

Cherokee County, OK

Risk-assessment baseline packet

Unit **County area 40021** Release **2026-10** As of **2026-09-28** Storm Events data through **2026-06-30**

Hazard Plain is an independent product built from public federal data. It is not a FEMA document and is not reviewed or endorsed by FEMA or any state agency.

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

This product uses the Federal Emergency Management Agency's OpenFEMA API, but is not endorsed by FEMA. The Federal Government or FEMA cannot vouch for the data or analyses derived from these data after the data have been retrieved from the Agency's website(s).

Plan clock

Status	Approved, expires 2027-09-18	Plan	Cherokee County (FEMA plan 105035)
Approved	2022-09-19	Expires	2027-09-18
As of	2026-09-28	Days	355 days to expiry
Update underway	none in FEMA's plan tracker		

What changed since your last plan (approved 2022-09-19)

New federal declarations	none (0 declaration rows; 0 counted incidents)	Storm Events records since approval	99 (data through 2026-06-30)
Repetitive loss now	FMA RL 6, SRL 5 (44 CFR 77.2); any definition: 14	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: 18 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" after these cover pages.

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

CONTENTS

1. Plan clock, page 1
2. What changed since your last plan (approved 2022-09-19), page 1
3. Supports B1-a: hazards, page 3
4. Supports B1-b: location, page 5
5. Supports B1-c: extent, page 5
6. Supports B1-d: previous occurrences, page 9
7. Supports B1-e: probability, page 13
8. Supports B1-f: variation across the planning area, page 17
9. Supports B2-a and B2-b: assets and impacts, page 18
10. Supports B2-a: context, page 20
11. Supports B2-c: repetitive loss, page 20
12. Sources and OpenFEMA disclaimer, page 22

Plan clock**Plan status for every jurisdiction listed in this county**

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry	Update underway	Notes
Cherokee County	County	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		member approved 2022-07-05
Fort Gibson town	Town	Approved, expires 2029-04-16	Muskogee County (FEMA plan 109682)	2024-04-17	2029-04-16	931		member approved 2024-05-08
Hulbert town	Town	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		
Oaks town	Town	Plan 108488 approved 2023-12-11, pending adoption here; not yet eligible	Delaware County (FEMA plan 108488), pending adoption here	2023-12-11 by FEMA; not yet adopted here	2028-12-10 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Tahlequah city	City	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		member approved 2022-07-05
Name not given in FEMA data (ID 4016440)	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		member approved 2022-07-14
Briggs Public School	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		
Grand View Public School	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		
Hulbert Public Schools	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		member approved 2022-07-05
Locust Grove Public Schools	School/School District	Approved, expires 2030-10-16	Mayes County (FEMA plan 110824)	2025-10-17	2030-10-16	1,479		member approved 2026-07-13
Lowrey Public School	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		member approved 2022-07-07
Norwood Public School	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		
Peggs Public School	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Shady Grove Public School	School/School District	Plan 105035 approved 2022-09-19, pending adoption here; not yet eligible	Cherokee County (FEMA plan 105035), pending adoption here	2022-09-19 by FEMA; not yet adopted here	2027-09-18 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Tahlequah Public Schools	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		member approved 2022-07-12
Tenkiller Public School	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		
Westville Public Schools	School/School District	Approved, expires 2027-03-29	Adair County (FEMA plan 108076)	2022-03-30	2027-03-29	182		
Woodall Public School	School/School District	Approved, expires 2027-09-18	Cherokee County (FEMA plan 105035)	2022-09-19	2027-09-18	355		member approved 2022-07-11

SOURCE

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

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 <i>(see note) 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	\$8,909,803	\$187,859	\$4,416,563	\$13,514,226	132		
2	Tornado	Relatively Moderate	Relatively Moderate	\$378,045	\$3,909	\$2,909,424	\$3,291,378	36		
3	Heat Wave	Relatively Moderate	Relatively Moderate	\$507	\$434	\$3,287,955	\$3,288,896	32		
4	Wildfire	Relatively Moderate	Relatively Moderate	\$1,697,354	\$7,682	\$740,790	\$2,445,826	22		
5	Ice Storm	Very High	Relatively High	\$1,454,452		\$21,313	\$1,475,765	5		

