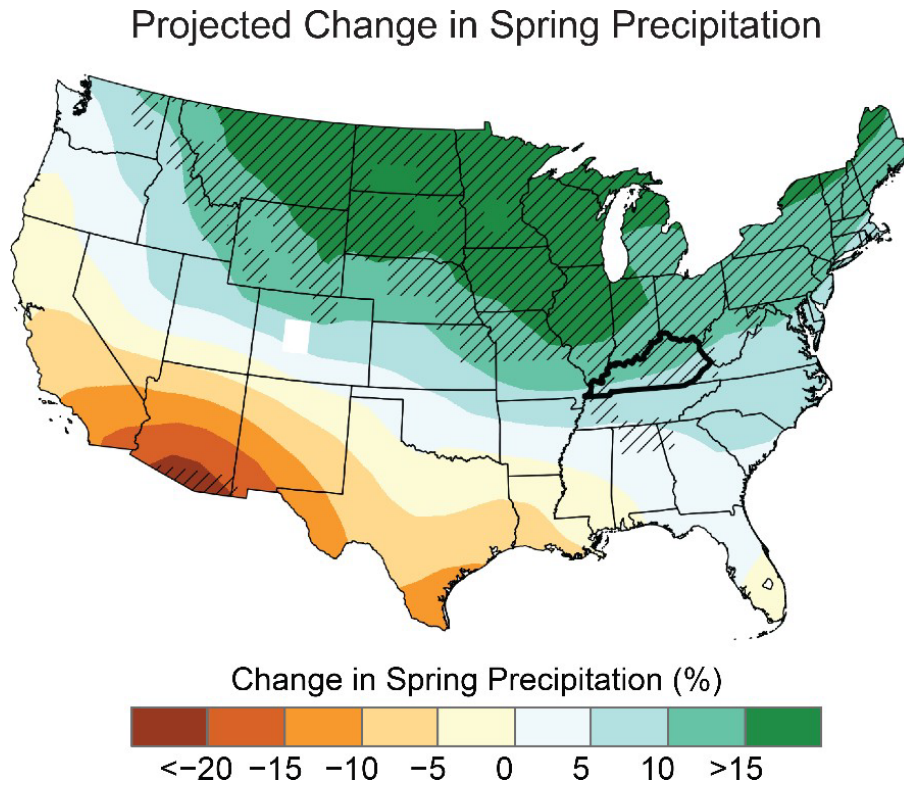


Figure 16 presents a map of the United States showing project changes in spring precipitation. The map demonstrates that Kentucky will receive approximately 10% more spring precipitation.

⁴⁶ [NOAA – State Climate Summaries: Kentucky](#)

⁴⁷ [NOAA – State Climate Summaries: Kentucky](#)

2.9.4.5 Karst/Sinkholes

Karst is a type of landscape where the dissolving of the bedrock has created sinkholes, sinking streams, caves, springs, and other characteristic features.⁴⁸ Karst is associated with soluble rock types such as limestone, marble, and gypsum. In general, a typical karst landscape forms when much of the water falling on the surface interacts with and enters the subsurface through cracks, fractures, and holes that have been dissolved into the bedrock. After traveling underground, sometimes for long distances, this water is then discharged from springs, many of which are cave entrances.

In Kentucky, approximately 50%–60% of the Commonwealth has karst or potential for karst, as indicated by maps showing areas where limestone crops out. About 38% of the Commonwealth has at least some karst development that can be recognized on topographic maps, and 25% of the Commonwealth is known to have well-developed karst features. Data obtained from the 2010 U.S. Census indicate that 2,894,115 people, or about 67% of the Commonwealth's population, live in a karst region.⁴⁹ Some of the larger Kentucky cities and towns located on karst are Frankfort, Louisville, Lexington, Lawrenceburg, Georgetown, Winchester, Paris, Versailles, and Nicholasville (all located in the inner Bluegrass region); Fort Knox, Bowling Green, Elizabethtown, Munfordville, Russellville, Hopkinsville, and Princeton (in the western Pennyroyal region); and Somerset, Monticello, and Mount Vernon (in the eastern Pennyroyal region).

Karst hazards that could have an impact on Kentucky's citizens and infrastructure include sinkholes, flooding, and groundwater and surface water contamination. Sinkholes are by far the largest and most frequently encountered karst hazards. Kentucky is ranked fifth nationally among states affected by sinkhole hazards.

Sinkholes are closed and internally drained topographic depressions of generally circular shape that develop where soil or other overburdened material subsides or collapses into subsurface voids. Sinkholes can form as a result of both natural (karst-related) processes and as a direct or indirect consequence of human activities. Human activities that can cause sinkholes include groundwater withdrawals, alteration, or diversion of surface runoff; subsurface mining; subsurface erosion, piping, or compaction of unconsolidated soils or sediments along buried pipelines or beneath highways and roads; and decaying buried organic debris (e.g., tree roots, buried trash, and other debris). Sinkholes also form in nonkarst areas where leaking water or sewer pipes and other human activities create or result in subsidence, compaction, or subsurface erosion (i.e., piping) of soil, gravel, or other fill materials.

⁴⁸ [NPS – Karst Landscapes](#)

⁴⁹ Cecil, M.C. (2015). *Population and land use in Kentucky karst regions: University of Kentucky Departments of Earth and Environmental Sciences and Geography, Kentucky Geological Survey*. Independent study final report, 15.

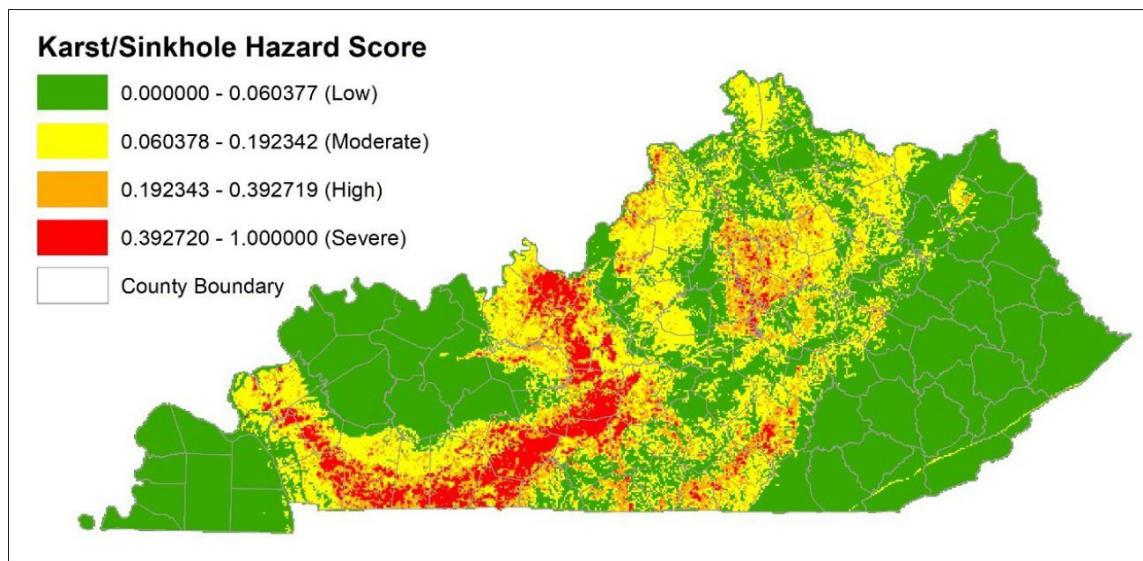
Sinkholes may be grouped into two broad categories: subsidence and collapse. Subsidence and collapse sinkholes often occur together in the same karst area, and many sinkholes form as a combination of the two processes. Subsidence sinkholes form by the relatively slow and gradual subsurface dissolution of soluble bedrock and piping of unconsolidated cover materials (soil, alluvium) into fractures and conduits enlarged by solution in the epikarst, a zone of intensified weathering and dissolution at the soil-bedrock interface. Subsidence sinkholes in Kentucky are generally recognizable as broad, shallow, bowl-shaped depressions. These sinkholes are largely responsible for the rolling topography that characterizes much of the Bluegrass and western Pennyroyal regions. Diameters can range from several tens to hundreds of feet, and shapes can be circular, elongate, or irregular and complex.

Collapse sinkholes form suddenly by failure of the roof or arch of soil, bedrock, or other surface and subsurface materials located above subsurface karst voids and caves.⁵⁰

Their seemingly unpredictable occurrence makes them a hazard of particular concern in karst areas. The Kentucky Geological Survey began developing a catalog of case histories of cover-collapse occurrences in 1997 and has documented 354 occurrences throughout the Commonwealth; an average of 24 new reports are received each year.

In the 2018 State Hazard Mitigation Plan, researchers looked at karst potential areas and sinkhole density and created a hazard map for the State (see Figure 17).

Figure 17. Karst/Sinkhole Hazard Score, Kentucky



⁵⁰ Waltham T., Bell, F., and Culshaw, M. (2005). *Sinkholes and subsidence: Karst and cavernous rocks in engineering and construction*. Berlin, Springer.

Figure 17 depicts a map of karst and sinkhole hazards in Kentucky. The far eastern and western areas of the State have a low sinkhole hazard risk, while the south-central region of the Commonwealth has a high-to-severe karst/sinkhole hazard risk.

With gradual warming and its effects on summer highs and winter lows, increased precipitation, and increased variability of the weather, it is expected that the probability (or, rather, the frequency and/or severity) of sinkhole events, particularly sinkhole flooding events, will increase.

2.9.4.6 Landslide

A landslide is a general term for the downslope movement of rock, soil, or both under the influence of gravity. The style of movement and resulting landform or deposit are influenced by the rock and soil type, slope location, and how fast the rock or soil moves. Landslides occur when the strength of rocks or soil is exceeded by stress applied to those hillslope materials. Common stresses are gravity, increased pore-water pressure, earthquake shaking, and slope modification.

Figure 18. Types of Landslides (Source: Kentucky Division of Emergency Management)⁵¹

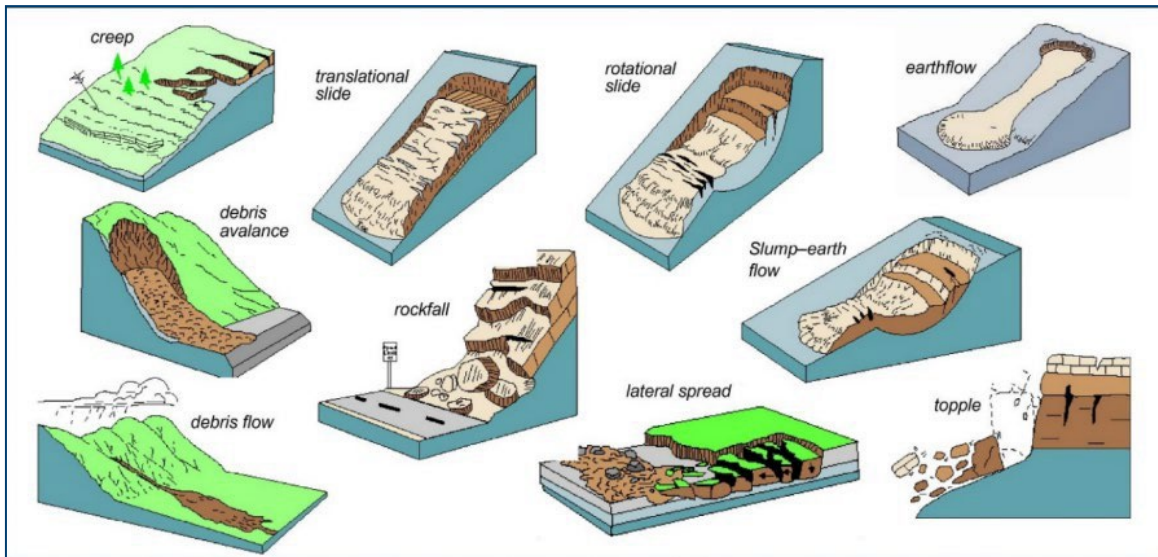


Figure 18 presents a diagram with various types of landslides, including creep, translational landslides, rotational slides, earthflows, debris avalanche, rockfall, slump-earth flow, debris flow, lateral spread, and topple.

Landslide-triggering mechanisms work in conjunction with the causes. Triggers are the external stimuli that can initiate slides and include rainfall, earthquake shaking, volcanic eruptions, rapid groundwater change, and slope modification by humans. Landslides can occur on natural or engineered slopes. Most landslides in Kentucky occur within colluvial soils or along the soil-bedrock contact. Colluvial soils are formed by weathering and erosion of rock and soil accompanied by downslope movement by gravity. When disturbed or loaded, by heavy rainfall saturating a slope, for example, these soils are susceptible to landslides.

⁵¹ [United States Geological Survey Landslide Fact Sheet FS2004-3072](#)

Figure 19. FEMA's Landslide Risk Index Score

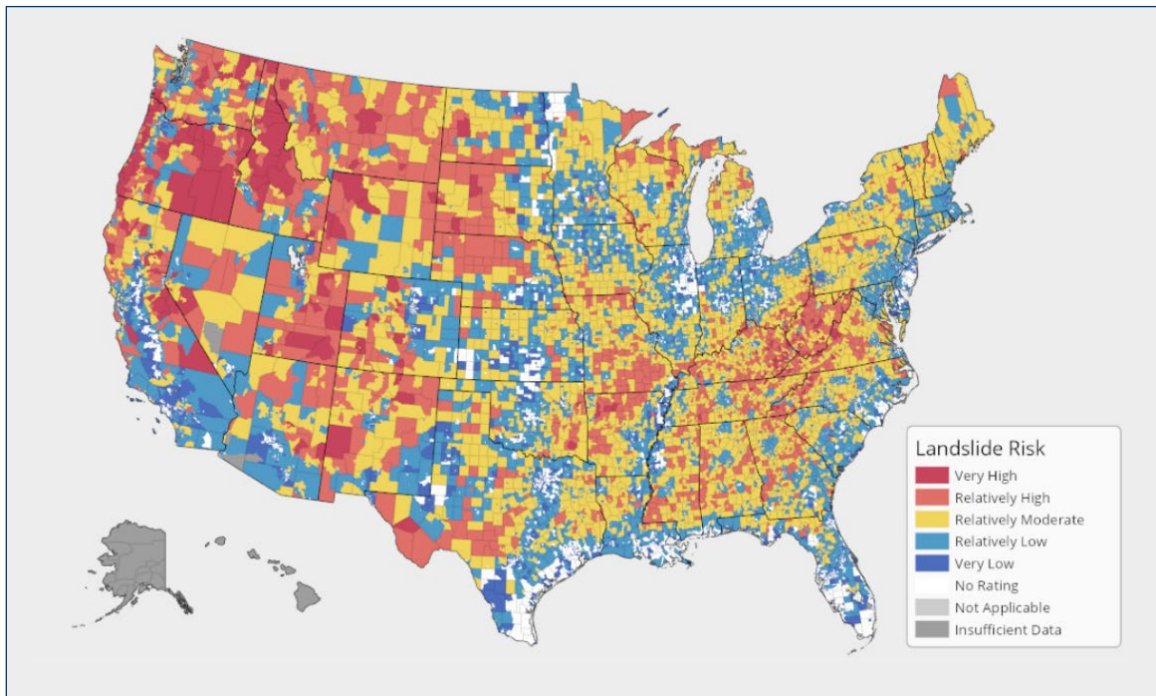


Figure 19 depicts a map of the United States demonstrating regional landslide risk; the majority of the Commonwealth of Kentucky is either at relatively moderate, relatively high, or very high landslide risk. FEMA's landslide risk index score represents a community's relative risk for landslides compared to the rest of the United States.

No systematic catalog of landslide occurrence or impact is maintained in the United States. One complication is that landslides are often considered a secondary hazard associated with a primary extreme event, such as a tropical storm or an earthquake. This makes compiling statistics on landslides and their impact difficult; as such, their impacts are likely underestimated. However, according to the U.S. Geological Survey, landslides cause \$1–\$2 billion in damages and more than 25 deaths on average each year in the United States. Direct costs of landslides include repairs and maintenance of roads and other property. Indirect costs, including loss of tax revenue on devalued property, loss of real estate value in landslide-prone areas, and environmental effects (such as water quality), may even exceed direct costs.

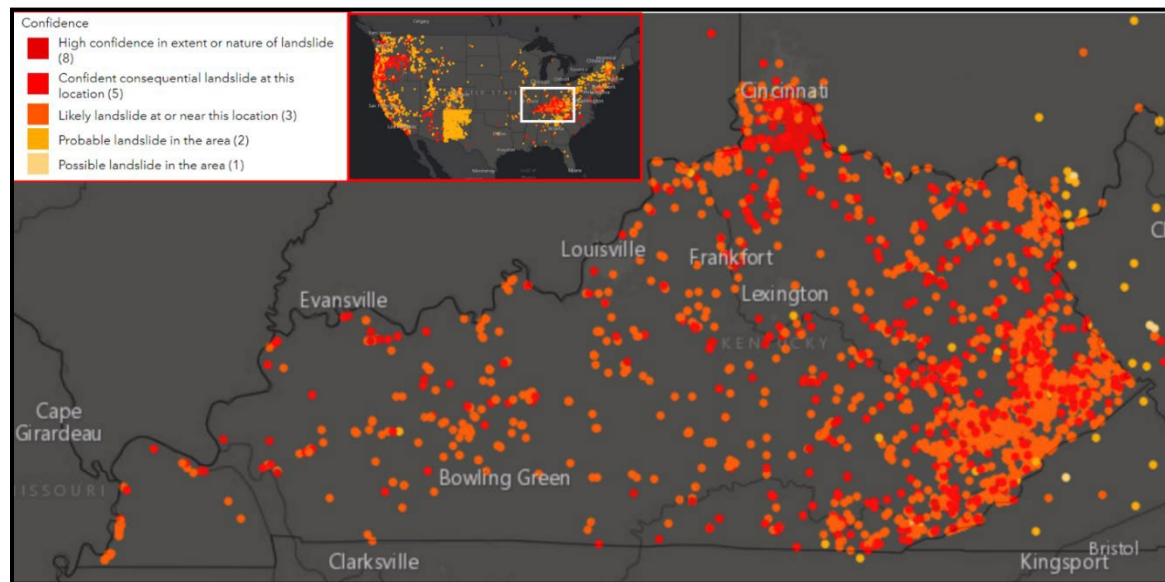
Figure 20. USGS Landslide Inventory, 2022

Figure 20 shows a map of Kentucky from USGS with landslide events from 2022. Most landslides have occurred along the eastern border of the Commonwealth.

There are more than 76,000 landslides in the Kentucky Geological Survey landslide inventory database as of 2018.⁵² Kentucky's landslides occur in all regions of the Commonwealth, mostly in the Eastern Kentucky Coal Field, Outer Bluegrass, the Knobs region, and along the Ohio River Valley. Areas generally prone to landslides include preexisting landslides, highly developed hillsides, poorly compacted artificial fill slopes, and steep drainage hollows or concave slopes with moderate-to-thick soils.

Evidence suggests that landslide costs rival or exceed flood and earthquake costs in Kentucky. Costs of landslides and rockfall repair exceed \$4 million annually, largely costs incurred by the Kentucky Transportation Cabinet. However, many slides unrelated to transportation go unreported and pose significant hazards to people and infrastructure. Landslide projects from 2003 to 2013 funded by a Kentucky Hazard Mitigation grant program that acquires landslide-damaged homes or stabilizes the area totaled approximately \$5 million. The most expensive landslide mitigation effort in the Commonwealth occurred in Hickman, when the federal government secured \$17 million to stabilize a large slide on the bluff of the Mississippi River.

Generally, more landslides occur when average statewide rainfall is higher than normal. There has been gradual warming since the late 1970s. This gradual warming will likely continue without much significant change until 2040. Further, part of the gradual warming since the late 1970s involves precipitation increases. Precipitation increases affect nearly every hazard identified in this hazard mitigation plan: landslides are

⁵² Kentucky Division of Emergency Management, 2018

triggered by precipitation; sinkholes flood with increased precipitation; flash flooding increases from severe storms; and winter storms either increase or become more severe. With gradual warming and its effects on summer highs and winter lows, increased precipitation, and increased variability of the weather, it is expected that the probability (or, rather, the frequency and/or severity) of landslide events will increase. Increasing urbanization and development on landslide-prone slopes will also increase the likelihood of slope failures. Finally, as the population increases, development of landslide-prone areas grows, and the hazard and risk will increase.

2.9.4.7 Severe Weather – High Winds, Thunderstorms, and Hailstorms

The Kentucky Hazard Mitigation Plan defines severe weather as an event that has at least one of the following: wind gusts of at least 58 mph or higher (i.e., 50 knots), tornado, or hail that is 1 inch or larger (i.e., the size of a quarter).

2.9.4.7.1 High Winds

High winds are defined as a rough horizontal movement of air caused by uneven heating of the earth's surface. Wind occurs at all scales, from local breezes lasting a few minutes to global winds resulting from solar heating of the earth. Effects from high winds can include downed trees and power lines and damage to roofs, windows, etc.

The Kentucky Hazard Mitigation Plan identifies three types of damaging wind associated with severe storms:

Downburst: A downburst refers to an area of strong, often damaging winds produced by air rapidly descending in a thunderstorm. Downbursts are sometimes described as a microburst when it covers an area of less than 2.5 square miles and lasts 3–7 minutes. Microbursts can be referred to as downbursts when they cover larger areas or last for more than 7 minutes. On rare occasions, downbursts can have wind speeds exceeding 150 mph.

Bow Echo: A bow echo is a bow-shaped line of convective cells, best seen on radar, and is often associated with swaths of damaging straight-line winds and small tornadoes.

Derecho: A derecho is a widespread and usually fast-moving convectively induced episode of damaging winds. Derechos can result from bow echoes, supercells, multicell clusters or lines, or a blend of any of these. They can produce damaging straight-line winds over areas hundreds of miles long and more than 100 miles across. Due to the large area extent, an episode is usually not classified as a derecho until it is complete.

As far as jurisdictional variations in vulnerability to severe wind events and tornado events, the eastern, northeastern, and southeastern parts of the Commonwealth are going to be far less vulnerable to severe wind and tornadoes than the western end of the Commonwealth. Central Kentucky has moderate vulnerability to tornadic and severe

wind activity compared to the western part of the Commonwealth. However, northwestern Kentucky can show high vulnerability to severe winds and tornadoes. Severe wind is a more troubling issue for Kentuckians than tornadoes. Straight-line winds are more frequent and often more damaging than tornadoes.

2.9.4.7.2 *Severe Storms/Thunderstorms and Hailstorms*

Severe storms, or thunderstorms, can be dangerous and can cause destructive, deadly flooding. When they contain strong winds, hail, or tornadoes, they can turn violent. NOAA classifies a storm as “severe” when it produces wind gusts of at least 58 mph and/or hail 1 inch in diameter (about the size of a quarter) or larger and/or a tornado.

Thunderstorms vary in type depending on size and organization. NOAA classifies thunderstorms by cells, or convection in the form of a single updraft, downdraft, or updraft/downdraft couplet, typically seen as a vertical dome or tower as in a towering cumulus cloud.⁵³

- Ordinary cell thunderstorms only have one cell. These storms may also be referred to as single-cell thunderstorms or pulse thunderstorms.
- Multicell cluster thunderstorms are organized in clusters of two to four short-lived cells.
- Multicell line thunderstorms form in a line that extends—sometimes for hundreds of miles—and can persist for hours. These are called squall lines, and they can be continuous or include contiguous precipitation.
- Long-lived squall lines are called derechos and can cause severe damage with fast, straight-line winds.
- Supercell thunderstorms are very dangerous storms with long-lived strong tornadoes and damaging wind, hail, and flash floods.

Thunderstorms form due to three conditions: moisture, rising unstable air (air that keeps rising when given a “nudge”), and a lifting mechanism to provide the nudge.

Thunderstorms have three stages in their lifecycle: the developing stage, the mature stage, and the dissipating stage. The developing stage of a thunderstorm is marked by a cumulus cloud that is pushed upward by a rising column of air (updraft). There is little to no rain during this stage but occasional lightning. The thunderstorm enters the mature stage when the updraft continues to feed the storm, but precipitation begins to fall out of the storm, creating a downdraft (a column of air pushing downward). When the downdraft and rain-cooled air spreads out along the ground it forms a gust front or a line of gusty winds. The mature stage is the most likely time for hail, heavy rain, frequent lightning, strong winds, and tornadoes. The production of a large amount of precipitation and a downdraft signifies the beginning of the dissipating stage.

⁵³ [Severe Weather 101: NOAA National Severe Storms Laboratory](#)

Hail forms inside a thunderstorm where there are strong updrafts of warm air and downdrafts of cold water. If a water droplet is picked up by the updrafts, it can be carried well above the freezing level. Water droplets freeze when temperatures reach 32 degrees or colder. As the frozen droplet begins to fall, it may thaw as it moves into warmer air toward the bottom of the thunderstorm. However, the droplet may be picked up again by another updraft and carried back into the cold air and refreeze. With each trip above and below the freezing level, the frozen droplet adds another layer of ice. The frozen droplet, with many layers of ice, falls to the ground as hail. Most hail is small and typically less than 2 inches in diameter.

Severe storms can have significant impacts on infrastructure. Lightning strikes can cause infrastructure and tree damage, start fires, and pose a threat to human life. Damage from hail increases with the size of the hail and can cause damage to vehicles, aircraft, and homes, and can be fatal to people and livestock. Additionally, heavy rain from severe thunderstorms can often lead to flash flooding in low-lying areas and in urban areas where the prevalence of impermeable surfaces (such as roads, roofs, and parking lots) accelerates storm runoff to ditches and streams. From 2010 to 2022, FEMA granted 21 disaster declarations in Kentucky, mostly for severe storms, tornadoes, and flooding.

Thunderstorms will potentially become more intense and severe as climate change creates conditions that are conducive to thunderstorm formation, with warmer surface temperatures and more moisture in the air due to increased evaporation. A study led by Purdue University found that a doubling of greenhouse gases in the atmosphere would significantly increase the number of days that severe thunderstorm could occur in the southern and eastern United States.⁵⁴

2.9.4.8 Severe Winter Storm

A severe winter storm consists of heavy snow, ice, strong winds, and/or cold temperatures. Heavy snow is considered 6 inches of snow or more in 12 hours; or 8 inches of snow or more in 24 hours. A severe winter storm is considered a blizzard if the storm has winds 35 mph or greater and significant snow or blowing snow with visibility less than 1/4 mile.

Snowfall is most likely from December to March, but it occasionally occurs as early as October or as late as April. Seasonal amounts average from close to 10 inches in the south to more than 20 inches in the north. Amounts are highly variable from year to year. In some years, a single heavy snowfall event may represent a large percentage of the seasonal total. Across southern Kentucky, seasonal totals of less than 5 inches are fairly common, while totals of more than 20 inches are infrequent. Northern areas rarely receive less than 10 inches of snow and occasionally receive as much as 40 inches or

⁵⁴ [Severe Thunderstorms and Climate Change: NASA](#)

more. Snow cover seldom persists for more than 1 week in the south or more than 2 weeks in the north.

The number of extremely cold events has also been below average in recent winters. The top 10 coldest winters all occurred prior to 1980. Also, since 1990, the number of very cold nights has been below average, and winter average temperatures have generally been near to above average.

However, winter storms still afflict Kentucky. Heavy snow is normally associated with storm systems that originate in the southwest, are fueled by Gulf of Mexico moisture, and track toward the northeast. Instead of snow, a winter storm may bring freezing rain that produces significant icing, but such events are infrequent. Intense winter storms are sometimes followed by cold waves that bring temperatures of zero degrees or colder.

Of the top 25 weather events ever recorded from the NWS Louisville Field Office, seven events have been severe winter storms. Kentucky witnessed 45 winter storm events between 2013 and 2018, with an average annual occurrence of 7.5 (Table 56).

Table 51. Severe Winter Storm Events in Kentucky, Annual Frequency, 2013–2018

Year	Winter Storm Events	Ice Storm Events	Heavy Snow Events	Events Combined
2013	5	3	3	11
2014	7	2	5	14
2015	3	1	3	7
2016	2	0	3	5
2017	0	0	1	1
2018	4	0	3	7
<i>Totals</i>	21	6	18	45
Frequency Per Year (/6)	3.5	1	3	7.5

Table 51 contains the frequency of severe winter storm events between 2013 and 2018 in Kentucky. In 2013, Kentucky experienced 5 winter storm events, 3 ice storm events, 3 heavy snow events, and 11 total events. In 2014, Kentucky experienced 7 winter storm events, 2 ice storm events, 5 heavy snow events, and 14 total events. In 2015, Kentucky experienced three winter storm events, one ice storm event, three heavy snow events, and seven total events. In 2016, Kentucky experienced two winter storm events, zero ice storm events, three heavy snow events, and five total events. In 2017, Kentucky experienced zero winter storm events, zero ice storm events, one heavy snow event, and one total event. In 2018, Kentucky experienced four winter storm events, zero ice storm events, three heavy snow events, and seven total events.

With gradual warming and its effects on summer highs and winter lows, increased precipitation, and increased variability of the weather, it is expected that the probability (or, rather, the frequency and/or severity) of severe winter storms, heavy snow, and ice storms will increase.

