

Jasper County, MO

Risk-assessment baseline packet

County FIPS: 29097 Release: 2026-10 Data as of: 2026-09-30 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.

Summary

Plan status as of 2026-09-30: Expired on 2026-05-10. Plan: Jasper/Newton County HMP (2021) (FEMA plan 107480), approved 2021-05-10.

Since the plan was approved on 2021-05-10: 1 new hazard declaration (1 incident) and 241 NOAA Storm Events records; details under "What changed since your last plan".

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$26,382,130 a year), Tornado (\$13,321,235) and Heat Wave (\$5,375,290).

The tables that follow are organized by the items of FEMA's Local Mitigation Plan Review Tool, Element B (B1-a to B2-c); each heading says which item its tables support.

TERMS USED

EAL: expected annual loss: FEMA's modeled average yearly loss from a hazard.

NRI: FEMA's National Risk Index (version 1.20, December 2025).

NFIP: National Flood Insurance Program.

RL, SRL: repetitive loss and severe repetitive loss: flood-insured properties with repeated claims (definitions in B2-c).

FMA, HMGP: Flood Mitigation Assistance and Hazard Mitigation Grant Program, FEMA mitigation grants.

PA: FEMA Public Assistance: disaster aid to governments and some nonprofits.

Zone-level: NOAA logged the event for a National Weather Service forecast zone, which may include parts of neighboring counties.

County-coded: NOAA logged the event to this county.

FIPS: the federal code for a place; 29097 is this area.

D0 to D4: U.S. Drought Monitor categories, from abnormally dry (D0) to exceptional drought (D4).

F/EF, EFU: Fujita and Enhanced Fujita tornado ratings; EFU is an unrated tornado.

kt, CONUS: knots (1 kt is about 1.15 mph); the contiguous United States.

CFR: Code of Federal Regulations.

A4-a, E1-a: other items of FEMA's Local Mitigation Plan Review Tool (sources, and changes since the last plan).

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

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Plan clock

Status:	Expired on 2026-05-10	Plan:	Jasper/Newton County HMP (2021) (FEMA plan 107480)
Approved:	2021-05-10	Days since expiry:	143
Update underway:	none recorded in FEMA's plan tracker		

Until a new plan is approved, FEMA mitigation project grants (HMGP, FMA) need a FEMA exception (44 CFR 201.6(a)(3)).

What changed since your last plan (approved 2021-05-10)

New federal declarations:	1 new hazard declaration (1 incident): DR-4929-MO (Severe Storms, Straight-Line Winds, Tornadoes, and Flooding)	Storm Events records since approval:	241 records (data through 2026-06-30)
Repetitive loss now:	FMA RL 0, SRL 2 (44 CFR 77.2); any definition: 19	Repeat-flood change:	this release sets the baseline count.

Sources: 1, 2, 4, 6 (numbered list at the end)

Plan status for every jurisdiction listed in this county: 33 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" on the following pages.

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

Plan clock

Plan status for every jurisdiction listed in this county

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry	Notes
Jasper County (unincorporated area)	Unincorporated	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Airport Drive village	Village	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Alba city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Asbury city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Avilla town	Town	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Brooklyn Heights town	Town	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Carl Junction city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Cartersville city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Carthage city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Duenweg city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	this jurisdiction approved 2021-06-28
Duquesne village	Village	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Fidelity town	Town	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Jasper city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Joplin city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	this jurisdiction approved 2021-05-05
Neck City city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Oronogo city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Purcell city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Sarcoie city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Waco city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Webb City city	City	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	this jurisdiction approved 2021-04-22
Avilla R-XIII School District	School/School District	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Carl Junction R-I School District	School/School District	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Carthage R-IX School District	School/School District	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Jasper County R-V School District	School/School District	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Joplin School District	School/School District	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Notes
Sarcoxie R-II School District	School/School District	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Webb City R-VII School District	School/School District	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Crowder College	College/University	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Martin Luther School	School/School District	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Missouri Southern State University	College/University	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Ozark Christian College	College/University	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
St. Ann's Catholic School	School/School District	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	
Vatterot College	College/University	Expired on 2026-05-10	Jasper/Newton County HMP (2021) (FEMA plan 107480)	2021-05-10	2026-05-10	-143	

Plan 107480 lists 23 other participants, named in the Excel file.