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
6	Drought	Relatively Moderate	Relatively Moderate		\$1,152,053		\$1,152,053	47		
7	Cold Wave	Relatively Low	Relatively Moderate	\$474	\$120,485	\$1,029,762	\$1,150,722	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
8	Lightning	Relatively High	Relatively Moderate	\$11,266		\$636,071	\$647,338	4		
9	Strong Wind	Relatively Low	Relatively Low	\$127,718	\$5,446	\$310,421	\$443,585	247		Includes 5 High Wind records, event types the NRI definition of this hazard leaves out.
10	Hail	Relatively Low	Relatively Low	\$301,752	\$2,410	\$68,773	\$372,936	196		
11	Earthquake	Relatively Low	Relatively Low	\$243,202		\$111,444	\$354,646			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
12	Winter Weather	Relatively Moderate	Relatively Moderate	\$100,618	\$912	\$33,682	\$135,212	37		
13	Hurricane	Very Low	Very Low	\$8,825	\$4,013	\$241	\$13,079	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
14	Landslide	Relatively Low	Very Low	\$2,663		\$365	\$3,027	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.
	Avalanche	Not Applicable	Not Applicable					0	NRI rates avalanche 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).
	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.	0 of 13
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 13
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	13 of 13
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	1 of 13
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.	13 of 13
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	13 of 13
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	13 of 13
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.	13 of 13
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	13 of 13
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.	13 of 13
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.	13 of 13
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	13 of 13
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	13 of 13
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.	13 of 13
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 13
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 13
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.	13 of 13
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	13 of 13

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.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Coastal Flood, Storm Surge/ Tide	none in data (FIRM for depth)	0					Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	0					Wind chill: in event narratives only; local data required.
Frost/Freeze (outside NRI Cold Wave definition)	crop damage	0					Temperature: in event narratives only; local data required.
Drought	US Drought Monitor D-scale	47, 2005 to 2026 (47 zone-level)	50 days to 255 days (median 145 days); 9 with a recorded value	255 days (about 8.4 months), 2012-07-01 to 2013-03-12, a run of 9 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)	276, 1964 to 2026	0.75 in to 4.25 in (median 0.88 in); 276 with a recorded value	4.25 in hail, 2011-05-22	Hail, 2022-04-16, \$75,000 property; \$0 crops (2022 dollars)	Event records naming member places: Tahlequah city (79 records), Hulbert town (29 records), Oaks town (1 record).	
Excessive Heat, Heat	heat index (narratives)	32, 1998 to 2024 (32 zone-level)	1 day to 27 days (median 2 days); 29 with a recorded value	27 consecutive days, 2011-07-14 to 2011-08-09, 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)	5, 1996 to 2013 (5 zone-level)		Ice Storm, 2007-12-09, \$15,000,000 property; \$0 crops, reported for the zone (2007 dollars); NWS zone OKZ068 (CHEROKEE), zone-level: may include parts of neighboring counties		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)	132, 1996 to 2026 (15 zone-level)		Flash Flood, 2000-06-21, \$500,000 property; crops not reported (2000 dollars)		Event records naming member places: Tahlequah city (52 records), Hulbert town (10 records). Zone-level records (15) 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)	0					Physical measure: in event narratives only; local data required.
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	4, 1996 to 2002		Lightning, 2002-07-06, damage not reported, 1 direct death, 1 direct injury	Lightning, 1999-05-11, \$30,000 property; crops not reported (1999 dollars)	Event records naming member places: Tahlequah city (3 records), Hulbert town (1 record).	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)	5, 1998 to 2020 (5 zone-level)	54 kt (62 mph) to 56 kt (64 mph) (median 55 kt (63 mph)); 2 with a recorded value	56 kt (64 mph) estimated gust, High Wind, 2020-05-15; NWS zone OKZ068 (CHEROKEE), 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)	315, 1955 to 2026	50 kt (58 mph) to 80 kt (92 mph) (median 61 kt (70 mph)); 232 with a recorded value	80 kt (92 mph) estimated gust, Thunderstorm Wind, 2025-05-19	Thunderstorm Wind, 2016-05-11, \$250,000 property; \$0 crops (2016 dollars)	Event records naming member places: Tahlequah city (110 records), Hulbert town (40 records), Fort Gibson town (1 record).	Speeds under 20 kt (likely entry errors) are left out of the observed range.