2.9.4.9 Tornado

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. Tornadoes occur when cool, dry air intersects and overrides a layer of warm, moist air, forcing the warm air to rise rapidly. Tornado wind speeds normally range from 65 mph to over 200 mph but can reach more than 300 mph. The maximum winds in tornadoes are often confined to extremely small areas and vary tremendously over short distances, even within the funnel itself. These storms typically travel around 10–20 mph but can move at more than 60 mph. Damage paths can vary from as narrow as 1 mile to as wide as 50 miles. Tornadoes can occur at any time of the year and at any time of day.

Tornadoes are measured by their intensity in terms of wind speed and their area using the Enhanced Fujita (EF) scale. The scale ranges from EF0, with minor damages from winds ranging 65–85 mph, to EF5 with severe damages from winds more than 200 mph.

Table 52. Enhanced Fujita Scale

EF Number	Estimated 3-second gust (mph)	Typical Damage
0 (Gale)	65–85	Some damage to chimneys; branches broken off trees; shallow-rooted trees blown over; damaged signboards.
1 (Weak)	86–110	Surfaces peeled off roofs; mobile homes pushed off foundations or overturned; autos pushed off roads.
2 (Strong)	111–135	Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
3 (Severe)	136–165	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forests uprooted. Well-constructed houses leveled; structures with weak foundations blown off, sometimes to a distance; cars flung about; large missiles generated.
4 (Devastating)	166–200	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars flung about; large missiles generated.
5 (Incredible)	200+	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile-sized missiles flying more than 100 meters; trees debarked; steel-reinforced concrete structures badly damaged.

Table 52 explains the Enhanced Fujita scale. An EF0 (gale) storm has estimated 3-second gusts of 65–85 mph; an EF1 (weak) storm has estimated 3-second gusts of 86–110 mph; an EF2 (strong) storm has estimated 3-second gusts of 111–135 mph; an EF3 (severe) storm has estimated 3-second gusts of 136–165 mph; an EF4 (devastating) storm has estimated 3-second gusts of 166–200 mph; and an EF5 (incredible) storm has estimated 3-second gusts of 200+ mph.

Kentucky experiences a relatively high number of tornadoes each year, with an annual average of approximately 24 tornadoes between 1991 and 2019.⁵⁵ On March 2, 2012, 18 tornadoes touched down in Kentucky, including one of EF4 and four of EF3 intensity, resulting in 22 fatalities. In April 2011, 41 tornadoes were reported, superseding an earlier April record of 29 tornadoes during the Super Outbreak of 1974. The December 10–11, 2021, tornado outbreak was one of the deadliest in Kentucky history, resulting in 76 fatalities. Twenty tornadoes touched down, including one of EF4 and three of EF3 intensity. The EF4 tornado path extended from near Woodland Mills, Tennessee (just across the border from Fulton County, Kentucky), to Breckinridge County (near Falls of Rough, Kentucky), a distance of 165.7 miles. The maximum estimated wind speed was 190 mph. A summary of impacts by county are summarized in Table 60: Damage Estimates by County of a December 10, 2021, Tornado. National Weather Service.

Table 53. Damage Estimates by County From One of the December 10, 2021, Tornadoes

	Deaths	Structures Damaged	Structures Destroyed
Fulton County	1	40	21
Hickman County	0	40	12
Graves County	24	1,390	785
Marshall County	1	341	356
Lyon County	1	141	45
Caldwell County	4	-	300 (estimate)
Hopkins County	15	1,000 (estimate)	500 (estimate)
Muhlenberg County	11	81	84

Table 53 contains damage estimates by county from one of the December 20, 2021, tornadoes. In Fulton County, there was 1 death, 40 structures damaged, and 21 structures destroyed. In Hickman County, there were 40 structures damaged and 12 structures destroyed. In Graves County, there were 24 deaths, 1,390 structures damaged, and 785 structures destroyed. In Marshall County, there was 1 death, 341 structures damaged, and 356 structures destroyed. In Lyon County, there was 1 death, 141 structures damaged, and 45 structures destroyed. In Caldwell County, there were 4 deaths and 300 structures destroyed. In Hopkins County, there were 15 deaths, 1,000 structures damaged, and 500 structures destroyed. In Muhlenberg County, there were 11 deaths, 81 structures damaged, and 84 structures destroyed.

According to NOAA, there is no known way to predict whether or how climate change is affecting tornado frequency or severity. Some studies predict that climate change could produce more severe thunderstorms known as supercells. As global temperatures rise, the hotter atmosphere can hold more moisture. This increases atmospheric instability,

⁵⁵ [NOAA – State Climate Summaries: Kentucky](#)

an ingredient to supercell formation. On the other hand, as the planet warms, wind shear (another vital ingredient) is likely to decrease. These two forces work against each other, and it is difficult to anticipate which one might have a greater impact on tornado formation. Furthermore, more frequent, or severe thunderstorms does not necessarily mean that more tornadoes will occur, especially since only about 20% of supercell thunderstorms produce tornadoes.⁵⁶

However, there is evidence to suggest that climate change has shifted tornado patterns geographically east due to its impact on the jet stream. The number of tornadoes in the states that make up Tornado Alley are falling, while tornado events have been on the rise in Mississippi, Alabama, Arkansas, Missouri, Illinois, Indiana, Tennessee, and Kentucky.

2.9.4.10 Wildfires

A wildfire is an uncontrolled burning of grasslands, brush, or woodlands. Wildfires can be divided into two categories: wildland and wildland-urban interface

A wildland fire is a wildfire in an area where development is essentially nonexistent, except for roads, railroads, power lines, and similar facilities. Wildland fires have been occurring in Kentucky for thousands of years. Unfortunately, these fires began to threaten homes and communities, prompting the need to suppress wildfires and establish forest protection laws.

An urban wildland interface fire is a wildfire in a geographic area where structures and other human development meet or intermingle with wildland or vegetative fuels. Areas that have experienced prolonged droughts or are excessively dry are at risk of wildfires. People start more than four out of every five wildfires, usually as debris burns, arson, or carelessness. Lightning strikes are the next leading cause of wildfires. Wildfire behavior is based on three primary factors: fuel, topography, and weather.

Table 54. Summary of Fire Occurrences, Extent, 2013–August 2018 (Source: Kentucky Division of Emergency Management)

Fire Class	Class Descriptor	# Fires	Acreage Burned	% of Total Fire Type
Class A	>0.25 Acres	92	12.3	1.7%
Class B	0.25 to 9 Acres	2,918	8,685.5	53.1%
Class C	10 to 99 Acres	2,172	77,954.4	39.6%
Class D	100 to 299 Acres	217	37,487.0	4.0%
Class E	300 to 999 Acres	81	37,620.0	1.5%
Class F	1,000 to 4,999 Acres	10	16,694.0	0.2%
Class G	5,000 or More Acres	1	7,400	0.0%

⁵⁶ [Tornadoes and Climate Change | National Geographic Society](#)

Table 54 contains a summary, by class, of fire occurrences between 2013 and 2018 in Kentucky. Class A fires, burning less than 1/4 acre, accounted for 1.7% of wildfires, with 12.3 acres burned and 92 total fires. Class B fires, burning between 1/4 acre and 9 acres, accounted for 53.1% of wildfires, with 8,685.5 acres burned and 2,918 total fires. Class C fires, burning between 10 and 99 acres, accounted for 39.6% of wildfires, with 77,954.4 acres burned and 2,172 total fires. Class D fires, burning between 100 and 299 acres, accounted for 4.0% of wildfires, with 37,487 acres burned and 217 total fires. Class E fires, burning between 300 and 999 acres, accounted for 1.5% of wildfires, with 37,620 acres burned and 81 total fires. Class F fires, burning between 1,000 and 4,999 acres, accounted for 0.2% of wildfires, with 16,694 acres burned and 10 total fires. Class G fires, burning more than 5,000 acres, accounted for less than 0.01% of wildfires, with 7,400 acres burned and 1 fire.

According to Kentucky Division of Forestry, wildfires are categorized into classes. These classes represent types of wildfires as well as an illustration of the extent, which is a measurement of how bad a wildfire can get, in terms of scale. Most wildfires in Kentucky have been Class B fires, meaning they burn small areas less than 10 acres.

Most wildfires in Kentucky have occurred in eastern portions of the Commonwealth, which are largely covered by State and national forests. Figure 5 shows the geographical distribution of wildfires between 2013 and 2018. Between January 1, 2013, and August 13, 2018, the Commonwealth of Kentucky suffered 5,491 wildfire events. The immediate danger from wildfires is the destruction of property, timber, wildlife, and injury or loss of life to persons in the affected area. From the 5,491 wildfire events between 2013 and 2018, 185,853 acres were burned.

Figure 21. Wildfire Event Locations, 2013–2018 (Source: Kentucky Division of Emergency Management)

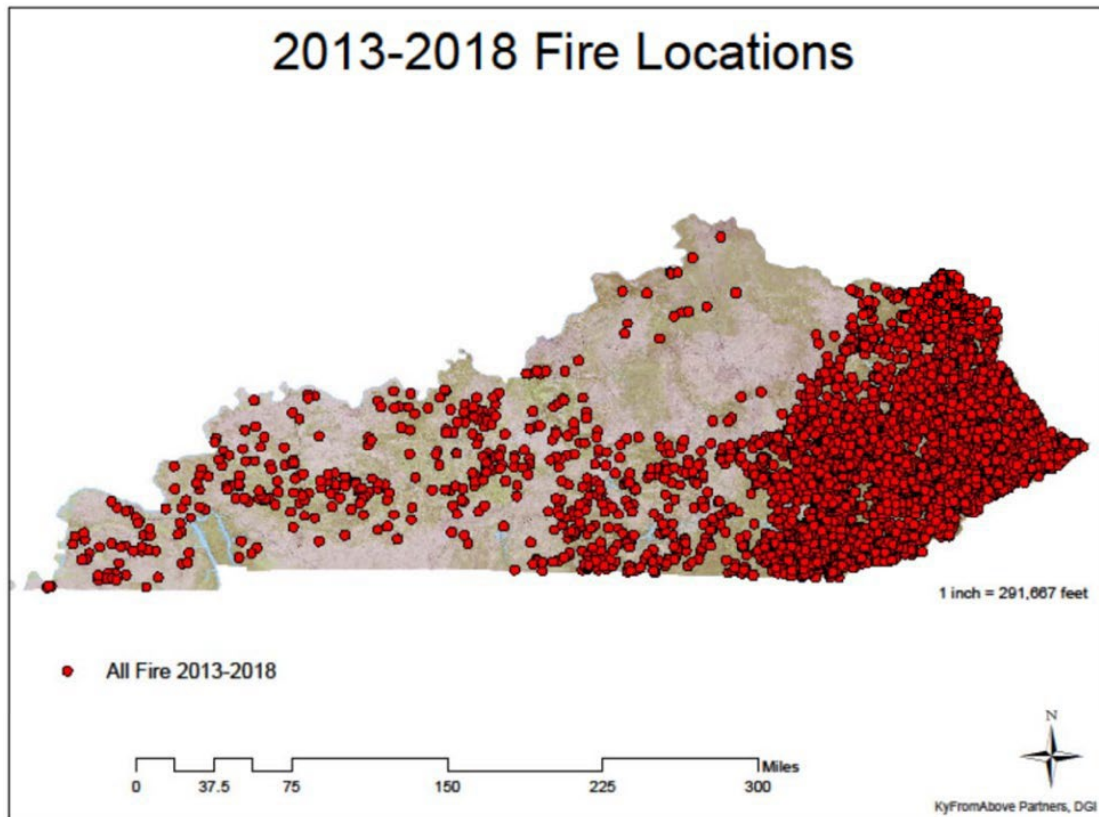


Figure 21 shows a map of fire locations between 2013 and 2018 in Kentucky. Most fires occurred in the eastern half of the Commonwealth, with a scattering across the south of the Commonwealth. There were also two other Kentucky Fire Management declarations made in November of 2016 the Eagles Nest fire declared on November 8, 2016, and the Southeastern Kentucky fire complex.

The following impacts resulted from these 5,491 wildfire events:

- Total suppression cost: \$4,766,014
- Average cost per fire: \$868
- Number of lost structures: 58
- Value of lost structures: \$370,150
- Improvements saved: \$2,346,085

Wildfires can cause widespread concern and disruptions even in cases where physical damages have been prevented. Smoke, closed roadways, and infrastructure disruptions may interfere with ordinary life and local economy. Wildfires are particularly damaging to the environment. Wildfires leave black soot, deposits of peat, smolder, and charcoal-like ground cover that can contaminate the soil and underground water table. These events

also cause dramatic changes in vegetation, eliminating some species or causing others to appear where they were not present before the fire.

Figure 22. Relative Wildfire Risk to Kentucky Homes (Source: USGS Wildfire Risk to Communities)

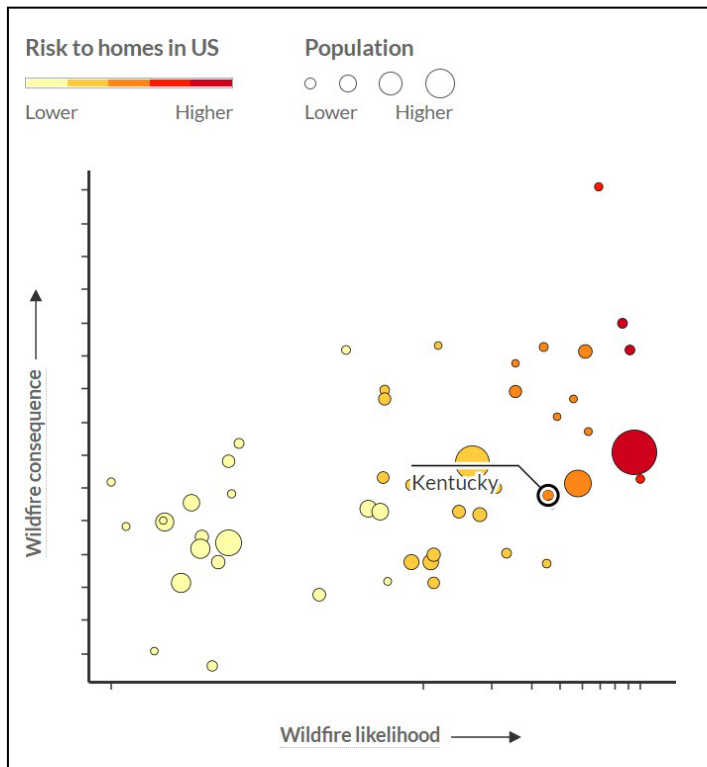


Figure 43 represents a graph of wildfire likelihood and wildfire consequences in terms of risks to homes in the United States and population size. Kentucky has a high wildfire risk with mild wildfire consequences and a medium populations size as compared to other states.

According to the USDA Forest Service, populated areas in Kentucky have, on average, greater risk than 72% of states in the United States (Figure 22) Counties in eastern Kentucky are particularly vulnerable to wildfires. Populated areas in Breathitt County have, on average, a greater wildfire likelihood than 93% of counties in Kentucky and 98% of the United States. Furthermore, individuals living in poverty have elevated fire risk and may require additional support recovering from a disaster.⁵⁷ As of 2021, 27.9% of Breathitt County residents live in poverty according to the U.S. Census Bureau, a ratio above the national and State average.

⁵⁷ National Fire Protection Association

Over the last several decades, climate conditions have grown hotter and drier, which creates more fuel for fires to burn hotter and travel faster. Another aspect that warmer temperatures have on the landscape is they allow non-native creatures to travel to and survive in areas they previously found uninhabitable. One example of a problematic species is the invasive bark beetle. Climate change has eliminated the seasonal cold spells that would normally kill off the beetles. Bark beetles have killed 100,000 square miles of trees across western North America in the last 20 years. Dead trees serve as tinder for wildfires. With increased fire vulnerability, it is critical to protect the health of Kentucky's vast forest resources.

2.9.5 Indispensable Services

Indispensable services are those that enable the continuous operation of critical business and government functions and/or are critical to human health and safety and economic security. Area Development District (ADD) staff have identified critical facilities within each ADD's Hazard Mitigation Plan. Critical facilities that correspond with several of FEMA's community lifelines, including safety and security; food, water, and shelter; health and medical; communication; and hazardous materials are included in Table 60 for all identified counties.

Table 55. Critical Facilities, Identified and MID Counties

ADD	County	Fire Stations	Police Stations	Emergency Operations Center	Hospitals	Schools	Water and Wastewater Treatment Plants	Total # of Critical Facilities
BSADD	Floyd	18	4	0	3	16	10	51
	Johnson	15	2	0	1	14	3	35
	Magoffin	8	2	0	0	6	2	18
	Martin	5	2	0	0	7	2	16
	Pike	22	2	0	2	25	3	54
BGADD	Lincoln	13	6	0	2	11	0	32
	Powell	2	1	1	0	6	0	10
CVADD	Clay	10	1	1	1	10	0	23
	Harlan	23	9	0	12	20	10	74
	Whitley	10	3	1	6	18	14	52
KRADD	Breathitt	5	2	1	1	12	11	32
	Knott	3	1	1	0	6	0	11
	Lee	4	2	1	0	5	0	12
	Leslie	6	2	1	1	7	0	17
	Letcher	7	4	1	2	12	0	26
	Owsley	2	2	1	0	3	0	8
		Fire	Police	Emergency Operations			Water and Wastewater Treatment	Total # of Critical Facilities

	County	Stations	Stations	Center	Hospitals	Schools	Plants	
	Perry	9	2	1	1	19	0	32
	Wolfe	2	1	0	0	7	1	11
LCADD	Casey	8	2	0	3	Not reported	22	35
	Cumberland	5	2	0	3	Not reported	26	36

Table 55 outlines the number of critical facilities—including fire stations, police stations, EOCs, hospitals, schools, and water and wastewater treatment plants—in the MID counties in Kentucky.

2.9.6 Conclusion

As this Mitigation Needs Assessment makes clear, there are at least 10 natural hazards that pose a considerable risk to Breathitt, Knott, Letcher, Perry, and Pike Counties. These counties were HUD-identified as most impacted and distressed by the 2022 severe storm, flooding, landslide, and mudslide events. By characterizing these hazards in terms of their frequency and each county's vulnerability, DLG and its subrecipients can draw on this 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. In addition, this assessment will inform all CDBG-DR programs and activities undertaken as part of this allocation such that, at a minimum, they do not exacerbate hazards but rather, serve to lessen their impacts.



3

General Requirements

3 General Requirements

3.1 Citizen Participation

3.1.1. Outreach and Engagement

In the development of this disaster recovery Action Plan, DLG conducted a survey of communities, organizations, tribal authorities, and citizens to better understand the remaining unmet needs and recovery ideas. The survey was posted on DLG's website in 2023 and is still available. The survey was discussed at disaster recovery meetings, sent to DLG field staff to share with communities and citizens, and discussed at the DLG Annual Governor's Conference in August 2023.

To gather feedback from groups least likely to participate in the survey process, such as racial/ethnic minorities, people with special communication needs, and persons in other protected classes, the Commonwealth took various steps on outreach:

- DLG shared the survey questions with the Kentucky Area Development Districts, (ADDs), counties, cities, and field offices. These entities are familiar with the impacted areas and were able to advertise the survey in impacted communities to specific vulnerable and distressed populations.
- DLG issued press releases notifying the public about the CDBG-DR award and the purpose of the funding. DLG requested community input from local governments, citizens, and organizations directly affected by the disasters. Press releases were posted on the website and disseminated through social media accounts.

The community survey generated more than 308 responses from the disaster-declared counties. Most respondents were from Breathitt & Perry Counties. The survey allowed respondents to select all answers that applied to them when asked how they were impacted. Some selected more than one answer. About half reported living in a community impacted by the storm, while more than one-quarter of responses included having significant property damage and loss of property and being permanently displaced from their home. Less than one percent of respondents who were evacuated from their homes returned to little or no property damage. From the survey, the most severely impacted and having the hardest recovery were elderly and disabled individuals, renters, low-income households, middle-income families who were underinsured or uninsured, those who were still unable to find housing, and small businesses.

Several recovery principles were presented, and the survey asked respondents to select whether they agreed or disagreed and why. The majority of respondents agreed with the

following principles presented:

- Build back better: Rebuild homes and communities so they are better prepared to withstand future disasters.
- Housing and community recovery go together: A complete recovery means survivors of the storm in 2022 have appropriate housing and impacted communities have resources to address their needs.
- Advance equity and racial justice: Prioritize those who face the greatest challenges for recovery.

There were respondents who disagreed with the last principle about prioritizing those who face the greatest challenges for recovery. There were many comments about how people impacted by the storms should be treated equally and how assistance should be based on need versus a certain identity. Economic Development, bank erosion, access ways, debris removal, acquisition of property, Infrastructure, dredging creeks and road repairs were the top suggestions for other guiding principles. 93% of respondents agreed that the biggest need for recovery from the 2022 storms is to rebuild housing. These themes of housing and business assistance were incorporated into the recovery programs as outlined in this Action Plan.

Respondents were also asked to prioritize programming on a scale of 1 to 5, with 5 being the highest rank or score a program could receive. Housing recovery assistance for LMI households ranked the highest, with an average score of 4.4. The next highest rank was for housing recovery assistance for residents of all incomes with a score of 4.36, followed by new construction with a score of 4.33. Finally, rehabilitation of existing homes and infrastructure investments with hazard mitigation scored 4.30 and 4.24a, respectively. Acquisition, debris removal, bank erosion, dredging creeks, bridges, affordable housing, business assistance, tree restoration, , intermediate assistance for food and personal items, rental assistance until permanent housing is secured, infrastructure and flood mitigation, and storm shelters were among the top priorities listed in the additional response section of the survey.

In the survey, DLG asked respondents to share their thoughts on how DLG can work with those impacted and local groups to help residents gain access to the resources and support they need to recover. Responses included good communication and an advertisement plan, making applications for funding straightforward and the process easy to understand, engage in community meetings, work thru local food pantries, reach out to the senior citizen population, help with insurance issues, and bringing the assistance down to the neighborhood level. DLG also asked about the top barriers to recovering fully; among the top responses were building on mountainous regions and the financial limitations with doing so, funding and cleaning the creeks and streams, access to funds and information, lack of carpenters/contractors to do the work, availability of land to build on, issues with the FEMA process, contractors who are overwhelmed, insurance company issues, lack of affordable housing, not enough storm shelters, and predatory lenders.

People who took the survey were asked to imagine their community 5 years after the storm. Respondents envisioned that, if recovered well, their communities would be

restored and replaced, businesses restored, creeks dredged and cleaned, equal housing for all, bridges repaired everyone who needed jobs would have one; there would be an adequate number of flood safe; new housing would be built; and the community would come together and help each other.

A second survey targeting city and county officials was released at the same time and received 8 responses. Most respondents agreed with the recovery principles (build back better, housing and community recovery go together, and advance equity and racial justice), Additional comments for guiding principles included themes of resiliency and strengthening businesses, downtowns, and infrastructure as well as addressing the cause of increased flooding and having streams and creeks dredged, and relocation of individuals in flood plains. Respondents were also asked to rank recovery priorities. The highest ranked recovery priority was infrastructure investment with hazard mitigation, with an average score of 4.75 out of 5. The next highest was housing recovery assistance for LMI individuals and new construction of housing, with a score of 4.50. Then the following received ascending scores: housing recovery assistance for residents of all incomes (4.38) and rehabilitation of existing homes (4.00). When asked how DLG can work with respondents and local groups to help residents gain access to resources and support that the community needs to recover, responses included additional technical assistance to local communities, advertising and being visible, and working with local organizations and recovery groups. Finally, the overwhelming result of when asked about the top barriers to recovering fully were funding and resources. Other responses include lack of space to rebuild and the need for more construction companies to accomplish the goal of building back.

DLG also consulted with disaster-affected residents, stakeholders, local governments, public housing authorities, and other affected parties in the surrounding geographic area to ensure the consistency of disaster impacts identified in the plan and to confirm that the plan and planning process were comprehensive and inclusive.

Through these consultation meetings, DLG was able to gather data, experiences, and community insight to develop an initial unmet needs assessment. All engagements were either conducted virtually or in-person, and surveys were submitted by each city and community organization. Table 61 shows the consultation events held to date.

Table 61. Table of Engagements/Consultations

Date	Meetings/Attendees
July 28, 2022	phone calls with Kentucky Ky Local Officials
July 29, 2022	phone calls with Kentucky Ky Local Officials
July 30, 2022	phone calls with Kentucky Ky Local Officials
July 31, 2022	phone calls with Kentucky Ky Local Officials
August 1, 2022	Mtg. with Rep. Angie Hatton-discuss water plant issues

August 2, 2022	Commissioner and Chief of Staff accompanied Governor on tour of flooded communities
August 3, 2022	Commissioner and Chief of Staff accompanied Governor on tour of flooded communities
August 3, 2022	Bi-weekly meeting with Governor, Judges and Mayors - flood issues were discussed
August 3, 2022	Bi-weekly meeting with Judges and Mayors - flood issues were discussed
August 6, 2022	DLG staff assisted Governor's cookout at State parks for flood victims
August 8, 2022	President Biden visited Eastern Kentucky flood areas
August 12, 2022	Staff Meeting Regarding Fleming-Neon Water issues
August 14, 2022	Bi-weekly Judges and Mayors Meeting
August 15, 2022	Meeting to discuss CDBG-DR with staff
August 16, 2022	Bi-weekly meeting with Governor, Judges and Mayors - flood issues were discussed
August 16, 2022	Bi-weekly meeting to discuss infrastructure - flood issues were discussed
August 16, 2022	East Kentucky Update with Governor
August 24, 2022	Interagency Recovery Coordination meeting with Emergency Management Director Slinker
August 25, 2022	Interagency Recovery Coordination Meeting - USACOE
August 26, 2022	Bi-weekly Judges and Mayors Meeting
August 26, 2022	Fleming Neon meeting with Kentucky River ADD
August 28, 2022	Weekly DLG staff DR meeting
August 28, 2022	Weekly Teams meeting with East Kentucky officials and Governor regarding recovery
August 30, 2022	Meeting with Breathitt County Judge Executive and Joe Williams, Field Representative
August 31, 2022	Bi-weekly Judges and Mayors Meeting
September 4, 2022	Kentucky Transportation Cabinet debris Teams meeting
September 6, 2022	DLG staff assisted Governor in Eastern Ky with Travel Trailer update

September 14, 2022	Bi-weekly meeting with Governor, Judges and Mayors - flood issues were discussed
September 15, 2022	DLG meeting with State Budget Director John Hicks regarding CDBG-DR program budget
October 10, 2022	DLG staff traveled with Lieutenant Governor for Eastern Ky travel Trailer update
November 2, 2022	Eastern Kentucky Housing Teams Meeting
November 22, 2022	Eastern Kentucky Housing Teams Meeting
January 25, 2023	Eastern Kentucky Housing Teams Meeting
February 8, 2023	Eastern Kentucky Housing Teams Meeting
February 22, 2023	Eastern Kentucky Housing Teams Meeting
March 4, 2023	DR discussion with Director, State and Federal Grants - DLG
March 22, 2023	Eastern Kentucky Housing Teams Meeting
March 28, 2023	DR meeting with Kentucky Housing Corporation
April 5, 2023	Eastern Kentucky Housing Teams Meeting
April 12, 2023	RSF Economic Coordination Meeting for Eastern Kentucky Flooding Event
April 19, 2023	Eastern Kentucky Housing Teams Meeting
May 8, 2023	DR meeting with Kentucky Housing Corporation
May 31, 2023	Eastern Kentucky Housing Teams Meeting

The Action Plan is posted on the DLG disaster recovery website https://kydlgweb.ky.gov/FederalGrants/16_DRP.cfm for the 30-day comment period.

For those who otherwise can not obtain a copy of the Action Plan, Please contact the DLG offices for a copy.:

Department for Local Government ATTN: Office of Federal Grants: DR Team 100
Airport Road 3rd Floor
Frankfort, KY 40601

3.1.2 Public Hearings

Per the Federal Register's approach for CDBG-DR, at least 1 public hearing in 1 of the HUD-identified MID areas is required during the 30-day comment period to obtain citizens' views and to respond to proposals and questions. The process below will be followed for a public hearing regarding the use of CDBG-DR funds or a substantial

amendment.

The public hearing (whether in-person, virtual, or hybrid) will be held at a time and accessible location convenient to potential and actual beneficiaries, and with accommodations for persons with disabilities and LEP persons.

DLG will hold two public hearings. The public hearings will be held during the 30 day public comment period. To find details about the public hearing please see the DLG website https://kydlgweb.ky.gov/FederalGrants/16_DRP.cfm, by phone at 502-573-2382, or by email at DLG at DLG.DR@ky.gov.

The public is encouraged to attend. Along with the hearing, DLG will provide key information and recorded presentations on the Action Plan and the funded programs on its disaster recovery website.

3.1.2.1 Effective Communication

DLG will ensure that all residents have equal access to information, including persons with various types of disabilities and LEP persons. As required, DLG shall make critical documents (e.g., the Action Plan, Citizen Participation Plan, Quarterly Progress Reports) available in a form accessible to LEP persons and persons with disabilities. DLG will take the following steps to identify the LEP persons who need language assistance and identify how language assistance will be provided:

1. Using a four-factor analysis to determine the appropriate level of language access for each of its CDBG-DR programs and ensure meaningful access by LEP individuals to critical services.
2. Translating vital documents based on a justified need to facilitate the participation of key populations of limited English speakers.
3. DLG will provide oral translation for LEP clients during public hearings to facilitate participation in those hearings.
4. Posting vital materials on the public website and ensuring documents are compliant with Section 508 regulations.
5. DLG's subrecipients must provide language assistance services that result in timely, accurate, and effective communication at no cost to LEP clients and/or their beneficiaries.

