

Howard County, TX

Risk-assessment baseline packet

County FIPS: 48227 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: No county-level plan row in FEMA data.

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$4,372,568 a year), Hail (\$2,978,824) and Drought (\$1,874,146).

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; 48227 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

No county-level plan row in FEMA data

What changed since your last plan

Not available. No county-level plan row in FEMA data, so there is no approval date to count from.

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

Plan status for every jurisdiction listed in this county

Source: 1

						Days to expiry negative = days since expiry	Update underway	Notes
Jurisdiction	Type	Status	Plan	Approved	Expires			

No rows for this unit.

No jurisdictions listed in FEMA plan data for this unit.

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

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 Low	Relatively Low	\$3,529,269	\$23,869	\$819,430	\$4,372,568	90	
2	Hail	Relatively High	Relatively High	\$1,346,366	\$128,205	\$1,504,253	\$2,978,824	220	
3	Drought	Relatively High	Relatively High	n/a	\$1,874,146	n/a	\$1,874,146	16	
4	Tornado	Relatively Moderate	Relatively Low	\$495,797	\$701	\$1,182,481	\$1,678,978	10	
5	Wildfire	Relatively Moderate	Relatively Moderate	\$888,914	\$378	\$69,578	\$958,870	2	
6	Strong Wind	Relatively Moderate	Relatively Moderate	\$190,235	\$16,261	\$431,624	\$638,120	110	Includes 18 High Wind records (a NOAA non-thunderstorm wind type, outside NRI's Strong Wind definition).
7	Cold Wave	Relatively Low	Relatively Low	\$3,861	\$2	\$527,005	\$530,869	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
8	Heat Wave	Relatively Low	Relatively Low	\$205	\$1,588	\$393,325	\$395,118	1	
9	Winter Weather	Relatively Moderate	Relatively Moderate	\$19,718	\$36	\$150,835	\$170,588	15	
10	Lightning	Relatively Low	Relatively Low	\$13,077	n/a	\$98,528	\$111,606	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
11	Earthquake	Very Low	Very Low	\$20,724	n/a	\$6,373	\$27,097		Storm Events does not record earthquakes.
12	Ice Storm	Very Low	Very Low	\$9,685	n/a	\$7,976	\$17,661	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
13	Hurricane	Very Low	Very Low	\$12,311	\$2,100	\$207	\$14,618	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
14	Landslide	Very Low	Very Low	\$43	n/a	\$9	\$52	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 lightning and landslide records (Storm Events records these hazards only in part).

Not applicable to this county per NRI, with no federal declaration and no Storm Events record since 1996: avalanche, coastal flooding, tsunامي 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 9501 (Very Low, 22.1); tract 9505 (Very Low, 17.4); tract 9506 (Very Low, 16.9)
Hurricane	tract 9501 (Very Low, 46.0); tract 9509 (Very Low, 41.5); tract 9505 (Very Low, 40.2)
Landslide	tract 9509 (Very Low, 76.7); tract 9501 (Very Low, 52.2); tract 9502 (Very Low, 34.2)
Tornado	tract 9508.02 (Relatively High, 90.2); tract 9509 (Relatively High, 79.7); tract 9508.01 (Relatively High, 79.4)
Wildfire	tract 9501 (Relatively High, 97.4); tract 9509 (Relatively High, 97.4); tract 9502 (Relatively Moderate, 96.2)

