

Harlan County, KY

Risk-assessment baseline packet

Unit **County area 21095** Release **2026-10** As of **2026-09-28** Storm Events data through **2026-06-30**

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A starting point for the plan's risk assessment (FEMA Local Mitigation Plan Review Tool, Element B). It does not replace local data or FEMA review. Section headings say which FEMA review item each table supports; whether an item is satisfied is decided by the plan and its reviewers.

OPENFEMA DISCLAIMER

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Plan clock

Status	Approved, expires 2027-08-16	Plan	Cumberland Valley ADD Regional (FEMA plan 107913)
Approved	2022-08-17	Expires	2027-08-16
As of	2026-09-28	Days	322 days to expiry
Update underway	none in FEMA's plan tracker		

What changed since your last plan (approved 2022-08-17)

New federal declarations	DR-4711-KY, DR-4804-KY, DR-4848-KY, EM-3624-KY, DR-4860-KY, EM-3626-KY, EM-3633-KY (7 declaration rows; 6 counted incidents)	Storm Events records since approval	38 (data through 2026-06-30)
Repetitive loss now	FMA RL 1, SRL 2 (44 CFR 77.2); any definition: 20	Repeat-flood change	First release: no prior release to compare.

SOURCES: FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API); FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API); NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>; FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

Plan status for every jurisdiction listed in this county

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Harlan County (unincorporated area)	Unincorporated	Approved, expires 2027-08-16	Cumberland Valley ADD Regional (FEMA plan 107913)	2022-08-17	2027-08-16	322		member approved 2022-10-20
Benham city	City	Approved, expires 2027-08-16	Cumberland Valley ADD Regional (FEMA plan 107913)	2022-08-17	2027-08-16	322		member approved 2022-12-16
Cumberland city	City	Approved, expires 2027-08-16	Cumberland Valley ADD Regional (FEMA plan 107913)	2022-08-17	2027-08-16	322		member approved 2022-10-20
Evarts city	City	Approved, expires 2027-08-16	Cumberland Valley ADD Regional (FEMA plan 107913)	2022-08-17	2027-08-16	322		member approved 2022-12-16

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Harlan city	City	Approved, expires 2027-08-16	Cumberland Valley ADD Regional (FEMA plan 107913)	2022-08-17	2027-08-16	322		member approved 2022-12-16
Loyall city	City	Approved, expires 2027-08-16	Cumberland Valley ADD Regional (FEMA plan 107913)	2022-08-17	2027-08-16	322		member approved 2023-03-01
Lynch city	City	Approved, expires 2027-08-16	Cumberland Valley ADD Regional (FEMA plan 107913)	2022-08-17	2027-08-16	322		member approved 2022-12-16

Plan 107913 also covers 18 other participants not listed on this page (named in the XLSX file).

SOURCE: FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

State plan status and tribal plans in this state: see the state page.

CONTENTS

1. Plan clock, page 1	7. Supports B1-e: probability, page 13
2. What changed since your last plan (approved 2022-08-17), page 1	8. Supports B1-f: variation across the planning area, page 17
3. Supports B1-a: hazards, page 3	9. Supports B2-a and B2-b: assets and impacts, page 18
4. Supports B1-b: location, page 5	10. Supports B2-a: context, page 20
5. Supports B1-c: extent, page 5	11. Supports B2-c: repetitive loss, page 21
6. Supports B1-d: previous occurrences, page 8	12. Sources and OpenFEMA disclaimer, page 22

Supports B1-a: hazards

Hazards NRI does not cover: check locally

- dam failure (incl. upstream dams)
 - levee failure
 - flash flood as its own subtype
 - ice jams
- debris flows
 - erosion (riverine and coastal)
 - land subsidence and sinkholes
 - expansive soils

The 18 National Risk Index hazards, ranked by expected annual loss (EAL)

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records since 1996 <i>count</i>	Evidence for an omission <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
1	Inland Flooding	Relatively Moderate	Relatively Low	\$13,339,260	\$507	\$341,058	\$13,680,825	57		
2	Cold Wave	Relatively Low	Relatively Moderate	\$716	\$218	\$1,224,964	\$1,225,898	14		Includes 13 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
3	Strong Wind	Relatively High	Relatively Moderate	\$83,235	\$2,036	\$1,140,460	\$1,225,731	167		Includes 10 High Wind records and 9 Strong Wind records, event types the NRI definition of this hazard leaves out.
4	Tornado	Relatively Low	Relatively Low	\$163,429	\$5	\$424,909	\$588,343	2		
5	Earthquake	Very Low	Very Low	\$208,061		\$61,128	\$269,189			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
6	Hail	Relatively Low	Relatively Low	\$148,178	\$202	\$20,252	\$168,632	63		
7	Heat Wave	Relatively Low	Very Low	\$7	under \$1	\$159,404	\$159,411	2		
8	Wildfire	Relatively Low	Relatively Low	\$87,295	\$4	\$33,947	\$121,247	1		
9	Winter Weather	Relatively Moderate	Relatively Moderate	\$4,284	under \$1	\$104,218	\$108,502	120		