Supports FEMA checklist item B1-a: hazard identification

Hazards NRI does not cover (local data needed)

- 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)

Sources: 5, 6

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>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
1	Inland Flooding	Relatively Moderate	Relatively Moderate	\$24,386,669	\$908,254	\$1,087,207	\$26,382,130	242	
2	Tornado	Relatively High	Relatively High	\$5,660,084	\$3,865	\$7,657,285	\$13,321,235	24	
3	Heat Wave	Relatively Moderate	Relatively Moderate	\$16,982	\$6	\$5,358,302	\$5,375,290	12	

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>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
4	Ice Storm	Very High	Very High	\$2,162,516	n/a	\$93,021	\$2,255,537	8	
5	Cold Wave	Relatively Moderate	Relatively Moderate	\$684	\$381,341	\$1,817,079	\$2,199,104	10	Includes 3 Frost/Freeze records (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
6	Drought	Relatively High	Relatively High	n/a	\$2,044,724	n/a	\$2,044,724	38	
7	Strong Wind	Relatively High	Relatively High	\$657,942	\$17,243	\$1,234,216	\$1,909,402	361	Includes 13 High Wind records (a NOAA non-thunderstorm wind type, outside NRI's Strong Wind definition).
8	Hail	Relatively Moderate	Relatively Moderate	\$1,856,619	\$5,119	\$25,553	\$1,887,291	270	
9	Earthquake	Relatively Low	Relatively Low	\$1,173,822	n/a	\$331,473	\$1,505,295		Storm Events does not record earthquakes.
10	Lightning	Relatively High	Relatively High	\$62,706	n/a	\$1,057,276	\$1,119,982	18	
11	Winter Weather	Relatively High	Relatively High	\$305,828	\$126	\$32,889	\$338,843	51	
12	Wildfire	Relatively Low	Relatively Low	\$110,276	\$132	\$22,721	\$133,129	1	
13	Hurricane	Very Low	Very Low	\$22,803	\$4,882	\$153	\$27,838	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
14	Landslide	Very Low	Very Low	\$377	n/a	\$11	\$387	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).

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

NRI risk rating combines expected annual loss with social vulnerability and community resilience; EAL rating rates expected annual loss alone. Both compare this county with all U.S. counties.

Local data needed: state and local landslide records (Storm Events records this hazard only in part).

Not applicable to this county per NRI, with no federal declaration and no Storm Events record since 1996: avalanche, coastal flooding, tsunami and volcanic activity. That is the evidence for leaving them out of the plan.

The state hazard mitigation plan also lists hazards for this county; FEMA asks the plan to explain any hazard it leaves out.

Supports FEMA checklist item B1-b: hazard location

Affects the whole county (national data give no location within it): Cold Wave, Drought, Hail, Heat Wave, Ice Storm, Lightning, Strong Wind and Winter Weather.

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.

Hazards that vary within the county: highest-rated census tracts

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Earthquake	tract 110 (Relatively Low, 76.3); tract 114 (Relatively Low, 75.8); tract 104 (Relatively Low, 74.4)
Hurricane	tract 121 (Very Low, 42.5); tract 104 (Very Low, 39.8); tract 119 (Very Low, 38.0)
Landslide	tract 121 (Very Low, 79.5); tract 120 (Very Low, 79.2); tract 119 (Very Low, 78.6)
Tornado	tract 104 (Very High, 99.2); tract 114 (Very High, 98.7); tract 116 (Very High, 97.7)
Wildfire	tract 119 (Relatively Low, 87.6); tract 112.02 (Relatively Low, 86.0); tract 104 (Relatively Low, 85.4)

Up to 3 census tracts per hazard, highest National Risk Index rating first, then highest score; a tract number is the Census tract number (for example 110 is Census Tract 110). FEMA's Resilience Analysis and Planning Tool maps the National Risk Index for every tract: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

Supports FEMA checklist item B1-c: hazard extent

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

Sources: 6, 7

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	7 records, 2000 to 2025 (7 zone-level)	1 day to 23 days (median 2.5 days); 6 with a recorded value	2000-12-12 to 2001-01-03 (2 records, 1 of them a monthly summary record), zone-level		Countywide (zone-level records).	
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	3 records, 2007 to 2021 (3 zone-level)		Frost/Freeze, 2007-04-07, \$6,800,000 crop damage (2007 dollars); NWS zone MOZ088		Countywide (zone-level records).	
Drought	U.S. Drought Monitor scale (D0 to D4)	38 records, 1999 to 2026 (38 zone-level)	31 days to 243 days (median 68.5 days); 12 with a recorded value	243 days (8 months), 2022-07-01 to 2023-02-28, a run of 8 consecutive Storm Events drought records, zone-level	Drought, 2012-08-01, \$2,500,000 property; \$29,650,000 crops (zone total, 2012 dollars)	Countywide (zone-level records).	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.