The published Language Access Plan will provide details on how DLG will conduct this work. By improving accessibility, DLG intends to increase participation in its programs and activities by LEP persons, individuals from underserved communities, and persons with disabilities.

Further details can be found in the [Public Website](#) and [Amendments](#) sections in this chapter.

There are multiple methods for the public to contact DLG. As programs are launch, applicants will be able to get information about the status of their application by contacting DLG. Those include:



- Website: (link to general information section on website)
https://kydlgweb.ky.gov/FederalGrants/16_DRP.cfm
- Phone number: (502) 573-2382
- TTY and relay services: TTY 711; TDD 1-800-648-6056
- Email: DLG.DR@ky.gov
- Fax: 502-227-8691
- Mail: Department for Local Government, ATTN: Office of Federal Grants: DR Team,
100 Airport Road 3rd Floor, Frankfort, KY 40601

3.1.3 Complaints

DLG or its subrecipients 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 and include email, comments posted on the DLG website, and handwritten complaints. DLG shall detail the process and contact information (through the website or email) for submitting complaints in its program guidelines, application documents, and on the DLG website. DLG shall maintain a tracker for collecting and categorizing complaints through resolution.
- Informal complaints are verbal complaints. DLG and its subrecipients 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).

All citizen complaints relative to Fair Housing/Equal Opportunity violations involving discrimination will be forwarded to the Department of Law and Public Safety, Office of the Attorney General, Division on Civil Rights. To file a fair housing complaint in Kentucky, please contact:

- Name: Kentucky Commission on Human Rights
- Address: 332 W. Broadway, Suite 1400, Louisville, Kentucky 40202
- Main Line: (502) 595-4024
- Main Fax: (502) 696-5230
- Email: kchr.mail@ky.gov

DLG's fraud, waste, and abuse policy will be available on the CDBG-DR Recovery website.

DLG or its subrecipients will include a written appeals process within each set of

program guidelines. The appeals processes will include but are not limited to:

- The process for submitting, tracking, and resolving a written appeal to the organization administering the program (DLG or its subrecipients), to include 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 on what may or may not be appealed.

Generally, policies that have been approved and adopted within program guidelines may not be appealed. DLG and its subrecipients do not have the authority to grant an appeal to a regulatory, statutory, or HUD-specified CDBG-DR requirement.

To contact DLG about a complaint follow the specific information available in the program policy and procedures or contact:

- Website: (link to complaint section on website)
https://kydlgweb.ky.gov/FederalGrants/16_DRP.cfm
- Phone number: (502) 573-2382
- TTY and relay services: TTY 711; TDD 1-800-648-6056
- Email: DLG.DR@ky.gov
- Fax: 502-227-8691
- Mail: Department for Local Government, ATTN: Office of Federal Grants: DR Team, 100 Airport Road 3rd Floor, Frankfort, KY 40601

3.2 Public Website

In accordance with [87 FR 31636](#) Section III.A.1.a, the Commonwealth of Kentucky will maintain a comprehensive, accessible website regarding all disaster recovery activities that utilize CDBG-DR funds. This website will serve as a central source of information for applicants and the public to ensure ease of access of information and overall transparency. To do this, the Commonwealth of Kentucky will ensure the website is accessible to persons with disabilities and LEP persons. Additionally, the Commonwealth of Kentucky will take all reasonable steps to ensure meaningful access to its programs and activities by LEP persons, including members of protected classes, vulnerable populations, and individuals from underserved communities, as described in Section III.D.1.d of the Consolidated Notice.

The lead agency to manage this website will be the DLG. Additionally, the website will be updated at a minimum on a quarterly basis. Information that will be available on the website will include:

- Action Plan and amendments
- Performance reports
- Citizen Participation Plan
- Procurement policies and procedures

- All executed contracts that will be paid with CDBG-DR funds
- A summary that includes the description and status of services or goods currently being procured by the grantee or the subrecipient (e.g., phase of procurement, requirements for proposals).
- Fraudulent Activity Notices that will include possible fraudulent activity, how the fraud can be avoided, and which local or State agencies to contact to take action.

The disaster recovery website can be found here: [Kentucky DLG - DRP Grants](#)

3.3 Amendments

Over time, recovery needs will change. Thus, DLG will amend the disaster recovery Action Plan as often as necessary to best address long-term recovery needs and goals. This plan describes proposed programs and activities. As programs and activities develop, an amendment may not be triggered if the program or activity is consistent with the descriptions provided in this plan. When unmet needs and program descriptions or other sections rise to the level of requiring an Action Plan amendment, the Commonwealth will do the following:

- Ensure that the current version of the Action Plan is accessible for viewing as a single document, with all amendments, so that the public and HUD do not have to view and cross-reference changes among multiple amendments.
- Identify amendments by highlighting added or changed text and striking out deleted text.
- Include a table that clearly illustrates where the funds are coming from and where they are going. Include a revised budget allocation table that reflects the entirety of all funds, if applicable to the amendment.

3.3.1 Substantial Amendment

A change to this Action Plan is considered substantial if it meets the following criteria:

- Addition or deletion of any allowable activity described in the approved application
- Change in the planned beneficiaries or overall benefit requirement
- Change in program benefit or eligibility criteria
- The allocation or reallocation of more than \$10,000,000

The amendment will be posted on the CDBG-DR Recovery website for a 30-day public comment period. The amendment will be posted in adherence with the Americans with Disabilities Act and LEP requirements.

A substantial Action Plan amendment shall require the following:

- The Commonwealth will revisit the impact and needs assessment when moving funds from one program to another through a substantial amendment.
- A 30-day public comment period will include the following:
 - The Commonwealth will prominently post the Action Plan amendment on the [DLG Disaster Recovery website](#) https://kydlgweb.ky.gov/FederalGrants/16_DRP.cfm
 - The Commonwealth will afford residents, affected local governments, and other

interested parties a reasonable opportunity to review the plan or substantial amendment.

- The Commonwealth will identify and consider potential barriers that limit or prohibit equitable participation and will undertake reasonable measures to increase coordination, communication, affirmative marketing, targeted outreach, and engagement with underserved communities and individuals, including persons with disabilities and LEP persons. This includes the following:
 - The Action Plan amendment will be translated according to the CDBG-DR Language Access Plan
 - The Action Plan amendment will be posted in a way that meets all accessibility requirements
- The Commonwealth will review and respond to all written and oral public comments received. Any updates or changes made to the Action Plan in response to public comments shall be clearly identified in the Action Plan and amendments. The public comments also will be submitted to HUD with the final Action Plan amendment.
- Submit to HUD for approval
- Receipt of approval from HUD

3.3.2 Non substantial Amendment

A non substantial amendment is an amendment to the plan that includes technical corrections and clarifications and budget changes that do not meet the monetary threshold for substantial amendments to the plan. The amendment does not require posting for public comment. DLG will notify HUD 5 business days before the change is effective. All amendments will be numbered sequentially and posted to the website into one final, consolidated Action Plan.

3.4 Displacement of Persons and Other Entities

To minimize the displacement of persons and other entities who may be affected by the activities outlined in this Action Plan, DLG and 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 in the event that proposed projects cause the displacement of persons or other entities. DLG will include detailed policies and procedures for when proposed programs or projects could potentially cause the displacement of people or other entities. DLG also will budget to cover the costs involved in implementing those policies and procedures. Currently, it is not anticipated that the proposed programs will cause displacement.

DLG has drafted a disaster recovery Residential Anti displacement and Relocation Assistance Plan (RARAP) that has been adapted to meet the URA, Section 104(d), and related waivers and the alternative requirements specified in the Consolidated Notice.

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.

The disaster displaced many residents, both tenants and homeowners, who are still looking for access to the housing market. Due to the limited stock of affordable housing, residents are finding it difficult to become first-time homebuyers or find suitable rental housing. The proposed programs in this Action Plan will address displacement due to the disaster by providing new housing opportunities.

3.5 Protection of People and Property

The Commonwealth of Kentucky will leverage CDBG-DR funds to build economic and disaster resilience into all recovery programs and activities. Some of the ways that the Commonwealth will do this are included in the sections below.

3.6 Elevation Standards

All structures, defined at 44 CFR 59.1, designed principally for residential use, and located in the SFHA (1% annual chance [or 100-year] floodplain) or equivalent FEMA data source, that receive assistance for new construction, reconstruction, rehabilitation of substantial damage, or rehabilitation that results in substantial improvement, as defined at 24 CFR 55.2(b)(10), must be elevated with the lowest floor, including the basement, at least 2 feet above the 1% annual chance floodplain elevation (base flood elevation). Structures that are elevated will meet federal accessibility standards.

Mixed-use structures with no dwelling units and no residents below 2 feet above base flood elevation must be elevated or floodproofed in accordance with FEMA floodproofing standards at 44 CFR 60.3(c)(3)(ii) or a successor standard up to at least 2 feet above base flood elevation.

Nonresidential structures, including infrastructure, will also be elevated to the standards described above.

If a critical action structure is in a 500-year floodplain, the structure must be elevated or floodproofed (in accordance with FEMA floodproofing standards at 44 CFR 60.3(c)(2)-(3) or successor standard) to the higher of the 500-year floodplain elevation or 3 feet above the 100-year floodplain. Critical actions are described as any activity for which even a slight chance of flooding would be too great because such flooding might result in loss of life, injury to persons, or damage to property. Examples might include hospitals, nursing homes, emergency shelters, police stations, and fire stations. In addition to the elevation standards described in this section, DLG will comply with applicable State and local codes and standards for floodplain management, including elevation, setbacks, and cumulative substantial damage requirements.

If the 500-year floodplain or elevation is unavailable, and the Critical Action is in the 100-year floodplain, then the structure must be elevated or floodproofed at least three feet above the 100-year floodplain elevation. Activities subject to elevation requirements must comply with applicable federal accessibility mandates.

The cost of elevation will be included as part of the overall cost of rehabilitation or replacement of a property. It is estimated that the costs will depend on the location, the size of the unit, and the level to which the property must be elevated. For single-family residences, if a home is within a 100-year floodplain, DLG will ensure the reasonableness of elevation costs by analyzing multiple bids from contractors, cost estimating software, and/or examples of comparable costs to elevate in similar markets.

If a project is funded by FEMA and CDBG–DR funds as the non-Federal match and a structure needs to be elevated, the alignment of HUD’s elevation standards with any alternative standard allowed by FEMA may not be feasible and may not be cost reasonable. HUD establishes an alternative requirement for the use of an alternative, FEMA-approved flood standard instead of the elevation requirements. This alternative requirement applies when CDBG–DR funds are used as match for FEMA assistance, the FEMA project commenced before HUD’s obligation of CDBG–DR funds, and the grantee has demonstrated that implementation costs of the required CDBG–DR elevation or flood proofing requirements are not reasonable costs.

3.7 Flood Insurance Requirements

Assisted property owners must comply with flood insurance requirements. HUD-assisted homeowners for a property located in an SFHA must obtain and maintain flood insurance in the amount and duration prescribed by FEMA’s National Flood Insurance Program (NFIP). DLG 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 but then that person failed to obtain it or allowed their flood insurance to lapse for the property. DLG is prohibited by HUD from providing CDBG-DR assistance for the rehabilitation or reconstruction of a house if the following conditions are met:

- The combined household income is greater than 120% AMI or the national median,
- The property was located in a floodplain at the time of the disaster, and
- 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, LMI homeowners may receive CDBG-DR assistance if:

- The homeowner had flood insurance at the time of the qualifying disaster and still has unmet recovery needs, or
- The household earns less than 120% AMI or the national median and has unmet recovery needs.

DLG and its subrecipients will implement procedures and mechanisms to ensure that assisted property owners comply with all flood insurance requirements, including the purchase and notification requirements described below:

- Flood insurance purchase requirements for funds used to rehabilitate or reconstruct existing residential buildings in an SFHA (or 100-year floodplain).

- Federal assistance to owners remaining in a floodplain.
- Prohibition on flood disaster assistance for failure to obtain and maintain flood insurance.
- Prohibition on flood disaster assistance for households above 120% of AMI for failure to obtain flood insurance.
- Responsibility to inform property owners to obtain and maintain flood insurance

3.8 Construction Standards

DLG will work with other State agencies including the Department of Housing, Building, and Construction within the Public Protection Cabinet and the Kentucky Housing Corporation to develop guidelines that will require quality inspections and code compliance inspections on all projects and places, with 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.

All rehabilitation, reconstruction, or new construction must meet an industry-recognized standard that has achieved certification under at least one of the following programs:

- ENERGY STAR® (certified homes or multifamily high rise)
- Enterprise Green Communities
- LEED (new construction, homes, midrise, existing building operations and maintenance, or neighborhood development)
- ICC 700 National Green Building Standard®
- U.S. Environmental Protection Agency (EPA) Indoor airPLUS
- Equivalent or higher Kentucky energy efficiency standards
- Any other equivalent comprehensive green building standard program acceptable to HUD

Additionally, all such covered construction must achieve a minimum energy efficiency standard, such as:

- ENERGY STAR (certified homes or multifamily high-rise)
- DOE Zero Energy Ready Home
- EarthCraft House/Multifamily
- Passive House Institute Passive Building or EnerPHit certification
- Greenpoint Rated New Home/Existing Home
- Earth Advantage New Homes
- Any other equivalent energy efficiency standard acceptable to HUD.

DLG will specify the standards that will be used within each set of program guidelines.

For the rehabilitation of non substantially damaged residential buildings, DLG will follow the guidelines to the extent applicable as specified in the HUD Office of Community Planning and Development (CPD) Green Building Retrofit Checklist. When older or obsolete products are replaced as part of rehabilitation work, the rehabilitation is

required to use ENERGY STAR-labeled, WaterSense-labeled, or Federal Energy Management Program-designed products and appliances.

For infrastructure projects, DLG will encourage, to the extent practicable, the use of green infrastructure design and implementation, such as those issued by:

- EPA through their Green Infrastructure Design and Implementation guidance
- HUD through their Green Infrastructure and Sustainable Communities Initiative

The term “substantial damage” applies to a structure in an SFHA or floodplain for which the total cost of repairs is 50% or more of the structure’s market value before the disaster occurred, regardless of the cause of the damage.

All projects will be subject to cost reasonableness standards as outlined in the policies and procedures of the applicable program specific to the applicable activity.

3.9 Contractors Standards

Contractors selected to carry out recovery and resilient activities will make every effort to provide opportunities to LMI persons by providing resources and information to notify Section 3 individuals and businesses about opportunities in the community. Grantee or subrecipients may elaborate on specific steps to promote Section 3.

DLG will undertake the following efforts to help meet its Section 3 goals:

- Ensure that Section 3 requirements are outlined in all applicable contracts and subrecipient agreements.
- Build the capacity of stakeholders, including subrecipients and contractors, to meet Section 3 standards through technical assistance, tools, and guidance.
- Designate a Section 3 coordinator who will manage, support, and facilitate an effective Section 3 program, and who will be able to effectively communicate program requirements to stakeholders.

DLG will report Section 3 accomplishments in the Disaster Recovery Grant Reporting (DRGR) system.

The Commonwealth also has a Minority and Women Business Enterprise Certification Program. The program encourages growth among Kentucky businesses owned by women and minorities and assists those businesses with expanding their markets. The Minority and Women Business Enterprise Certification Program, along with Kentucky’s [SMALL BUSINESS CONNECTION Database](#), helps facilitate the development of women- and minority-owned businesses in Kentucky. DLG will promote the Minority and Women Business Enterprise Certification Program.

Recovery programs implemented by DLG and its subrecipients will incorporate uniform best practices of construction standards for all construction contractors performing work in all relevant jurisdictions. All contractors are statutorily required to be licensed and registered with the Department of Housing, Building, and Construction within the Public Protection Cabinet. Construction contractors will be required to carry the required licenses and insurance coverage for all work performed, and contractors will be required

to provide a warranty period for all work performed. DLG will outline contractor requirements in the respective program guidelines that address procurement, bonding, wage rates, Section 3 requirements, and any other requirements necessary to ensure the work is completed and in compliance with local, State, and federal regulations.

Contractors' standards, warranty periods, and warranty notification periods will be detailed in the respective policies and procedures documents and will pertain to the scale and type of work being performed, including the controls for ensuring that construction costs are reasonable and consistent with market costs at the time and place of construction.

Rehabilitation contract work provided through a program included in this Action Plan may be appealed by homeowners whose property was repaired by contractors under the Commonwealth's control.

In addition, DLG will provide information on reporting contractor fraud or illegal activities in their applicable program guidelines. The Attorney General of Kentucky has set up multiple ways to file a report:

- Citizens can call 502-696-5485 to report any suspected fraud
- Suspected price gouging can be reported to <https://secure.kentucky.gov/formservices/AttorneyGeneral/PriceGougingComplaintForm>
- Scams can be reported to <https://secure.kentucky.gov/formservices/AttorneyGeneral/ScamReport>
- The Attorney General's Consumer Protection hotline remains active and can be reached by calling 1-888-432-9257

The Attorney General's office has a list of natural disaster scams with tips on how to avoid these common scams.

The processes for homeowners to submit appeals for rehabilitation work, as well as complaints such as contractor fraud, poor quality work, and associated issues, will be detailed within each respective set of program guidelines.

3.10 Preparedness, Mitigation, and Resilience

3.10.1 Design Programs That Protect People and Property from Harm

The primary focus of the housing recovery program is to provide relief for those affected by disasters while complying with all CDBG-DR requirements and addressing recognized impediments to fair housing choice as required under the Fair Housing Act. Assistance may be provided to eligible applicants under a variety of housing option activities, including rehabilitation, reconstruction, new construction, demolition, elevation, hazard mitigation, down payment assistance, and storm hardening of homeowner and rental housing units, as allowable. All housing activities should consider the following objectives:

- Provide high-quality, durable, resilient, mold-resistant, energy-efficient, decent, safe, and sanitary housing that meets Green Building Standards and mitigates the impact from future disasters.
 - Resilient measures may include elevating the first floor of habitable area,

- breakaway ground floor walls, reinforced roofs, storm shutters, and debris impact-resistant windows, as well as other measures.
- Rental units also will follow safe, decent, and sanitary requirements in the impacted areas identified in the HUD-approved Action Plan.
- Prioritize households while affirmatively furthering fair housing for the following:
 - Families with children under age 18
 - Elderly households
 - Disabled households
 - Veteran populations
- Emphasize housing choices and designs to reduce maintenance and insurance costs, as well as provide independent living options.
- Make improvements to reduce the possibility of property damage, personal and commercial hardship, and long-lasting monetary burdens.

3.10.2 Emphasize High Quality, Durability, Energy Efficiency, and Sustainability

For rehabilitation construction, the Commonwealth will follow [the Department of Housing and Urban Development's CPD Green Building Retrofit Checklist](#) to the extent applicable to the rehabilitation work undertaken, including the use of mold-resistant products when replacing surfaces such as drywall. When older or obsolete products are replaced as part of the rehabilitation work, rehabilitation is required to use ENERGY STAR-labeled, WaterSense-labeled, or Federal Energy Management Program-designated products and appliances or other equivalent.

3.10.3 Enforce Resilient Building Codes

DLG will require both quality inspections and code compliance inspections on all projects. Site inspections will be required on all projects to ensure quality and compliance with building codes. DLG will encourage and support subrecipients' efforts to update and strengthen local compliance codes to mitigate hazard risks due to high winds, tornados, and flooding where applicable. DLG, as necessary, will coordinate with the KYEM to provide technical guidance on hazard mitigation code examples.

3.10.4 Fund Feasible, Cost-Effective Measures

DLG will require that applicants demonstrate that projects (1) address a problem that has been repetitive or a problem that poses a significant risk to public health and safety if left unsolved; (2) cost less than the anticipated value of the reduction in both direct damages and subsequent negative impacts on the area if future disasters were to occur; (3) have been determined to be the most practical, effective, and environmentally sound alternative after consideration of a range of options; (4) contribute, to the extent practicable, to a long-term solution to the problem it is intended to address; and/or (5) consider long-term changes to the areas and entities it protects and have manageable future maintenance and modification requirements.

3.10.5 Make Land Use Decisions to Reduce Future Risks

The legislature of the Commonwealth of Kentucky has in [Kentucky Revised Statute](#)

[\(KRS\) Chapter 100](#) delegated to local government units the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. While the elected body has the power to adopt the zoning ordinance, the responsibility for overseeing the preparation of the ordinance falls to the local planning commissions. The statute permits three types of local planning units with commissions: independent, joint, and regional.

The planning commission of each unit is required to prepare a comprehensive plan, which serves as a guide for public and private actions and decisions to assure the development of public and private property in the most appropriate relationships. The elements of the plan may be expressed in words, graphics, or other appropriate forms. They will be interrelated, and each element will describe how it relates to each of the other elements.

Additionally, the Commonwealth established 15 Area Development Districts (ADDs) through [KRS Chapter 147A](#) that guide local communities in conducting the necessary research and studies and coordinate and cooperate with all appropriate groups and agencies in order to develop, and adopt and revise when necessary, a district development plan or series of plans including but not limited to the following districtwide plan elements: goals and objectives; water and sewer; land use; and open space and recreation. The plans serve as a general guide for public and private actions and decisions to assure the development of public and private property in the most appropriate relationships. The districts are placed under the direction of regional planning councils.

One of an ADD's critical functions is to coordinate local hazard mitigation plans. ADDs will review and approve comprehensive plans from each local planning commission and will help develop regional hazard mitigation plans that incorporates local hazard mitigation plans for the Commonwealth's hazard mitigation plans. The plans use the best available data to identify risks and are used to inform land use decisions. At a minimum, hazard mitigation plans are updated every 5 years.

DLG will require local governments to demonstrate how their projects or activities fit into local or regional mitigation plans, the Commonwealth's mitigation plan, existing risk mapping, and connection to this Action Plan's mitigation assessment.

3.10.6 Increase Awareness of Hazards

Seeking input from stakeholders and communities around the Commonwealth is an important component of the planning process. DLG used a variety of methods to inform local officials and the public on the purpose and goals of mitigation; understanding risks, threats, and hazards in MID areas; and gathering feedback on how to craft programs that will meet the needs of communities as quickly as possible. In addition to gaining feedback, this process helped local stakeholders and members of the public understand what to expect from CDBG-DR funding and allowed them to play a key role in shaping the outcomes of this plan. The outreach methods, along with the feedback obtained, include webinars, a survey of community and citizens, and stakeholder meetings.

DLG is committed to ensuring environmental justice in minority, low-income, refugee,

and immigrant populations. Members of these populations are encouraged to participate in DLG's outreach efforts and provide valuable input on the needs and priorities of their communities. To ensure adequate public participation and access to information as required by Executive Order 12898, DLG will solicit public recommendations in developing and implementing environmental justice strategies, use public documents that are concise and understandable, and translate appropriate public documents for LEP persons.

DLG also will provide meaningful opportunities for public participation throughout the environmental review process, as required by guidance from the Council on Environmental Quality.

DLG's subrecipients receiving CDBG-DR funds are considered responsible entities and must complete an environmental review of all project activities under 24 CFR Part 58 prior to obligating any project funds. After subrecipients complete environmental review(s) pursuant to 24 CFR part 58 and receive from HUD an approved Request for Release of Funds and certification (as applicable) or adopts another Federal agency's environmental review and receives from HUD (or the state) an approved Request for Release of Funds and certification (as applicable), subrecipients may draw down funds for an activity. Subrecipients will be required to post on their website the environmental reviews for public comment.

3.10.7 Develop the Risk Assessment

This Action Plan details how this funding will be allocated to reduce the effects of natural disasters and eliminate long-term risks to Kentuckians. The purpose of the mitigation risk assessment is to detail a strategy that (1) reduces the risks and vulnerabilities of people in hazard-prone areas through current technology; (2) reduces the potential impact of natural disasters on new and existing properties, infrastructure, and local economies; and (3) promotes education, outreach, and research and development programs to improve knowledge and awareness among citizens and industry about the hazards they may face and mitigation alternatives that can reduce vulnerabilities.

The focus on mitigation can result in cost savings that can be used to fund more resilient work in local communities. As per FEMA's analysis on mitigation, local communities can save \$6 on average for every \$1 spent on federal mitigation grants.⁵⁸ This cost savings can be attributed to paying for risk-reduction practices or technologies that can prevent damage and increased costs from future disasters.

DLG has completed this risk-based Mitigation Needs Assessment to identify and analyze all significant current and future disaster risks that provide a substantive basis for the activities proposed in Section 4. The assessment utilized the findings of Kentucky's State Hazard Mitigation Plan; data and research acquired from essential data

⁵⁸ FEMA: [Natural Hazard Mitigation Saves Interim Report](#)

resources; and consultation with public, private, and nonprofit stakeholders to arrive at a

thorough assessment of the hazards that pose substantial risk of loss of life, injury, damage, and loss of property, along with suffering and hardship.

3.10.8 Use the Hazard Mitigation Plan

The Commonwealth of Kentucky's 2018 Hazard Mitigation Plan (HMP) is the most recent risk assessment completed through the FEMA hazard mitigation planning process and is the starting point for the Action Plan's risk-based Mitigation Needs Assessment. The HMP was completed by the Kentucky Division of Emergency Management, which focuses on emergency management and the hazards faced by Kentuckians and provides a mitigation strategy for the Commonwealth. The purpose of the HMP is to reduce death, injuries, and property losses caused by natural hazards in Kentucky. The 2018 HMP identifies hazards based on the history of disasters within the Commonwealth and lists goals, objectives, strategies, and actions for reducing future losses.

This assessment utilizes the findings of Kentucky's HMP; data and research acquired from essential data resources; and consultation with public, private, and nonprofit stakeholders to arrive at a thorough assessment of the hazards that pose a substantial risk of loss of life, injury, damage, and loss of property, along with suffering and hardship.

3.10.9 Ensure Mitigation Efforts Are Cost-Reasonable

All rehabilitation, reconstruction, and new construction work will be designed to incorporate the principles of sustainability, including water and energy efficiency, resilience, and mitigation against the impact of future disasters. DLG will—and will encourage its applicants to—incorporate preparedness and mitigation measures for rebuilding activities. This helps to ensure that communities build back safer and stronger than before the disaster. 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 the restoration of infrastructure.

3.10.10 Support Long-Term Recovery Planning

DLG has an excellent relationship with local governments and will coordinate with the local governments to promote sound, sustainable, long-term recovery planning that has been informed through the evaluation of natural hazards. In preparing this Action Plan, DLG met with local governments, regional districts, nonprofits, and agencies.

Through these consultation meetings, DLG was able to gather data, experiences, and community insight to develop an initial unmet needs assessment. All engagements were either conducted virtually or in-person, and surveys were submitted by each city and community organization. Table 61 shows the consultation events held to date.

3.11 Broadband Infrastructure in Housing

Per 24 CFR 570.202, any substantial rehabilitation or new construction of a building

with more than four rental units will include the 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 of its program or activity or an undue financial burden, or
- The structure of the housing to be substantially rehabilitated makes installation of broadband infrastructure infeasible.

3.12 Cost-Effectiveness

The Commonwealth will establish policies and procedures to assess the cost-effectiveness of each proposed program or activity to assist a household under any residential rehabilitation or reconstruction program or activity funded with CDBG-DR funds. Policies and procedures also will establish the criteria for determining when the cost of rehabilitation or reconstruction of the unit will not be cost-effective relative to other means of assisting the property owner.

As mentioned above, the existing housing stock is not affordable for the residents who need housing the most. Rehabilitating old and damaged housing may not be the most cost-effective way to resolve this problem. Reconstruction and constructing new housing using updated technologies and better energy-efficient materials will ensure that residents can own a home that is resilient and addresses the risks faced by the community.

DLG will define “demonstrable hardship” as experiencing conditions such as continued financial hardships, impacts from COVID-19 on the affordability of the housing stock, or residing in unsafe or unsanitary living conditions as a result of the 2022 disasters.

DLG defines a residential property as “not suitable for rehabilitation” if any of these conditions apply:

- The property is declared a total loss.
- Repairs would exceed 50% of the cost of reconstruction.
- Homes cannot be rehabilitated under existing agency policies and award caps due to legal, engineering, or environmental constraints such as permitting, extraordinary site conditions, or historic preservation.

The Commonwealth may provide exceptions to award maximums on a case-by-case basis and will include procedures within program guidelines on how the Commonwealth or its subrecipients will analyze the circumstances under which an exception is needed, and the amount of assistance necessary and reasonable.

Further, DLG and its sub-recipients will adhere to the uniform administrative requirements (2 CFR 200), that costs will be determined to be necessary and reasonable as defined by 2 CFR 200.404.

3.13 Duplication of Benefits

Section 312 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, generally prohibits any person, business concern, or other entity from receiving financial assistance with respect to any part of a loss resulting from a major disaster for which such person, business concern, or other entity has received financial assistance under any other program or from insurance or any other source. To comply with Section 312, DLG shall ensure that each program and activity provides assistance to a person or entity only to the extent that the person or entity has a disaster recovery need that has not been fully met.

Additionally, DLG will require that all sources (federal, state, local, and private) and amounts of funding received or estimated to be received will be documented prior to awarding CDBG-DR funds to the applicant.

Program policies will outline a process for preventing duplication. Further, any additional funds paid to applicant awardees for the same purpose as the assistance awarded after the CDBG-DR funded project is completed must be returned to DLG.

As per the Duplication of Benefits Policy, DLG and its subrecipients are subject to the requirements in Federal Register Notices explaining the duplication of benefits requirement (84 FR 28836 and 84 FR 28848, published June 20, 2019, or other applicable notices).