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)	52, 1956 to 2026	F/EF0 to F/EF3 (median F/EF1); 51 with a recorded value	F3 tornado, 1999-06-01, 2 mi within this county, 350 yd wide, \$1,500,000 property; crops not reported (1999 dollars), 2 direct deaths, 5 direct injuries		Event records naming member places: Hulbert town (5 records), Tahlequah city (4 records).	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)	22, 2005 to 2026 (22 zone-level)		Wildfire, 2011-07-27, \$15,000 property; \$0 crops, reported for the zone (2011 dollars); NWS zone OKZ068 (CHEROKEE), zone-level: may include parts of neighboring counties		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)	37, 1996 to 2026 (37 zone-level)		Winter Storm, 2009-01-26, \$4,000,000 property; \$0 crops, reported for the zone (2009 dollars), 1 direct injury (reported for the zone); NWS zone OKZ068 (CHEROKEE), 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/>

Supports B1-d: previous occurrences

Declaration rows

28

Counted incidents

21

Federal disaster declarations for this county

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2022-06-29	2022-05-02	DR-4657-OK	Major disaster	SEVERE STORMS, TORNADOES, AND FLOODING	Inland Flooding; Tornado	PA not declared for this county	during plan review, check whether your last plan included it; within last 5 years	
2021-02-24	2021-02-08	DR-4587-OK	Major disaster	SEVERE WINTER STORMS	Ice Storm	none found		
2021-02-17	2021-02-08	EM-3555-OK	Emergency	SEVERE WINTER STORM	Ice Storm	none found		same incident as DR-4587
2020-04-05	2020-01-20	DR-4530-OK	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$50,833.10		
2020-03-13	2020-01-20	EM-3462-OK	Emergency	COVID-19	Non-natural, not counted	none found		same incident as DR-4530
2019-06-01	2019-05-07	DR-4438-OK	Major disaster	SEVERE STORMS, STRAIGHT-LINE WINDS, TORNADOES, AND FLOODING	Inland Flooding; Strong Wind; Tornado	\$139,067.80		
2017-07-25	2017-05-16	DR-4324-OK	Major disaster	SEVERE STORMS, TORNADOES, STRAIGHT-LINE WINDS, AND FLOODING	Tornado (primary); also designated: Inland Flooding, Strong Wind	none found		
2017-05-26	2017-04-28	DR-4315-OK	Major disaster	SEVERE STORMS, TORNADOES, AND FLOODING	Inland Flooding; Tornado	\$423,642.85		
2016-02-10	2015-12-26	DR-4256-OK	Major disaster	SEVERE WINTER STORMS AND FLOODING	Inland Flooding; Winter Weather	\$64,589.65		
2015-05-26	2015-05-05	DR-4222-OK	Major disaster	SEVERE STORMS, TORNADOES, STRAIGHT-LINE WINDS, AND FLOODING	Inland Flooding; Strong Wind; Tornado	PA not declared for this county		
2011-05-27	2011-04-21	DR-1988-OK	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$156,338.77		
2011-02-02	2011-01-31	EM-3316-OK	Emergency	SEVERE WINTER STORM	Winter Weather	none found		
2010-03-05	2010-01-28	DR-1883-OK	Major disaster	SEVERE WINTER STORM	Ice Storm	\$159,465		
2010-02-25	2009-12-24	DR-1876-OK	Major disaster	SEVERE WINTER STORM	Winter Weather	\$29,496.31		
2010-01-30	2010-01-28	EM-3308-OK	Emergency	SEVERE WINTER STORM	Winter Weather	none found		same incident as DR-1883
2009-02-17	2009-01-26	DR-1823-OK	Major disaster	SEVERE WINTER STORM	Winter Weather	\$2,253,356.38		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance		Flags	Notes
						<i>federal share obligated, nominal dollars</i>			
2007-12-10	2007-12-08	EM-3280-OK	Emergency	SEVERE WINTER STORMS	Ice Storm	none found			
2007-02-01	2007-01-12	DR-1678-OK	Major disaster	SEVERE WINTER STORMS	Winter Weather	\$646,409.59			
2007-01-14	2007-01-12	EM-3272-OK	Emergency	SEVERE WINTER STORMS AND FLOODING	Ice Storm	none found			same incident as DR-1678
2006-01-10	2005-11-27	DR-1623-OK	Major disaster	EXTREME WILDFIRE THREAT	Wildfire	none found			
2005-09-05	2005-08-29	EM-3219-OK	Emergency	HURRICANE KATRINA EVACUATION	Hurricane: evacuation support, not a local hazard event; not counted	\$12,822.12			
2003-05-10	2003-05-08	DR-1465-OK	Major disaster	SEVERE STORMS AND TORNADOES	Tornado	PA not declared for this county			
2001-01-05	2000-12-25	DR-1355-OK	Major disaster	SEVERE WINTER ICE STORM	Ice Storm	\$494,949.83			
2000-12-28	2000-12-25	EM-3158-OK	Emergency	SEVERE WINTER AND ICE STORM	Ice Storm	none found			same incident as DR-1355
1990-05-18	1990-04-14	DR-866-OK	Major disaster	SEVERE STORMS, TORNADOES & FLOODING	Inland Flooding; Tornado	none found			
1986-10-14	1986-09-26	DR-778-OK	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found			
1974-06-10	1974-06-10	DR-441-OK	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found			
1973-12-10	1973-12-10	DR-409-OK	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found			