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Earthquake	Modified Mercalli (local data)	0					Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	hail size (inches)	341 records, 1955 to 2026	0.75 in to 4.5 in (median 1 in); 341 with a recorded value	4.5 in hail, 2003-05-06	Hail, 2020-05-03, \$2,000,000 property; \$0 crops (2020 dollars)	Event records naming jurisdictions in the plan: Joplin city (51 records), Sarcoxie city (29 records), Carthage city (26 records), Carl Junction city (21 records), Webb City city (18 records), Duenweg city (14 records), Jasper city (14 records), Oronogo city (14 records), Cartersville city (13 records), Asbury city (7 records); and 6 more jurisdictions (see the Excel file).	
Excessive Heat, Heat	heat index (in event narratives)	12 records, 1999 to 2022 (12 zone-level)	1 day to 92 days (median 9 days); 7 with a recorded value	June 2012 to August 2012 (3 monthly summary records), zone-level	Excessive Heat, 2011-08-03, \$324,000 property; \$0 crops (zone total, 2011 dollars)	Countywide (zone-level records).	
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.
Ice Storm	Sperry-Piltz ice scale (local data)	8 records, 1996 to 2019 (8 zone-level)		Ice Storm, 2007-12-09, \$5,000,000 property; \$0 crops (2007 dollars); NWS zone MOZ088		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	242 records, 1996 to 2026 (7 zone-level)		Flood, 2015-12-27, \$1,000,000 property; \$0 crops (2015 dollars)		Event records naming jurisdictions in the plan: Joplin city (36 records), Carthage city (20 records), Alba city (19 records), Jasper city (16 records), Duquesne village (11 records), Oronogo city (10 records), Webb City city (10 records), Asbury city (8 records), Carl Junction city (7 records), Avilla town (5 records); and 8 more jurisdictions (see the Excel file). Zone-level records (7) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage is often \$0 or blank for floods, major ones included; FEMA Public Assistance by declaration (B1-d) shows which floods cost the most.
Debris Flow	none (count and damage only)	0					
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	18 records, 1996 to 2023		Lightning, 2011-05-23, \$0 property; \$0 crops (2011 dollars); 1 direct death, 1 direct injury	Lightning, 2014-08-07, \$1,000,000 property; \$0 crops (2014 dollars)	Event records naming jurisdictions in the plan: Joplin city (7 records), Carthage city (3 records), Duenweg city (2 records), Sarcoxie city (2 records), Carl Junction city (1 record), Cartersville city (1 record), Webb City city (1 record).	Storm Events lists lightning with damage or casualties.

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	13 records, 1996 to 2025 (13 zone-level)	50 kt (58 mph) to 67 kt (77 mph) (median 52 kt (60 mph)); 11 with a recorded value	67 kt (77 mph) measured gust, High Wind, 2005-11-27; NWS zone MOZ088	High Wind, 2015-11-11, \$50,000 property; \$0 crops (zone total, 2015 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	456 records, 1957 to 2026	50 kt (58 mph) to 90 kt (104 mph) (median 52 kt (60 mph)); 372 with a recorded value	90 kt (104 mph), measurement type not recorded, Thunderstorm Wind, 1973-05-11	Thunderstorm Wind, 2009-05-08, \$3,000,000 property; \$0 crops (2009 dollars)	Event records naming jurisdictions in the plan: Carthage city (66 records), Joplin city (62 records), Sarcoxie city (30 records), Jasper city (24 records), Webb City city (24 records), Duquesne village (15 records), Oronogo city (14 records), Carl Junction city (13 records), Alba city (11 records), Asbury city (8 records); and 7 more jurisdictions (see the Excel file).	Speeds under 20 kt (likely entry errors) are left out of the observed range.
Tornado	Enhanced Fujita (Fujita before Feb 2007)	54 records, 1951 to 2026	F/EF0 to F/EF5 (median F/EF1); 53 with a recorded value	EF5 tornado, 2011-05-22, 8.8 mi within this county, 1,600 yd wide, \$2,800,000,000 property; \$0 crops (2011 dollars), 158 direct deaths, 1150 direct injuries		Event records naming jurisdictions in the plan: Joplin city (5 records), Jasper city (3 records), Carl Junction city (2 records), Cartersville city (2 records), Duenweg city (2 records), Oronogo city (2 records), Avilla town (1 record), Carthage city (1 record), Fidelity town (1 record), Waco city (1 record).	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).
Wildfire	acres burned (local data)	1 record, 2006 (1 zone-level)		No damage reported in 1 record.		Countywide (zone-level records).	
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	51 records, 1997 to 2026 (51 zone-level)		Winter Storm, 1999-01-01, \$125,000 property; crops not reported (1999 dollars); NWS zone MOZ088		Countywide (zone-level records).	

Where a hazard names more than 10 jurisdictions, the table lists the 10 with the most records; every one is in the Excel file, sheet "B1-c Extent".

In event narratives only (local data needed): wind chill, temperature, heat index, ice thickness, acres burned and snow depth; any physical measure of debris flow and lightning.

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records from zones that no NWS zone-county file places in this county (mostly before 2020) are not counted here (the Methods page explains the zone matching).

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

A monthly summary record covers most or all of a month; it does not count days at wave conditions.