4

Grantee Proposed Use of Funds

4 Grantee Proposed Use of Funds

4.1 Overview

DLG is the lead agency and responsible entity for administering \$297,994,000 in CDBG- DR funds for recovery from the storm events in 2022. DLG will implement programs either directly or through a unit of general local government (UGLG), tribal authority, or local non-profits, as well as in partnership with subrecipients. All programs have been designed in accordance with HUD-eligible activities to meet HUD National Objectives and the requirements of the Consolidated Notice. These programs, along with the funding allocated to each, are outlined below.

Owner-Occupied Housing Assistance

Single-Family New Housing Construction with
Homebuyer Assistance Owner-Occupied
Rehabilitation/Reconstruction

Rental Housing Assistance

Multifamily Rental New Construction Rental
Rehabilitation/Reconstruction

FEMA Non-Federal Cost Share

Public Services

Housing Counseling and Legal Aid Assistance

Economic Revitalization

Small Business Grant Program

Infrastructure

Public Infrastructure
Stormwater Management
Broadband
Roads and Bridges
Debris Removal
Watershed Restoration

Planning and Administration

Resilience
Planning
Administration

4.2 Program Budget

Table 81. Program Allocations

Program Category	Program	Budget	HUD-Identified MID Budget (%)	Grantee-Identified MID Budget (%)	Percentage of Allocation	Maximum Award
Housing	Single-Family New Housing Construction	\$ 70,000,000	80%	20%	23%	\$200,000 per housing unit
Housing	Owner- Occupied Rehabilitation/ Reconstruction	\$ 24,905,300	80%	20%	8%	\$50,000 grant and up to \$50,000 additional as a loan.
Housing	Multifamily Rental New Construction	\$ 30,000,000	80%	20%	10%	\$200,000 per new rental unit;
Housing	Multifamily Rental Rehabilitation/Reconstruction	\$5,000,000	80%	20%	2%	\$100,000 per rehabbed unit
Economic Revitalization	Small Business Grant Program	\$3,000,000	80%	20%	1%	\$200,000 for operating costs; \$20,000 per job
Infrastructure and Other Activities	Public Infrastructure, Stormwater Management, Watershed Restoration, Broadband, Debris Removal, Roads, and Bridges	\$ 134,389,000	80%	20%	45%	\$10,000,000 per project
FEMA Non-Federal Cost Share Buyout Program	Buyout of Properties Located in Flood Plain	\$11,300,000	80%	20%	4%	
Public Services	Housing Counseling and Legal Aid	\$3,000,000	80%	20%	1 %	N/A
Planning	Resilience Planning	\$1,500,000	80%	20%	1%	\$25,000 to \$100,000
Administration	Administration	\$14,899,700	N/A	N/A	5%	N/A
TOTAL		\$297,994,000	\$238,395,200	\$59,598,800	100%	

4.3 Connection to Unmet Needs

As required by [Federal Register, Vol. 88, No. 96](#), May 18, 2023 (88 FR 6393), the Kentucky DLG will allocate at least 80% of the funds to address unmet needs in the HUD-identified MID areas. The remaining 20% of the allocation may be used to address unmet needs in a grantee-identified MID area that received a presidential major disaster declaration from severe storms, flooding, landslides, and mudslides (DR-4663). Currently, the Commonwealth anticipates putting 80% of funding in Breathitt County, Knott County, Letcher County, Perry County and Pike County (41572), and the remaining 20% will be focused on supporting recovery efforts in the counties the DLG identified and outlined in this document.

This Action Plan primarily considers and addresses housing and infrastructure unmet needs and incorporates mitigation activities into all programs.

The Federal Register Notice also requires that at least 70% of all program funds benefit LMI persons or households. Based on data and the current priorities to encourage LMI persons to participate in the program, the Commonwealth anticipates meeting the LMI requirement. In addition, the Commonwealth also will be assessing the status of eligible unmet needs of LMI persons and non-LMI persons and determining, at an appropriate stage, whether to request a modification of the requirement.

4.4 Leveraging Funds

The Commonwealth of Kentucky understands the importance of leveraging all available funds and resources to increase its ability to address and mitigate major disasters. As a component of this Action Plan, DLG has coordinated across federal, State, and local organizations to gather information about other resources available for recovering from the 2022 designated disasters. The Commonwealth anticipates leveraging CDBG-DR funds with other funding sources, such as FEMA grants, SBA loans, and other State and local funds. CDBG-DR funds will be used to address critical unmet needs that remain after all other federal sources have been committed and exhausted to prevent any duplication of benefits.

In addition, to ensure coordination in funding and activities, the Commonwealth will utilize its strong interagency partnerships to ensure that information, program updates, and data are shared when necessary and utilize methods to reach vulnerable

populations, protected classes, persons experiencing homelessness, and those who are historically underserved.

DLG is committed to using CDBG-DR funds to address critical unmet needs that remain following the infusion of funding from other funding sources detailed below. Existing State resources and other funds from the disaster appropriation will be further examined to ensure that all available and viable funding is used where it is most needed and will be leveraged appropriately.

4.4.1 Interchangeability of Disaster Funds

HUD has authorized grantees that receive an award in this Allocation Announcement Notice and under prior appropriations to use those funds interchangeably and without limitation for the same activities related to unmet recovery needs in the MID areas resulting from a major disaster in a prior or future appropriation acts when the MID areas overlap and when the use of the funds will address unmet recovery needs of prior or future major disasters. There are overlapping HUD and State MIDs for the 2021 and 2022 disaster events, DLG will determine as the programs progress if interchangeability of Disaster Funds will be utilized.

4.4.2 Commonwealth Funding

After the 2022 disasters, the Commonwealth of Kentucky moved quickly to set up relief funds and a centralized [resource website](#) to help those affected. Resources include but are not limited to sheltering, food sources, financial, insurance, and mental health assistance.

State Aid Funding for Emergencies (SAFE) Fund from Kentucky Senate Bill 1

The Senate passed a bill that created a fund that allocated \$212 million to cities, counties, and nonprofits to offset the cost of recovery. Costs incurred for debris clean- up, infrastructure replacement, relief for businesses, and temporary housing are eligible.

Team Eastern Kentucky Flood Relief Fund

Governor Beshear has established the Team Eastern Kentucky Flood Relief Fund to assist those impacted by the flooding and the severe weather system overnight on July 26, 2022. As of August, 2023, 41,500 donations have been received, totaling \$13,200,000. The funds that have been raised have gone to funeral assistance payments (\$440,000) and over \$4 million in \$500 checks

have been sent to survivors that were approved for any amount of FEMA assistance. \$1.175 million has been committed for building new homes (\$975,000) and home repair (\$200,000) with nonprofit partners. The remainder of the funding is committed to build homes in new high-ground communities. Donations are still being collected.

Kentucky Housing Corporation (KHC)

Kentucky Housing Corporation invests in affordable housing solutions by offering programs and services designed to develop, preserve, and sustain affordable housing throughout the Commonwealth. The disaster recovery resources page on KHC's website:

<https://www.kyhousing.org/Programs/Pages/Kentuckians-In-Need.aspx>

is there residents recovering from the disaster can access housing-specific resources, such as finding immediate shelter for rent, contacting FEMA, and connecting with SBA. The Kentucky Housing Corporation also helps with foreclosure relief and FHA insurance for mortgages and home rehabilitation.

4.4.3 Federal Assistance and Private Insurance

Additional funding sources that are important to document for the purposes of leveraging disaster recovery funds and ensuring compliance regarding duplication of benefits include FEMA, SBA, and private insurance. Data specific to these sources were provided above in the unmet needs assessments. Summary information is provided here to document Kentucky DLG's research as it relates to leveraging available funding sources.

Table 82. FEMA IA, PA, and HMGP Assistance

FEMA Program	Approved FEMA Assistance	Total Approved Applications
Individual Assistance (IA)	\$103,255,263	7,292
Public Assistance (PA)	\$81,529,993	684
Hazard Mitigation Grant Program (HMGP)	\$113,915,814	156

Table 83. SBA Residential and Business Loans

SBA Loan Type	Loan Amount Issued
Residential Loans Executed and Awarded	\$9,246,800
Business Loans Executed	\$8,336,200

4.5 Program Partners

DLG will engage program partners through formal agreements, interagency agreements, and informal partnerships. It is critical for DLG to engage a spectrum of program partners so that programs are more accessible, understandable, and tailored to equitably meet the unmet needs of disaster-impacted residents and communities. When engaging in formal agreements for the administration or implementation of programs, DLG will ensure that recipients of CDBG-DR funds have the capacity and expertise to carry out the program activities included in their scope of work. DLG may help expand recipient capacity and will provide technical assistance and training to recipients on program requirements, applicable federal cross-cutting requirements and Commonwealth overlays, and reporting and performance requirements, and may allocate administrative funding, as appropriate, to do so.

Kentucky DLG plans to fund UGLGs such as cities and counties as well as tribal authorities, other state agencies, non-profit organizations, and/or political subdivisions who will then award grant funds to citizens and projects within their communities. DLG will provide extensive CDBG-DR training as well as descriptive guidelines that each UGLG and tribe will need to follow as they administer and award funding in their communities. Understanding that for many UGLGs the burden of administering a CDBG-DR grant might be too much for existing staff, DLG plans to award administrative funding in the form of project delivery funds for them to hire qualified grant administrators. There is a long tradition in Kentucky through the regular CDBG program of communities hiring ADDs or other certified administrators. Proper administration of the CDBG-DR funds is critical to Kentucky's recovery, and DLG will work with their partners to ensure that all regulatory rules are followed in the implementation of the CDBG-DR funds.

4.5.1 Area Development Districts

The concept of ADDs originated in Kentucky in the early 1960s with the establishment of Area Development Councils. These councils were organized in all counties and ultimately served as the precursor for Area Development authorization. Landmark federal acts, such as the Appalachian Regional Development Act, a product of visionary Kentuckian John Whisman, and the Public Works and Economic Development Act of 1965, were passed with the intention of utilizing the Area Development network to administer and deliver needed federal resources to communities across the United States. These acts resulted in the creation of two new federal agencies: The Appalachian Regional Commission and the Economic Development Administration.

In the period between 1966 and 1972, Kentucky formally created 15 ADDs to serve every county and municipality in the Commonwealth.

As mentioned in the previous section, the ADDs will assist the UGLG administer their awarded CDBG-DR funds. They will not only assist with regulatory compliance but will also be available to facilitate conversations with other partners, such as nonprofit community organizations that can assist communities implement CDBG-DR programs.

Further, the ADDs are designed to be essential in a necessary federal-State-local partnership, “the three-legged stool,” which provides for the optimum synergy to advance real improvement in the quality of life for Kentucky citizens. This concept has effectively eliminated debilitating parochialism and serves as a model for public/private collaboration, convening public officials to discuss common public service challenges, and to cost-effectively deliver competent public administration assistance to State and local governments. This service legacy has now operated for more than 5 decades.

Programs and activities conducted by ADDs include:

- Workforce development
- Economic development
- Water/wastewater planning
- Transportation and infrastructure planning
- Healthcare and aging services
- GIS mapping
- Agriculture planning
- Tourism
- Broadband planning
- Hazard mitigation and disaster preparedness planning

4.5.2 Kentucky Housing Corporation

Kentucky Housing Corporation (KHC) invests in affordable housing solutions by offering programs and services designed to develop, preserve, and sustain affordable housing throughout the Commonwealth.

Created by the 1972 General Assembly, KHC is a self-supporting, public corporation of the Commonwealth of Kentucky and is governed by a 15-member board of directors.

KHC is a quasi-government agency, which is administratively attached to the Kentucky Finance and Administration Cabinet, and a portion of KHC’s funds are derived from the interest earned through the sale of

tax-exempt mortgage revenue bonds. From these proceeds, KHC has made homeownership possible for more than 76,000 Kentucky families.

KHC also receives fee income for administering federal programs, including rental assistance that makes quality housing available to more than 27,500 low-income Kentuckians. Other programs offered by KHC include rental housing financing, including administering LIHTCs, homeownership education/counseling, housing rehabilitation, homeless programs, home energy and repair initiatives, and loan servicing. KHC's skills and focus areas make the organization a valuable resource for the CDBG-DR housing programs. DLG plans to partner with KHC on their housing programs, specifically in implementing their new construction multifamily program.

KHC works with many partners across the Commonwealth to invest in and create affordable housing opportunities.

4.5.3 Kentucky Energy and Environment Cabinet

The Kentucky Energy and Environment Cabinet (EEC) serves the public by enforcing laws relating to natural resources and the environment. It keeps citizens safe and healthy while supporting a positive business climate. Within the EEC, there are two main departments and several offices, including:

- The Department for Environmental Protection protects and enhances Kentucky's environment through its Divisions of Air Quality, Waste Management, Water, Enforcement and Compliance Assistance.
- The Department for Natural Resources provides technical assistance, education, and funding to sustain Kentucky's natural resources. It is home to the Divisions of Abandoned Mine Lands, Forestry, Mine Permits, Conservation, Oil and Gas, Mine Safety, and Mine Reclamation.
- The Office of Energy Policy brings a common-sense approach that ensures the Commonwealth thrives amid rapid changes occurring in the production, delivery, and use of energy.
- The Office of Kentucky Nature Preserves works to protect the Commonwealth's natural heritage and educate Kentuckians about its importance.

Division of Water

The Division of Water is part of the EEC, and its mission is to manage, protect, and enhance the quality and quantity of the Commonwealth's water resources for present and future generations through voluntary,

regulatory, and educational programs. It also assists in watershed management. Kentucky is divided into seven major river basins, each of which is staffed by a basin coordinator. The basin coordinators serve as facilitators for agency activities and as a point of contact for local organizations interested in addressing clean water issues and watershed planning.

DLG and the Division of Water are committed to partnering in the design and implementation of the infrastructure and planning CDBG-DR funds. The two agencies have had several meetings to discuss the most advantageous infrastructure project that will help mitigate future disasters. The Watershed Management Plans for the seven watershed basins are also in need of updating. Through this partnership, these plans can be updated to include the most recent flooding data as well as outline innovative future projects to mitigate flooding events.

4.5.4 Kentucky Association of Mitigation Managers

The Kentucky Association of Mitigation Managers (KAMM) was formed to promote natural hazard mitigation and management in Kentucky. Current members represent local, State, and federal officials; floodplain coordinators; planning and zoning officials; engineers; surveyors; GIS specialists; hydrologists; and public safety and emergency managers. The purpose of KAMM is to:

- Provide a forum for floodplain coordinators, emergency and mitigation managers, engineers, code enforcement officials, and surveyors.
- Gain knowledge and network on issues pertinent to floodplain management, mitigation, and disaster recovery.
- Promote public awareness of floodplain and stormwater management and mitigation.
- Promote the professional status of floodplain, stormwater, and emergency management and mitigation and secure all resulting benefits.
- Enhance cooperation and exchange information among various private and nonprofit organizations, individuals, and local, State, and federal agencies.
- Inform individuals concerned with floodplain, stormwater, and emergency management and mitigation through educational and professional seminars and provide a method for dissemination of both general and technical information.
- Inform concerned individuals of pending floodplain, stormwater, and emergency management and mitigation legislation and other hazard-related matters.

- Study and support legislation pertinent and necessary to the effective implementation of floodplain and stormwater management and mitigation regulations.

DLG will coordinate with KAMM in association with the Division of Water and Kentucky Emergency Management to plan for and implement CDBG-DR infrastructure and planning projects.

4.6 Distribution of Funds

Each of the program descriptions below include information on how DLG will distribute CDBG-DR funds, including the eligible applicant, beneficiary, and partners. DLG plans to directly administer programs most of the funds. The remaining funds will be made available to the other eligible applicants. They will administer the CDBG-DR funds to complete infrastructure and planning projects and provide direct assistance to homeowners, landlords, and businesses. DLG anticipates an extensive training program for UGLGs and tribal authorities that will include the fundamentals in managing CDBG-DR funds. DLG will also hold informational application workshops in the disaster-affected regions for UGLGs and tribal authorities to advertise the availability of the CDBG-DR funds. DLG will mandate that each entity hire a DLG- certified grant administrator.

Partnerships between local communities and community partners are strongly encouraged, and DLG will work with the ADDs to facilitate those conversations. These partnerships will not only assist in reaching potential direct beneficiaries in the communities for housing and business projects, but they can also assist in the implementation of the housing and business development programs.

Each program section includes the following subsections, as applicable for the different types of programs:

- Program Budget and Amount for LMI and HUD MIDs
- Program Description
- Program Tieback to Disaster/Unmet Needs
- How the Program Will Promote Housing for Vulnerable Populations
- Program Affordability Period (if applicable)
- Program Definition of Second Home/Eligibility (if applicable)
- Program National Objective(s)
- Program Eligibility
- Program Responsible Entity
- Program Maximum Assistance
- Program Estimated Begin and End Dates
- Other Program Details
- Program Competitive Application Overview (if applicable)
- Program Method of Distribution Description/Overview

- How Mitigation Set-Aside Activities Will Meet the Definition of Mitigation
- How Mitigation Set-Aside Activities Will Address Current and Future Risks
- How the Program Will Advance Long-Term Resilience (Infrastructure and Planning)
- How the Program Will Address Disaster-Related Storm Water Management/Other Systems (Infrastructure and Planning)

4.7 Program Income

The Commonwealth understands that certain activities funded with CDBG-DR funds could result in the generation of program income. DLG shall develop and adopt specific policies and procedures for each program that generates program income and will specify in those policies whether program income may be retained by local governments, if applicable. Up to 5% of the program income generated by CDBG-DR funds may be used for administrative costs by DLG, Units of General Local Government, or other subrecipients.

During the grant period: Should program income be generated by DLG, Units of General Local Government, or other subrecipients, program grant funds are not allowed to be drawn until all program income has been expended. Program income will be treated as additional CDBG-DR funds subject to the requirements of the applicable Federal Register Notice and must be used in accordance with the disaster recovery Action Plan.

Once grant is closed: Should program income be generated by Units of General Local Government or other subrecipients, they will mail the program income payment to DLG with the contract and activity number in the memo line. The funds will be deposited by DLG and recorded as program income to be applied to the Commonwealth's annual CDBG program. Program income funds will be expended first for eligible annual CDBG

claims. Any remaining balance in CDBG-DR activities resulting from the use of program income will be de-obligated by DLG at activity closeout.

Unless otherwise specified, all program income shall be remitted to the Commonwealth. DLG shall treat program income as additional CDBG-DR funds subject to the requirements of the Consolidated Notice and shall use it in accordance with the Commonwealth's CDBG-DR Action Plan.

To the maximum extent feasible, program income shall be used or distributed before additional withdrawals from the U.S. Department of the Treasury are made.

4.8 Resale or Recapture

Resale or recapture requirements will vary by program and may not be applicable to all CDBG-DR programs. If applicable, the resale or recapture requirements are described

within each of the program guidelines and will provide additional details on the terms of resale or recapture and the specific circumstances under which resale or recapture will be used. The resale and recapture provisions must clearly describe the terms of the resale and recapture provisions, the specific circumstances under which these provisions will be used, and how the provisions will be enforced (whether by recorded deed restrictions, covenants, or other similar mechanisms). The affordability restrictions, including the affordability period requirements, do not apply to housing units newly constructed or reconstructed for an owner-occupant to replace the owner-occupant's home that was damaged by the disaster.

4.9 Promoting Equity in Recovery and Housing for Vulnerable Populations

KHC and DLG are recipients of HUD funding that is administered throughout Kentucky; however, other State agencies also have a role in Kentucky's efforts to affirmatively further fair housing. To ensure that there is a concerted level across State agencies, DLG will focus on implementing the following recommendations:

- Collaborate with other State agencies and community partners (e.g., local nonprofit organizations) to affirmatively further fair housing. By working with partners like KHC, DLG will align policies and funding to expand affordable housing opportunities and explore avenues for practical fair housing solutions. A few of the strategies will include utilizing scoring evaluations that encourage equity, providing guidance and training to subrecipients, analyzing program activity data, and conducting regular monitoring. DLG will coordinate with community partners to ensure that impacted and vulnerable populations are aware of and can access assistance. DLG will also work with nonprofit organizations that provide housing services and have equity as part of their mission.

Kentucky's municipalities and counties play a central role in ensuring that residents have access to housing.

As discussed previously, in 2019 Kentucky Housing Corporation and DLG developed an Analysis of Impediments to Fair Housing Choice. The document includes (1) a review of demographic housing data and analysis of public and private sector policies and programs that impact housing decisions across the Commonwealth, (2) a list of impediments that restrict fair housing choice for Kentuckians, and (3) a series of recommended actions to remove the identified impediments. The report recommends the following initiatives that would affirmatively further fair housing through local administrative decisions, planning documents, and municipal ordinances:

- Expand affordable housing in a variety of locations
- Identify developable land within the municipality for developers of affordable housing
- Participate in regional planning efforts to ensure that there is affordable housing

in a variety of locations

- Support funding applications, zoning decisions, and other administrative functions to expand the inventory of affordable housing options for protected classes
- Support fair housing education and outreach efforts

Engage the Kentucky Commission on Human Rights and/or Lexington Fair Housing Council, Inc., to provide fair housing education and outreach at the local or regional level with topics appropriate for residents, landlords, appointed boards and commissions, elected officials, real estate professionals, architects, etc.

4.10 Program Details

4.10.1 Single-Family New Housing Construction

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
Single-Family New Housing Construction	\$ 70,000,000	\$ 56,000,000	\$ 14,000,000

Program Description:

The Single-Family New Housing Construction program will provide resilient and affordable housing to impacted Kentucky residents by funding developer-constructed new housing units. The program will offer developer incentives to construct new single-family houses on vacant lots within existing neighborhoods or the development of new neighborhoods for residential purposes. DLG will offer homebuyer assistance to potential buyers who meet income requirements to make the homes affordable. Program details and eligible activities will be further detailed in the program guidelines.

All new units must be constructed outside of the SFHA and follow State and local floodplain ordinances and laws. Based on the disaster impact and post-disaster unmet needs assessment included in this document, it is understood that a variety of housing sizes and types are needed to respond to the needs of all residents. DLG will make awards to projects that offer a variety of housing sizes to best serve families with children, disabled persons, and seniors. Single family homeownership opportunities are a valuable tool to build wealth and reduce poverty, particularly for LMI households.

Only costs incurred after an award will be eligible for reimbursement. Reimbursement of pre-award costs is not allowed.

DLG anticipates that the majority of the funding will be utilized to develop single family housing on “high ground” sites and carry out these activities directly. If funding is still available, DLG will open applications to other eligible applicants.

Program Tieback to Disaster:

Through this program, the Commonwealth will address unmet housing recovery needs by financing the replacement of damaged or destroyed affordable housing stock. The construction of new, single-family housing units will allow for households impacted and/or displaced by the flood of 2022 to find safe and affordable housing options. This program will also provide direct financial assistance to homebuyers to occupy the newly constructed single-family homes.

How the Program Will Promote Housing for Vulnerable Populations:

The Commonwealth of Kentucky aims to lead an equitable recovery from the flood of 2022, which will require an examination of systemic policies and practices that may marginalize some populations and perpetuate disparities.

In 2019, Kentucky Housing Corporation and DLG developed an Analysis of Impediments to Fair Housing Choice. The document includes (1) a review of demographic housing data and analysis of public and private sector policies and programs that impact housing decisions across the Commonwealth, (2) a list of impediments that restrict fair housing choice for Kentuckians, and (3) a series of recommended actions to remove the identified impediments.

DLG's Single-Family New Housing Construction program will help impacted residents, vulnerable populations, and members of underserved communities expedite their recovery by:

- Performing outreach and engagement to understand the needs of impacted participants and facilitating connections with vulnerable populations.
- Coordinating with local organizations to ensure that refugee and immigrant populations are aware of and can access assistance.
- Coordinating with local nonprofit organizations that provide services to people with disabilities and historically underserved populations to ensure the promotion of the program and help remove barriers to assistance.

Program Affordability Period:

Affordability periods will be documented through a restricted use covenant, mortgage, or other legal and financial mechanism for the buyer of the single-family housing unit (defined as four units or less). Affordability periods will be based on the amount of homeownership assistance provided to homebuyer at the time of closing:

Homeownership Assistance Per Unit	Minimum Period of Affordability in Years
Less than \$15,000	5
\$15,000 to \$40,000	10
More than \$40,000	15

Sale to Initial Occupant:

DLG will support the construction of single-family homes for LMI homebuyers. Developers can build homes within the development for non-LMI homebuyers, but those homes would not be supported with CDBG-DR funds.

All LMI buyer applicants can utilize CDBG-DR assistance for down payment and closing costs as a benefit to buyers, providing up to 100% of the minimum required down payment that will be recorded as a forgivable loan.

Each year of occupancy in the unit will result in a percentage of the CDBG-DR assistance taken off the amount due if the home should be sold prior to meeting the entire affordability period. The percentage forgiven each year will be outlined in the program policies. The buyer will be asked to sign a subrogation agreement stating that any funds later received from any other source will be identified and subject to review to determine if a duplication of benefit exists.

If the initial occupant sells their home prior to the end of the affordability period described above, DLG will recapture the remaining balance of the CDBG-DR assistance. The amount recaptured cannot exceed the net proceeds of the sale. The recapture approach will be documented in the same legal mechanism used to record the affordability period and will be communicated to the buyer.

Program Definition of Second Home/Eligibility:

Per the requirements in the Consolidated Notice, properties that served as second homes at the time of or following the disaster are not eligible for assistance for rehabilitation, reconstruction, new construction, or replacement. A “second home” is defined as a home that is not the primary residence of the owner, a tenant, or any occupant at the time of the disaster or at the time of application for CDBG-DR assistance.

The primary residence of the applicant will be verified at the time of application and prior to awarding funding to the applicant. The primary residence will be verified using a variety of documentation including, but not limited to, voter registration cards, tax returns, homestead exemptions, and driver’s licenses. The detailed process of verification will be outlined in the program policies.

Program National Objective(s):

Assistance provided under this program will meet the national objective of benefiting LMI persons or households.

Program Eligibility:

New construction, acquisition, clearance, and homeownership assistance; HCDA Section 105(a)1, 4, 5, 11, 14, 15, and 24; applicable waivers identified in the Allocation Announcement Notice and Consolidated Notice.

Other Program Details:

The program will fund incentives for developers to build new construction housing. The funding incentives will be in the form of a lien secured with the property at the time of the award and can be drawn down during construction, with 10% retainage held until an LMI buyer assumes ownership of the home. Eligible developer costs include acquisition, demolition and clearance, soft and hard construction costs, resilience, energy efficiency, and other costs related to development. Developers are responsible for establishing their project cost estimates. Cost reasonableness will be determined by competitive comparison of projects. Additionally, DLG may use details regarding cost of materials using industry-standard, cost-estimating software, comparative and market analysis of price per square foot, and/or the comparison of multiple competitive bids. Applications will include specific details about the number, location, size, and design of the units, as well as the identified developer who will construct all units. Through the review of submitted applications, DLG will document that no other funds have been provided for the same development, ensuring no duplication of benefits. Development agreements

will be required between the jurisdiction and the developer. All eligible costs incurred by the developer will be claimed by the jurisdiction who will act as a pass-through for funding. Specific activities will be detailed in the program guidelines.

Assistance will be provided to LMI homebuyers, as needed, to purchase the home and make the home affordable. Down payment and closing cost assistance awards will be determined based on need and a duplication of benefits review. Program guidelines will document how a down payment award will be determined. Assistance will be provided in the form of a forgivable loan to the buyer at the time of closing.

Geographic Eligibility:

HUD has identified the following MID areas:

- Breathitt County
- Knott County
- Lecher County
- Perry County
- Pike County (41572)

Kentucky has decided to expand the HUD-identified MID areas in ZIP code 41572 to include the entire county of Pike.

In addition to HUD's identified MIDs, Kentucky has identified the following counties as eligible for CDBG-DR funding.

Casey County, Clay County, Cumberland County, Floyd County, Harlan County, Johnson County, Lee County, Leslie County, Lincoln County, Magoffin County, Martin County, Owsley County, Powell County, Whitley County, and Wolfe County

Program Responsible Entity or Administering Entity:

For any projects administered directly by the State, DLG will serve as Responsible Entity. Program guidelines will outline who will implement projects under this program.

Other eligible applicants may include City, county, and tribal governments will apply to DLG and assume the role of the responsible entity. Eligible applicants may work with qualified organizations or partners to help implement the projects. Subrecipients such as non-profit organizations, other state agencies, or non-federally recognized tribes, may apply for funding, but DLG will act as Responsible Entity.

Applicants must work with a certified grant administrator to assist with application development, grant administration, and activity delivery.

- **Eligible Developers:** Approved developers must be identified under the eligible applicant's request for funding, or selected directly by DLG or their subrecipient. They must be experienced and in good standing with the Commonwealth. The

developers or partnerships may be for-profit or nonprofit entities. Additional eligibility requirements will be described in the program guidelines.

- **Eligible Beneficiaries:** The program's beneficiaries are the homebuyers who will purchase and occupy the newly constructed housing units. DLG will prioritize and market to LMI disaster-impacted households for the first 4 months of the program, after which all eligible LMI homebuyers will be prioritized. Cities and counties will conduct advertising to ensure that impacted households are informed and can participate in the program.