School districts and special districts in this county: \$26,080.75 (included in the county total above). Public Assistance matched by applicant name to the school districts and special districts FEMA lists as plan members in this county. They are not shown as member blocks, so their total is listed here. These dollars are already included in the county PA column of the declarations table (the FEMA record places each applicant in this county); do not add this line to the county total.

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
1995-04-19	1995-04-19	EM-3115-OK	Emergency	EXPLOSION AT FEDERAL COURTHOUSE IN OKLAHOMA CITY	Non-natural, not counted		
1960-07-15	1960-07-15	DR-104-OK	Major disaster	HEAVY RAINS, HAIL, FLOODS & TORNADOES	Hail; Inland Flooding; Tornado		
1959-11-09	1959-11-09	DR-95-OK	Major disaster	HEAVY RAINS & FLOODS	Inland Flooding		
1959-07-08	1959-07-08	DR-92-OK	Major disaster	FLOOD	Inland Flooding		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
1957-05-18	1957-05-18	DR-74-OK	Major disaster	FLOOD	Inland Flooding		
1956-04-07	1956-04-07	DR-54-OK	Major disaster	TORNADOES	Tornado		
1955-06-01	1955-06-01	DR-35-OK	Major disaster	FLOOD & TORNADO	Inland Flooding (primary); also designated: Tornado		

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

13 Fire Management declarations (1971-04-08 to 2012-07-30) FEMA filed as Statewide with no county; each names one local fire. Listed on the state page.

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: 3 rows, \$136,782.13

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-1989-OK	2011-06-06	SEVERE STORMS, TORNADOES, STRAIGHT-LINE WINDS, AND FLOODING	Cherokee Indian Nation	\$2,056.04
DR-1985-OK	2011-05-13	SEVERE WINTER STORM AND SNOWSTORM	Cherokee Indian Nation	\$121,461.91
DR-1735-OK	2007-12-18	SEVERE WINTER STORMS	Cherokee Indian Nation	\$13,264.18