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records since 1996 <i>count</i>	Evidence for an omission <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
10	Landslide	Relatively Moderate	Relatively Low	\$3,725		\$37,888	\$41,613	2		
11	Lightning	Very Low	Very Low	\$4,880		\$34,684	\$39,564	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
12	Hurricane	Very Low	Very Low	\$25,480	\$37	\$688	\$26,205	0		Declared 1 time; no Storm Events record of this type.
13	Ice Storm	Very Low	Very Low	\$13,693		\$2,370	\$16,063	4		
14	Avalanche	Relatively Low	Very Low	under \$1		\$11,284	\$11,285	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Drought	No Rating	No Expected Annual Losses		\$0		\$0	3		
	Coastal Flooding	Not Applicable	Not Applicable					0	NRI rates coastal flooding Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Tsunami	Not Applicable	Not Applicable					0	NRI rates tsunami Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	Volcanic Activity	Not Applicable	Not Applicable					0	NRI rates volcanic activity Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.

Total = buildings + agriculture + population equivalence; FEMA values each expected death (or 10 injuries) at \$13.7 million (2024 dollars).

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Check your state hazard mitigation plan's hazard list for this county; explain any hazard you drop.

Supports B1-b: location

Where each hazard occurs

Hazard	Location	Census tracts rated <i>rated of all tracts</i>
Avalanche	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	11 of 11
Coastal Flooding	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 11
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 11
Earthquake	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	11 of 11
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
Hurricane	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	11 of 11
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
Inland Flooding	The FEMA Flood Insurance Rate Map (FIRM) is the required location source for flooding. See the FEMA Flood Map Service Center (https://msc.fema.gov) for this county.	11 of 11
Landslide	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	11 of 11
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
Tornado	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	11 of 11
Tsunami	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 11
Volcanic Activity	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 11
Wildfire	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	11 of 11
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11

SOURCE
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Supports B1-c: extent

Extent: scale, observed range and worst recorded event per hazard

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Avalanche	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Coastal Flood, Storm Surge/ Tide	none in data (FIRM for depth)	0					Flood depth: see the FEMA Flood Insurance Rate Map.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	1, 2015 to 2015 (1 zone-level)	2 days; 1 with a recorded value	2 consecutive days, 2015-02-19 to 2015-02-20, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Wind chill: in event narratives only; local data required.
Frost/Freeze (outside NRI Cold Wave definition)	crop damage	13, 2007 to 2020 (13 zone-level)		No crop damage reported in 13 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Temperature: in event narratives only; local data required.
Drought	US Drought Monitor D-scale	3, 2016 to 2019 (3 zone-level)	29 days to 36 days (median 32.5 days); 2 with a recorded value	36 days (about 1.2 months), 2016-11-08 to 2016-12-13, a run of 2 consecutive Storm Events drought records, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					No Storm Events record; local data required (e.g., USGS).
Hail	hail size (inches)	65, 1968 to 2025	0.75 in to 5 in (median 1 in); 65 with a recorded value	5 in hail, 1968-04-23	Hail, 2002-05-01, \$30,000 property; \$0 crops (2002 dollars)	Event records naming member places: Harlan city (15 records), Evarts city (4 records), Cumberland city (2 records).	
Excessive Heat, Heat	heat index (narratives)	2, 2010 to 2010 (2 zone-level)	1 day; 2 with a recorded value	1 consecutive day, 2010-08-12, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Heat index: in event narratives only; local data required.
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					Storm Events files every zone of a storm's episode under the storm's event type and category, so a Hurricane (Typhoon) record, especially an inland or remnant one, does not by itself mean hurricane-force winds here; read the damage and wind columns.
Ice Storm	Sperry-Piltz (local data)	4, 2004 to 2021 (4 zone-level)		No damage reported in 4 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Ice thickness: in event narratives only; local data required.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Flash Flood, Flood, Lakeshore Flood	damage and flood days (FIRM for depth)	57, 1996 to 2022 (5 zone-level)		Flood, 2020-02-06, \$5,000,000 property; \$0 crops (2020 dollars)		Event records naming member places: Cumberland city (3 records), Evarts city (3 records), Harlan city (3 records), Lynch city (2 records), Benham city (1 record). Zone-level records (5) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage can be \$0 or blank even for a major flood, so the worst record here may not be the worst flood; compare FEMA Public Assistance by declaration in B1-d.
Debris Flow	none (count and damage)	2, 2001 to 2003 (1 zone-level)		No damage reported in 2 records.		Event records naming member places: Harlan city (1 record). Zone-level records (1) apply countywide.	Physical measure: in event narratives only; local data required.
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	0					Storm Events lists lightning with damage or casualties; physical measure in event narratives only; local data required.
High Wind and Strong Wind (outside NRI Strong Wind definition)	wind speed (kt and mph)	19, 2003 to 2024 (19 zone-level)	36 kt (41 mph) to 80 kt (92 mph) (median 50 kt (58 mph)); 19 with a recorded value	80 kt (92 mph) estimated gust, High Wind, 2006-10-17; NWS zone KYZ088 (HARLAN), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	
Thunderstorm Wind	wind speed (kt and mph)	165, 1969 to 2025	37 kt (43 mph) to 78 kt (90 mph) (median 51 kt (59 mph)); 133 with a recorded value	78 kt (90 mph) estimated gust, Thunderstorm Wind, 2014-04-28, 3 direct injuries	Thunderstorm Wind, 2011-04-09, \$50,000 property; crops not reported (2011 dollars)	Event records naming member places: Harlan city (23 records), Evarts city (18 records), Cumberland city (7 records), Lynch city (5 records), Loyall city (2 records), Benham city (1 record).	