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 9501 is Census Tract 9501). 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	0					Wind chill: in event narratives only (local data needed).
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	0					Temperature: in event narratives only (local data needed).
Drought	U.S. Drought Monitor scale (D0 to D4)	16 records, 1996 to 2006 (16 zone-level)	22 days to 394 days (median 31 days); 4 with a recorded value	394 days (about 12.9 months), 1998-04-01 to 1999-04-29, a run of 13 consecutive Storm Events drought records, zone-level	Drought, 1996-08-01, property not reported; \$20,000,000 crops, reported for the zone (1996 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.
Earthquake	Modified Mercalli (local data)	0					Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	hail size (inches)	319 records, 1955 to 2026	0.75 in to 5 in (median 1 in); 319 with a recorded value	5 in hail, 1996-05-10		No event record names a jurisdiction in the plan.	
Excessive Heat, Heat	heat index (in event narratives)	1 record, 2019 (1 zone-level)	1 day; 1 with a recorded value	1 consecutive day, 2019-08-26, zone-level		Countywide (zone-level records).	Heat index: in event narratives only (local data needed).
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)	6 records, 2007 to 2015 (6 zone-level)		Ice Storm, 2007-01-12, \$10,000 property; \$0 crops (2007 dollars); NWS zone TXZ052		Countywide (zone-level records).	Ice thickness: in event narratives only (local data needed).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	90 records, 1996 to 2026		Flash Flood, 2012-09-28, \$600,000 property; \$0 crops (2012 dollars)		No event record names a jurisdiction in the plan.	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					Physical measure: in event narratives only (local data needed).
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	0					Storm Events lists lightning with damage or casualties; physical measure in event narratives only (local data needed).
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	18 records, 1996 to 2025 (18 zone-level)	35 kt (40 mph) to 62 kt (71 mph) (median 50.5 kt (58 mph)); 16 with a recorded value	62 kt (71 mph) measured gust, High Wind, 2018-12-26; NWS zone TXZ052	High Wind, 2005-06-10, \$15,000 property; \$0 crops, reported for the zone (2005 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	144 records, 1956 to 2026	48 kt (55 mph) to 94 kt (108 mph) (median 56 kt (64 mph)); 124 with a recorded value	94 kt (108 mph), measurement type not recorded, Thunderstorm Wind, 1973-09-04	Thunderstorm Wind, 2025-06-08, \$1,000,000 property; \$0 crops (2025 dollars)	No event record names a jurisdiction in the plan.	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	52 records, 1954 to 2018	F/EF0 to F/EF3 (median F/EF0); 51 with a recorded value	EF3 tornado, 2016-05-22, 4.01 mi within this county, 500 yd wide, \$75,000 property; crops not reported (2016 dollars)	Tornado, 2005-06-05, \$25,000 property; \$300,000 crops (2005 dollars)	No event record names a jurisdiction in the plan.	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).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Wildfire	acres burned (local data)	2 records, 2006 to 2011 (2 zone-level)		Wildfire, 2011-05-09, \$240,000 property; crops not reported (2011 dollars); NWS zone TXZ052		Countywide (zone-level records).	Acres burned: in event narratives only (local data needed).
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	15 records, 1996 to 2026 (15 zone-level)		Winter Weather, 2006-11-30, \$2,000 property; \$0 crops (2006 dollars); NWS zone TXZ052		Countywide (zone-level records).	Snow depth: in event narratives only (local data needed).

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records whose zone 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.

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 20 declarations covering 9 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

No county-level plan row in FEMA data, so there is no approval date to count from.

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>	Notes
2021-02-19	2021-02-11	DR-4586-TX	Major disaster	Severe Winter Storms	Ice Storm	\$78,767.76	
2021-02-14	2021-02-11	EM-3554-TX	Emergency	Severe Winter Storm	Ice Storm	no Public Assistance recorded	same incident as DR-4586
2020-03-25	2020-01-20	DR-4485-TX	Major disaster	COVID-19 Pandemic	Non-natural, not counted	no Public Assistance recorded	
2020-03-13	2020-01-20	EM-3458-TX	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded	same incident as DR-4485
2011-09-09	2011-08-30	DR-4029-TX	Major disaster	Wildfires	Wildfire	\$34,250.77	
2011-07-01	2011-04-06	DR-1999-TX	Major disaster	Wildfires	Wildfire	\$145,406.37	
2011-06-21	2011-06-20	FM-2930-TX	Fire management	Boyken Road Fire	Wildfire	no Public Assistance recorded	same incident as DR-1999
2011-05-09	2011-05-09	FM-2908-TX	Fire management	Matt Loop Fire	Wildfire	no Public Assistance recorded	same incident as DR-1999
2008-03-31	2008-03-31	FM-2758-TX	Fire management	Kentwood Fire	Wildfire	no Public Assistance recorded	same incident as EM-3284
2008-03-27	2008-03-27	FM-2757-TX	Fire management	Silver Heels Fire	Wildfire	no Public Assistance recorded	same incident as EM-3284