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 records	During plan review records	Last 5 years records	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	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Drought	47	12	3	15	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	276	18	5	23	0	0	1955 to 2026-06-30	
Heat Wave	32	9	4	13	0	0	1996 to 2026-06-30	
Hurricane	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Ice Storm	5	0	0	0	5	0	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
Inland Flooding	132	3	3	6	11	0	1996 to 2026-06-30	
Landslide	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Lightning	4	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	320	34	1	35	3	0	1955 to 2026-06-30	Includes 5 High Wind records, event types the NRI definition of this hazard leaves out.
Tornado	52	12	1	13	7	0	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	22	7	2	9	1	0	1996 to 2026-06-30	
Winter Weather	37	4	2	6	6	0	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
2025-05-19	Thunderstorm Wind	80 kt (92 mph) estimated gust	\$5,000 property; \$0 crops (2025 dollars)	0, 0	COOKSON	new since last plan; within last 5 years	B1-c worst recorded: Thunderstorm Wind
2025-03-30	Thunderstorm Wind	61 kt (70 mph) estimated gust	\$30,000 property; \$0 crops (2025 dollars)	1, 1	SCRAPER	new since last plan; within last 5 years	deaths or injuries recorded
2020-05-15	High Wind	56 kt (64 mph) estimated gust	\$20,000 property; \$0 crops, reported for the zone (2020 dollars)	0, 0	NWS zone OKZ068 (CHEROKEE), zone-level: may include parts of neighboring counties		B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2012-07-01	Drought		\$0 property; \$0 crops, reported for the zone (2012 dollars)	0, 0	NWS zone OKZ068 (CHEROKEE), zone-level: may include parts of neighboring counties		B1-c worst recorded: Drought
2011-07-27	Wildfire		\$15,000 property; \$0 crops, reported for the zone (2011 dollars)	0, 0	NWS zone OKZ068 (CHEROKEE), zone-level: may include parts of neighboring counties		B1-c worst recorded: Wildfire

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2011-07-14	Excessive Heat		\$0 property; \$0 crops, reported for the zone (2011 dollars)	0, 0	NWS zone OKZ068 (CHEROKEE), zone-level: may include parts of neighboring counties		B1-c worst recorded: Excessive Heat, Heat
2011-05-22	Hail	4.25 in	\$0 property; \$0 crops (2011 dollars)	0, 0	PEGGS		B1-c worst recorded: Hail
2007-12-09	Ice Storm		\$15,000,000 property; \$0 crops, reported for the zone (2007 dollars)	0, 0	NWS zone OKZ068 (CHEROKEE), zone-level: may include parts of neighboring counties		B1-c worst recorded: Ice Storm
2002-07-06	Lightning		damage not reported	1, 1	HULBERT		B1-c worst recorded: Lightning
2000-06-21	Flash Flood		\$500,000 property; crops not reported (2000 dollars)	0, 0	COUNTYWIDE		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
1999-06-01	Tornado	F3, 2 mi within this county, 350 yd wide	\$1,500,000 property; crops not reported (1999 dollars)	2, 5	HULBERT		deaths or injuries recorded
1996-09-26	Flash Flood		damage not reported	4, 0	COUNTYWIDE		deaths or injuries recorded

The full list is in the XLSX file, sheet "B1-d Storm Events history" (927 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.

Tribal and special-area declarations in this state are listed on the state page.

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 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		events per year				1994 to 2023 (30 years)	see B1-f	Not Applicable in NRI for this county; no descriptor.
Coastal Flooding		events per year at a location (modeled)			not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.

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
Cold Wave	1.58	event-days per year	about 1.58 days per year		event-days in 0 of 30 years, 1996 to 2025 (0%)	30	2005-11-12 to 2024-11-12 (19 years)	countywide	No recorded event-days, 1996 to 2025; descriptor not assigned. Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.
Drought	17.1	event-days per year	about 17.1 days per year	Likely	event-days in 11 of 30 years, 1996 to 2025 (36.7%)	595	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI gives about 17.1 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 11 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	0.00119	annual probability at a location	chance a given location in the county has at least minor- damage shaking in a year: 0.119%			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	8.79	events per year	about 8.79 per year	Highly likely	FEMA annualized frequency (modeled)	334.2 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	18.3	event-days per year	about 18.3 days per year	Likely	event-days in 15 of 30 years, 1996 to 2025 (50%)	266	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.0099	events per year	about 1 in 101 years	Unlikely	FEMA annualized frequency (modeled)	6	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	1.64	event-days per year	about 1.64 days per year	Likely	event-days in 4 of 30 years, 1996 to 2025 (13.3%)	110	1946-12-31 to 2014-02-12 (67 years)	countywide	NRI gives about 1.64 ice storm event-days a year here (its annualized frequency over 67 years; not its event count divided by the years), but Storm Events has a record in only 4 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.
Inland Flooding	3.46	event-days per year	about 3.46 days per year	Highly likely	event-days in 27 of 30 years, 1996 to 2025 (90%)	97	1996 to 2023 (28 years)	see B1-f	
Landslide	0.585	events per year (modeled)	about 0.59 per year	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	