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Tornado	Enhanced Fujita (F before Feb 2007)	2, 2007 to 2007	F/EF0; 2 with a recorded value	EF0 tornado, 2007-04-03, 1.18 mi within this county, 50 yd wide, \$700,000 property; \$0 crops (2007 dollars)		No event record names a member place.	From 1996 on, tornado records are per-county segments and length is the path length within this county (NWS Instruction 10-1605); records before 1996 may give the whole path length, including the path outside this county, and before 1996 a tornado is listed once, under the county where it began, with the whole path's rating; counties farther along the path may not list it. Length is not used to rank tornadoes.
Tsunami	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					Physical measure: in event narratives only; local data required.
Wildfire	acres burned (local data)	1, 2016 to 2016 (1 zone-level)		No damage reported in 1 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Acres burned: in event narratives only; local data required.
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall local)	120, 1996 to 2026 (120 zone-level)		Heavy Snow, 1998-01-27, \$20,000 property; \$0 crops, reported for the zone (1998 dollars); NWS zone KYZ088 (HARLAN), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Snow depth: in event narratives only; local data required.

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records are placed with NWS zone-county files, which exist from 2020 on; an earlier record is placed by its zone number in the nearest later file only when its zone name matches that file, records from zones NWS renumbered are placed by name or left out, and a record whose zone is in no known file is left out of every count, so counts before 2020 can be low. Some current zones are also missing from the NWS files, so recent counts can be low too.

Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

SOURCES

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>

Supports B1-d: previous occurrences

Declaration rows

33

Counted incidents

29

Federal disaster declarations for this county

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance		Flags	Notes
						federal share obligated, nominal dollars			
2026-01-24	2026-01-23	EM-3633-KY	Emergency	SEVERE WINTER STORM	Winter Weather	none found	new since last plan; within last 5 years		
2025-04-03	2025-04-02	EM-3626-KY	Emergency	SEVERE STORMS, STRAIGHT-LINE WINDS, TORNADOES, AND FLOODING	Inland Flooding; Strong Wind; Tornado	none found	new since last plan; within last 5 years		
2025-02-24	2025-02-14	DR-4860-KY	Major disaster	SEVERE STORMS, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide; Strong Wind	\$827,455.62	new since last plan; within last 5 years		
2025-02-16	2025-02-14	EM-3624-KY	Emergency	SEVERE STORMS, STRAIGHT-LINE WINDS, FLOODING, AND LANDSLIDES	Inland Flooding; Landslide; Strong Wind	none found	new since last plan; within last 5 years		same incident as DR-4860
2024-11-26	2024-09-27	DR-4848-KY	Major disaster	REMNANTS OF HURRICANE HELENE	Hurricane (primary); also designated: Inland Flooding, Landslide, Strong Wind	none found	new since last plan; within last 5 years		
2024-07-23	2024-05-21	DR-4804-KY	Major disaster	SEVERE STORMS, STRAIGHT-LINE WINDS, TORNADOES, LANDSLIDES, AND MUDSLIDES	Landslide; Strong Wind; Tornado	none found	new since last plan; within last 5 years		
2023-05-09	2023-02-15	DR-4711-KY	Major disaster	SEVERE STORMS, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide, Strong Wind	\$1,422,912.08	new since last plan; within last 5 years		
2022-07-29	2022-07-26	DR-4663-KY	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide	\$965,222.20	during plan review, check whether your last plan included it; within last 5 years		
2021-04-23	2021-02-27	DR-4595-KY	Major disaster	SEVERE, STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide	\$621,677.31			
2021-03-31	2021-02-08	DR-4592-KY	Major disaster	SEVERE WINTER STORMS, LANDSLIDES, AND MUDSLIDES	Ice Storm	\$75,405.10			
2020-04-24	2020-02-03	DR-4540-KY	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide	\$1,836,654.02			
2020-03-28	2020-01-20	DR-4497-KY	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	none found			
2020-03-13	2020-01-20	EM-3469-KY	Emergency	COVID-19	Non-natural, not counted	none found			same incident as DR-4497
2019-04-17	2019-02-06	DR-4428-KY	Major disaster	SEVERE STORMS, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide; Strong Wind	\$3,383,969.70			
2018-04-12	2018-02-09	DR-4358-KY	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide	\$805,329.31			
2016-11-20	2016-11-18	FM-5166-KY	Fire management	SOUTHEASTERN KENTUCKY FIRE COMPLEX	Wildfire	none found			
2015-05-12	2015-03-03	DR-4218-KY	Major disaster	SEVERE WINTER STORM, SNOWSTORM, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide, Winter Weather	none found			