Program Maximum Assistance:

DLG is setting a maximum award of \$200,000 per housing unit. The maximum award will cover, per housing unit, reimbursement to developers for construction, funds for developers to use towards building materials that can better withstand storm events and mitigate against future natural disaster damage, and funds for down payment assistance and closing costs for LMI households. Program guidelines will include details regarding how jurisdictions will manage the maximum award to ensure sufficient down payment assistance funds are available after the housing units are completed. Policies will also specify the process by which applications can be reviewed to identify situations where exceeding the maximum award amount may be necessary. For example, the program will consider cases where design will need to accommodate persons living with disabilities under the Fair Housing Act, Section 504, and/or the ADA.

How the Program Promotes Long-Term Resilience:

The Single-Family New Housing Construction program will invest in new owner-occupied housing with housing stock that is more energy efficient; resilient to the hazards in the impacted communities (including flood, wind, extreme heat/winter, drought, and other applicable high-risk hazards based on housing location); and can mitigate the projected impacts of climate change. In addition, the new housing will be built to accessibility and visibility standards that will allow impacted residents to age in place and increase the housing stock available to individuals living with disabilities.

By building in a manner that achieves higher energy efficiency, resilience, and more accommodating construction standards, the Commonwealth will mitigate future loss of life and property. This will reduce short- and long-term interruptions caused by future disasters.

Program Application Overview and Selection:

Application review, approval and associated funding decisions will be made through evaluation of threshold criteria related to the grant application and subject to funding availability. The application must show that the project will:

- Respond to a demonstrated need
- Impact vulnerable communities
- Qualify as a CDBG-DR-eligible activity

- Meet a national objective
- Be located in a declared disaster-affected area

DLG may establish a minimum threshold scoring rubric based on the following criteria:

- Project is located in one of the HUD- or grantee-identified MID (priority given to HUD-identified MID areas)
- Evidence of developer capacity
 - All sources of funding are identified
 - Experience with federal grants
 - Project management team members are identified
- Ability to get projects to construction start
 - Preliminary designs are complete
 - Cost estimates are complete
 - Housing sites have been identified and site control is in place (either the developer already owns the sites or has an executed option to purchase)
 - An implementation plan with milestones included
- The budget is comprehensive and reasonable for the project scope
 - Hard costs are detailed per house (labor and materials)
 - Soft costs are identified (A/E fees, inspection, financing and legal fees, equipment rentals)
- Amount of additional funds leveraged
- The degree to which the designs and plans mitigate future hazards and meet a green building standard
 - The project scope takes into consideration the specific location of the unit(s) and will plan accordingly for the specific hazards and natural features that would affect or be affected by the project
 - Project site is NOT located in an SFHA
 - Energy-efficient appliances will be included in the units
 - Green building standards as outlined in the program guidelines have been acknowledged and will be followed during the construction process
- An outreach and marketing plan for disaster-impacted and vulnerable populations has been submitted

The minimum scoring threshold will allow DLG to review and approve projects on a rolling basis rather than wait for multiple competitive applications to be submitted at the same time.

Project beneficiaries do not need to be identified in the application. Beneficiaries will apply through the local jurisdiction for eligibility to purchase a constructed housing unit.

Program Method of Distribution:

DLG will post program guidelines and open an application. DLG will receive the applications and make funding decisions based on completeness of the application, compliance with threshold items, review of minimum score, justification for funding, and



feasibility of the project. A city, county, or tribal authority will apply in conjunction with an eligible developer who is committed to the project and completing the work in a timely manner.

DLG recognizes that the maximum award per-unit will not cover all development costs, and requires applicants to look for financing options to fully fund projects and document all other funds.

Program Timeline:

This program will begin in the Summer of 2024. The program will end when all funds have been expended and all eligible participants have completed closeout, or 6 years after execution of the grant agreement with HUD.

4.10.2 Owner-Occupied Rehabilitation and Reconstruction

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
Owner-Occupied Rehabilitation and Reconstruction	\$24,905,300	\$ 19,924,240	\$ 4,981,060

Program Description:

The Owner-Occupied Rehabilitation and Reconstruction program is intended to assist homeowners repair their homes, support rehabilitation of older and existing housing stock, and provide safe and decent housing opportunities for residents. The program will provide assistance in the form of grants up to \$50,000 and forgivable loans if costs run over \$50,000 for each home rehabilitated or reconstructed. The program beneficiaries will be eligible homeowners who experienced damage to their homes from the 2022 flood events and have remaining recovery needs after accounting for other benefits received. Because the program will benefit homeowners impacted by the 2022 flood events, the applicant must own the property as their principal place of residence and have damages resulting from the declared eligible disaster. Program guidelines will document how DLG will work with applicants to ensure sufficient documentation of ownership and damage.

The program will fund rehabilitation and reconstruction including additional costs to comply with federal, State, and local construction standards, such as replacing onsite residential infrastructure, complying with green building standards, and ensuring that homes are accessible for individuals living with disabilities, senior residents, and individuals and families at risk of homelessness. Eligible costs also include elevation, flood- and wind-resistant structures, and other program-required mitigation costs that will help protect homes from natural hazards faced in the disaster-impacted communities.

Program Tieback to Disaster:

Through this program, the Commonwealth will address unmet housing recovery needs by addressing needed repairs or reconstruction to homes impacted by the 2022 flood events.

How the Program Will Promote Housing for Vulnerable Populations:

The Commonwealth of Kentucky aims to lead an equitable recovery from the 2022 flood events, which will require an examination of systemic policies and practices that may marginalize some populations and perpetuate disparities. The 2019 Analysis of Impediments to Fair Housing conducted by DLG and the Kentucky Housing Corporation provided recommendations that will serve as a guide for implementing the programs.

DLG's Owner-Occupied Rehabilitation and Reconstruction program will help impacted residents, vulnerable populations, and members of underserved communities expedite their recovery by:

- Performing outreach and engagement to understand the needs of impacted participants and facilitating connections with vulnerable populations.
- Coordinating with local organizations to ensure that refugee and immigrant populations are aware of and can access assistance.
- Coordinating with local nonprofit organizations that provide services to people with disabilities and historically underserved populations to ensure the promotion of the program and help remove barriers to assistance.
- During the application process, ensuring that eligible applicants to DLG have the tools to market the program to potential beneficiaries.

Program Definition of Second Home/Eligibility:

Per the requirements in the Consolidated Notice, properties that served as second homes at the time of or following the disaster are not eligible for assistance for rehabilitation, reconstruction, new construction, or replacement. A "second home" is defined as a home that was not the primary residence of the owner, a tenant, or any occupant at the time of the disaster or at the time of application for CDBG-DR assistance.

The primary residence of the applicant will be verified at the time of application and prior to awarding funding to the applicant. The primary residence will be verified using a variety of documentation including, but not limited to, voter registration cards, tax returns, homestead exemptions, and driver's licenses. The detailed process of verification will be outlined in the program policies.

Program National Objective(s):

Assistance provided under this program will meet the national objectives of benefiting LMI persons or households or addressing an urgent need. The program may use the Urgent Need national objective to assist eligible disaster-impacted applicants with incomes greater than 80% AMI. The national objective will be met based on applicant's household income verified at the time of award by the jurisdiction to the beneficiary.

Program Eligibility:

Rehabilitation, reconstruction, elevation; HCDA Section 105(a)1, 4, 5, 11, and 14; applicable waivers identified in the Allocation Announcement Notice and Consolidated Notice (87 FR 6326).

Only costs incurred after an award will be eligible for reimbursement. Reimbursement of pre-award costs is not allowed.

Other Program Details:

Applicants will complete an initial reconnaissance of homes and beneficiaries in their jurisdiction eligible for rehabilitation and reconstruction prior to submitting an application to DLG. After the award, potential beneficiaries will apply to the awarded jurisdiction or their implementation partner(s) running the rehabilitation program. If eligible, the jurisdiction or their implementation partner(s) will complete an inspection of the applicant's property to document structural damage and develop a cost estimate for repairs or reconstruction. Based on this cost estimate, the jurisdiction or its implementation partner(s) will conduct a duplication of benefits review with the applicant to ensure no other funds were provided for the same repairs. The results of the duplication of benefits review will determine the maximum award amount that will be verified by DLG. Program guidelines will outline the details of a maximum award, including how change orders or unanticipated scope increases will be addressed. Program guidelines will further detail eligible construction activities, including but not limited to exterior repairs, interior repairs, electrical, plumbing, mechanical, resilient mitigation, and lead abatement (when required by federal regulations). The jurisdiction or its implementation partner(s) will develop a detailed scope of work and bid the project. The jurisdiction or its implementation partner(s) will follow federal procurement requirements, verify contractor eligibility, select the contractor, and directly fund the contractor for completed work. The amount of the grant, or grant and loan depending on total award, will be secured through a lien with covenants and restrictions filed on the property. The beneficiary will not select or fund the contractor directly.

Geographic Eligibility:

HUD has identified the following MID areas:

- Breathitt County
- Knott County
- Lecher County
- Perry County
- Pike County (41572)

Kentucky has decided to expand the HUD-identified MID areas in ZIP code 41572 to include the entire county of Pike.

In addition to HUD's identified MIDs, Kentucky has identified the following counties as eligible for CDBG-DR funding.

Casey County, Clay County, Cumberland County, Floyd County, Harlan County, Johnson County, Lee County, Leslie County, Lincoln County, Magoffin County, Martin County, Owsley County, Powell County, Whitley County, and Wolfe County

Special Flood Hazard Area Development:

Rehabilitation and reconstruction are eligible activities in the SFHA. If properties are assisted in this area, the scope of work will be required to minimize harm to or within the floodplain. Rehabilitation activities in the SFHA that include rehabilitation of substantial damage properties or rehabilitation resulting in substantial improvement of the structure as defined in the program guidelines will also be required to meet elevation standards, when feasible. Flood insurance requirements will be required for any use of CDBG-DR funding in the SFHA and will also be recorded as a permanent restrictive covenant on the property to ensure that future owners understand the flood insurance requirements.

As part of the homeowner-occupied rehabilitation/reconstruction application process, it will also need to be determined if the home ever received other federal disaster recovery benefits that required the maintenance of flood insurance. If flood insurance was not obtained or maintained, then the applicant will not be eligible for CDBG-DR funding.

Program Responsible Entity or Administering Entity:

City, county, and tribal governments will apply to DLG and assume the role of the responsible entity to operate an owner-occupied housing rehabilitation and reconstruction program. Eligible applicants may work with qualified organizations or partners to help implement the projects.

Applicants must work with a certified grant administrator to assist with application development, grant administration, and activity delivery.

If DLG, another state agency, or a qualified non-profit organization is identified to operate this program, DLG will serve as responsible entity, and will enter into a subrecipient agreement with any other organization supporting this program.

Beneficiaries will then apply to the entity jurisdiction or their implementation partner for participation in the program.

Eligible Beneficiaries:

To be eligible for the program, homeowners must meet the following criteria:

- The damaged property must have been the applicant's primary residence at the time of the disaster.
- The damaged property must have sustained damage because of the 2022 flood events.
- The damaged property must be an eligible structure as defined in the program guidelines, including but not limited to single-family residences, manufactured homes, and prefabricated homes.

Program Maximum Assistance:

Applicants will apply to serve multiple beneficiaries within a jurisdiction. Each rehabilitated or reconstructed home is eligible for a maximum award of \$100,000 per

property in the form of a grant for costs less than \$50,000 and a forgivable loan for costs above \$50,000. Policies will also specify the process by which applications can be reviewed to identify situations where exceeding the maximum award amount may be necessary.

How the Program Promotes Long-Term Resilience:

The Owner-Occupied Rehabilitation and Reconstruction program will rehabilitate or reconstruct existing owner-occupied housing to be more energy efficient and resilient to the hazards in the impacted area. By rehabilitating and reconstructing in a manner that achieves higher energy efficiency, resilience, and more accommodating construction standards, the Commonwealth will mitigate future loss of life and property. This will reduce short- and long-term interruptions caused by future disasters.

Program Application Overview:

Application approval and associated funding decisions will be made through evaluation of threshold criteria related to the grant application and subject to funding availability.

For applications to be eligible, applicants must show that the project will:

- Respond to a demonstrated need
- Impact vulnerable communities
- Meet a national objective
- Qualify as a CDBG-DR-eligible activity
- Be located in a declared disaster-affected area

DLG may establish a minimum threshold scoring rubric for applications that will be based on the following criteria:

- Project is located in one of the HUD- or grantee-identified MIDs (preference will be given to HUD-identified MID areas)
- Project readiness is demonstrated by an implementation plan including program milestones that will be met
- Potential homes and eligible LMI homeowners are preliminarily identified
- All sources of funds are identified
- Anticipated budget that is provided is cost-reasonable
- The degree by which proposed designs and plans will mitigate future hazards and meet a green building standard is appropriate
 - The project scope takes into consideration the specific location of the unit(s) and will plan accordingly for the specific hazards and natural features that would affect or be affected by the project, as feasible
 - Energy-efficient appliances will be included in the units, if replaced
 - Green building standards as outlined in the program guidelines have been acknowledged and will be followed during the construction process

The minimum scoring threshold will allow DLG to review and approve projects on a rolling basis rather than wait for multiple competitive applications to be submitted at the same time.

Project beneficiaries do not need to be identified in the application. Beneficiaries will apply through the local jurisdiction for eligibility for rehabilitation or reconstruction.

Program Method of Distribution:

DLG will post program guidelines and open an application. DLG will receive the applications and make funding decisions based on completeness of the application, compliance with threshold items, review of minimum score, and justification for funding. City, county, and tribal governments will apply to DLG to develop programs that will fund eligible homeowners. DLG will encourage applicants to consider leveraging other funds or look for financing options to fully fund the projects.

Program Timeline:

This program will begin in the summer of 2024. The program will end when all funds have been expended and all eligible participants have completed closeout, or 6 years after execution of the grant agreement with HUD.

4.10.3 Multifamily New Construction

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
Multifamily New Construction	\$30,000,000	\$24,000,000	\$6,000,000

Program Description:

The Multifamily New Construction program will offer funding subsidies for the construction of multifamily structures (five or more units) on vacant lots within existing neighborhoods. The program will offer incentives to encourage builders and developers to build new rental units in the disaster-impacted areas. The new units will incorporate green and resilient building practices to mitigate future risks of hazards.

Program Tieback to Disaster:

Through this program, the Commonwealth will address unmet housing recovery needs by increasing the availability of safe, sanitary, and affordable housing to replace units lost as a result of the 2022 flood events.

How the Program Will Promote Housing for Vulnerable Populations:

The Commonwealth of Kentucky aims to lead an equitable recovery from the 2022 flood events, which will require an examination of systemic policies and practices that may marginalize some populations and perpetuate disparities. The 2019 Analysis of Impediments to Fair Housing Choice conducted by DLG and the Kentucky Housing Corporation provided some recommendations that will serve as a guide for implementing the programs.

DLG's Multifamily New Construction program will help impacted residents, vulnerable populations, and members of underserved communities expedite their recovery by:

- Performing outreach and engagement to understand the needs of impacted participants and facilitating connections with vulnerable populations.
- Coordinating with local organizations to ensure that refugee and immigrant populations are aware of and can access the assistance.
- Coordinating with local nonprofit organizations that provide services to people with disabilities and historically underserved populations to ensure the promotion of the program and help remove barriers to assistance.

Program Affordability Period:

For multifamily projects (containing five or more units), the affordability period for new construction will be 20 years.

Affordable Rents:

Units that are intended to meet an LMI national objective in a project must be rented to persons of verified LMI income and subject to the 65% HOME rent limits (published annually by HUD) for the affordability period.

Restrictive Covenants:

To ensure that projects are completed per program requirements, applicants must agree to a restrictive covenant being recorded on the property through the affordability terms. The affordability period will be documented through a personally guaranteed loan and restricted use covenant. Both will be in place until the end of the affordability period or until the loan is paid in full.

Program Definition of Second Home/Eligibility:

A “second home” is defined as a home that was not the primary residence of the owner, a tenant, or any occupant at the time of the disaster or at the time of application for CDBG-DR assistance. Because the Multifamily New Construction program is constructing new rental housing, second homes are not eligible for assistance.

The primary residence of the applicant will be verified at the time of application and prior to awarding funding to the applicant. The primary residence will be verified using a variety of documentation including, but not limited to, voter registration cards, tax returns, homestead exemptions, rental agreement, and driver’s licenses. The detailed process of verification will be outlined in the program policies.

Program National Objective(s):

Low- to Moderate-Income Housing (LMH) or Urgent Need will be used to meet a national objective for this program. To meet the LMH national objective, 51% of units must be occupied by LMI households. CDBG-DR funds can pay for multifamily rental new construction when less than 51% of the units will be occupied by LMI households; however, a minimum of 20% of all occupants must be LMI households. Where LMI occupancy is between 20% and 50%, the CDBG-DR funds must not exceed the percent of LMI households to occupy the units. Meaning that even if a project qualified for the maximum award amount, if they only propose to offer 30% LMI units in the development, the CDBG-DR award cannot exceed 30% of the total project costs, based on the application budget. CDBG-DR funds that provide assistance to the LMI units will meet the LMH national objective. If less than 20% LMI occupancy is achieved, Urgent Need will be the determined national objective.

Program Eligibility:

New construction, acquisition, clearance; HCDA Section 105(a)1, 4, 11, 14, and 15; applicable waivers identified in the Allocation Announcement Notice and Consolidated Notice (87 FR 6364).

Only costs incurred after an award will be eligible for reimbursement. Reimbursement of pre-award costs is not allowed.

Other Program Details:

Eligible activities include constructing new rental units necessary to replace those that were lost from the 2022 flood event and increasing available affordable housing for residents displaced by the flood. DLG will make awards up to \$10,000,000 per project. Awards will be made in the form of either a grant or a loan, and financing details will be outlined in program guidelines. In conjunction with awards for new construction, applicants may identify mitigation measures to be incorporated into the new multifamily housing project. These mitigation measures include but are not limited to structural and utility design modifications to make the building more resistant to floods, grading and slope stabilization, and drainage improvements. New construction of multifamily properties will meet resilient green building standards and include the installation of broadband infrastructure, where feasible. Developers are responsible for establishing their project cost estimates. Cost reasonableness will be determined by details regarding cost of materials using industry-standard, cost-estimating software; comparative and market analysis of price per square foot; and/or the comparison of multiple competitive bids. Applications will include specific details about the number, location, size, and design of the units, as well as the identified developer who will construct all units. Through the review of submitted applications, DLG will document that no other funds have been provided for the same development, ensuring no duplication of benefits. Development agreements will be required between the jurisdiction and the developer. All eligible costs incurred by the developer will be claimed by the jurisdiction who will act as a pass-through for funding. Specific eligible activities will be detailed in the program guidelines.

DLG understands that KHC has existing programs, procedures, and knowledge of the multi-family landscape in Kentucky to assist DLG meet the rental needs of the disaster impacted areas of the state. Through collaboration on the multi-family housing policy as well as frequent meetings, DLG will work with KHC to implement its multi-family housing program. Program guidelines may outline how this program can align with or compliment existing KHC programs.

Special Flood Hazard Area Development:

DLG will discourage development in the SFHA. However, if that location is the only suitable building location in the community based on topography, construction in the SFHA can be considered. If properties are constructed in this area, the development will be required to meet the elevation standards as described in the program guidelines. Property owners will also be required to obtain and maintain flood insurance. This requirement will be recorded as a permanent restrictive covenant on the property to ensure that future owners understand the flood insurance requirements.

Geographic Eligibility:

HUD has identified the following MID areas:

- Breathitt County
- Knott County
- Lecher County
- Perry County
- Pike County (41572)

Kentucky has decided to expand the HUD-identified MID areas in ZIP code 41572 to include the entire county of Pike.

In addition to HUD's identified MIDs, Kentucky has identified the following counties as eligible for CDBG-DR funding.

Casey County, Clay County, Cumberland County, Floyd County, Harlan County, Johnson County, Lee County, Leslie County, Lincoln County, Magoffin County, Martin County, Owsley County, Powell County, Whitley County, and Wolfe County

Program Responsible Entity or Administering Entity:

- **Eligible Applicants:** City, county, and tribal governments, in coordination with eligible developers, will apply to DLG. The local jurisdiction will assume the role of the responsible entity. If a city, county, or tribal government applies, it must work with a certified grant administrator to assist with application development, grant administration, and activity delivery.

For-profit and nonprofit housing developers may apply directly to DLG. Developers, non-profit subrecipients, or other state agencies cannot assume the role of responsible entity; as such, DLG will remain the responsible entity for direct awards to developers, non-profit subrecipients, or other state agencies.

- **Eligible Developers:** If the developer is not applying directly, approved developers must be identified in the city, county, or tribal authority's request for funding. The developer must be experienced and in good standing with the Commonwealth. The developers or partnerships may be for-profit or nonprofit entities. Developers and any future owner of the property will be required to comply with the term of affordability and any other covenants and restrictions placed on the property. Additional eligibility requirements will be described in the program guidelines.
- **Eligible Beneficiaries:** The program's beneficiaries will be the renters who meet the income eligibility. The owner/developer of the multifamily development will be required to ensure that priority will be given to—and advertisement will be targeted to—disaster-impacted LMI households. The property owner/developer will be responsible for ensuring the ratio of LMI units is maintained for the affordability period.

Program Maximum Assistance:

The maximum award is \$10,000,000 for any new construction project. This award will include incentives for construction, incentives for applicable mitigation measures, and the cost of compliance such as additional costs incurred paying Davis Bacon wages. Policies will also specify the process by which applications can be reviewed to identify situations where exceeding the maximum award amount may be necessary.

How the Program Promotes Long-Term Resilience:

The Multifamily New Construction program will invest in new multifamily housing that is more energy efficient; resilient to the hazards in the impacted communities (including flood, wind, extreme heat/winter, drought, and other applicable high-risk hazards based on the location of the housing); and can mitigate the projected impacts of climate change. In addition, the new housing will be built to accessibility and visibility standards that will allow impacted residents to age in place and increase the housing stock available to individuals living with disabilities.

Program Application Overview:

Application review, approval and associated funding decisions will be made through evaluation of threshold criteria related to the grant application and subject to funding availability.

For applications to be eligible, applicants must show that the project will:

- Respond to a demonstrated need
- Impact vulnerable communities
- Meet a national objective
- Qualify as a CDBG-DR-eligible activity
- Be located in a declared disaster-affected area

DLG may establish minimum threshold scoring rubric for applications based on the following criteria:

- Project is located in one of the HUD- or grantee-identified MIDs (priority will be given to projects located in the HUD-identified MID areas)
- Evidence of developer capacity
 - All sources of funding are identified
 - Documentation of experience
 - Project management team members are identified
- Demonstrated construction readiness
 - Preliminary designs are complete
 - Cost estimates are complete
 - Developer has site control (either already own the site or has an executed option to purchase)

- An implementation plan with milestones is included
- Budget is comprehensive and reasonable for the project scope
 - Hard costs are detailed per house (labor and materials)
 - Soft costs are identified (A/E fees, inspection, financing and legal fees, equipment rentals)
- The degree to which the designs and plans mitigate future hazards and meet a green building standard
 - The project scope takes into consideration the specific location of the unit(s) and will plan accordingly for the specific hazards and natural features that would affect or be affected by the project as feasible
 - Energy-efficient appliances will be included in the units
 - Green building standards as outlined in the program guidelines have been acknowledged and will be followed during the construction process
- A rental outreach and marketing plan for disaster impacted and vulnerable populations has been submitted

The minimum scoring threshold will allow DLG to review and approve projects on a rolling basis rather than wait for multiple competitive applications to be submitted at the same time.

Project beneficiaries do not need to be identified in the application.

Program Method of Distribution:

DLG will post program guidelines and open an application. DLG will receive the applications and make funding decisions based on completeness of the application, compliance with threshold items, review of minimum score, justification for funding, and feasibility of the project. A city, county, or tribal authority will apply in conjunction with an eligible developer/owner who is committed to the project and completing the work in a timely manner.

DLG recognizes that the maximum award amount will not cover all development costs, and requires applicants to look for financing options to fully fund projects and document all other funds.

Program Timeline:

This program will begin in the summer of 2024. The program will end when all funds have been expended and all eligible participants have completed closeout, or 6 years after execution of the grant agreement with HUD.

4.10.4 Rental Rehabilitation/Reconstruction

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
Multifamily and Small Rental Rehabilitation/Reconstruction	\$5,000,000	\$4,000,000	\$1,000,000

Program Description:

The program is intended to assist eligible owners of rental properties with seven units or fewer to rehabilitate or reconstruct rental housing to provide safe, clean, and affordable rental housing to LMI households. The program will restore or reconstruct affordable rental units in disaster-impacted areas with the goal of ensuring that impacted counties do not lose the remaining rental units. It will work to alleviate blight in some of the areas that were hit hardest by the storm.

The program will provide assistance for activities necessary to restore storm-damaged rental units, including rehabilitation, reconstruction, elevation, and/or other mitigation activities. Mitigation activities include but are not limited to structural and utility retrofits or design modifications/retrofits to make the building more resistant to flood and wind damage such as, grading and slope stabilization, drainage improvements, and structural enhancements. Assistance may also be provided to make housing accessible for individuals living with disabilities. Substantial rehabilitation and reconstruction of properties with more than four rental units will include the installation of broadband infrastructure, where feasible.

Program Tieback to Disaster:

Through this program, the Commonwealth will address unmet housing recovery needs by providing rehabilitation/reconstruction assistance to landlords to ensure the availability of safe, affordable housing for those impacted by the 2022 flood event.

How the Program Will Promote Housing for Vulnerable Populations:

The Commonwealth of Kentucky aims to lead an equitable recovery from the 2022 flood, which will require an examination of systemic policies and practices that may marginalize some populations and perpetuate disparities. The 2019 Analysis of Impediments to Fair Housing Choice conducted by DLG and the Kentucky Housing Corporation provided some recommendations that will serve as a guide for implementing the programs.

DLG's Multifamily and Small Rental Rehabilitation/Reconstruction program will help impacted residents, vulnerable populations, and members of underserved communities expedite their recovery by:

- Performing outreach and engagement to understand the needs of impacted participants and facilitating connections with vulnerable populations.

- Coordinating with local organizations to ensure that refugee and immigrant populations are aware of and can access the assistance.
- Coordinating with local nonprofit organizations that provide services to people with disabilities and historically underserved populations to ensure the promotion of the program and help remove barriers to assistance.

Program Affordability Period:

The program must maintain affordability periods in accordance with HOME program standards at 24 CFR 92.252(e)(4). The following affordability time frames apply to the units that will be occupied by LMI households.

Rental Housing Activity of Existing Housing Per Unit Amount of CDBG-DR Funds	Minimum Period of Affordability in Years
Less than \$15,000	5
\$15,000–\$40,000	10
More than \$40,000 or rehabilitation involving refinancing	15
New construction or acquisition of newly constructed housing	20

Affordable Rents:

Units that are intended to meet the LMI national objective in a project must be rented to persons of verified LMI income and subject to the 65% HOME rent limits for the affordability period.

Restrictive Covenants:

To ensure that projects are completed per program requirements, applicants must agree to a restrictive covenant being recorded on the property through the affordability terms. The affordability period will be documented through a personally guaranteed loan and restricted use covenant. Both will be in place until the end of the affordability period or until the loan is paid in full.

Required Number of Affordable Units by Property Size:

Number of Total Units in Property	Number of Units That Must Be Affordable to LMI Households
1	1
2	1
3	2
4	3
5	3
6	4
7	4

Program Definition of Second Home/Eligibility:

Per the requirements in the Consolidated Notice, properties that served as second homes at the time of or following the disaster are not eligible for assistance for rehabilitation, reconstruction, new construction, or replacement. A “second home” is defined as a home that was not the primary residence of the owner, a tenant, or any occupant at the time of the disaster or at the time of application for CDBG-DR assistance.

The primary residence of the applicant will be verified at the time of application and prior to awarding funding to the applicant. The primary residence will be verified using a variety of documentation including, but not limited to, voter registration cards, tax returns, homestead exemptions, rental agreement, and driver’s licenses. The detailed process of verification will be outlined in the program policies.

Program National Objective(s):

Assistance provided under this program will meet the national objectives of benefiting LMI persons or households.

Program Eligibility:

Rehabilitation, reconstruction, elevation, and lead-based paint and clearance; HCDA Section 105(a) 2, 4, 5, 11, 14, and 24; applicable waivers identified in the Allocation Announcement Notice and Consolidated Notice (87 FR 6326); other applicable waivers or alternative requirements.

Only costs incurred after an award will be eligible for reimbursement. Reimbursement of pre-award costs is not allowed.

Other Program Details:

Landlords at the time of this disaster event whose rental properties sustained damage and who have been unable to fully recover may apply through their local jurisdiction for assistance to rehabilitate or reconstruct damaged rental units. An awarded jurisdiction or its implementation partner(s) running the rehabilitation program will establish local applications and program guidelines. If eligible, the jurisdiction will complete an inspection of the rental property to document structural damage and develop a cost estimate for repairs or reconstruction. Based on this cost estimate, the jurisdiction will conduct a duplication of benefits review with the owner applicant to ensure that no other funds were provided for the same repairs, including insurance or other federal assistance. The results of the duplication of benefits review will determine the maximum award amount.

Program guidelines will outline the details of a maximum award, including how change orders or unanticipated scope increases will be addressed. Program guidelines will further detail eligible construction activities including but not limited to exterior repairs, interior repairs, electrical, plumbing, mechanical, resilient mitigation, and lead abatement (when required by federal regulations). The jurisdiction will develop a detailed scope of

work and bid the project. The jurisdiction will follow federal procurement requirements, verify contractor eligibility, select the contractor, and directly fund the contractor for completed work. The amount of the loan will be based on the total award and will be secured through a lien with covenants and restrictions filed on the property.