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 23 declarations covering 18 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2026-08-03	2026-06-04	DR-4929-MO	Major disaster	Severe Storms, Straight-Line Winds, Tornadoes, and Flooding	Inland Flooding; Strong Wind; Tornado	not yet in FEMA's PA summaries (they cover declarations through 2026-06-30)	new since last plan; within last 5 years	
2020-03-26	2020-01-20	DR-4490-MO	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$2,276,240.54		
2020-03-13	2020-01-20	EM-3482-MO	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded		same incident as DR-4490
2019-07-09	2019-04-29	DR-4451-MO	Major disaster	Severe Storms, Tornadoes, and Flooding	Inland Flooding; Tornado	\$179,450.23		
2017-06-02	2017-04-28	DR-4317-MO	Major disaster	Severe Storms, Tornadoes, Straight-Line Winds and Flooding	Inland Flooding (primary); also designated: Strong Wind, Tornado	PA not declared for this county		
2016-01-21	2015-12-23	DR-4250-MO	Major disaster	Severe Storms, Tornadoes, Straight-Line Winds, and Flooding	Inland Flooding (primary); also designated: Strong Wind, Tornado	\$362,082.45		
2016-01-02	2015-12-22	EM-3374-MO	Emergency	Severe Storms, Tornadoes, Straight-Line Winds, and Flooding	Inland Flooding (primary); also designated: Strong Wind, Tornado	no Public Assistance recorded		same incident as DR-4250
2011-05-09	2011-04-19	DR-1980-MO	Major disaster	Severe Storms, Tornadoes, and Flooding	Inland Flooding; Tornado	\$115,453,571.45		
2011-02-03	2011-01-31	EM-3317-MO	Emergency	Severe Winter Storm	Winter Weather	no Public Assistance recorded		
2009-06-19	2009-05-08	DR-1847-MO	Major disaster	Severe Storms, Tornadoes, and Flooding	Inland Flooding; Tornado	\$371,915.31		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2009-01-30	2009-01-26	EM-3303-MO	Emergency	Severe Winter Storm	Ice Storm	no Public Assistance recorded		
2008-05-23	2008-05-10	DR-1760-MO	Major disaster	Severe Storms and Tornadoes	Tornado	PA not declared for this county		
2008-03-19	2008-03-17	DR-1749-MO	Major disaster	Severe Storms and Flooding	Inland Flooding	\$171,768		
2007-12-27	2007-12-06	DR-1736-MO	Major disaster	Severe Winter Storms	Ice Storm	\$3,999,251.40		
2007-12-12	2007-12-08	EM-3281-MO	Emergency	Severe Winter Storms	Ice Storm	no Public Assistance recorded		same incident as DR-1736
2007-01-15	2007-01-12	DR-1676-MO	Major disaster	Severe Winter Storms and Flooding	Ice Storm	\$402,296.64		
2005-09-10	2005-08-29	EM-3232-MO	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded		
2003-05-06	2003-05-04	DR-1463-MO	Major disaster	Severe Storms, Tornadoes, and Flooding	Inland Flooding; Tornado	\$1,059,998		
2002-05-06	2002-04-24	DR-1412-MO	Major disaster	Severe Storms, Tornadoes and Flooding	Inland Flooding; Tornado	\$28,588.68		FEMA's declaration record does not list Public Assistance, but FEMA's PA project summaries show obligations for this county
1995-06-02	1995-05-13	DR-1054-MO	Major disaster	Severe Storms, Tornadoes, Hail, Flooding	Hail; Inland Flooding; Tornado	PA not declared for this county		
1993-07-09	1993-06-10	DR-995-MO	Major disaster	Severe Storms & Flooding	Inland Flooding	PA not declared for this county		
1976-07-21	1976-07-21	DR-516-MO	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1973-04-19	1973-04-19	DR-372-MO	Major disaster	Heavy Rains, Tornadoes & Flooding	Inland Flooding; Tornado	no Public Assistance recorded		

School districts and special districts in this county: \$72,259.46 (included in the county total above). Public Assistance matched by applicant name to the school districts and special districts FEMA lists as plan participants in this county. They have no row of their own in the jurisdiction table, 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), so this line is not added to it.

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.

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
1964-07-08	1964-07-08	DR-173-MO	Major disaster	Severe Storms & Flooding	Inland Flooding
1961-05-27	1961-05-27	DR-114-MO	Major disaster	Floods	Inland Flooding
1960-04-20	1960-04-20	DR-100-MO	Major disaster	Floods	Inland Flooding
1957-05-22	1957-05-22	DR-75-MO	Major disaster	Tornadoes & Floods	Tornado (primary); also designated: Inland Flooding

FEMA recorded these with designated area Statewide and no county, so they are listed on every county page in the state and not counted with county rows. Local data needed: whether each one affected this county.

Public Assistance filed under this county for declarations that do not list it: 3 rows, \$70,788.59

Sources: 2, 3

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-1961-MO	2011-03-23	Severe Winter Storm and Snowstorm	FREEMAN HOSPITAL	\$32,517.98
DR-1773-MO	2008-06-25	Severe Storms and Flooding	Clearmont, City of	\$4,485
DR-1728-MO	2007-09-21	Severe Storms and Flooding	Vineyard Benefit Special Road District	\$33,785.61

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.

Public Assistance not placed in any Missouri county: 24 rows, \$2,272,582.85; listed on the Missouri state page.