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Notes
						<i>federal share obligated, nominal dollars</i>	
2008-03-14	2008-03-14	EM-3284-TX	Emergency	Wildfires	Wildfire	no Public Assistance recorded	
2006-01-11	2005-11-27	DR-1624-TX	Major disaster	Extreme Wildfire Threat	Wildfire	\$29,346.47	
2005-09-24	2005-09-23	DR-1606-TX	Major disaster	Hurricane Rita	Hurricane: evacuation support (county designated for sheltering evacuees, no Individual Assistance), not a local hazard event; not counted	no Public Assistance recorded	
2005-09-21	2005-09-20	EM-3261-TX	Emergency	Hurricane Rita	Hurricane: evacuation support (county designated for sheltering evacuees, no Individual Assistance), not a local hazard event; not counted	no Public Assistance recorded	same incident as DR-1606
2005-09-02	2005-08-29	EM-3216-TX	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	\$181,077.43	
1999-09-01	1999-08-01	EM-3142-TX	Emergency	Extreme Fire Hazards	Wildfire	no Public Assistance recorded	
1998-08-26	1998-08-22	DR-1239-TX	Major disaster	Tropical Storm Charley	Hurricane; Inland Flooding: designated for Hazard Mitigation only (no Public or Individual Assistance for this county); not counted	PA not declared for this county	
1993-09-10	1993-08-30	EM-3113-TX	Emergency	Extreme Fire Hazard	Drought (primary); also designated: Wildfire	no Public Assistance recorded	
1992-09-09	1992-05-01	DR-960-TX	Major disaster	Excessive Rain & Hail	Hail	PA not declared for this county	
1989-05-19	1989-05-04	DR-828-TX	Major disaster	Severe Storms, Tornadoes & Flooding	Inland Flooding; Tornado	PA not declared for this county	

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
1998-06-23	1998-06-04	EM-3127-TX	Emergency	Fire	Wildfire
1963-09-24	1963-09-24	DR-159-TX	Major disaster	Hurricane Cindy	Hurricane (primary); also designated: Inland Flooding
1961-09-16	1961-09-16	DR-118-TX	Major disaster	Hurricane Carla	Hurricane (primary); also designated: Inland Flooding
1960-07-15	1960-07-15	DR-103-TX	Major disaster	Heavy Rains, Hail, Floods & Tornadoes	Hail; Inland Flooding; Tornado
1959-07-08	1959-07-08	DR-93-TX	Major disaster	Floods	Inland Flooding
1958-06-06	1958-06-06	DR-85-TX	Major disaster	Tornadoes, Rain, Hail & Floods	Tornado (primary); also designated: Hail, Inland Flooding
1957-04-29	1957-04-29	DR-72-TX	Major disaster	Hurricane, Rain, Wind, Hail & Floods	Hurricane (primary); also designated: Hail, Inland Flooding
1954-07-01	1954-07-01	DR-18-TX	Major disaster	Flood	Inland Flooding
1953-06-19	1953-06-19	DR-9-TX	Major disaster	Flood	Inland Flooding
1953-05-15	1953-05-15	DR-2-TX	Major disaster	Tornado & Heavy Rainfall	Tornado

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.

91 Fire Management declarations (1988-03-12 to 2009-04-10) FEMA filed as Statewide with no county; each names one local fire. Listed on the state page.