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance		Flags	Notes
						federal share obligated, nominal dollars			
2015-04-30	2015-02-15	DR-4216-KY	Major disaster	SEVERE WINTER STORMS, SNOWSTORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Winter Weather (primary); also designated: Inland Flooding, Landslide		\$120,175.29		
2011-05-04	2011-04-12	DR-1976-KY	Major disaster	SEVERE STORMS, TORNADOES, AND FLOODING	Inland Flooding; Tornado		none found		
2005-09-10	2005-08-29	EM-3231-KY	Emergency	HURRICANE KATRINA	Hurricane: evacuation support, not a local hazard event; not counted		none found		
2004-06-10	2004-05-26	DR-1523-KY	Major disaster	SEVERE STORMS, TORNADOES, FLOODING, AND MUDSLIDES	Inland Flooding; Landslide; Tornado		\$159,535.99		
2003-07-02	2003-06-14	DR-1475-KY	Major disaster	SEVERE STORMS, FLOODING, MUD AND ROCK SLIDES, AND TORNADOES	Inland Flooding; Tornado	PA not declared for this county			
2002-04-04	2002-03-17	DR-1407-KY	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding		\$1,886,297.49		
2001-11-02	2001-11-02	FM-2385-KY	Fire management	KY - SOUTHEASTERN FIRE COMPLEX - 11/02/01	Wildfire		none found		
2000-11-04	2000-10-30	FM-2349-KY	Fire management	KY - SOUTHEASTERN DISTRICT FIRE COMPLEX - 11/03/00	Wildfire		none found		
1996-01-13	1996-01-05	DR-1089-KY	Major disaster	BLIZZARD OF 96	Winter Weather		none found		
1994-03-16	1994-02-09	DR-1018-KY	Major disaster	SEVERE WEATHER, FREEZING RAIN, SLEET, SNW	Winter Weather		none found		
1993-03-16	1993-03-13	EM-3104-KY	Emergency	SEVERE SNOWFALL & WINTER STORM	Winter Weather		none found		
1984-05-15	1984-05-15	DR-705-KY	Major disaster	HIGH WINDS, TORNADOES & FLOODING	Inland Flooding; Strong Wind; Tornado		none found		
1977-04-06	1977-04-06	DR-529-KY	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding		none found		
1970-06-05	1970-06-05	DR-288-KY	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding		none found		
1970-02-02	1970-02-02	DR-282-KY	Major disaster	HEAVY SNOWMELT, RAINS & FLOODING	Inland Flooding (primary); also designated: Winter Weather		none found		
1967-03-27	1967-03-27	DR-226-KY	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding		none found		

County Public Assistance: applicants the FEMA record places in this county, including any state agencies FEMA files there; statewide rows are listed on the state page; federal share obligated, nominal dollars.

Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

SOURCES

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)

FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Statewide declarations

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
1964-03-17	1964-03-17	DR-163-KY	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding		
1963-03-13	1963-03-13	DR-148-KY	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
1962-03-12	1962-03-12	DR-128-KY	Major disaster	FLOODS	Inland Flooding		
1957-01-31	1957-01-31	DR-66-KY	Major disaster	FLOOD	Inland Flooding		

FEMA recorded these with designated area Statewide and no county. Listed on every county page in the state; not counted with county rows.

SOURCE

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

Public Assistance filed under this county for declarations that do not list it: 1 row, \$2,061.15

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-1578-KY	2005-02-08	SEVERE WINTER STORM AND RECORD SNOW	Guthrie, City of	\$2,061.15

FEMA's Public Assistance summaries file these applicants under this county, but FEMA's declaration rows for these disasters do not designate it (an electric cooperative or district serving several counties, for example). Not in any declaration row above and not counted.

SOURCES

FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

Previous occurrences by hazard, with explicit no-event rows

Hazard	Storm Events records <i>full period</i>	Since plan approval <i>records</i>	During plan review <i>records</i>	Last 5 years <i>records</i>	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Cold Wave	14	0	0	0	0	0	1996 to 2026-06-30	Includes 13 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
Drought	3	0	0	0	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		No Storm Events record; local data required (e.g., USGS).
Hail	65	3	2	5	0	0	1955 to 2026-06-30	
Heat Wave	2	0	0	0	0	0	1996 to 2026-06-30	
Hurricane	0	0	0	0	1	1	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Ice Storm	4	0	0	0	1	0	1996 to 2026-06-30	
Inland Flooding	57	0	1	1	20	4	1996 to 2026-06-30	
Landslide	2	0	0	0	12	4	1996 to 2026-06-30	

Hazard	Storm Events records <i>full period</i>	Since plan approval <i>records</i>	During plan review <i>records</i>	Last 5 years <i>records</i>	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Lightning	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Strong Wind	184	28	13	39	7	5	1955 to 2026-06-30	Includes 10 High Wind records and 9 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	2	0	0	0	6	2	1950 to 2026-06-30	
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Volcanic Activity	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	1	0	0	0	3	0	1996 to 2026-06-30	
Winter Weather	120	7	5	12	7	1	1996 to 2026-06-30	