Source: 3

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval records	In the 12 months before plan approval records	Last 5 years records	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Cold Wave	10	4	2	4	0	0	1996 to 2026-06-30	Includes 3 Frost/Freeze records.
Drought	38	17	1	17	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	341	28	3	28	1	0	1955 to 2026-06-30	
Heat Wave	12	1	0	1	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

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Ice Storm	8	0	0	0	3	0	1996 to 2026-06-30	
Inland Flooding	242	59	4	51	13	1	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	18	2	1	1	0	0	1996 to 2026-06-30	
Strong Wind	469	106	11	104	3	1	1955 to 2026-06-30	Includes 13 High Wind records.
Tornado	54	7	0	7	11	1	1950 to 2026-06-30	
Wildfire	1	0	0	0	0	0	1996 to 2026-06-30	
Winter Weather	51	17	7	17	1	0	1996 to 2026-06-30	

Notable Storm Events records

Sources: 1, 6, 7

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Deaths, injuries <i>direct only</i>	Location	Flags	Why listed
2022-07-01	Drought		\$0 property; \$0 crops (zone total, 2022 dollars)	0, 0	NWS zone MOZ088 (JASPER), zone-level	new since last plan; within last 5 years	B1-c worst recorded: Drought
2015-12-27	Flood		\$1,000,000 property; \$0 crops (2015 dollars)	0, 0	CARTHAGE to MORGAN HGTS		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2012-06-01	Heat		\$0 property; \$0 crops (zone total, 2012 dollars)	0, 0	NWS zone MOZ088 (JASPER), zone-level		B1-c worst recorded: Excessive Heat, Heat
2011-05-22	Tornado	EF5, 8.8 mi within this county, 1,600 yd wide	\$2,800,000,000 property; \$0 crops (2011 dollars)	158, 1150	CENTRAL CITY to DUENWEG		deaths or injuries recorded
2007-12-09	Ice Storm		\$5,000,000 property; \$0 crops (zone total, 2007 dollars)	0, 0	NWS zone MOZ088 (JASPER), zone-level		B1-c worst recorded: Ice Storm
2007-04-07	Frost/Freeze		\$0 property; \$6,800,000 crops (zone total, 2007 dollars)	0, 0	NWS zone MOZ088 (JASPER), zone-level		B1-c worst recorded: Frost/Freeze
2005-11-27	High Wind	67 kt (77 mph) measured gust	damage not reported	0, 0	NWS zone MOZ088 (JASPER), zone-level		B1-c worst recorded: High Wind and Strong Wind
2003-05-06	Hail	4.5 in	damage not reported	0, 0	ASBURY		B1-c worst recorded: Hail
2003-05-04	Tornado	F3, 5 mi within this county, 880 yd wide	\$21,200,000 property; crops not reported (2003 dollars)	2, 15	CARL JCT		deaths or injuries recorded
2000-12-12	Extreme Cold/ Wind Chill		\$0 property; \$0 crops (zone total, 2000 dollars)	0, 0	NWS zone MOZ088 (JASPER), zone-level		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
1999-07-23	Heat		damage not reported	3, 0	NWS zone MOZ088 (JASPER), zone-level		deaths or injuries recorded
1973-05-11	Thunderstorm Wind	90 kt (104 mph), measurement type not recorded	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Thunderstorm Wind

The full list is in the Excel file, sheet "B1-d Storm Events history" (1,244 rows).

Location is the place NOAA recorded, as written in its data; it need not be a jurisdiction in this plan.

Local data needed: state-declared emergencies, from your state emergency management agency (federal data do not include them).

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

Supports FEMA checklist item B1-e: probability of future events

Probability: FEMA annualized frequency and descriptor per hazard

Sources: 5, 6

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	2.21	event-days per year	about 2.21 days per year	Likely	Storm Events event-days in 6 of 30 years, 1996 to 2025 (20%)	42	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	12.5	event-days per year	about 12.5 days per year	Likely	Storm Events event-days in 11 of 30 years, 1996 to 2025 (36.7%)	392	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.00158	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.158%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	7.47	events per year	about 7.47 per year	Highly likely	FEMA annualized frequency (modeled)	283.9 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	16.4	event-days per year	about 16.4 days per year	Likely	Storm Events event-days in 6 of 30 years, 1996 to 2025 (20%)	205	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are in B1-d.
Ice Storm	1.13	event-days per year	about 1.13 days per year	Likely	Storm Events event-days in 6 of 30 years, 1996 to 2025 (20%)	77	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	4.86	event-days per year	about 4.86 days per year	Highly likely	Storm Events event-days in 29 of 30 years, 1996 to 2025 (96.7%)	136	1996 to 2023 (28 years)	see B1-f	
Landslide	0.128	events per year (modeled)	about 1 in 8 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	55.5	days per year with a strike	about 55.5 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	6.02	events per year	about 6.02 per year	Highly likely	FEMA annualized frequency (modeled)	229	1986 to 2023 (38 years)	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
Tornado	0.522	events per year	about 0.52 per year	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.000894	annual probability at a location	chance a given location in the county burns in a year: 0.0894%	Possible	Storm Events records in 1 of 30 years, 1996 to 2025 (3.33%)	not shown	modeled	see B1-f	
Winter Weather	10.5	event-days per year	about 10.5 days per year	Likely	Storm Events event-days in 23 of 30 years, 1996 to 2025 (76.7%)	199	2005-11-12 to 2024-11-12 (19 years)	countywide	