Other Requirements and Enforceability:

Tenants displaced by the rehabilitation or reconstruction activities are eligible for assistance under the Uniform Relocation Act (URA). The program guidelines will define situations where tenants have been displaced and what procedures are in place to address the cost of permanent or temporary relocation.

Special Flood Hazard Area Development:

Rental units located in the SFHA are eligible for rehabilitation and reconstruction activities. If properties are assisted in the SFHA, the scope of work will be required to minimize harm to or within the floodplain, as described in the program guidelines. Rehabilitation activities in the SFHA that include rehabilitation of substantial damage properties or rehabilitation resulting in substantial improvement of the structure as defined in the program guidelines will also be required to meet elevation standards, where feasible. Flood insurance requirements will be required for any use of CDBG-DR funding in the SFHA and will also be recorded as a permanent restrictive covenant on the property to ensure that future owners understand the flood insurance requirements.

As part of the Rental Rehabilitation/Reconstruction program application process, it will also need to be determined if the property has ever received other federal disaster recovery benefits that required the maintenance of flood insurance. If flood insurance was not obtained or maintained, then the applicant will not be eligible for CDBG-DR funding.

Geographic Eligibility:

HUD has identified the following MID areas:

- Breathitt County
- Knott County
- Lecher County
- Perry County
- Pike County (41572)

Kentucky has decided to expand the HUD-identified MID areas in ZIP code 41572 to include the entire county of Pike.

In addition to HUD's identified MIDs, Kentucky has identified the following counties as eligible for CDBG-DR funding.

Casey County, Clay County, Cumberland County, Floyd County, Harlan County, Johnson County, Lee County, Leslie County, Lincoln County, Magoffin County,

Martin County, Owsley County, Powell County, Whitley County, and Wolfe County

Program Responsible Entity or Administering Entity:

City, county, and tribal governments will apply to DLG and assume the role of the responsible entity to operate the Rental Rehabilitation/Reconstruction program. DLG will allow local entities to submit applications for rental housing projects with up to seven units. Existing landlords will apply to the awarded jurisdiction to participate in the rehabilitation and reconstruction program. Beneficiaries will be documented as the existing or initial renters occupying the rehabilitated units.

Applicants must work with a certified grant administrator to assist with application development, grant administration, and activity delivery.

Eligible Property Owners (landlords): Current property owners of rental units must apply to the local jurisdiction for funding. They must be in good standing with the Commonwealth. The property owners may be individuals, for-profit entities, or nonprofit entities. Additional eligibility requirements will be described in the program guidelines.

Eligible Beneficiaries:

The program's beneficiaries are renters who meet the income eligibility or disaster impact criteria including current residents of the project. The buildings once renovated must maintain the required ratio of LMI to non-LMI units for the affordability period.

Program Maximum Assistance:

The maximum award is \$100,000 per unit as a forgivable loan for any rehabilitation or reconstruction project. Program guidelines will stipulate a process for applications to identify situations where exceeding the maximum award amount may be necessary. For example, increased costs of compliance associated with accessibility concerns, environmental mitigation, and other extenuating circumstances may warrant exceeding the maximum award amount. Such requests will be reviewed by DLG on a case-by-case basis.

Program Timeline:

This program will begin in the summer of 2024. The program will end when all funds have been expended and all eligible participants have completed closeout, or 6 years after execution of the grant agreement with HUD.

Program Application Overview:

Application review, approval, and associated funding decisions will be made through evaluation of threshold criteria related to the grant application and subject to funding availability.

For applications to be eligible, applicants must show that the project will:

- Respond to a demonstrated need
- Impact vulnerable communities
- Meet a national objective
- Qualify as a CDBG-DR-eligible activity
- Be located in a declared disaster-affected area

DLG may establish minimum threshold scoring rubric for applications based on the following criteria:

- The project is located in one of the HUD- or grantee-identified MIDs (priority will be given to projects located in the HUD-identified MID areas)
- The budget is comprehensive and reasonable for how many units they plan to assist
- The proposed review of landlord designs and plans will include consideration of mitigation of future hazards and meet a green building standard
 - The project scope takes into consideration the specific location of the unit(s) and will plan accordingly for the specific hazards and natural features that would affect or be affected by the project as feasible
 - Energy-efficient appliances will be included in the units, if replaced
 - Green building standards as outlined in the program guidelines have been acknowledged and will be followed during the construction process
- A potential outreach and marketing plan that landlords will use to advertise the units to disaster-impacted and vulnerable populations has been submitted
- Process is outlined by which the rental unit owners will be evaluated to ensure they are in good standing with the Commonwealth and have experience managing rental properties
- A proposed relocation plan outline has been submitted, including how the program responsible entity or administering entity will implement the plan once rental units are identified to ensure the plan meets URA requirements

The minimum scoring threshold will allow DLG to review and approve projects on a rolling basis rather than wait for multiple competitive applications to be submitted at the same time.

Program Method of Distribution:

There will be an open application window with deadlines and a competitive review process. DLG will receive the applications and make funding decisions based on the competitiveness and completeness of the application, justification for funding, and feasibility of the program.

DLG will encourage applicants to consider leveraging other funds or look for financing options to fully fund the projects.



Once awarded program funds from DLG, awarded jurisdictions will receive and review applications from landlords. Local jurisdictions must have clear and consistent program guidelines consistent with the State's program.

4.10.5 Housing Counseling and Legal Aid

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
Housing Counseling and Legal Aid	\$3,000,000	\$2,400,000	\$600,000

Program Description:

DLG will provide grants to subrecipients to deliver critical support services, the need for which has increased because of the 2022 flood event. This Housing Counseling and Legal Aid program was developed by DLG to provide a wide range of counseling services to renters and homeowners impacted by the 2022 flood.

The program is a collaboration of HUD-certified, nonprofit, community-based organizations that provide a wide range of counseling services. Counselors provide support services, such as foreclosure prevention, relocation services, title transfers and title searches, and debt management. Counselors also assist with application intake for CDBG-DR-funded programs. Housing counselors may provide information to renters participating in the other rental housing programs as well.

This program also will fund legal services needed to help impacted residents transition to more permanent housing.

Program Tieback to Disaster/Unmet Needs:

The program provides services to individuals and households living in the impacted communities or who were impacted by the 2022 flood.

How the Program Will Promote Housing for Vulnerable Populations:

In the aftermath of a disaster, housing counseling and legal services are a critical component of comprehensive disaster relief. Legal resources are often confusing, unattainable, and/or unaffordable to LEP individuals, HUD-defined vulnerable populations, and LMI households as they work through the challenges of recovery that require legal representation, support, and analysis. Failure to resolve these legal issues often results in the denial of recovery resources and/or delays to recovery.

Housing counseling and legal services providers will help impacted residents, vulnerable populations, and members of underserved communities expedite their recovery by:

- Providing access to fair housing information for participants
- Providing guidance and counseling services to LEP households
- Assessing housing needs and financial resources and addressing other concerns about short- and long-term housing
- Discussing the unique assistance needs and resources that are available

- Connecting with State and local recovery resources
- Communicating with lenders, insurance companies, and government agencies
- Supporting application intake and assisting with the necessary paperwork for recovery programs, thereby reducing barriers of entry into recovery and other funding programs
- Reviewing income, expenses, credit, and debt and helping to develop ways to improve a participant's financial situation
- Providing other housing navigation services, as needed

Program National Objective(s):

LMI persons or households and/or Urgent Need.

The program may use the Urgent Need national objective to provide assistance to eligible disaster-impacted applicants with incomes greater than 80% of AMI.

Program Eligibility:

Public Services; HCDA Section 105(a)8; applicable waivers identified in the Allocation Announcement Notice and Consolidated Notice; other applicable waivers or alternative requirements.

Other Program Details:

Housing counseling organizations may provide supportive services, including but not limited to foreclosure prevention, homebuyer financial counseling, relocation advisory services, debt management, and assistance with application intake for CDBG-DR-funded programs. The services also may provide support to navigate insurance requirements, State programs, application submittal, and any technology gaps.

Assistance will be provided to eligible subrecipient legal services providers to deliver recovery-related assistance, such as working through insurance claims; clearing property titles; working through heirship and probate; fighting unlawful evictions and foreclosures; combating contractor scams, disputes, and fraud; assistance with school transfers; and other legal services needed for applicants to complete their recovery.

Financial counseling services will be provided to owners of rental properties who will rent housing at affordable rates to income-qualified tenants. They will receive training on fair housing requirements and compliance requirements for participating in affordable rental programs.

Geographic Eligibility:

HUD has identified the following MID areas:

- Breathitt County
- Knott County
- Lecher County

- Perry County
- Pike County (41572)

Kentucky has decided to expand the HUD-identified MID areas in ZIP code 41572 to include the entire county of Perry.

In addition to HUD's identified MIDs, Kentucky has identified the following counties as eligible for CDBG-DR funding.

Casey County, Clay County, Cumberland County, Floyd County, Harlan County, Johnson County, Lee County, Leslie County, Lincoln County, Magoffin County, Martin County, Owsley County, Powell County, Whitley County, and Wolfe County

Program Responsible Entity or Administering Entity:

Eligible subrecipients include HUD-certified housing counseling agencies, nonprofit organizations, and community-based organizations.

These entities may apply directly to DLG for funding. However, subrecipients cannot assume the role of responsible entity; as such, DLG will remain the responsible entity for direct awards to subrecipients.

Program Maximum Assistance:

The maximum amount allocated to subrecipients will be detailed in the program guidelines and applicable Notice of Funding Availability (NOFA) and will be determined based on such factors as the subrecipient's capacity, the scope of work, the types of services provided, and/or the communities served by the organization.

Method of Distribution:

The Commonwealth will implement this program through subrecipients.

Program Application Overview:

The program policies and public funding announcements will provide information on how qualified organizations are selected as subrecipients, to include all scoring criteria, relative weighting, and minimum requirements. Subrecipients will be selected competitively through a NOFA, competitive procurement, or other process described in the program guidelines.

The program is not competitive for residents seeking housing or legal services.

Program Timeline:

This program will begin in the summer of 2024. The program will end when all funds have been expended and all eligible participants have completed closeout, or 6 years after execution of the grant agreement with HUD.

4.10.6 FEMA Non-Federal Cost Share Buyout Program

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
FEMA Non-Federal Cost Share Buyout Program	\$11,300,000	\$9,040,000	\$2,260,000

Program Description:

The CDBG-DR FEMA Non-Federal Cost Share Buyout Program is being limited to the non-Federal cost-share to leverage FEMA programs or activities in areas that are defined in the 2022 Kentucky Action Plan for Disaster Recovery to be high risk for future disasters. Homes and eligible structures will be identified through the application for FEMA Hazard Mitigation Grant Program (HMGP). The identified structures will be purchased and demolished. The program is voluntary and eligible residents will be prioritized based on funding availability and by local planning.

All properties eligible for acquisition and demolition of residential structures must be located within the Disaster Risk Reduction Area (DRRA) and are subject to repetitive damage. As such, low-income properties that are demolished are exempt from Section 104(d) of the HCDA and 24 CFR 42.375. The acquisition of real property is exclusively on a voluntary basis and the unit(s) of local government will not exercise their power of eminent domain to acquire properties or any other involuntary acquisition process.

The CDBG-DR FEMA Non-Federal Cost Share Buyout Program will improve the resiliency of impacted communities by transforming the high-risk disaster-affected areas and parcels of land into local government-owned green space, storm water management systems, or creating a natural buffer to safeguard against future disasters. Because this program seeks to create a natural green space in areas where properties are acquired, the program will not consider properties for rehabilitation/reconstruction activities.

Tie-Back and Damage Requirements:

The property owner must have sustained damage and have qualified for FEMA buyout assistance as a direct result of the 2021 and/or 2022 flooding disaster events and located within a floodplain (any land area susceptible to being inundated by floodwaters from any source), a floodway (type of floodplain where the channel is built to take the residual floodwaters), or other identified Disaster Risk Reduction Area that is intended to reduce risk from future hazards.

How the Program Will Promote Housing for Vulnerable Populations:

The program will move vulnerable populations from harms way by purchasing properties and creating green space. The program will include a Safe Housing Incentive that will

further assist vulnerable populations move into safe long-term housing outside of high-risk, disaster-affected areas.

Program Definition of Second Home/Eligibility:

Per the requirements in the Consolidated Notice, properties that served as second homes at the time of or following the disaster are not eligible for assistance for rehabilitation, reconstruction, new construction, or replacement. A “second home” is defined as a home that is not the primary residence of the owner, a tenant, or any occupant at the time of the disaster or at the time of application for CDBG-DR assistance. This prohibition does not apply to acquisitions that meet the definition of a buyout.

CDBG-DR National Objective:

Assistance provided under this program will either meet the national objectives of benefiting LMI persons or households (LMH), providing housing incentives to low to moderate income households (LMHI), benefiting low to moderate income area (LMA) benefit, or addressing an urgent need.

The program may use the Urgent Need national objective to assist eligible disaster-impacted applicants with incomes greater than 80% AMI. The national objective will be met based on applicant’s household income verified at the time of award by the jurisdiction to the beneficiary.

Program Eligible Activities:

Acquisition and clearance; safe housing incentives; HCDA Section 105(a)1, 4, 5, 9, 11, and 14; applicable waivers identified in the Allocation Announcement Notice and Consolidated Notice (87 FR 31636), other applicable waivers or alternative requirements.

Buyout is the acquisition of a property owner’s real property located in the floodplain, floodway, and/or other disaster-affected area for the specific purpose of reducing the risk of property damage from future hazards. The acquisition must immediately provide a benefit to damaged property owners located in the Disaster Risk Reduction Area (DRRA), providing them with a pre-disaster fair-market value of their damaged property.

The FEMA Non-Federal Cost Share Buyout Program is limited exclusively to those property owners who have been affected property affected by the 2021 and/or 2022 flooding disaster events in the HUD Identified MID areas and any property affected by the 2022 flooding disaster event in a State-Identified MID area . All property owners must have been approved for buyout assistance by FEMA. All funds will be disbursed by the subrecipient to all property owners and all relocation-eligible tenants.

Relocation Assistance for Owners' Tenants refers to property owners renting a unit to tenants who would be eligible for this assistance. If any property owner of a residential home or unit participates in the FEMA Non-Federal Cost Share Buyout Program and that home or unit contains tenants that will be required to be relocated, the tenants are considered to be displaced persons who are eligible for relocation benefits under the Uniform Relocation Act (URA).

A safe housing incentive is any incentive provided to encourage households to relocate to suitable housing in a lower risk area. The payment is in addition to the agreed upon purchase price of the property and will be determined on a case-by-case basis. Funds will not be provided to a homeowner to compensate them for an estimated or actual amount of loss from the declared disaster.

Ineligible Activities for the FEMA Non-Federal Cost Share Buyout Program include:

- Second homes,
- Sold homes,
- Vacant lots/land,
- Agricultural land,
- Commercial structures,
- Travel trailers/RVs, and
- Boats.

Geographic Eligibility:

All properties participating in this program must be located in a floodway or other high-risk, disaster-affected areas known as a Disaster Risk Reduction Area (DRRA).

The DRRA will be determined after consultation with FEMA and will mirror the FEMA designated buyout areas. They will be a high risk for flooding. They will be described in the program policies.

Geographic eligible areas are defined as any property affected by the 2021 and/or 2022 flooding disaster events in the HUD Identified MID areas and any property affected by the 2022 flooding disaster event in a State-Identified MID area. properties must be located in a Federally determined floodplain or floodway or DRRA.

Program Responsible Entity or Administering Entity:

The Kentucky Emergency Management (KYEM) will be the administering entity for this program. DLG will enter into a subrecipient agreement with KYEM to outline the roles and responsibilities for this program. DLG will remain the Responsible Entity for environmental compliance and oversight of the program to ensure it meets all CDBG-DR requirements.

Eligible Beneficiaries:

Eligible property owners include those who have also qualified for FEMA buyout assistance:

- Owner-Occupants – Damaged single-family structures located in a HUD-Identified MID and/or State-Identified MID.
- Owner-Occupants on Non-Owned Land
- Rental Property Owners – Damaged rental single-family or duplex units located in a HUD-Identified MID and/or State-Identified MID.

Clear Title

All property owners must transfer their interests in the property or grant the floodplain easement required by the FEMA Non-Federal Cost Share Buyout Program in order for the property to be eligible under the program.

Tenants

If the property that is purchased under the FEMA Non-Federal Cost Share Buyout Program contains a tenant(s) that will be required to be located as a result of the program, the tenants are considered displaced persons who are eligible for relocation benefits under the Uniform Relocation Act (URA). Because all acquisitions are considered to be voluntary under this program, property owners are not eligible for additional assistance under the URA and Real Property Acquisition Policies Act.

Other Program Details:

All program funded projects will be undertaken as a voluntary acquisition activity. Neither the State, nor any of its subrecipients, shall expropriate land, nor shall the state or its designee exercise its power of eminent domain, if applicable.

The FEMA HMGP program will apply a restrictive covenant on the property in perpetuity meaning that the property will be dedicated and maintained in perpetuity for a use that is compatible with open space, recreational, floodplain and wetlands management practices, or other disaster-risk reduction practices. No new structure will be erected on property acquired or accepted under the program other than those approved by KYEM.

DLG will work with KYEM to establish an open space management plan or equivalent before implementation. The plan will be fully transparent about the planned use of acquired properties post buyout, or the process by which the planned use will be determined and enforced.

Program Maximum Assistance:

All acquisition awards are limited to the pre-disaster fair market value of the property, which is determined at the time of the appraisal of the property. All awards are subject to the Robert T Stafford Act, requiring that all fund funds used for the same purpose as the CDBG-DR funds be deducted as a duplication of benefit. The maximum total CDBG-DR assistance for which an applicant is eligible for acquisition assistance is 13% of FEMA assessed Fair Market Value and any applicable relocation incentives.

How the Program Promotes Long-Term Resilience:

The program promotes long-term resilience by relocating people out of harms way and by creating an open space in high-risk, disaster-affected areas. In future flood events, structures and people will not be as affected in the buyout areas because they will not be inhabited.

Program Method of Distribution:

The program will be administered by KYEM and follow their process for awarding HMGP funding. This program will be the non-federal cost share for that program.

Program Timeline:

This program will begin after approval of this Action Plan, which is anticipated to be within the first half of 2024. The program will end when all funds have been expended and all eligible participants have completed closeout, or 6 years after execution of the grant agreement with HUD.

4.10.7 Small Business Grant Program

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
Small Business Grant Program	\$3,000,000	\$2,400,000	\$600,000

Program Description:

CDBG-DR funds can be used for CDBG-DR-eligible activities related to economic revitalization. The attraction, retention, and return of businesses and jobs to a disaster-impacted area is critical to long-term recovery. For CDBG-DR purposes, economic revitalization may include any CDBG-DR-eligible activity that demonstrably restores and improves the local economy through job creation and retention or by expanding access to goods and services.

DLG will prioritize economic revitalization funding in LMI and socially vulnerable communities that include members of protected classes, HUD-identified vulnerable populations, and historically underserved communities. Economic revitalization recipients will also be required to advertise and promote funding for Section 3 businesses and workers.

The Small Business Grant program is designed to allow for a flexible range of eligible activities to help local entities meet the economic recovery or mitigation needs of their disaster-impacted communities. Each activity must clearly have a tie to revitalizing disaster-impacted communities. This program is designed to promote sustainable long-term recovery by implementing projects that account for the unique hazards, opportunities, land use restrictions, underserved communities, and disaster impacts within Kentucky's impacted communities. Subrecipients will be required to describe the data and/or planning analysis they used in their project prioritization process, including how their projects address the following opportunities, as applicable:

- How the project supports members of protected classes, historically underserved communities, and/or vulnerable populations.
- How the project spurs economic growth and retains or creates jobs to replace those that were lost.

Program Tieback to Disaster and Unmet Needs:

This program addresses unmet recovery and mitigation economic revitalization needs in HUD-identified and grantee-identified MIDB after deducting any duplication of benefits from other federal, State, or private sources.

Program National Objective(s):

The program will meet the national objective of LMI job creation or retention (LMJ). HUD has provided a waiver allowing economic revitalization programs to identify the LMI jobs benefit by documenting, for each person employed, the name of the business, type of

job, and the annual wages or salary of the job. HUD will consider the person income-qualified if the person's annual wages or salary of the job is at or under the HUD-established income limit for a one-person family. This method replaces the standard CDBG requirement in which grantees must review the annual wages or salary of a job compared to the person's total household income and size (87 FR 31636 II.D.2.).

Program Eligible Activities:

Economic Revitalization and Development; HCDA Section 105(a)15, 17 and 19; applicable waivers identified in the Allocation Announcement Notice and Consolidated Notice; other applicable waivers or alternative requirements.

Other Program Details:

DLG will provide funding for the following activities:

- Working capital
- Purchase of equipment
- Job retention or job creation if recipient can prove the job replacement is for jobs that were lost as a result of the declared disaster.

Program Responsible Entity or Administering Entity:

City, county, and tribal governments will apply to DLG and assume the role of the responsible entity. Applications will include information about the business entity they will be assisting with funds.

Applicants must work with a certified grant administrator to assist with application development, grant administration, and activity delivery.

Eligible Beneficiaries:

Eligible applicants will provide funding to business entities that will provide jobs for LMI individuals. These LMI individuals hired or retained are the program beneficiaries. Fifty-one percent of the jobs created or retained as a result of CDBG-DR funding will be for LMI individuals.

Program Underwriting:

DLG will review all applications, focusing on the following criteria for each proposed business project:

- Reasonable project costs
- Commitment of all project sources of financing
- Substitution of CDBG-DR funds for nonfederal financial support has been avoided
- Financial feasibility of the project
- Assurance that CDBG-DR funds will be disbursed on a pro rata basis

Geographic Eligibility:

HUD has identified the following MID areas:

- Breathitt County
- Knott County
- Lecher County
- Perry County
- Pike County (41572)

Kentucky has decided to expand the HUD-identified MID areas in ZIP code 41572 to include the entire county of Pike.

In addition to HUD's identified MIDs, Kentucky has identified the following counties as eligible for CDBG-DR funding.

Casey County, Clay County, Cumberland County, Floyd County, Harlan County, Johnson County, Lee County, Leslie County, Lincoln County, Magoffin County, Martin County, Owsley County, Powell County, Whitley County, and Wolfe County

Program Maximum Assistance:

The grant assistance for the Small Business Grant program will be tiered and on a per-assisted-business basis:

- \$200,000 max assistance for operating capital for qualified businesses
- \$20,000 per LMI job retained or replaced, up to \$200,000

The Federal Register Notice waived the public benefit standard that sets the maximum per job grant limit. Each applicant must maintain documentation of the creation and retention of total jobs, number of jobs within appropriate salary ranges, and the average amount of assistance per job.

Program Method of Distribution:

There will be an open application window and review process. DLG will receive the applications and make funding decisions based on the completeness of the application, justification for funding, and feasibility of the project.

Program Application Overview:

Application approval and associated funding allocations will be made through evaluation of threshold criteria related to the grant application and subject to funding availability. DLG will assess each application based on the response to the following criteria. The project must:

- Be an eligible activity under CDBG-DR
- Meet a CDBG-DR national objective
- Be located in one of the HUD- or grantee-identified MIDs
- Demonstrate how the project will address a disaster-related impact
- State how many LMI and non-LMI jobs will be retained or created with the funding

- Be cost-reasonable
- List other leveraged funds
- If operating capital is used, show the ability of the applicant to operate and maintain the project beyond the life of the CDBG-DR grant
- Demonstrate how the project positively impacts members of protected classes, HUD-defined vulnerable populations, and/or historically underserved communities from the risks in each of the respective impacted communities
- State other benefits of the project

Program Timeline:

This program will begin in the spring of 2024. The program will end when all funds have been expended and all eligible participants have completed closeout, or 6 years after execution of the grant agreement with HUD.

4.10.8 Infrastructure

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
Public Infrastructure, Stormwater Management, Debris Removal, Broadband, Watershed Restoration, Roads, and Bridges	\$134,389,000	\$ 107,511,200	\$ 26,877,800

Program Description:

This program provides funding for infrastructure projects that will help impacted communities recover from the 2022 storm events and become more resilient to current and future natural hazards. Under this program, DLG will seek to fund recovery activities including improvements to community water and sewer systems and mitigation activities such as stormwater management systems, both engineered and nature based. DLG developed this program to not only support communities in replacing and rebuilding what was damaged or lost in the disaster event but also to implement mitigation measures. The goal of the Public Infrastructure and Stormwater Management program is to provide a resilient recovery by:

- Reducing or eliminating the long-term risk of loss of life, injury, and damage from future disaster events
- Recovering from the disaster impacts
- Protecting publicly funded recovery investments in impacted communities

DLG will prioritize projects that provide the essential public infrastructure in LMI and socially vulnerable communities, protect life and property, and address the needs of members of protected classes, HUD-identified vulnerable populations, and historically underserved communities. Public infrastructure projects will be selected through DLG's competitive application process.

DLG anticipates that the majority of the funding will be utilized to develop infrastructure on "high ground" sites and carry out these activities directly. If funding is still available, DLG will open applications to other eligible applicants.

How the Program Will Advance Long-Term Resilience:

This program is designed to promote sound, sustainable long-term recovery and projects that account for the unique hazards, opportunities, land use restrictions, underserved communities, and disaster impacts within Kentucky's impacted communities.

Applicants 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. Applicants will also be required to demonstrate how the projects will be operated and maintained beyond the life of the CDBG-DR grant, including incorporating technologies to prevent

early failures of the project.

Eligible projects may consider how to mitigate, eliminate, or reduce loss of life or property with respect to the natural hazards identified in the [Mitigation Needs Assessment](#). Applicants seeking to incorporate mitigation should evaluate whether their project:

- Mitigates the risk to public infrastructure
- Mitigates the risk to one or more of FEMA's community lifelines, including safety and security; food, water, and shelter; health and medical; energy; communications; transportation; and hazardous materials
- Incorporates nature-based solutions
- Protects and benefits disadvantaged communities
- Promotes resiliency through ancillary or triple bottom line benefits (social, environmental, and economic benefits)
- Considers climate change and future conditions
- Leverages federal, State, and local partnerships

Program Tieback to Disaster and Unmet Needs:

This program addresses unmet recovery and mitigation needs for public infrastructure in HUD-identified and grantee-identified MIDS. Disaster-related impacts also will be part of the competitive application review criteria.

Program National Objective(s):

Low to moderate income area (LMA) benefit and Urgent Need (UN) national objectives

Assistance provided under this program will meet the national objectives of benefiting LMI areas or addressing an Urgent Need.

The Urgent Need national objective will only be used when an LMI national objective cannot be achieved through the project, but the project has demonstrable recovery or mitigation benefits within the HUD- or grantee-identified MID. Each approved application will describe the urgency, type, scale, and location of the disaster-related impact that will be addressed through the project.

Program Eligible Activities:

Acquisition, construction, reconstruction, or installation of public works, facilities, and site or other improvements; HCDA Section 105(a)1, 2, 4, 9 and 14; applicable waivers identified in the Allocation Announcement Notice and Consolidated Notice (88 FR 6393); other applicable waivers or alternative requirements. Activities may include acquisition, planning, engineering, and construction. Infrastructure improvements can also include improvements intended for flood protection, drainage improvement, and hazard mitigation. Types of eligible projects include:

- Improvement or rehabilitation of existing infrastructure such as

- community water and sewer systems
- New or enhanced stormwater management practices
- Expand Broadband Access
- Repair Damaged Roads and Bridges
- Watershed Restoration
- Debris Removal

Funds cannot be used to cover the costs for maintenance and operation, purchase of construction equipment, or buildings used for general use by government entities.

Private utilities can be funded with CDBG-DR funds.

Geographic Eligibility:

HUD-identified MID areas:

- Breathitt County
- Knott County
- Letcher County
- Perry County
- Pike County (41572)

Kentucky has decided to expand the HUD-identified MID area in ZIP codes 41572 to include the entire county of Pike.

In addition to HUD's identified MIDs, Kentucky has identified the following counties as eligible for CDBG-DR funding.

Casey County, Clay County, Cumberland County, Floyd County, Harlan County, Johnson County, Lee County, Leslie County, Lincoln County, Magoffin County, Martin County, Owsley County, Powell County, Whitley County, and Wolfe County

Program Responsible Entity or Administering Entity:

State government agencies, city, county, and tribal governments will apply to DLG and assume the role of the responsible entity to implement public infrastructure projects. Eligible applicants may work with qualified organizations or partners to help implement the projects.

Applicants must work with a certified grant administrator to assist with application development, grant administration, and activity delivery.

Eligible Beneficiaries:

Beneficiaries of public infrastructure projects will be those residents located within the defined service area of the public facility. If the service area in which the infrastructure is located contains 51% or more LMI residents, then the service area can be considered to meet the LMI national objective. If the service area serves less than 51% LMI, it will be considered an Urgent Need project.

Program Maximum Assistance:

The maximum assistance available is \$10 million per project. Funding is allocated for each project based on the eligibility criteria below. 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.

Program Method of Distribution:

There will be an open application window with deadlines and a competitive review process. DLG will receive the applications and make funding decisions based on the competitiveness and completeness of the application, justification for funding, and feasibility of the project. DLG may coordinate with other State partners, such as the Kentucky Division of Water and KAMM, to provide technical assistance to communities in developing applications and assist in evaluating and scoring applications based on the criteria described in this plan.