SOURCES

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>

Notable Storm Events records

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2020-02-06	Flood		\$5,000,000 property; \$0 crops (2020 dollars)	0, 0	SAND HILL		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2016-11-08	Drought		damage not reported	0, 0	NWS zone KYZ088 (HARLAN), zone-level: may include parts of neighboring counties		B1-c worst recorded: Drought
2015-02-19	Extreme Cold/ Wind Chill		damage not reported	0, 0	NWS zone KYZ088 (HARLAN), zone-level: may include parts of neighboring counties		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2014-04-28	Thunderstorm Wind	78 kt (90 mph) estimated gust	damage not reported	0, 3	DRESSEN to EVARTS		deaths or injuries recorded
2011-04-09	Thunderstorm Wind	60 kt (69 mph) estimated gust	\$50,000 property; crops not reported (2011 dollars)	0, 0	HARLAN		B1-c most damaging: Thunderstorm Wind
2010-08-12	Excessive Heat		\$0 property; \$0 crops, reported for the zone (2010 dollars)	0, 0	NWS zone KYZ088 (HARLAN), zone-level: may include parts of neighboring counties		B1-c worst recorded: Excessive Heat, Heat
2007-04-03	Tornado	EF0, 1.18 mi within this county, 50 yd wide	\$700,000 property; \$0 crops (2007 dollars)	0, 0	CAWOOD		B1-c worst recorded: Tornado
2006-10-17	High Wind	80 kt (92 mph) estimated gust	\$150,000 property; \$0 crops, reported for the zone (2006 dollars)	0, 0	NWS zone KYZ088 (HARLAN), zone-level: may include parts of neighboring counties		B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2002-05-01	Hail	1.75 in	\$30,000 property; \$0 crops (2002 dollars)	0, 0	HARLAN		B1-c most damaging: Hail
1998-01-27	Heavy Snow		\$20,000 property; \$0 crops, reported for the zone (1998 dollars)	0, 0	NWS zone KYZ088 (HARLAN), zone-level: may include parts of neighboring counties		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
1997-02-21	Thunderstorm Wind	speed not recorded	\$10,000 property; \$0 crops (1997 dollars)	2, 0	AGES		deaths or injuries recorded
1968-04-23	Hail	5 in	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Hail

The full list is in the XLSX file, sheet "B1-d Storm Events history" (454 rows).

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records are placed with NWS zone-county files, which exist from 2020 on; an earlier record is placed by its zone number in the nearest later file only when its zone name matches that file, records from zones NWS renumbered are placed by name or left out, and a record whose zone is in no known file is left out of every count, so counts before 2020 can be low. Some current zones are also missing from the NWS files, so recent counts can be low too.

SOURCES

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

State-declared emergencies are not in federal data. Add them from your state emergency management agency.

FEMA's declaration data list no tribal or special-area declarations for this state.

Supports B1-e: probability

Probability: FEMA annualized frequency and descriptor per hazard

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1994 to 2023 (30 years)	see B1-f	0.01 is NRI's minimum avalanche frequency for a county in an avalanche susceptibility zone; NRI records no avalanche here, so the descriptor reflects the floor, not local events.
Coastal Flooding		events per year at a location (modeled)				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Cold Wave	0.948	event-days per year	about 0.948 days per year	Possible	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	18	2005-11-12 to 2024-11-12 (19 years)	countywide	Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area- weighted, so can be fractional)	NRI period	Location	Note
Drought	10.6	event-days per year	about 10.6 days per year	Possible	event-days in 2 of 30 years, 1996 to 2025 (6.67%)	357	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI gives about 10.6 drought event-days a year here (its annualized frequency over 25.25 years; not its event count divided by the years), but Storm Events has a record in only 2 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Earthquake	0.00222	annual probability at a location	chance a given location in the county has at least minor- damage shaking in a year: 0.222%			not shown	modeled	see B1-f	Descriptor not assigned: the NRI value is the chance at a location in the county, not how often the hazard affects the county, and Storm Events does not record earthquakes.
Hail	3.07	events per year	about 3.07 per year	Highly likely	FEMA annualized frequency (modeled)	116.7 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	2.42	event-days per year	about 2.42 days per year	Possible	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	40	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 2.42 heat wave event-days a year here (its annualized frequency over 19 years; not its event count divided by the years), but Storm Events has a record in only 1 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Hurricane	0.0137	events per year	about 1 in 73 years	Possible	FEMA annualized frequency (modeled)	4	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are counted separately in B1-d and need not match.
Ice Storm	0.134	event-days per year	about 0.134 days per year	Likely	event-days in 4 of 30 years, 1996 to 2025 (13.3%)	9	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	1.5	event-days per year	about 1.5 days per year	Likely	event-days in 20 of 30 years, 1996 to 2025 (66.7%)	42	1996 to 2023 (28 years)	see B1-f	
Landslide	1.6	events per year (modeled)	about 1.6 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	52.3	days per year with a strike	about 52.3 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area- weighted, so can be fractional)	NRI period	Location	Note
Strong Wind	4.91	events per year	about 4.91 per year	Highly likely	FEMA annualized frequency (modeled)	187	1986 to 2023 (38 years)	countywide	
Tornado	0.105	events per year	about 1 in 9 years	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami		annual probability at the most exposed location (used in place of a county value)				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Volcanic Activity		annual probability				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Wildfire	0.00541	annual probability at a location	chance a given location in the county burns in a year: 0.541%	Possible	Storm Events records in 1 of 30 years, 1996 to 2025 (3.33%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI: the NRI value is the chance at a location in the county, not how often the hazard affects the county.
Winter Weather	17.5	event-days per year	about 17.5 days per year	Highly likely	event-days in 27 of 30 years, 1996 to 2025 (90%)	333	2005-11-12 to 2024-11-12 (19 years)	countywide	