FEMA annualized frequency (modeled) is the National Risk Index v1.20 (December 2025) estimate of how often a hazard affects this county in a year; it is not recorded events divided by years, and its unit differs by hazard (events, event-days, or days with a lightning strike per year). For earthquake, wildfire, coastal flooding and tsunami the value is the chance (or number of events) at a location in the county, not across the county, so no "1 in N years" is given and the descriptor comes from Storm Events where it has a record (none for earthquake). The Methods page gives each hazard's method, from FEMA's National Risk Index Technical Documentation v1.20.

Where NRI gives event-days, the descriptor comes from the share of years with a Storm Events record; NRI's source records more events, so the two differ.

Descriptor scale used in this packet (defined per unit)

Sources: 5, 6

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

Intensity bands: historical frequency (Storm Events)

Source: 6

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	138	30	4.6
Hail	2.00 in+	1996 to 2025	19	30	0.633
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	277	30	9.23
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	19	30	0.633
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	30	30	1
Tornado	EF0-1	1996 to 2025	17	30	0.567
Tornado	EF2-3	1996 to 2025	3	30	0.1
Tornado	EF4-5	1996 to 2025	1	30	0.0333
Tornado	unrated (EFU)	1996 to 2025	1	30	0.0333

The bands show how often events of each severity were recorded in this county, to profile how severe events have been (FEMA's probability item asks for the range of intensities).

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.

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 (<https://resilience.climate.gov/>).

Supports FEMA checklist item B1-f: hazards that vary across jurisdictions

Range of census tract risk within the county

Source: 5

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Cold Wave	29 of 29	32.3	59.3	83.2	Relatively High 1, Relatively Moderate 26, Relatively Low 2
Drought	17 of 29	72.0	89.5	99.2	Relatively High 3, Relatively Moderate 2, Relatively Low 8, Very Low 4, No Rating 12
Earthquake	29 of 29	35.4	59.2	76.3	Relatively Low 26, Very Low 3
Hail	29 of 29	73.3	86.4	94.9	Relatively High 7, Relatively Moderate 22
Heat Wave	29 of 29	66.5	90.8	95.6	Relatively High 26, Relatively Moderate 3
Hurricane	29 of 29	26.7	33.6	42.5	Very Low 29
Ice Storm	29 of 29	89.5	96.0	99.0	Very High 5, Relatively High 23, Relatively Moderate 1
Inland Flooding	29 of 29	20.2	74.7	91.5	Relatively High 12, Relatively Moderate 14, Relatively Low 3
Landslide	29 of 29	17.1	51.1	79.5	Very Low 29
Lightning	29 of 29	54.4	87.2	96.3	Very High 1, Relatively High 25, Relatively Moderate 3
Strong Wind	29 of 29	60.7	84.3	93.6	Relatively High 18, Relatively Moderate 11

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Tornado	29 of 29	70.9	93.2	99.2	Very High 14, Relatively High 14, Relatively Moderate 1
Wildfire	26 of 29	22.3	77.7	87.6	Relatively Low 20, Very Low 6, No Rating 3
Winter Weather	29 of 29	63.7	85.2	95.5	Relatively High 23, Relatively Moderate 6

Drought: Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range mostly reflects where crop and livestock value is.

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.

The score ranks a tract against all U.S. tracts (100 = highest). The rating is FEMA's category for the tract's risk value, computed differently, so the two can disagree.

Frequency data for cold wave, drought, hail, heat wave, ice storm, lightning, strong wind and winter weather are county-wide or coarse (49 km grid or NWS zone), the same for every jurisdiction; the tract range mostly reflects where buildings and people are (crop and livestock value where a line above names agriculture).

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Jasper County (unincorporated area)	Unincorporated	Expired on 2026-05-10	FMA RL 0, SRL 0; any 8	\$527,729.95	0 total; 0 since its plan	
Airport Drive village	Village	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$63,755.40	0 total; 0 since its plan	
Alba city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$22,542.17	32 total; 8 since its plan	
Asbury city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$13,172.63	23 total; 3 since its plan	
Avilla town	Town	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	18 total; 1 since its plan	
Brooklyn Heights town	Town	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	9 total; 3 since its plan	
Carl Junction city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$1,432,215.42	44 total; 5 since its plan	
Carterville city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$59,424.31	24 total; 7 since its plan	
Carthage city	City	Expired on 2026-05-10	FMA RL 0, SRL 1; any 4	\$482,674.32	116 total; 12 since its plan	
Duenweg city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$31,112.88	30 total; 6 since its plan	
Duquesne village	Village	Expired on 2026-05-10	FMA RL 0, SRL 1; any 1	\$332,082.95	32 total; 9 since its plan	
Fidelity town	Town	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	12 total; 3 since its plan	