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
Lightning	57.3	days per year with a strike	about 57.3 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	7.04	events per year	about 7.04 per year	Highly likely	FEMA annualized frequency (modeled)	268	1986 to 2023 (38 years)	countywide	
Tornado	0.849	events per year	about 0.85 per year	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	0.0128	annual probability at a location	chance a given location in the county burns in a year: 1.28%	Likely	Storm Events records in 13 of 30 years, 1996 to 2025 (43.3%)	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	8.79	event-days per year	about 8.79 days per year	Likely	event-days in 21 of 30 years, 1996 to 2025 (70%)	167	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
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	73	30	2.43
Hail	2.00 in+	1996 to 2025	9	30	0.3
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	151	30	5.03
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	37	30	1.23
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	46	30	1.53
Tornado	EF0-1	1996 to 2025	30	30	1
Tornado	EF2-3	1996 to 2025	3	30	0.1
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	1	30	0.0333

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	0 of 13				Not Applicable 13	
Coastal Flooding	0 of 13				Not Applicable 13	
Cold Wave	13 of 13	63.0	67.0	80.7	Relatively High 1, Relatively Moderate 12	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	1 of 13	99.4	99.4	99.4	Relatively High 1, No Rating 12	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. Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range above mostly reflects where crop and livestock value is, not where buildings and people are. Confirm locally.
Earthquake	13 of 13	32.4	41.7	75.7	Relatively Low 7, Very Low 6	
Hail	13 of 13	70.0	76.1	85.2	Relatively Moderate 13	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	13 of 13	93.6	94.3	96.8	Very High 1, Relatively High 12	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	13 of 13	29.9	35.4	39.4	Very Low 13	
Ice Storm	13 of 13	96.5	97.6	99.5	Very High 6, Relatively High 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.
Inland Flooding	13 of 13	50.0	77.4	97.8	Very High 3, Relatively High 3, Relatively Moderate 7	
Landslide	13 of 13	30.8	82.8	93.9	Relatively Low 7, Very Low 6	
Lightning	13 of 13	92.1	93.1	98.0	Very High 3, Relatively High 10	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	13 of 13	68.3	70.9	83.3	Relatively High 2, Relatively Moderate 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.
Tornado	13 of 13	77.5	82.1	94.4	Very High 1, Relatively High 12	
Tsunami	0 of 13				Not Applicable 13	
Volcanic Activity	0 of 13				Not Applicable 13	
Wildfire	13 of 13	93.6	96.7	97.8	Relatively High 9, Relatively Moderate 4	
Winter Weather	13 of 13	78.8	84.1	93.0	Relatively High 13	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
Cherokee County	County	Approved, expires 2027-09-18	FMA RL 6, SRL 5; any 14	\$2,998,876.29	0; 0	Includes \$12,822.12 for declarations not counted as hazard incidents (EM-3219-OK).
Fort Gibson town	Town	Approved, expires 2029-04-16	FMA RL 0, SRL 2; any 3	none found	1; 0	Whole community, including the part in Muskogee County; none of its repeat-flood properties are in this county.
Hulbert town	Town	Approved, expires 2027-09-18	FMA RL 0, SRL 0; any 0	none found	85; 11	
Oaks town	Town	Plan 108488 approved 2023-12-11, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	none found	1; no approved plan	
Tahlequah city	City	Approved, expires 2027-09-18	FMA RL 0, SRL 0; any 0	\$417,442.70	248; 11	