FEMA annualized frequency (modeled) comes from the National Risk Index v1.20 (December 2025). It is not recorded events divided by years, and what it measures depends on the hazard. For most hazards it estimates how often the hazard affects this county each year: it counts events or event-days (drought, heat wave, cold wave, winter weather, ice storm and inland flooding are in days per year; lightning is the number of days per year with a recorded cloud-to-ground strike, from the NOAA Storm Prediction Center daily lightning climatology); it may count events in the surrounding area (hail, strong wind, tornado, hurricane and ice storm use a 49 km grid and buffers) and is averaged over the county's area; and some hazards use a minimum value for places with no recorded event. Earthquake, wildfire and coastal flooding are different: FEMA computes them for each census block and averages them over the county, so the value is the chance (for coastal flooding, the modeled number of floods per year) at a location in the county, which is lower than the chance that the hazard strikes somewhere in the county. Earthquake is the chance of at least minor-damage shaking (U.S. Geological Survey model); wildfire is the chance that a location burns in a large fire (U.S. Forest Service burn probability); coastal flooding comes from FEMA flood zones and NOAA high-tide flooding, so it can be above 1 where high-tide flooding is frequent. Tsunami is the value at the county's most exposed location, from recorded events and modeled return periods. For these four hazards the packet gives no "1 in N years" and takes the descriptor from Storm Events (none for earthquake) unless the value is 1 or more a year. Landslide is a U.S. Geological Survey modeled county rate spread by slope susceptibility. Volcanic activity is the chance that a volcano affecting the county erupts in a year. Drought counts only extreme and exceptional drought (D3 and D4). Source: FEMA, National Risk Index Technical Documentation v1.20, sections 5.2.2 (Table 5), 5.2.3, 7.4, 10.4, 16.5, 17.1, 17.3.1, 17.5, 20.3.1, 21.4, 22.4 and 6 to 23.

SOURCES
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Descriptor scale used in this packet (defined per unit)

Unit	Descriptor	Definition
events per year	Highly likely	1 or more per year
events per year	Likely	about once in 1 to 10 years

Unit	Descriptor	Definition
events per year	Possible	about once in 10 to 100 years
events per year	Unlikely	less than once in 100 years
annual probability	Likely	10% to under 100% chance in a given year
annual probability	Possible	1% to under 10% chance in a given year
annual probability	Unlikely	under 1% chance in a given year
event-days (share of years)	Highly likely	event-days recorded in 90% or more of years
event-days (share of years)	Likely	event-days recorded in 10% to under 90% of years
event-days (share of years)	Possible	event-days recorded in some years but under 10% of years
lightning strike-days	Highly likely	cloud-to-ground strikes on 1 or more days per year

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Intensity bands: historical frequency (Storm Events)

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	36	30	1.2
Hail	2.00 in+	1996 to 2025	5	30	0.167
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	130	30	4.33
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	2	30	0.0667
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	16	30	0.533
Tornado	EF0-1	1996 to 2025	2	30	0.0667
Tornado	EF2-3	1996 to 2025	0	30	0
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

Hail smaller than 1 inch is not counted: on 2010-01-05 the National Weather Service raised its severe-hail threshold from 3/4 inch to 1 inch, so smaller reports became less common after 2009 (NWS Service Change Notice 09-52). NRI hail frequency uses a 0.75 inch threshold.

SOURCE

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Optional: future conditions. Not a required item in the 2025 FEMA Local Mitigation Planning Policy Guide; some states ask for it. The federal Climate Mapping for Resilience and Adaptation (CMRA) site gives county exposure to future climate conditions.