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Jasper city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$102,163.35	57 total; 11 since its plan	
Joplin city	City	Expired on 2026-05-10	FMA RL 1, SRL 2; any 7	\$10,627,417.83	161 total; 26 since its plan	Whole community, including the part in Newton County; in-county portion (county table): FMA RL 0, FMA SRL 0, NFIP RL 5, NFIP SRL 0, any category 5.
Neck City city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$17,053.67	13 total; 3 since its plan	
Oronogo city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$85,584.50	40 total; 11 since its plan	
Purcell city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$12,112.50	1 total; 0 since its plan	
Sarcoxie city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 1	\$41,724.45	66 total; 16 since its plan	
Waco city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$3,239.63	14 total; 1 since its plan	
Webb City city	City	Expired on 2026-05-10	FMA RL 0, SRL 0; any 0	\$824,561.04	53 total; 12 since its plan	

Repetitive-loss counts are for whole NFIP communities, which can extend beyond this county (see the note in B2-c).

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

County Public Assistance in B1-d also includes applicants filed under the county that are not jurisdictions in this plan (for example state agencies, special districts and nonprofits), so the jurisdiction rows add up to less.

Supports FEMA checklist items B2-a and B2-b: vulnerability and potential impacts

Local data needed

The table below gives county-level starting figures; the plan describes impacts for each jurisdiction and its own assets.

- Critical facilities and lifelines per hazard
- A problem statement per jurisdiction 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

Sources: 1, 2, 3, 5, 6, 7

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>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2021-05-10 <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 <i>nominal dollars</i>
Cold Wave	\$27,640,036,673	\$125,185,028	122,722	\$684	\$381,341	\$1,817,079	under 0.0001%		\$0	
Drought	n/a	\$53,288,512	n/a	n/a	\$2,044,724	n/a	3.84% (agriculture)		\$16,900,000	
Earthquake	\$49,512,753,111	n/a	122,761	\$1,173,822	n/a	\$331,473	0.00237%			
Hail	\$27,640,036,673	\$125,185,028	122,722	\$1,856,619	\$5,119	\$25,553	0.00672%	\$160,000		
Heat Wave	\$27,640,036,673	\$125,185,028	122,722	\$16,982	\$6	\$5,358,302	under 0.0001%		\$0	
Hurricane	\$27,640,036,673	\$125,185,028	122,722	\$22,803	\$4,882	\$153	under 0.0001%			
Ice Storm	\$27,639,807,931	n/a	122,720	\$2,162,516	n/a	\$93,021	0.00782%			

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>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2021-05-10 <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 <i>nominal dollars</i>
Inland Flooding	\$27,627,966,348	\$16,362,214	2,205	\$24,386,669	\$908,254	\$1,087,207	n/a (see note)	\$5,000		1 declaration not yet in FEMA's PA summaries (they cover declarations through 2020)
Landslide	\$142,984,610	n/a	552	\$377	n/a	\$11	0.000263%			
Lightning	\$27,640,036,673	n/a	122,722	\$62,706	n/a	\$1,057,276	0.000227%	\$15,000		
Strong Wind	\$27,640,036,673	\$125,185,028	122,722	\$657,942	\$17,243	\$1,234,216	0.00238%	\$1,525,000	\$8,000	1 declaration not yet in FEMA's PA summaries (they cover declarations through 2020)
Tornado	\$27,640,036,673	\$125,185,028	122,722	\$5,660,084	\$3,865	\$7,657,285	0.0205%	\$1,150,000		1 declaration not yet in FEMA's PA summaries (they cover declarations through 2020)

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>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2021-05-10 <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 <i>nominal</i>
Wildfire	\$1,240,538,260	\$21,851,691	12,810	\$110,276	\$132	\$22,721	0.00889%			
Winter Weather	\$27,640,036,673	\$125,185,028	122,722	\$305,828	\$126	\$32,889	0.00111%		\$0	

Totals since 2021-05-10 (Storm Events through 2026-06-30): 198 county-coded records, 198 with a damage value recorded (including \$0), \$2,855,000; 43 zone-level records, 36 with a damage value recorded (including \$0), \$16,908,000 reported for the zone; Public Assistance: the 1 counted declaration is not yet in FEMA's PA summaries (they cover declarations through 2026-06-30).

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 does not add up to the total; the unit total counts each declaration once.

NRI computes earthquake exposure on its own basis, so it exceeds the county building value in B2-a.

Supports FEMA checklist item B2-a: vulnerability (county context)

County context

Source: 5

Measure	Value
Population	122,722
Building value (total, not at risk)	\$27,640,036,673
Agriculture value (total, not at risk)	\$125,185,028
NRI risk rating (all hazards)	Relatively Moderate
Expected annual loss, buildings and agriculture, all hazards	\$39,783,000
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)	\$18,717,186
Social vulnerability rating	Relatively Low
Community resilience rating	Relatively Moderate
NRI version	December 2025

FEMA's all-hazard expected annual loss adds buildings, agriculture and population equivalence; this table gives the property part and the population-equivalence part as separate rows.