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 2022-09-19 <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											Not Applicable in NRI for this county
Coastal Flooding											Not Applicable in NRI for this county
Cold Wave	\$7,273,645,875	\$87,034,846	47,015	\$474	\$120,485	\$1,029,762	under 0.0001%				
Drought		\$30,022,642			\$1,152,053		3.84% (agriculture)		\$0		NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$13,051,455,764		47,078	\$243,202		\$111,444	0.00186%				
Hail	\$7,273,645,875	\$87,034,846	47,015	\$301,752	\$2,410	\$68,773	0.00415%	\$55,000			
Heat Wave	\$7,273,645,875	\$87,034,846	47,015	\$507	\$434	\$3,287,955	under 0.0001%		\$0		
Hurricane	\$7,254,808,038	\$85,552,094	46,797	\$8,825	\$4,013	\$241	0.000122%				
Ice Storm	\$7,273,630,939		47,015	\$1,454,452		\$21,313	0.02%				
Inland Flooding	\$7,272,054,633	\$4,712,120	1,533	\$8,909,803	\$187,859	\$4,416,563	n/a (see note)	\$0			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	\$220,489,726		1,423	\$2,663		\$365	0.00121%				
Lightning	\$7,273,645,875		47,015	\$11,266		\$636,071	0.000155%				
Strong Wind	\$7,273,645,875	\$87,034,846	47,015	\$127,718	\$5,446	\$310,421	0.00176%	\$223,000			
Tornado	\$7,273,645,875	\$87,034,846	47,015	\$378,045	\$3,909	\$2,909,424	0.0052%	\$420,000			
Tsunami											Not Applicable in NRI for this county
Volcanic Activity											Not Applicable in NRI for this county
Wildfire	\$1,399,578,127	\$76,531,183	21,981	\$1,697,354	\$7,682	\$740,790	0.121%		\$0		
Winter Weather	\$7,273,645,875	\$87,034,846	47,015	\$100,618	\$912	\$33,682	0.00138%		\$0		

Totals since 2022-09-19 (Storm Events through 2026-06-30): 67 county-coded records, 67 with a damage value recorded (including \$0), \$698,000; 32 zone-level records, 32 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance on counted declarations none found (0 declarations, 0 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	47,015
Building value (total, not at risk)	\$7,273,645,875
Agriculture value (total, not at risk)	\$87,034,846
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$14,721,884
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)	\$13,566,804
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)	6	Severe repetitive loss, FMA definition (44 CFR 77.2)	5
Repetitive loss, NFIP insurance definition	14	Severe repetitive loss, NFIP insurance definition	5

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	6	5	14	5	14	0	6
CHEROKEE COUNTY*	6	5	14	5	14	0	6

SOURCESFEMA, 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
Cherokee County	400488	6	5	14	5	14	0	6	
Fort Gibson town	400123	0	2	3	2	3	0	0	Whole community, including the part in Muskogee County; none of its repeat-flood properties are in this county.
Hulbert town	400036	0	0	0	0	0	0	0	
Oaks town	400314	0	0	0	0	0	0	0	
Tahlequah city	400037	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.

SOURCESFEMA, 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)**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	3	3	9	3	9	0	6
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	0	0	0	0	0
non-residential	3	2	5	2	5	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.

SOURCESFEMA, 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 fmaRL field description omits the Increased Cost of Compliance clause of 44 CFR 77.2(i). NFIP repetitive loss (FEMA insurance definition, nfipRL) 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 8 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)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
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_unsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_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_scsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/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

OpenFEMA disclaimer

This product uses the Federal Emergency Management Agency's OpenFEMA API, but is not endorsed by FEMA. The Federal Government or FEMA cannot vouch for the data or analyses derived from these data after the data have been retrieved from the Agency's website(s).

Hazard Plain is an independent product built from public federal data. It is not a FEMA document and is not reviewed or endorsed by FEMA or any state agency.

Reuse, citation and corrections

Reuse and citation: Hazard Plain text and tables are licensed under Creative Commons Attribution 4.0 International (CC BY 4.0, <https://creativecommons.org/licenses/by/4.0/>); credit Hazard Plain and the release. The underlying federal data are public domain; OpenFEMA data are also subject to the OpenFEMA terms and conditions.

Cite this: Hazard Plain (2026). Cherokee County, OK: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-28; County area 40021). Preview: automated baseline. Built from FEMA OpenFEMA, the FEMA National Risk Index and NOAA NCEI Storm Events; source versions in the packet's Sources list.

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_OK_40021. Preview: automated baseline.