Supports B1-f: variation across the planning area

Range of census tract risk within the county

Hazard	Tracts rated of all	Risk score min NRI score, 0 to 100	Median	Max	Tracts by rating	Note
Avalanche	11 of 11	66.6	67.2	68.7	Very Low 11	
Coastal Flooding	0 of 11				Not Applicable 11	
Cold Wave	11 of 11	53.2	74.6	89.5	Relatively High 5, Relatively Moderate 6	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Drought	0 of 11				No Rating 11	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Earthquake	11 of 11	24.2	43.5	72.2	Relatively Low 6, Very Low 5	
Hail	11 of 11	50.3	65.2	84.4	Relatively Moderate 4, Relatively Low 7	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Heat Wave	11 of 11	9.3	25.4	50.2	Relatively Low 7, Very Low 4	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Hurricane	11 of 11	30.7	42.1	52.6	Relatively Low 1, Very Low 10	
Ice Storm	11 of 11	8.0	20.7	52.6	Relatively Low 2, Very Low 9	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Inland Flooding	11 of 11	41.8	86.8	99.3	Very High 3, Relatively High 5, Relatively Moderate 1, Relatively Low 2	
Landslide	11 of 11	83.6	96.4	98.1	Relatively Moderate 6, Relatively Low 5	
Lightning	11 of 11	11.9	24.7	46.0	Relatively Low 6, Very Low 5	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Strong Wind	11 of 11	81.3	94.4	99.0	Very High 4, Relatively High 6, Relatively Moderate 1	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Tornado	11 of 11	34.2	50.5	72.3	Relatively Moderate 5, Relatively Low 6	
Tsunami	0 of 11				Not Applicable 11	
Volcanic Activity	0 of 11				Not Applicable 11	
Wildfire	11 of 11	66.2	84.2	90.2	Relatively Moderate 3, Relatively Low 7, Very Low 1	
Winter Weather	11 of 11	66.3	85.1	95.2	Relatively High 7, Relatively Moderate 4	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.

Rated tracts only: No Rating (score 0.0), Not Applicable and Insufficient Data tracts are counted but not used for the minimum, median and maximum.

SOURCE

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Per-member block (Starter, confirm locally)

Member	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance matched <i>federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since the member's plan</i>	Notes
Harlan County (unincorporated area)	Unincorporated	Approved, expires 2027-08-16	FMA RL 1, SRL 2; any 16	\$2,512,311.36	0; 0	
Benham city	City	Approved, expires 2027-08-16	FMA RL 0, SRL 0; any 0	\$1,302,622.09	2; 0	
Cumberland city	City	Approved, expires 2027-08-16	FMA RL 0, SRL 0; any 1	\$3,406,908.75	12; 0	
Evarts city	City	Approved, expires 2027-08-16	FMA RL 0, SRL 0; any 0	\$154,936.26	25; 2	
Harlan city	City	Approved, expires 2027-08-16	FMA RL 0, SRL 0; any 2	\$367,862.32	42; 1	
Loyall city	City	Approved, expires 2027-08-16	FMA RL 0, SRL 0; any 1	none found	2; 0	
Lynch city	City	Approved, expires 2027-08-16	FMA RL 0, SRL 0; any 0	\$3,973,068.92	7; 0	

Member rows are whole NFIP communities and need not add up to the county total: a community that extends into another county is counted in full on each member row, while the county table counts only its part in this county.

School districts and special districts get a plan clock row only.

SOURCES

FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Supports B2-a and B2-b: assets and impacts

Local data required

County-level starter. The plan must describe impacts for each participant and its own assets.

- Critical facilities and lifelines per hazard
- A problem statement per participant per hazard
- Changes in development in hazard-prone areas since the last approval, or a statement of none (E1-a)
- Future assets

County-level starter: exposure, expected annual loss and damage since the plan

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2022-08-17 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Avalanche	\$1,314,223		3	under \$1		\$11,284	under 0.0001%				
Coastal Flooding											Not Applicable in NRI for this county
Cold Wave	\$4,004,518,630	\$273,071	26,728	\$716	\$218	\$1,224,964	under 0.0001%				
Drought		\$0			\$0						agriculture exposure is 0 in NRI
Earthquake	\$7,181,595,435		26,831	\$208,061		\$61,128	0.0029%				
Hail	\$4,004,521,524	\$273,071	26,728	\$148,178	\$202	\$20,252	0.0037%	\$0			
Heat Wave	\$4,004,518,630	\$273,071	26,728	\$7	under \$1	\$159,404	under 0.0001%				
Hurricane	\$3,998,845,495	\$273,071	26,697	\$25,480	\$37	\$688	0.000637%			none found (1 declaration)	
Ice Storm	\$3,994,394,399		26,631	\$13,693		\$2,370	0.000343%				
Inland Flooding	\$3,985,526,323	\$122,253	5,732	\$13,339,260	\$507	\$341,058	n/a (see note)			\$2,250,367.70	NRI counts the full building value of any census block with some flood loss; this is not the value of buildings in the floodplain. Use local FIRM overlays for B2-a/B2-b. EAL as % of exposure: n/a.
Landslide	\$767,263,858		6,374	\$3,725		\$37,888	0.000486%			\$2,250,367.70	
Lightning	\$4,004,521,524		26,728	\$4,880		\$34,684	0.000122%				
Strong Wind	\$4,004,521,524	\$273,071	26,728	\$83,235	\$2,036	\$1,140,460	0.00208%	\$59,250	\$74,000	\$2,250,367.70	Storm Events damage since the plan includes 3 zone-level High Wind records (\$74,000), an event type the NRI definition of this hazard leaves out.
Tornado	\$4,004,521,524	\$273,071	26,728	\$163,429	\$5	\$424,909	0.00408%			none found (2 declarations)	
Tsunami											Not Applicable in NRI for this county
Volcanic Activity											Not Applicable in NRI for this county
Wildfire	\$169,712,983	\$98,668	4,198	\$87,295	\$4	\$33,947	0.0514%				