Public Assistance not placed in any Texas county: 1 row, \$902,084.65; listed on the Texas 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 <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
Cold Wave	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Drought	16			0	1		1996 to 2026-06-30	
Earthquake	0			0	0			Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	319			21	1		1955 to 2026-06-30	
Heat Wave	1			0	0		1996 to 2026-06-30	
Hurricane	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Ice Storm	6			0	1		1996 to 2026-06-30	
Inland Flooding	90			21	1		1996 to 2026-06-30	
Landslide	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Lightning	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Strong Wind	162			25	0		1955 to 2026-06-30	Includes 18 High Wind records.
Tornado	52			0	1		1950 to 2026-06-30	
Wildfire	2			0	6		1996 to 2026-06-30	
Winter Weather	15			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	Why listed
2019-08-26	Excessive Heat		\$0 property; \$0 crops, reported for the zone (2019 dollars)	0, 0	NWS zone TXZ052 (HOWARD), zone-level	B1-c worst recorded: Excessive Heat, Heat
2018-12-26	High Wind	62 kt (71 mph) measured gust	\$0 property; \$0 crops, reported for the zone (2018 dollars)	0, 0	NWS zone TXZ052 (HOWARD), zone-level	B1-c worst recorded: High Wind and Strong Wind
2016-05-22	Tornado	EF3, 4.01 mi within this county, 500 yd wide	\$75,000 property; crops not reported (2016 dollars)	0, 0	BIG SPRING to MORITA	B1-c worst recorded: Tornado
2012-09-28	Flash Flood		\$600,000 property; \$0 crops (2012 dollars)	0, 0	SETTLERS ADDITION	B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2011-05-09	Wildfire		\$240,000 property; crops not reported, reported for the zone (2011 dollars)	0, 0	NWS zone TXZ052 (HOWARD), zone-level	B1-c worst recorded: Wildfire
2007-01-12	Ice Storm		\$10,000 property; \$0 crops, reported for the zone (2007 dollars)	0, 0	NWS zone TXZ052 (HOWARD), zone-level	B1-c worst recorded: Ice Storm
2006-11-30	Winter Weather		\$2,000 property; \$0 crops, reported for the zone (2006 dollars)	0, 0	NWS zone TXZ052 (HOWARD), zone-level	B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
2000-03-22	Flash Flood		\$10,000 property; crops not reported (2000 dollars)	2, 1	COUNTYWIDE	deaths or injuries recorded
1998-04-01	Drought		damage not reported	0, 0	NWS zone TXZ052 (HOWARD), zone-level	B1-c worst recorded: Drought
1996-05-10	Hail	5 in	\$30,000,000 property; crops not reported (1996 dollars)	0, 48	BIG SPRING	deaths or injuries recorded
1973-09-04	Thunderstorm Wind	94 kt (108 mph), measurement type not recorded	damage not recorded (pre-1996 record)	0, 0	location not recorded	B1-c worst recorded: Thunderstorm Wind
1956-06-22	Tornado	F1, 0.4 mi path length (whole path, pre-1996), 33 yd wide	\$30 property; crops not recorded (1956 dollars)	0, 3	location not recorded	deaths or injuries recorded

The full list is in the Excel file, sheet "B1-d Storm Events history" (663 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).

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

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	0.579	event-days per year	about 0.579 days per year		event-days in 0 of 30 years, 1996 to 2025 (0%)	11	2005-11-12 to 2024-11-12 (19 years)	countywide	No Storm Events cold wave record, 1996 to 2025.
Drought	64.9	event-days per year	about 64.9 days per year	Likely (from Storm Events: 4 of 30 years)	event-days in 4 of 30 years, 1996 to 2025 (13.3%)	2,044	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.000213	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.0213%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	4.63	events per year	about 4.63 per year	Highly likely	FEMA annualized frequency (modeled)	176.1 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	6	event-days per year	about 6 days per year	Possible (from Storm Events: 1 of 30 years)	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	98	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.00893	events per year	about 1 in 112 years	Unlikely	FEMA annualized frequency (modeled)	2	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	0.146	event-days per year	about 0.146 days per year	Likely (from Storm Events: 4 of 30 years)	event-days in 4 of 30 years, 1996 to 2025 (13.3%)	10	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	2.25	event-days per year	about 2.25 days per year	Likely (from Storm Events: 26 of 30 years)	event-days in 26 of 30 years, 1996 to 2025 (86.7%)	63	1996 to 2023 (28 years)	see B1-f	
Landslide	0.107	events per year (modeled)	about 1 in 9 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	47.9	days per year with a strike	about 47.9 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	1.92	events per year	about 1.92 per year	Highly likely	FEMA annualized frequency (modeled)	74	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	0.498	events per year	about 1 in 2 years	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.00386	annual probability at a location	chance a given location in the county burns in a year: 0.386%	Possible (from Storm Events: 2 of 30 years)	Storm Events records in 2 of 30 years, 1996 to 2025 (6.67%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI.
Winter Weather	6.16	event-days per year	about 6.16 days per year	Likely (from Storm Events: 11 of 30 years)	event-days in 11 of 30 years, 1996 to 2025 (36.7%)	117	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	140	30	4.67
Hail	2.00 in+	1996 to 2025	26	30	0.867
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	66	30	2.2
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	18	30	0.6
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	7	30	0.233
Tornado	EF0-1	1996 to 2025	6	30	0.2
Tornado	EF2-3	1996 to 2025	4	30	0.133
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