Social vulnerability: higher means people are more likely to be harmed and slower to recover. Community resilience: lower means the community is less able to recover. High social vulnerability and low resilience both raise the NRI risk rating.

Supports FEMA checklist item B2-c: repetitive loss properties

Repetitive loss in this county, both definitions

Sources: 1, 4

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	0	Severe repetitive loss, FMA definition (44 CFR 77.2)	2
Repetitive loss, NFIP insurance definition	19	Severe repetitive loss, NFIP insurance definition	2

The state NFIP coordinator's list, the source FEMA's Handbook names, often uses the NFIP insurance definition (second row).

Repeat-flood properties: county and state-level rows

Sources: 1, 4

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	0	2	19	2	19	0	5
of which: Carthage city	0	1	4	1	4	0	2
of which: Joplin city	0	0	5	0	5	0	1
of which: Sarcoxie city	0	0	1	0	1	0	0
of which: Duquesne city	0	1	1	1	1	0	0
of which: Jasper County (unincorporated area)	0	0	8	0	8	0	2
Statewide, no county in FEMA's file	0	0	3	0	3	0	0

The statewide row counts properties FEMA's file gives with no county in this state; they are listed for reference and are not in this county's counts.

Repeat-flood properties by jurisdiction in the plan (NFIP community)

Sources: 1, 4

Jurisdiction	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
Jasper County (unincorporated area)	290807	0	0	8	0	8	0	2	
Airport Drive village	290761	0	0	0	0	0	0	0	
Alba city	290954	0	0	0	0	0	0	0	
Asbury city	290765	0	0	0	0	0	0	0	
Avilla town	290324	0	0	0	0	0	0	0	
Brooklyn Heights town	290334	0	0	0	0	0	0	0	
Carl Junction city	290179	0	0	0	0	0	0	0	
Cartersville city	290180	0	0	0	0	0	0	0	
Carthage city	290181	0	1	4	1	4	0	2	

Jurisdiction	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
Duenweg city	290182	0	0	0	0	0	0	0	
Duquesne village	290728	0	1	1	1	1	0	0	
Fidelity town	290426	0	0	0	0	0	0	0	
Jasper city	290722	0	0	0	0	0	0	0	
Joplin city	290183	1	2	7	2	7	0	2	Whole community, including the part in Newton County; in-county portion (county table): FMA RL 0, FMA SRL 0, NFIP RL 5, NFIP SRL 0, any category 5.
Neck City city	290376	0	0	0	0	0	0	0	
Oronogo city	290185	0	0	0	0	0	0	0	
Purcell city	290539	0	0	0	0	0	0	0	
Sarcoxie city	290186	0	0	1	0	1	0	0	
Waco city	290445	0	0	0	0	0	0	0	
Webb City city	290187	0	0	0	0	0	0	0	

Counts by occupancy group for each jurisdiction are in the Excel file, sheet "B2-c Jurisdictions".

Jurisdiction 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 jurisdiction row, while the county table counts only its part in this county.

County repeat-flood properties by occupancy group

Sources: 1, 4

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	0	2	16	2	16	0	5
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	0	0	0	0	0
non-residential	0	0	3	0	3	0	0
not reported	0	0	0	0	0	0	0

FEMA's occupancy groups have no institutional class; institutional properties are counted in non-residential or other residential in the table by occupancy group.

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. NFIP repetitive loss (the FEMA insurance definition) is 2 or more claims over \$1,000 in 10 years, and a property can leave that group once it is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured. The Methods page gives the OpenFEMA field details.

Counts are aggregates of FEMA's public NFIP Multiple Loss Properties file (FEMA's data date 2026-08-02; file version 2026-08-04). No property is identified. County assignment is FEMA's geocode.

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

Tables cite these sources by number. The full list, for the plan's bibliography (FEMA review item A4-a):

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-29T134039Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
 2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-29T162832Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
 3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
 4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-30, <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 2026-09-30, 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 2026-09-30, <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 2026-09-30, <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 2026-09-30, 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_scscd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scscd_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 (used to match place names and codes; no table prints its values)
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What this packet is and what the plan adds

This packet is the federal data for the plan's risk assessment (the summary on page 1 says how it is organized); the plan and FEMA's review decide whether each item is met.

The plan adds what only the community has: local data on assets, critical facilities, development and each jurisdiction's impacts; local hazard history, including state-declared emergencies; the mitigation strategy; and adoption.

How the federal data are built: National Risk Index values are FEMA's model, not counts of events. Storm Events is more complete from 1996; zone-level records are placed by forecast zone, not by location in the county. Public Assistance for a jurisdiction is matched by applicant name. The Methods page gives every rule and the known edge cases.

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).

Reuse, citation and corrections

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Cite this: Hazard Plain (2026). Jasper County, MO: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 29097). Automated baseline. <https://hazardplain.org/mo/29097/> 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: contact@hazardplain.org