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2022-08-17 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Winter Weather	\$4,004,518,630	\$273,071	26,728	\$4,284	under \$1	\$104,218	0.000107%		\$0	none found (1 declaration)	

Totals since 2022-08-17 (Storm Events through 2026-06-30): 28 county-coded records, 28 with a damage value recorded (including \$0), \$59,250; 10 zone-level records, 5 with a damage value recorded (including \$0), \$74,000 reported for the zone; Public Assistance on counted declarations \$2,250,367.70 (7 declarations, 2 with PA).

Total = buildings + agriculture + population equivalence; FEMA values each expected death (or 10 injuries) at \$13.7 million (2024 dollars).

FEMA does not split Public Assistance by hazard. A declaration mapped to several hazards is listed under each of them with its full amount, so the per-hazard column must not be added up; the unit total counts each declaration once.

Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Supports B2-a: context

County context

Measure	Value
Population	26,728
Building value (total, not at risk)	\$4,004,521,524
Agriculture value (total, not at risk)	\$273,071
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$14,085,252
Expected annual loss, population equivalence, all hazards (NRI values each statistical life at \$13.7M; a modeled value of expected deaths and injuries, not property damage)	\$3,597,254
Social vulnerability rating	Relatively High
Community resilience rating	Very Low
NRI version	December 2025

FEMA's all-hazard expected annual loss total adds buildings, agriculture and population equivalence; the two parts are shown separately so the property figure is not read as including the statistical value of life.

SOURCE

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Supports B2-c: repetitive loss

Repetitive loss in this county, both definitions

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	1	Severe repetitive loss, FMA definition (44 CFR 77.2)	2
Repetitive loss, NFIP insurance definition	20	Severe repetitive loss, NFIP insurance definition	2

Your state NFIP coordinator's list may use the NFIP insurance definition, so its counts can be higher.

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Repeat-flood properties: county total and NFIP communities

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	1	2	20	2	20	0	3
HARLAN COUNTY *	1	2	16	2	16	0	3
CUMBERLAND, CITY OF	0	0	1	0	1	0	0
HARLAN, CITY OF	0	0	2	0	2	0	0
LOYALL, CITY OF	0	0	1	0	1	0	0

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Repeat-flood properties by plan member (NFIP community)

Member	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>	Note
Harlan County (unincorporated area)	210098	1	2	16	2	16	0	3	
Benham city	210099	0	0	0	0	0	0	0	
Cumberland city	210100	0	0	1	0	1	0	0	
Evarts city	210101	0	0	0	0	0	0	0	
Harlan city	210102	0	0	2	0	2	0	0	
Loyall city	215189	0	0	1	0	1	0	0	
Lynch city	210104	0	0	0	0	0	0	0	

Per-member types: XLSX sheet 'B2-c Members'.

Member rows are whole NFIP communities and need not add up to the county total: a community that extends into another county is counted in full on each member row, while the county table counts only its part in this county.

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

County repeat-flood properties by occupancy group

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	1	1	18	1	18	0	3
2 to 4 unit residential	0	0	1	0	1	0	0
other residential	0	0	0	0	0	0	0
non-residential	0	1	1	1	1	0	0
not reported	0	0	0	0	0	0	0

Institutional properties cannot be separated in this data: FEMA's occupancy groups have no institutional class, so they fall in non-residential or other residential in the table by occupancy group.

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites; OpenFEMA's fmaRI field description omits the Increased Cost of Compliance clause of 44 CFR 77.2(i). NFIP repetitive loss (FEMA insurance definition, nfipRI) is 2 or more claims over \$1,000 in 10 years and can drop to false when a property is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured.

Your state NFIP coordinator's list may use the NFIP insurance definition, so its counts can be higher.

Counts are aggregates of FEMA's public NFIP Multiple Loss Properties file (as of 2026-08-02). No property is identified. County assignment is FEMA's geocode.

Counts may differ from your state NFIP coordinator's list, which is the source the Handbook names.

In this county 0 properties are FMA repetitive loss but not NFIP repetitive loss, and 19 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

Every table above lists its own sources. The full list, for the plan's bibliography (FEMA review item A4-a):

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
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5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-28, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_cousubs_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_place_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_elsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_unsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip)

gazetteer/2024_Gazetteer/2024_Gaz_scsd_national.zip, https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx

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Corrections: to report an error, name the packet, the table and what your records show. Contact: to be added

Hazard Plain release 2026-10. As of 2026-09-28; Storm Events data through 2026-06-30. File hazard-plain_2026-10_KY_21095. Preview: automated baseline.