Program Application Overview:

Application approval and associated funding allocations will be made through evaluation of threshold criteria related to the grant application and subject to funding availability.

DLG will assess each application based on the response to the following criteria: For applications to be eligible, applicants must show the project:

- Is an eligible activity under CDBG-DR
- Meets a CDBG-DR national objective
- Mitigates risk to critical public infrastructure
- Is located in the disaster impacted area

DLG will establish weighted scoring that will assess such factors as the following:

- Whether the project is located in one of the HUD- or grantee-identified MIDs
- How the project will address a disaster-related impact
- Whether the project can be implemented successfully as designed
- How effective the proposed project is in protecting the public, including members of protected classes, HUD-defined vulnerable populations, and historically underserved communities, from the risks in each of the respective impacted communities
- How the project will mitigate natural hazard risk to critical structures, facilities, and systems
- Whether the project considers future conditions
- Whether the project incorporates nature-based solutions such as grade-stabilization structures, wetland development, riparian buffers or filter strips, or Karst stormwater best management practices
- The outreach and engagement plan and efforts carried out by the applicant
- The cost-reasonableness of the project (applications must include an

- engineer's estimate or equivalent)
- Other funds leveraged
- The ability of the applicant to operate and maintain the project beyond the life of the CDBG-DR grant
- Other benefits of the project

Program Timeline:

This program will begin in the spring of 2024. The program will end when all funds have been expended and all eligible participants have completed closeout, or 6 years after execution of the grant agreement with HUD.

Broadband Infrastructure in Housing

Broadband Infrastructure in Housing Any substantial rehabilitation or new construction of a building with more than four (4) rental units 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.

Any new construction or substantial rehabilitation of a building with more than four rental units must include installation of broadband infrastructure, with the following exceptions:

- The location of the new construction or substantial rehabilitation makes installation of broadband infrastructure infeasible;
- The cost of installing broadband infrastructure would result in a fundamental alteration in the nature of a 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 state will require the review for the feasibility of implementing the requisite broadband infrastructure in the plans and specifications approval process and will perform on-site inspections during construction and post construction to ensure compliance, where applicable.

ROADS AND BRIDGES

The 2022 flooding disaster devastated roads and bridges throughout the Commonwealth of Kentucky. The Kentucky Transportation Cabinet estimate state highways in Breathitt and Perry counties have \$13-\$15 million in damages. Local, state, and federal roads and bridges were all impacted with closures. After inspecting almost 1,100 bridges across the disaster area, KYTC determined over 170 bridges were in need of repair and almost 100 of those would be full replacement or replacement of the bridge's superstructure. In the aftermath of the disaster, the Kentucky Transportation Cabinet and local governments moved quickly to provide emergency and temporary repairs to enable roads to reopen. However, over a year after the flooding began, work still remains to fully restore roads throughout the state.

Due to closures on many of the roadways, other local roads that were not rated for heavy use were more heavily used, causing additional wear and tear. These indirect impacts on local roads and privately-owned roads made recovery efforts even more difficult. The local roads are used for personal travel for Kentucky's individuals and families and for the transportation of agricultural equipment, livestock, feed, and coal trucks, making these roads critical to the state economy. These indirect impacts may not be covered by federal disaster recovery assistance, with responsibility potentially falling on the local and state governments.

4.10.9 Planning

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
Resilience Planning	\$1,500,000	\$1,200,000	\$300,000

Program Description:

The Resilience Planning program will make awards to UGLGs and contracted partner organizations to support local resilience and watershed planning. The program will build on the existing efforts of State, local, and regional hazard mitigation, watershed, and resiliency planning. Resilience is defined as a community's ability to minimize damage and recover quickly from extreme events and changing conditions, including natural hazard risks.

Depending on funding availability, types of activities could include but are not limited to:

Updating or creating watershed plans by partnering with appropriate water basin coordinators.

DLG will provide funding for city, county, and tribal governments to work with the seven watershed planning areas to update or create watershed plans. Each of the seven watershed areas have a basin coordinator whose planning efforts are supported by the Kentucky Energy and Environment Cabinet. Together, the applicant and the basin coordinators will create a strategic watershed plan that will include projects to improve the water quality and reduce flood risk within the geographic watershed. Recommended actions could be constructing natural structures like wetland development, riparian buffers/filter strips, and stream back restoration. The planning processes should follow the Watershed Planning Guidebook for Kentucky Communities. There are HUD- and grantee-identified MID counties located in all seven basin districts. Most of the counties do not have a current watershed plan.

Developing local plans that focus on mitigation and resiliency.

Kentucky's planning allocation of CDBG-DR funds may also be used to create or update local comprehensive plans that emphasis resiliency and mitigation activities as they relate to housing development, public land use, and infrastructure. Plans can involve the development of updated local codes and standards to improve resilience, including using FEMA's Building Codes Toolkit or current IBC codes. Funding may also be used to develop floodplain ordinances with higher regulatory standards or other planning efforts designed for mitigation and resiliency. Applicants can work with the Kentucky Association of Mitigation Managers (KAMM) to provide information and best practices. KAMM membership includes local, State, and federal officials; floodplain coordinators; planning and zoning officials; engineers; surveyors; GIS specialists; hydrologists; and public safety and emergency managers.

How the Program Promotes Equity in Recovery and Housing for Vulnerable Populations:

DLG will ensure to prioritize planning work focused on mitigation in LMI and socially vulnerable communities, including for members of protected classes, HUD-identified vulnerable populations, and historically underserved communities.

How the Program Will Advance Long-Term Resilience:

This program meets the definition of long-term resilience through the creation of comprehensive, local, and watershed plans that promote resilient land use, redevelopment, and long-term recovery as well as considering future risk conditions. The plans will enhance the value and integrity of the social, ecological, and economic resources in the region; improve public access and recreational opportunities; and reach underserved and socially vulnerable populations.

Program Tieback to Disaster and Unmet Needs:

This program addresses unmet recovery and mitigation needs for planning in HUD-identified and grantee-identified MIDs. How the project addresses disaster-related impacts, underserved communities, and localities with outdated or stale plans will also be part of the application review criteria.

Program National Objective(s):

Planning activities are presumed to meet a national objective under the requirements at 24 CFR 570.208(d)(4).

Program Eligible Activities:

Planning; HCDA Section 105(a)12 and 16; applicable waivers identified in the Allocation Announcement Notice and Consolidated Notice (87 FR 31636); other applicable waivers or alternative requirements.

Eligible Applicants:

Eligible applicants are UGLGs that include cities, counties, and tribal governments. Eligible applicants can work with nonprofit planning organizations.

Applicants must work with a certified grant administrator to assist with project development, application, and activity delivery. Applicants who lack the capacity to produce planning documents internally should also contract with another qualified entity to lead the planning activity.

Geographic Eligibility:

HUD-identified MID areas:

- Breathitt County
- Knott County

- Letcher County
- Perry County
- Pike County (41572)

Kentucky has decided to expand the HUD-identified MID area in ZIP codes 41572 to include the entire county of Pike.

In addition to HUD's identified MIDs, Kentucky has identified the following counties as eligible for CDBG-DR funding.

Casey County, Clay County, Cumberland County, Floyd County, Harlan County, Johnson County, Lee County, Leslie County, Lincoln County, Magoffin County, Martin County, Owsley County, Powell County, Whitley County, and Wolfe County

Program Maximum Assistance:

The assistance that eligible applicants may receive per plan is between \$25,000 and \$100,000. The amount will depend on the scope and type of plan.

Program Method of Distribution:

There will be an open application window with deadlines and a competitive review process. DLG will receive the applications and make funding decisions based on the competitiveness and completeness of the application and justification for funding. DLG may coordinate with other State partners, such as Kentucky Division of Water and KAMM, to provide technical assistance to communities in developing applications and assist with evaluating and scoring applications based on the criteria described in this plan.

Program Application Overview:

Application approval and associated funding allocations will be made through evaluation of threshold criteria related to the grant application and subject to funding availability. DLG will assess each application based on the response to the following criteria. For applications to be eligible, the project must:

- Be an eligible activity under CDBG-DR
- Have a proposed plan that will mitigate risk
- Be located in the disaster-impacted area
- DLG will establish weighted scoring that will assess such factors as the following:
- Proposed project is located in one of the HUD- or grantee-identified MIDs (priority will be given to areas in the HUD-identified MID areas)
- Proposed plan is in alignment with meeting the CDBG-DR goal of helping mitigate future disaster risks
- Degree to which the proposed plan will consider and mitigate risks to members of protected classes, HUD-defined vulnerable populations, and historically underserved communities
- Proposed plan will include a path for adopting and implementing the plan



Program Timeline:

This program will begin in the spring of 2024. The program will end when all funds have been expended and all eligible participants have completed closeout, or 6 years after execution of the grant agreement with HUD

4.10.10 Administrative

Program	Budget	HUD-Identified MID Budget	Grantee-Identified MID Budget
Administrative	\$14,899,700	\$11,919,760	\$2,979,940

Program Description:

Administration costs are necessary to support expenses related to administrative activities and include contract development, overall grant management, compliance and monitoring, and other costs specified as eligible administrative expenses in 24 CFR 570.206. Up to 5% of the overall grant and any program income may be used for administration of the grant, inclusive of administrative costs incurred by DLG.

Program Eligible Activities:

Program administrative costs, defined at 24 CFR 570.205 and 570.206, and any applicable waivers or alternative requirements are eligible.

5 Appendix

5 Appendix

5.1 Certifications

- a. The grantee certifies that it has in effect and is following a residential anti displacement and relocation assistance plan (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. The grantee certifies its compliance with restrictions on lobbying required by 24 CFR part 87, together with disclosure forms, if required by part 87.
- c. The grantee certifies that the action plan for disaster recovery is authorized under state and local law (as applicable) and that the grantee, and 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.
- d. The grantee certifies that activities to be undertaken with CDBG–DR funds are consistent with its action plan.
- e. The grantee certifies that it will comply with the acquisition and relocation requirements of the URA, as amended, and implementing regulations at 49 CFR part 24, as such requirements may be modified by waivers or alternative requirements.
- f. The grantee certifies that it will comply with section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) and implementing regulations at 24 CFR part 75.
- g. The grantee 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 a state grantee 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).
- h. State grantee certifies that it has consulted with all disaster-affected local governments (including any CDBG-entitlement grantees), Indian tribes, and any local public housing authorities in determining the use of funds, including the method of distribution of funding, or activities carried out directly by the state.
- i. The grantee certifies that it is complying with each of the following criteria:
 - (1) 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 Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 U.S.C. 5121 et seq.).

- (2) 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.
 - (3) The aggregate use of CDBG–DR funds shall principally benefit low- and moderate income families in a manner that ensures that at least 70 percent (or another percentage permitted by HUD in a waiver) of the grant amount is expended for activities that benefit such persons.
 - (4) The grantee 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- and 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 grantee certifies to the Secretary that it lacks sufficient CDBG funds (in any form) to comply with the requirements of clause (a).
- j. State and local government grantees certify that the grant will be conducted and administered in conformity with title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), the Fair Housing Act (42 U.S.C. 3601–3619), and implementing regulations, and that it will affirmatively further fair housing. An Indian tribe grantee certifies that the grant will be conducted and administered in conformity with the Indian Civil Rights Act.
- k. The grantee certifies that it has adopted and is enforcing the following policies, and, in addition, state grantees must certify that they will require local governments that receive their grant funds to certify that they have adopted and are enforcing:
- (1) A policy prohibiting the use of excessive force by law enforcement agencies within its jurisdiction against any individuals engaged in nonviolent civil rights demonstrations; and
 - (2) A policy of enforcing applicable state and local laws against physically barring entrance to or exit from a facility or location that is the subject of such nonviolent civil rights demonstrations within its jurisdiction.
- l. The grantee 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 grantee has reviewed the requirements applicable to the use of grant funds.
- m. The grantee certifies to the accuracy of its Financial Management and Grant Compliance Certification Requirements, or other recent certification submission, if

approved by HUD, and related supporting documentation as provided in section III.A.1. of the Consolidated Notice and the grantee's implementation plan and related submissions to HUD as provided in section III.A.2. of the Consolidated Notice.

- n. The grantee certifies that it will not use CDBG–DR funds for any activity in an area identified as flood prone for land use or hazard mitigation planning purposes by the state, local, or tribal government or delineated as a Special Flood Hazard Area (or 100-year floodplain) in FEMA's most current flood advisory maps, unless it also ensures that the action is designed or modified to minimize harm to or within the floodplain, in accordance with Executive Order 11988 and 24 CFR part 55. The relevant data source for this provision is the state, local, and tribal government land use regulations and hazard mitigation plans and the latest-issued FEMA data or guidance, which includes advisory data (such as Advisory Base Flood Elevations) or preliminary and final Flood Insurance Rate Maps.
- o. The grantee certifies that its activities concerning lead-based paint will comply with the requirements of 24 CFR part 35, subparts A, B, J, K, and R.
- p. The grantee certifies that it will comply with environmental requirements at 24 CFR part 58.
- q. The grantee certifies that it will comply with the provisions of title I of the HCDA and with other applicable laws.

5.2 Waivers

New housing construction waiver and alternative requirement. 42 U.S.C. 5305(a) and 24 CFR 570.207(b)(3) are waived to the extent necessary to permit new housing construction, subject to the following alternative requirement. When a CDBG-DR grantee carries out a new housing construction activity, 24 CFR 570.202 shall apply and shall be read to extend to new construction in addition to rehabilitation assistance. Private individuals and entities must remain compliant with federal accessibility requirements as well as with the applicable site selection requirements of 24 CFR 1.4(b)(3) and 8.4(b)(5).

Construction standards for new construction, reconstruction, and rehabilitation. HUD is adopting an alternative requirement to require grantees to adhere to the applicable construction standards in II.B.2.a. through II.B.2.d. when carrying out activities to construct, reconstruct, or rehabilitate residential structures with CDBG-DR funds as part of activities eligible under 42 U.S.C. 5305(a) (including activities authorized by waiver and alternative requirement). For purposes of the Consolidated Notice, the terms “substantial damage” and “substantial improvement” shall be as defined in 44 CFR 59.1 unless otherwise noted.

Green and resilient building standard for new construction and reconstruction of housing. Grantees must meet the Green and Resilient Building Standard, as defined in this subparagraph, for: (i) all new construction and reconstruction (i.e., demolishing a housing unit and rebuilding it on the same lot in substantially the same manner) of residential buildings and (ii) all rehabilitation activities of substantially damaged residential buildings, including changes to structural elements such as flooring systems, columns, or load-bearing interior or exterior walls. The Green and Resilient Building Standard requires that all construction covered by the paragraph above and assisted with CDBG-DR funds meet an industry-recognized standard that has achieved certification under (i) Enterprise Green Communities; (ii) LEED (New Construction, Homes, Midrise, Existing Buildings Operations and Maintenance, or Neighborhood Development); (iii) ICC-700 National Green Building Standard Green+ Resilience; (iv) Living Building Challenge; or (v) any other equivalent comprehensive green building program acceptable to HUD. Additionally, all such covered construction must achieve a minimum energy efficiency standard, such as (i) ENERGY STAR (Certified Homes or Multifamily High-Rise); (ii) DOE Zero Energy Ready Home; (iii) EarthCraft House, EarthCraft Multifamily; (iv) Passive House Institute Passive Building or EnerPHit certification from the Passive House Institute US (PHIUS), International Passive House Association; (v) Greenpoint Rated New Home, Greenpoint Rated Existing Home (Whole House or Whole Building label); (vi) Earth Advantage New Homes; or (vii) any other equivalent energy efficiency standard acceptable to HUD. Grantees must identify, in each project file, which of these Green and Resilient Building Standards will be used for any building subject to this paragraph. However, grantees are not required to use the same standards for each project or building.

Standards for rehabilitation of non substantially damaged residential buildings.

For rehabilitation other than the rehabilitation of substantially damaged residential buildings described in section II.B.2.a. above, grantees must follow the guidelines specified in the HUD CPD Green Building Retrofit Checklist. Grantees must apply these guidelines to the extent applicable for the rehabilitation work undertaken, for example, the use of mold resistant products when replacing surfaces such as drywall. Products and appliances replaced as part of the rehabilitation work, must be ENERGY STARlabeled, WaterSense-labeled, or Federal Energy Management Program (FEMP)-designated products or appliances.

Elevation standards for new construction, reconstruction, and rehabilitation of substantial damage, or rehabilitation resulting in substantial improvements. The following elevation standards apply to new construction, rehabilitation of substantial damage, or rehabilitation resulting in substantial improvement of residential structures located in an area delineated as a special flood hazard area or equivalent in FEMA's data sources. 24 CFR 55.2(b)(1) provides additional information on data sources, which apply to all floodplain designations. All structures, defined at 44 CFR 59.1, designed principally for residential use, and located in the one percent annual chance (or 100-year) floodplain, that receive assistance for new construction, reconstruction, rehabilitation of substantial damage, or rehabilitation that results in substantial improvement, as defined at 24 CFR 55.2(b)(10), must be elevated with the lowest floor, including the basement, at least two feet above the one percent annual chance floodplain elevation (base flood elevation). Mixed-use structures with no dwelling units and no residents below two feet above base flood elevation, must be elevated or floodproofed, in accordance with FEMA floodproofing standards at 44 CFR 60.3(c)(3)(ii) or successor standard, up to at least two feet above base flood elevation. All Critical Actions, as defined at 24 CFR 55.2(b)(3), within the 500-year (or 0.2 percent annual chance) floodplain must be elevated or floodproofed (in accordance with FEMA floodproofing standards at 44 CFR 60.3(c)(2)– (3) or successor standard) to the higher of the 500-year floodplain elevation or three feet above the 100-year floodplain elevation. If the 500-year floodplain is unavailable, and the Critical Action is in the 100-year floodplain, then the structure must be elevated or floodproofed (in accordance with FEMA floodproofing standards at 44 CFR 60.3(c)(2)–(3) or successor standard) at least three feet above the 100-year floodplain elevation. Critical Actions are defined as “any activity for which even a slight chance of flooding would be too great, because such flooding might result in loss of life, injury to persons or damage to property.” For example, Critical Actions include hospitals, nursing homes, emergency shelters, police stations, fire stations, and principal utility lines. In addition to other requirements in this section, grantees must comply with applicable state, local, and tribal codes and standards for floodplain management, including elevation, setbacks, and cumulative substantial damage requirements. Grantees using CDBG–DR funds as the nonFederal match in a FEMA-funded project may apply the alternative requirement for the elevation of structures described in section III.F.6. Structures that are elevated must meet federal accessibility standards.

Broadband infrastructure in housing. Any substantial rehabilitation, as defined by 24 CFR 5.100, reconstruction, or new construction of a building with more than four rental units must include installation of broadband infrastructure, except where the grantee documents that: (i) the location of the new construction or substantial rehabilitation makes installation of broadband infrastructure infeasible; (ii) 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 (iii) the structure of the housing to be substantially rehabilitated makes installation of broadband infrastructure infeasible.

Applicable affordability periods for new construction of affordable rental housing.

To meet the low- and moderate income housing national objective, rental housing assisted with CDBG–DR funds must be rented to low- and moderate-income (LMI) households at affordable rents, and a grantee must define “affordable rents” in its action plan. Because the waiver and alternative requirement in II.B.1. authorizes the use of grant funds for new housing construction, HUD is imposing the following alternative requirement to modify the low- and moderate-income housing national objective criteria in 24 CFR 570.208(a)(3) and 570.483(b)(3) for activities involving the new construction of affordable rental housing of five or more units. For activities that will construct five or more units, in addition to other applicable criteria in 24 CFR 570.208(a)(3) and 570.483(b)(3), in its action plan, a grantee must define the affordability standards, including “affordable rents,” the enforcement mechanisms, and applicable timeframes, that will apply to the new construction of affordable rental housing, i.e., when the activity will result in construction of five or more units, the affordability requirements described in the action plan apply to the units that will be occupied by LMI households. The minimum timeframes and other related requirements acceptable for compliance with this alternative requirement are the HOME Investment Partnerships Program (HOME) requirements at 24 CFR 92.252(e), including the table listing the affordability periods at the end of 24 CFR 92.252(e). Therefore, the grantee must adopt and implement enforceable affordability standards that comply with or exceed requirements at 24 CFR 92.252(e)(1) for the new construction of affordable rental housing in structures containing five or more units.

Affordability period for new construction of homes built for LMI households. In addition to alternative requirements in II.B.1., the following alternative requirement applies to activities to construct new single-family units for homeownership that will meet the LMI housing national objective criteria. Grantees must establish affordability restrictions on all newly constructed single-family housing (for purposes of the Consolidated Notice, single family housing is defined as four units or less), that, upon completion, will be purchased and occupied by LMI homeowners. The minimum affordability period acceptable for compliance are the HOME requirements at 24 CFR 92.254(a)(4). If a grantee applies other standards, the periods of affordability applied by a grantee must meet or exceed the applicable HOME requirements in 24 CFR 92.254(a)(4) and the table of affordability periods directly following that provision. Grantees shall establish resale or recapture requirements for housing funded pursuant to this paragraph and shall describe those requirements in the action plan or substantial

amendment in which the activity is proposed. The resale or recapture requirements must clearly describe the terms of resale or recapture and the specific circumstances under which resale or recapture will be used. Affordability restrictions must be enforceable and imposed by recorded deed restrictions, covenants, or other similar mechanisms. The affordability restrictions, including the affordability period requirements in this paragraph do not apply to housing units newly constructed or reconstructed for an owner-occupant to replace the owner-occupant's home that was damaged by the disaster.

Homeownership assistance waiver and alternative requirement. 42 U.S.C.

5305(a)(24) is waived and replaced with the following alternative requirement: "Provision of direct assistance to facilitate and expand homeownership among persons at or below 120 percent of area median income (except that such assistance shall not be considered a public service for purposes of 42 U.S.C. 5305(a)(8)) by using such assistance to— (A) subsidize interest rates and mortgage principal amounts for homebuyers with incomes at or below 120 percent of area median income; (B) finance the acquisition of housing by homebuyers with incomes at or below 120 percent of area median income that is occupied by the homebuyers; (C) acquire guarantees for mortgage financing obtained by homebuyers with incomes at or below 120 percent of area median income from private lenders, meaning that if a private lender selected by the homebuyer offers a guarantee of the mortgage financing, the grantee may purchase the guarantee to ensure repayment in case of default by the homebuyer. This subparagraph allows the purchase of mortgage insurance by the household but not the direct issuance of mortgage insurance by the grantee; (D) provide up to 100 percent of any down payment required from homebuyers with incomes at or below 120 percent of area median income; or (E) pay reasonable closing costs (normally associated with the purchase of a home) incurred by homebuyers with incomes at or below 120 percent of area median income." While homeownership assistance, as described above, may be provided to households with incomes at or below 120 percent of the area median income, HUD will only consider those funds used for households with incomes at or below 80 percent of the area median income to qualify as meeting the LMI person benefit national objective.

Limitation on emergency grant payments—interim mortgage assistance. 42 U.S.C. 5305(a)(8), 24 CFR 570.201(e), 24 CFR 570.207(b)(4), and 24 CFR 1003.207(b)(4) are modified to extend interim mortgage assistance (IMA) to qualified individuals from three months to up to twenty months. IMA must be used in conjunction with a buyout program, or the rehabilitation or reconstruction of single-family housing, during which mortgage payments may be due but the home is not habitable. A grantee using this alternative requirement must document, in its policies and procedures, how it will determine that the amount of assistance to be provided is necessary and reasonable.

Buyout activities. CDBG–DR grantees may carry out property acquisition for a variety of purposes, but buyouts are a type of acquisition for the specific purpose of reducing the risk of property damage. HUD has determined that creating a new activity and alternative requirement for buyouts is necessary for consistency with the application of other Federal resources commonly used for this type of activity. Therefore, HUD is waiving 42 U.S.C. 5305(a) and establishing an alternative requirement only to the extent

necessary to create a new eligible activity for buyouts. The term “buyouts” means the acquisition of properties located in a floodway, floodplain, or other Disaster Risk Reduction Area that is intended to reduce risk from future hazards. Grantees can designate a Disaster Risk Reduction Area, as defined below. Grantees carrying out buyout activities must establish an open space management plan or equivalent, if one has not already been established, before implementation. The plan must establish full transparency about the planned use of acquired properties postbuyout, or the process by which the planned use will be determined and enforced. Buyout activities are subject to all requirements that apply to acquisition activities generally including but not limited to, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA) (42 U.S.C. 4601, et seq.) and its implementing regulations at 49 CFR part 24, subpart B, unless waived or modified by alternative requirements. Only acquisitions that meet the definition of a “buyout” are subject to the post-acquisition land use restrictions imposed by the alternative requirement (II.B.7.a. below). The key factor in determining whether the acquisition is a buyout is whether the intent of the purchase is to reduce risk of property damage from future flooding or other hazards in a floodway, floodplain, or a Disaster Risk Reduction Area. A grantee that will buyout properties in a Disaster Risk Reduction Area must establish criteria in its policies and procedures to designate an area as a Disaster Risk Reduction Area for the buyout, pursuant to the following requirements: (1) the area has been impacted by the hazard that has been caused or exacerbated by the disaster for which the grantee received its CDBG–DR allocation; (2) the hazard identified must be a predictable environmental threat to the safety and well-being of program beneficiaries, including members of protected classes, vulnerable populations, and underserved communities, as evidenced by the best available data (e.g., FEMA Repetitive Loss Data, EPA’s Environmental Justice Screening and Mapping Tool, HHS’s climate change related guidance and data, etc.) and science (such as engineering and structural solutions propounded by FEMA, USACE, other federal agencies, etc.); and (3) the area must be clearly delineated so that HUD and the public may easily determine which properties are located within the designated area. Grantees may only redevelop an acquired property if the property is not acquired through a buyout program (i.e., the purpose of acquisition was something other than risk reduction). When acquisitions are not acquired through a buyout program, the purchase price must be consistent with 2 CFR part 200, subpart E—Cost Principles (“cost principles”) and the pre-disaster fair market value may not be used. II.B.7.a. Buyout requirements: (i) Property to be acquired or accepted must be located within a floodway, floodplain, or Disaster Risk Reduction Area. (ii) Any property acquired or accepted must be dedicated and maintained in perpetuity for a use that is compatible with open space, recreational, floodplain and wetlands management practices, or other disaster-risk reduction practices. (iii) No new structure will be erected on property acquired or accepted under the buyout program other than: (a) a public facility that is open on all sides and functionally related to a designated open space (e.g., a park, campground, or outdoor recreation area); (b) a restroom; or (c) a flood control structure, provided that: (1) the structure does not reduce valley storage, increase erosive velocities, or increase flood heights on the opposite bank, upstream, or downstream; and (2) the local floodplain

manager approves the structure, in writing, before commencement of construction of the structure. (iv) After the purchase of a buyout property with CDBG–DR funds, the owner of the buyout property (including subsequent owners) is prohibited from making any applications to any Federal entity in perpetuity for additional disaster assistance for any purpose related to the property acquired through the CDBG–DR funded buyout, unless the assistance is for an allowed use as described in paragraph (ii) above. The entity acquiring the property may lease or sell it to adjacent property owners or other parties for compatible uses that comply with buyout requirements in return for a maintenance agreement. (v) A deed restriction or covenant running with the property must require that the buyout property be dedicated and maintained for compatible uses that comply with buyout requirements in perpetuity. (vi) Grantees must choose from one of two valuation methods (pre-disaster value or post-disaster value) for a buyout program (or a single buyout activity). The grantee must apply its valuation method for all buyouts carried out under the program. If the grantee determines the post-disaster value of a property is higher than the pre-disaster value, a grantee may provide exceptions to its established valuation method on a case-by case basis. The grantee must describe the process for such exceptions and how it will analyze the circumstances to permit an exception in its buyout policies and procedures. Each grantee must adopt policies and procedures on how it will demonstrate that the amount of assistance for a buyout is necessary and reasonable. (vii) All buyout activities must be classified using the “buyout” activity type in the Disaster Recovery and Grant Reporting (DRGR) system. (viii) Any state grantee implementing a buyout program or activity must consult with local or tribal governments within the areas in which buyouts will occur.

Safe housing incentives in disaster affected communities. The limitation on eligible activities in section 42 U.S.C. 5305(a) is waived and HUD is establishing the following alternative requirement to establish safe housing incentives as an eligible activity. A safe housing incentive is any incentive provided to encourage households to relocate to suitable housing in a lower risk area or in an area promoted by the community’s comprehensive recovery plan. Displaced persons must receive any relocation assistance to which they are entitled under other legal authorities, such as the URA, section 104(d) of the HCDA, or those described in the Consolidated Notice. The grantee may offer safe housing incentives in addition to the relocation assistance that is legally required. Grantees must maintain documentation, at least at a programmatic level, describing how the grantee determined the amount of assistance for the incentive was necessary and reasonable, how the incentive meets a national objective, and that the incentives are in accordance with the grantee’s approved action plan and published program design(s). A grantee may require the safe housing incentive to be used for a particular purpose by the household receiving the assistance. However, this waiver does not permit a compensation program meaning that funds may not be provided to a beneficiary to compensate the beneficiary for an estimated or actual amount of loss from the declared disaster. Grantees are prohibited from offering housing incentives to a homeowner as an incentive to induce the homeowner to sell a second home, consistent with the prohibition and definition of second home in section II.B.12.