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	10 of 10	40.4	54.9	76.4	Relatively Moderate 8, Relatively Low 2
Drought	8 of 10	76.6	85.3	99.7	Relatively High 2, Relatively Moderate 1, Relatively Low 2, Very Low 3, No Rating 2
Earthquake	10 of 10	4.4	13.6	22.1	Very Low 10
Hail	10 of 10	96.6	98.6	99.3	Very High 7, Relatively High 3
Heat Wave	10 of 10	36.3	55.7	81.1	Relatively Moderate 5, Relatively Low 5
Hurricane	10 of 10	31.6	37.8	46.0	Very Low 10
Ice Storm	10 of 10	17.8	30.5	39.2	Relatively Low 3, Very Low 7
Inland Flooding	10 of 10	9.0	47.4	69.6	Relatively Moderate 5, Relatively Low 3, Very Low 2
Landslide	10 of 10	12.4	22.3	76.7	Very Low 10
Lightning	10 of 10	37.1	54.5	79.0	Relatively High 1, Relatively Moderate 5, Relatively Low 4
Strong Wind	10 of 10	77.4	88.0	94.5	Relatively High 7, Relatively Moderate 3

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Tornado	10 of 10	61.6	75.9	90.2	Relatively High 7, Relatively Moderate 3
Wildfire	10 of 10	58.0	93.2	97.4	Relatively High 2, Relatively Moderate 6, Relatively Low 1, Very Low 1
Winter Weather	10 of 10	83.8	92.8	97.8	Very High 1, Relatively High 9

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	Public Assistance to this jurisdiction	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	<i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	<i>all years; since its plan</i>	

No rows for this unit.

No city, town, township or county rows in FEMA plan data for this unit; same as county.

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.

No county-level plan row in FEMA data, so there is no approval date to count from.

- 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
- Texas A&M Forest Service TxWRAP for wildfire risk; Texas State Hazard Mitigation Plan hazard list for B1-a exclusions.

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 plan <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
Cold Wave	\$8,350,124,403	\$34,565,977	34,838	\$3,861	\$2	\$527,005	under 0.0001%				
Drought	n/a	\$16,684,908	n/a	n/a	\$1,874,146	n/a	11.2% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$14,851,768,621	n/a	34,860	\$20,724	n/a	\$6,373	0.00014%				
Hail	\$8,350,124,403	\$34,565,977	34,838	\$1,346,366	\$128,205	\$1,504,253	0.0161%				
Heat Wave	\$8,350,124,403	\$34,565,977	34,838	\$205	\$1,588	\$393,325	under 0.0001%				
Hurricane	\$8,350,124,403	\$34,457,963	34,838	\$12,311	\$2,100	\$207	0.000147%				
Ice Storm	\$8,350,124,403	n/a	34,838	\$9,685	n/a	\$7,976	0.000116%				
Inland Flooding	\$8,349,442,626	\$698,402	447	\$3,529,269	\$23,869	\$819,430	n/a (see note)				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.
Landslide	\$42,785,528	n/a	128	\$43	n/a	\$9	0.000101%				
Lightning	\$8,350,124,403	n/a	34,838	\$13,077	n/a	\$98,528	0.000157%				
Strong Wind	\$8,350,124,403	\$34,565,977	34,838	\$190,235	\$16,261	\$431,624	0.00228%				
Tornado	\$8,350,124,403	\$34,565,977	34,838	\$495,797	\$701	\$1,182,481	0.00594%				

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 plan <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
Wildfire	\$2,451,991,544	\$12,318,797	13,388	\$888,914	\$378	\$69,578	0.0363%				
Winter Weather	\$8,350,124,403	\$34,565,977	34,838	\$19,718	\$36	\$150,835	0.000236%				

Totals since the plan: not available. No county-level plan row in FEMA data, so there is no approval date to count from.

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	34,838
Building value (total, not at risk)	\$8,350,124,403
Agriculture value (total, not at risk)	\$34,565,977
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$8,577,490
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)	\$5,191,626
Social vulnerability rating	Relatively High
Community resilience rating	Relatively Low
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)	0
Repetitive loss, NFIP insurance definition	2	Severe repetitive loss, NFIP insurance definition	0

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	0	2	0	2	0	0
of which: Big Spring city (community ID not in plan data)	0	0	2	0	2	0	0
Statewide, no county in FEMA's file	3	8	12	7	13	1	9

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.

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	0	2	0	2	0	0
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	0	0	0	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 2 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):

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 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_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 (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, organized by the items of FEMA's Local Mitigation Plan Review Tool, Element B. Each section heading names the item its tables support; the plan and FEMA's review decide whether the 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.

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Corrections: to report an error, name the packet, the table and what your records show. Contact: contact@hazardplain.org

Hazard Plain release 2026-10. As of 2026-09-30; Storm Events data through 2026-06-30. Automated baseline.