National objectives for buyouts and safe housing incentives. Activities that assist LMI persons and meet the criteria for the national objectives described below, including in II.B.10., will be considered to benefit LMI persons unless there is substantial evidence to the contrary and will count towards the calculation of a grantee's overall LMI benefit requirement as described in section III.F.2. The grantee shall appropriately ensure that activities that meet the criteria for any of the national objectives below do not benefit moderate-income persons to the exclusion of low-income persons. When undertaking buyout activities, to demonstrate that a buyout meets the low- and moderate-income housing (LMH) national objective, grantees must meet all requirements of the HCDA, and applicable regulatory criteria described below. 42 U.S.C. 5305(c)(3) provides that any assisted activity that involves the acquisition of property to provide housing shall be considered to benefit LMI persons only to the extent such housing will, upon completion, be occupied by such persons. In addition, 24 CFR 570.483(b)(3), 24 CFR 570.208(a)(3), and 24 CFR 1003.208(c) apply the LMH national objective to an eligible activity carried out for the purpose of providing or improving permanent residential structures that, upon completion, will be occupied by LMI households. A buyout program that merely pays homeowners to leave their existing homes does not guarantee that those homeowners will occupy a new residential structure. Therefore, acquisition-only buyout programs cannot satisfy the LMH national objective criteria. To meet a national objective that benefits a LMI person, buyout programs can be structured in one of the following ways: (1) The buyout activity combines the acquisition of properties with another direct benefit—LMI housing activity, such as down payment assistance—that results in occupancy and otherwise meets the applicable LMH national objective criteria; (2) The activity meets the low- and moderate-income area (LMA) benefit criteria and documents that the acquired properties will have a use that benefits all the residents in a particular area that is primarily residential, where at least 51 percent of the residents are LMI persons. Grantees covered by the “exception criteria” as described in section IV.C. of the Consolidated Notice may apply it to these activities. To satisfy LMA criteria, grantees must define the service area based on the end use of the buyout properties; or (3) The program meets the criteria for the low- and moderate-income limited clientele (LMC) national objective by restricting buyout program eligibility to exclusively LMI persons and benefiting LMI sellers by acquiring their properties for more than current fair market value (in accordance with the valuation requirements in section II.B.7.a.(vi)).

For LMI Safe Housing Incentive (LMHI). The following alternative requirement establishes new LMI national objective criteria that apply to safe housing incentive (LMHI) activities that benefit LMI households. HUD has determined that providing CDBG–DR grantees with an additional method to demonstrate how safe housing incentive activities benefit LMI households will ensure that grantees and HUD can account for and assess the benefit that CDBG–DR assistance for these activities has on LMI households. The LMHI national objective may be used when a grantee uses CDBG–DR funds to carry out a safe housing incentive activity that benefits one or more LMI persons. To meet the LMHI national objective, the incentive must be (a.) tied to the voluntary acquisition of housing (including buyouts) owned by a qualifying LMI household and made to induce a move outside of the affected floodplain or disaster risk

reduction area to a lower-risk area or structure; or (b.) for the purpose of providing or improving residential structures that, upon completion, will be occupied by a qualifying LMI household and will be in a lower risk area.

Alternative requirement for housing rehabilitation—assistance for second homes. HUD is instituting an alternative requirement to the rehabilitation provisions at 42 U.S.C. 5305(a)(4) as follows: properties that served as second homes at the time of the disaster, or following the disaster, are not eligible for rehabilitation assistance or safe housing incentives. This prohibition does not apply to acquisitions that meet the definition of a buyout. A second home is defined for purposes of the Consolidated Notice as a home that is not the primary residence of the owner, a tenant, or any occupant at the time of the disaster or at the time of application for CDBG–DR assistance. Grantees can verify a primary residence using a variety of documentation including, but not limited to, voter registration cards, tax returns, homestead exemptions, driver’s licenses, and rental agreements. Acquisition of second homes at post-disaster fair market value is not prohibited.

Infrastructure (Public Facilities, Public Improvements), Match, and Elevation of Nonresidential Structures HUD is adopting an alternative requirement to require grantees to adhere to the applicable construction standards and requirements in II.C.1., II.C.2. and II.C.4., which apply only to those eligible activities described in those paragraphs.

Infrastructure planning and design. All newly constructed infrastructure that is assisted with CDBG–DR funds must be designed and constructed to withstand extreme weather events and the impacts of climate change. To satisfy this requirement, the grantee must identify and implement resilience performance metrics as described in section II.A.2. For purposes of this requirement, an infrastructure activity includes any activity or group of activities (including acquisition or site or other improvements), whether carried out on public or private land, that assists the development of the physical assets that are designed to provide or support services to the general public in the following sectors: Surface transportation, including roadways, bridges, railroads, and transit; aviation; ports, including navigational channels; water resources projects; energy production and generation, including from renewable, nuclear, and hydro sources; electricity transmission; broadband; pipelines; stormwater and sewer infrastructure; drinking water infrastructure; schools, hospitals, and housing shelters; and other sectors as may be determined by the Federal Permitting Improvement Steering Council. For purposes of this requirement, an activity that falls within this definition is an infrastructure activity regardless of whether it is carried out under sections 105(a)(2), 105(a)(4), 105(a)(14), another section of the HCDA, or a waiver or alternative requirement established by HUD. Action plan requirements related to infrastructure activities are found in section III.C.1.e. of the Consolidated Notice.

Elevation of nonresidential structure. Nonresidential structures, including infrastructure, assisted with CDBG–DR funds must be elevated to the standards described in this paragraph or floodproofed, in accordance with FEMA floodproofing standards at 44 CFR 60.3(c)(3)(ii) or successor standard, up to at least two feet above the 100-year (or one percent annual chance) floodplain. All Critical Actions, as defined at

24 CFR 55.2(b)(3), within the 500-year (or 0.2 percent annual chance) floodplain must be elevated or floodproofed (in accordance with FEMA floodproofing standards at 44 CFR 60.3(c)(2)– (3) or successor standard) to the higher of the 500-year floodplain elevation or three feet above the 100-year floodplain elevation. If the 500-year floodplain or elevation is unavailable, and the Critical Action is in the 100-year floodplain, then the structure must be elevated or floodproofed at least three feet above the 100-year floodplain elevation. Activities subject to elevation requirements must comply with applicable federal accessibility mandates. In addition to the other requirements in this section, the grantee must comply with applicable state, local, and tribal codes and standards for floodplain management, including elevation, setbacks, and cumulative substantial damage requirements. Grantees using CDBG–DR funds as the non-Federal match in a FEMA-funded project may apply the alternative requirement for the elevation of structures described in section IV.D.5.

CDBG–DR funds as match. As provided by the HCDA, grant funds may be used to satisfy a match requirement, share, or contribution for any other Federal program when used to carry out an eligible CDBG–DR activity. This includes programs or activities administered by the FEMA or the U.S. Army Corps of Engineers (USACE). By law, (codified in the HCDA as a note to section 105(a)) only \$250,000 or less of CDBG–DR funds may be used for the non-Federal costshare of any project funded by USACE. Appropriations acts prohibit the use of CDBG–DR funds for any activity reimbursable by, or for which funds are also made available by FEMA or USACE. In response to a disaster, FEMA may implement, and grantees may elect to follow, alternative procedures for FEMA’s Public Assistance Program, as authorized pursuant to section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (“Stafford Act”). Like other projects, grantees may use CDBG–DR funds as a matching requirement, share, or contribution for section 428 Public Assistance Projects. For all match activities, grantees must document that CDBG–DR funds have been used for the actual costs incurred for the assisted project and for costs that are eligible, meet a national objective, and meet other applicable CDBG requirements.

Requirements for flood control structures. Grantees that use CDBG–DR funds to assist flood control structures (i.e., dams and levees) are prohibited from using CDBG–DR funds to enlarge a dam or levee beyond the original footprint of the structure that existed before the disaster event, without obtaining pre-approval from HUD and any Federal agencies that HUD determines are necessary based on their involvement or potential involvement with the levee or dam. Grantees that use CDBG–DR funds for levees and dams are required to: (1) register and maintain entries regarding such structures with the USACE National Levee Database or National Inventory of Dams; (2) ensure that the structure is admitted in the USACE PL 84–99 Program (Levee Rehabilitation and Inspection Program); (3) ensure the structure is accredited under the FEMA National Flood Insurance Program; (4) enter the exact location of the structure and the area served and protected by the structure into the DRGR system; and (5) maintain file documentation demonstrating that the grantee has conducted a risk assessment before funding the flood control structure and documentation that the investment includes risk reduction measures.

Economic Revitalization and Section 3 Requirements on Economic Opportunities

CDBG–DR funds can be used for CDBG–DR eligible activities related to economic revitalization. The attraction, retention, and return of businesses and jobs to a disaster impacted area is critical to long-term recovery. Accordingly, for CDBG–DR purposes, economic revitalization may include any CDBG–DR eligible activity that demonstrably restores and improves the local economy through job creation and retention or by expanding access to goods and services. The most common CDBG–DR eligible activities to support economic revitalization are outlined in 24 CFR 570.203 and 570.204 and sections 105(a)(14), (15), and (17) of the HCDA. Based on the U.S. Change Research Program’s Fourth National Climate Assessment, climate-related natural hazards, extreme events, and natural disasters disproportionately affect LMI individuals who belong to underserved communities because they are less able to prepare for, respond to, and recover from the impacts of extreme events and natural hazards, or are members of communities that have experienced significant disinvestment and historic discrimination. Therefore, HUD is imposing the following alternative requirement: When funding activities under section 105(a) of the HCDA that support economic revitalization, grantees must prioritize those underserved communities that have been impacted by the disaster and that were economically distressed before the disaster, as described further below in II.D.1.

The term “underserved communities” refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life. Underserved communities that were economically distressed before the disaster include, but are not limited to, those areas that were designated as a Promise Zone, Opportunity Zone, a Neighborhood Revitalization Strategy Area, a tribal area, or those areas that meet at least one of the distress criteria established for the designation of an investment area of Community Development Financial Institution at 12 CFR 1805.201(b)(3)(ii)(D). Grantees undertaking an economic revitalization activity must maintain supporting documentation to demonstrate how the grantee has prioritized underserved communities for purposes of its activities that support economic revitalization, as described below in II.D.1.

Prioritizing economic revitalization assistance—alternative requirement. When funding activities outlined in 24 CFR 570.203 and 570.204 and sections 105(a)(14), (15), and (17) of the HCDA, HUD is instituting an alternative requirement in addition to the other requirements in these provisions to require grantees to prioritize assistance to disaster-impacted businesses that serve underserved communities and spur economic opportunity for underserved communities that were economically distressed before the disaster.

National objective documentation for activities that support economic revitalization. 24 CFR 570.208(a)(4)(i)&(ii), 24 CFR 570.483(b)(4)(i)&(ii), 24 CFR 570.506(b)(5)&(6), and 24 CFR 1003.208(d) are waived to allow the grantees under the Consolidated Notice to identify the LMI jobs benefit by documenting, for each person employed, the name of the business, type of job, and the annual wages or salary of the job. HUD will consider the person income qualified if the annual wages or salary of the job is at or under the HUD-established income limit for a one-person family. This method replaces the standard CDBG requirement—in which grantees must review the annual wages or salary of a job in comparison to the person’s total household income and size

(i.e., the number of persons). Thus, this method streamlines the documentation process by allowing the collection of wage data for each position created or retained from the assisted businesses, rather than from each individual household.

Public benefit for activities that support economic revitalization. When applicable, the public benefit provisions set standards for individual economic development activities (such as a single loan to a business) and for the aggregate of all economic development activities. Economic development activities support economic revitalization. Currently, public benefit standards limit the amount of CDBG assistance per job retained or created, or the amount of CDBG assistance per LMI person to whom goods or services are provided by the activity. These dollar thresholds can impede recovery by limiting the amount of assistance the grantee may provide to a critical activity. HUD waives the public benefit standards at 42 U.S.C. 5305(e)(3), 24 CFR 570.482(f)(1), (2), (3), (4)(i), (5), and (6), and 570.209(b)(1), (2), (3)(i), (4), and 24 CFR 1003.302(c) for all economic development activities. Paragraph (g) of 24 CFR 570.482 and paragraph (c) and (d) under 570.209 are also waived to the extent these provisions are related to public benefit. However, grantees that choose to take advantage of this waiver in lieu of complying with public benefit standards under the existing regulatory requirements shall be subject to the following condition: grantees shall collect and maintain documentation in the project file on the creation and retention of total jobs; the number of jobs within appropriate salary ranges, as determined by the grantee; the average amount of assistance provided per job, by activity or program; and the types of jobs. Additionally, grantees shall report the total number of jobs created and retained and the applicable national objective in the DRGR system.

Clarifying note on Section 3 worker eligibility and documentation requirements. Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) (section 3) applies to CDBG–DR activities that are section 3 projects, as defined at 24 CFR 75.3(a)(2). The purpose of section 3 is to ensure that economic opportunities, most importantly employment, generated by certain HUD financial assistance shall be directed to low- and very low-income persons, particularly those who are recipients of government assistance for housing or residents of the community in which the Federal assistance is spent. CDBG–DR grantees are directed to HUD’s guidance published in CPD Notice 2021–09, “Section 3 of the Housing and Urban Development Act of 1968, as amended by the Housing and Community Development Act of 1992, final rule requirements for CDBG, CDBG–CV, CDBG–DR, CDBG–Mitigation (CDBG–MIT), NSP, section 108, and RHP projects,” as amended (<https://www.hud.gov/sites/dfiles/OCHCO/documents/2021-09cpdn.pdf>). All direct recipients of CDBG–DR funding must report section 3 information through the DRGR system.

Waiver and modification of the job relocation clause to permit assistance to help a business return. CDBG requirements prevent program participants from providing assistance to a business to relocate from one labor market area to another if the relocation is likely to result in a significant loss of jobs in the labor market from which the business moved. This prohibition can be a critical barrier to reestablishing and rebuilding a displaced employment base after a major disaster. Therefore, 42 U.S.C. 5305(h), 24 CFR 570.210, 24 CFR 570.482(h), and 24 CFR 1003.209, are waived to allow a grantee to provide assistance to any business that was operating in the disaster-declared labor

market area before the incident date of the applicable disaster and has since moved, in whole or in part, from the affected area to another state or to another labor market area within the same state to continue business.

Underwriting. Notwithstanding section 105(e)(1) of the HCDA, no CDBG–DR funds may be provided to a for-profit entity for an economic development project under section 105(a)(17) of the HCDA unless such project has been evaluated and selected in accordance with guidelines developed by HUD pursuant to section 105(e)(2) of the HCDA for evaluating and selecting economic development projects. Grantees and their subrecipients are required to comply with the underwriting guidelines in Appendix A to 24 CFR part 570 if they are using grant funds to provide assistance to a for-profit entity for an economic development project under section 105(a)(17) of the HCDA. The underwriting guidelines are found at Appendix A of 24 CFR part 570.

HUD is waiving the requirements at 24 CFR 570.483(b)(5) and (c)(3), which limit the circumstances under which the planning activity can meet an LMI or slum-and-bligh national objective. Instead, as an alternative requirement, 24 CFR 570.208(d)(4) applies to states when funding disaster recovery-assisted, planning-only grants, or when directly administering planning activities that guide disaster recovery. In addition, 42 U.S.C. 5305(a)(12) is waived to the extent necessary so the types of planning activities that states may fund or undertake are expanded to be consistent with those of CDBG entitlement grantees identified at 24 CFR 570.205.

Waiver of Section 414 of the Stafford Act. Section 414 of the Stafford Act (42 U.S.C. 5181) provides that, “Notwithstanding any other provision of law, no person otherwise eligible for any kind of replacement housing payment under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Pub. L. 91–646) [42 U.S.C. 4601 et seq.] [“URA”] shall be denied such eligibility as a result of his being unable, because of a major disaster as determined by the President, to meet the occupancy requirements set by [the URA].” Accordingly, homeowner occupants and tenants displaced from their homes as a result of the identified disasters and who would have otherwise been displaced as a direct result of any acquisition, rehabilitation, or demolition of real property for a federally funded program or project may become eligible for a replacement housing payment notwithstanding their inability to meet occupancy requirements prescribed in the URA. Section 414 of the Stafford Act and its implementing regulation at 49 CFR 24.403(d)(1) are waived to the extent that they would apply to real property acquisition, rehabilitation, or demolition of real property for a CDBG-DR-funded project commencing more than 1 year after the date of the latest applicable presidentially declared disaster undertaken by the grantees, or subrecipients, provided that the project was not planned, approved, or otherwise underway before the disaster. For purposes of this waiver, a CDBG-DR funded project shall be determined to have commenced on the earliest of: (1) the date of an approved Request for Release of Funds and certification; (2) the date of completion of the site-specific review when a program utilizes tiering; or (3) the date of sign-off by the approving official when a project converts to exempt under 24 CFR 58.34(a)(12). The waiver will simplify the administration of the disaster recovery process and reduce the administrative burden

associated with the implementation of Stafford Act Section 414 requirements for projects commencing more than 1 year after the date of the presidentially declared disaster, considering most of such persons displaced by the disaster will have returned to their dwellings or found another place of permanent residence. This waiver does not apply with respect to persons who meet the occupancy requirements to receive a replacement housing payment under the URA nor does it apply to persons displaced or relocated temporarily by other HUD-funded programs or projects. Such persons' eligibility for relocation assistance and payments under the URA is not impacted by this waiver.

5.3 Summary and Response of Public Comments

Public comments and responses will be summarized after the public comment period, prior to final Action Plan submission.

5.4 Data Sources/Methodologies

U.S. Department of Housing and Urban Development (HUD)

Federal Emergency Management Agency (FEMA)

U.S. Small Business Administration (SBA)

U.S. Department of Agriculture (USDA)

AG Web. "Kentucky Farmers Endure Epic Ruin And Worst Storm Damage In State History As Agriculture Rushes To Rebuild."

<https://www.agweb.com/news/business/taxes-and-finance/kentucky-farmers-endure-epic-ruin-and-worst-storm-damage-state>

Barren River Area Development District. "Barren River Area Development District Hazard Mitigation Plan," 2016. <https://www.bradd.org/index.php/bradd-hazard-mitigation-plan/category/1-hazard-mitigation?download=477:hazard-mitigation-plan>.

Big Sandy Area Development District. "Big Sandy ADD Multi-Jurisdictional Hazard Mitigation Plan," 2016. <https://img1.wsimg.com/blobby/go/d1a68165-9a0b-4cc8-bcbc-1e7a38f4397b/downloads/2016%20Big%20Sandy%20ADD%20Hazard%20Mitigation%20Plan%20Upda.pdf?ver=1656609514248>.

Bluegrass Area Development District. "Bluegrass Area Development District Regional Hazard Mitigation Plan," 2022. <https://drive.google.com/drive/folders/1yGlalQeFhQB7B-i782L6wZ9v6vhgclg>

Cumberland Valley Area Development District. "Cumberland Valley Area Development District Regional Hazard Mitigation Plan," 2021. <https://app.box.com/s/po3fmckmz28vg570wgbs0es2t44ekb9w>.

Environmental Protection Agency. 2016. "What Climate Change Means for Kentucky." <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-ky.pdf>

Executive Office of the President, Office of Management and Budget. 2021. Memorandum for the heads of Departments and Agencies. <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>

FEMA. 2020. "Flood Zones | FEMA.Gov." <https://www.fema.gov/glossary/flood-zones>

Fivco Area Development District. "Fivco ADD Multi-Jurisdictional Hazard Mitigation Plan," 2016. <https://www.dropbox.com/s/qloog6f6mp5z0mg/2016-FIVCO-Regional-Hazard-Mitigation-Plan.pdf?dl=0>.

Fox Weather. 2021. "Tornado damage to Kentucky agriculture will impact farms outside parth of destruction." <https://www.foxweather.com/weather-news/tornado-damage-to-kentucky-farms-agriculture-livestock>

Gateway Area Development District. "Gateway Area Development District Hazard Mitigation Plan," 2019. http://gwadd.org/wp-content/uploads/2019/04/GatewayAreaDevelopmentDistrictHazardMitigationPlanUpdate_Final.pdf.

Green River Area Development District. "Green River Area Development District Hazard Mitigation Plan," 2021. https://gradd.com/wp-content/uploads/dlm_uploads/2021/09/GRADD-Hazard-Mitigation-Plan-Revised_07062021-1.pdf.

HUD. Tribal Directory Assessment Tool (TDAT). <https://egis.hud.gov/TDAT/>

Illinois Association for Floodplain and Stormwater Management. 2006. "Natural Aspects of Flooding" <https://www.illinoisfloods.org/content/documents/desk-reference/1%20Natural%20Aspects%20of%20Flooding.pdf>

IRS. Opportunity Zones. <https://www.irs.gov/credits-deductions/businesses/opportunity-zones>

Jackson Purchase Area Development District. "Jackson Purchase Region Natural Hazard Mitigation Plan," 2018. <https://www.purchaseadd.org/download/jackson-purchase-region-natural-hazard-mitigation-plan/>.

Kentucky Housing Corporation, Department for Local Government. 2020. "Analysis of Impediment to Fair Housing Choice." https://www.kyhousing.org/Planning-Documents/Documents/Kentucky%20Statewide%20AI_04.29.20_FINAL.pdf

Kentucky Division of Emergency Management. "2018 Kentucky Hazard Mitigation Plan," 2018. <https://kyem.ky.gov/recovery/Pages/2018-Kentucky-Hazard-Mitigation-Plan-.aspx>.

Kentucky River Area Development District. "Kentucky River Area Development District Regional Hazard Mitigation Plan," 2017. <https://www.kradd.org/wp-content/uploads/KRADD%20HMP%202017.pdf>.

Kentucky Housing Corporation. Kentucky Consolidated Plan 2020–2024. <https://www.kyhousing.org/Planning-Documents/Documents/Updated%202020%20Consolidated%20Plan%20Needs%20Assessment.pdf>

KYStats. 2023. "Civilian Labor Force Report." https://kystats.ky.gov/Reports/Tableau/CLFR_2019

Lake Cumberland Area Development District. "Lake Cumberland Area Development District Regional Multi-Hazard Mitigation Plan," 2016. https://www.lcadd.com/images/WEB_FINAL_2016_HAZARD_MITIGATION_PLAN.pdf.

Lexington Herald Leader. 2022 "Heavy rain knocks out power to more than 23,500 Eastern KY customers". <https://www.kentucky.com/news/state/kentucky/article263913706.html>

Lincoln Trail Area Development District. "Lincoln Trail Region Hazard Mitigation Plan," 2015. <https://ltadd.org/wp-content/uploads/2020/05/Lincoln-Trail-Region-HMP-2015.pdf>.

NASA Global Climate Change. 2013. "Severe Thunderstorms and Climate Change." [Severe thunderstorms and climate change – Climate Change: Vital Signs of the Planet \(nasa.gov\)](https://climate.nasa.gov/evidence/#thunderstorms)

National Centers for Environmental Information. "Storm Events Database." Accessed July 11, 2022. <https://www.ncdc.noaa.gov/stormevents/listevents.jsp?sort=CD&statefips=21%2CKENTUCKY&county=BREATHITT%3A25&county=GRAVES%3A83&county=HOPKINS%3A107&county=WARREN%3A227&eventType=%28Z%29+Drought&beginDate yyyy=2000&beginDate mm=01&beginDate dd=01&endDate yyyy=2022&endDate mm=03&endDate dd=31>.

National Geographic Society. "Tornadoes and Climate Change." <https://education.nationalgeographic.org/resource/tornadoes-and-climate-change/>

National Park Service. "Karst Landscapes – Caves and Karst." Accessed July 11, 2022. <https://www.nps.gov/subjects/caves/karst-landscapes.htm>.

NOAA: National Centers for Environmental Information. "Storm Events Database." <https://www.ncdc.noaa.gov/stormevents/>

NOAA: National Severe Storm Laboratory. "Severe Weather 101 – Thunderstorms." <https://www.nssl.noaa.gov/education/svrwx101/thunderstorms/>

NOAA. "NOAA's National Weather Service - Glossary." Accessed May 6, 2022. <https://forecast.weather.gov/glossary.php?word=urban%20flooding>.

NOAA. "What Is the Heat Index?" Accessed July 11, 2022. <https://www.weather.gov/ama/heatindex>.

NOAA: National Weather Service. "Wind Chill Chart." <https://www.weather.gov/safety/cold-wind-chill-chart>

NOAA and National Integrated Drought Information System. "Historical Data and Conditions." *Drought.Gov*. Accessed July 11, 2022. <https://www.drought.gov/historical-information>.

Pennyriple Area Development District. "Pennyriple Regional Hazard Mitigation Plan," 2016. <https://www.dropbox.com/s/2fgg1e1iru6kx7w/2016%20Pennyriple%20Hazard%20Mitigation%20Plan2.pdf?dl=0>.

Population and land use in Kentucky karst regions: University of Kentucky Departments of Earth and Environmental Sciences and Geography, Kentucky Geological Survey. 2015. "Karst." <https://www.uky.edu/KGS/karst/>

Risk Factor of Louisville. 2022. "Does Louisville have Flood Risk?" <https://riskfactor.com/city/louisville/2148000 fsid/flood>

Runkle, Jennifer, Kenneth Kunkel, Sarah Champion, Rebekah Frankson, and Brooke Stewart. "Kentucky – State Climate Summaries 2022." Silver Spring, MD: NOAA/NESDIS, 2022. <https://statesummaries.ncics.org/chapter/ky/>.

Stantec Consulting Services, Division of Emergency Management, and Lexington Fayette County Government. "Lexington Fayette County Hazard Mitigation Plan," 2018. https://bereadylexington.com/wp-content/uploads/2019/04/LFUCG_HMP_Draft_4-1-19_V2_Condensed.pdf.

Surgo Ventures. 2021. *U.S. County-Level Rental Arrears Estimates – Kentucky*. https://precisionforcovid.org/rental_arrears

The Illinois Association for Floodplain and Stormwater Management. 2006. "Natural Aspects of Flooding." <https://www.illinoisfloods.org/content/documents/desk-reference/1%20Natural%20Aspects%20of%20Flooding.pdf>

Union of Concerned Scientists. 2018. "Heat Waves and Climate Change: What the Science Tells Us about Extreme Heat Events." <https://www.ucsusa.org/resources/heat-waves-and-climate-change>

United States Geological Survey. 2004. "Landslide Types and Processes." <https://pubs.usgs.gov/fs/2004/3072/pdf/fs2004-3072.pdf>

University of Kentucky Center for Business and Economic Research. 2021. *Impact of the Coronavirus Pandemic on Housing*. https://cber.uky.edu/sites/cber/files/publications/COVID%20Housing_Final.pdf

U.S. Census Bureau. 2022. *QuickFacts, Kentucky*. <https://www.census.gov/quickfacts/fact/table/KY,US/PST045221>

Waltham T., Bell, F., and Culshaw, M. 2005. "Sinkholes and subsidence: Karst and cavernous rocks in engineering and construction." https://www.researchgate.net/publication/285472898_Sinkholes_and_Subsidence_Karst_and_Cavernous_Rocks_in_Engineering_and_Construction

WKMS. 2022. "Kentucky state parks still figuring out next steps for tornado survivors." <https://www.wkms.org/housing/2022-02-17/kentucky-state-parks-still-figuring-out-next-steps-for-tornado-survivors>

5.5 Important Definitions and Terms

ADD: Area Development District
AFFH: Affirmatively furthering fair housing
ALICE: Asset Limited, Income Constrained, Employed
AMI: Area Median Income
BGADD: Bluegrass Area Development District
BRADD: Barren River Area Development District
BSADD: Big Sandy Area Development District
CBDO: Community-Based Development Organization
CDBG: Community Development Block Grant
CDBG-DR: Community Development Block Grant – Disaster Recovery
CDC: Centers for Disease Control and Prevention
CFR: Code of Federal Regulations
CO: Certifying Officer
CP: Participation
CVADD: Cumberland Valley Area Development District
DLG: Kentucky Department for Local Government
DOB: Duplication of Benefits
DRGR: Disaster Recovery and Grant Reporting System
DRRA: Disaster Risk Reduction Area
D-SNAP: Disaster Supplemental Nutrition Assistance Program
EEC: Kentucky Energy and Environment Cabinet
EJ: Environmental Justice
FEMA: Federal Emergency Management Agency
FIVCO: Fivco Area Development District
GRADD: Green River Area Development District
HCDA Act: Housing and Community Development Act of 1974, as amended
HMGP: Hazard Mitigation Grant Program
HUD: U.S. Department of Housing and Urban Development
IA: (FEMA) Individual Assistance
JPADD: Jackson Purchase Area Development District
KAMM: Kentucky Association of Mitigation Managers
KHC: Kentucky Housing Corporation
KRADD: Kentucky River Area Development District
KYEM: Kentucky Emergency Management

KYTC: Kentucky Transportation Cabinet
LCADD: Lake Cumberland Area Development District
LIHTC: Low-Income Housing Tax Credit
LMA: Low to moderate income area
LMH: LMI persons or households
LMHI: Low to moderate income households
LIHTC: Low-Income Housing Tax Credit
LMI: Low- to moderate-income
LTADD: Lincoln Trail Area Development District
MID: Most Impacted and Distressed areas
NFIP: National Flood Insurance Program
NOFA: Notice of Funding Availability
PA: (FEMA) Public Assistance
PADD: Pennyrile Area Development District
PHA: Public Housing Authorities
RE: Responsible Entity
RFP: Request for Proposals
SBA: U.S. Small Business Administration
SFHA: Special Flood Hazard Area
UGLG: Unit of general local government
USGS: U.S. Geological Survey
UN: Urgent Need
URA: Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended
USACE: U.S. Army Corps of Engineers

