

Lebanon County, PA

Risk-assessment baseline packet

County FIPS: 42075 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 (\$26,704,076 a year), Hurricane (\$4,934,539) and Tornado (\$2,631,788).

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; 42075 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.

CONTENTS

- 1. Summary and terms used, page 1
- 2. Plan clock, page 2
- 3. What changed since your last plan, page 2
- 4. B1-a: hazard identification, page 5
- 5. B1-b: hazard location, page 6
- 6. B1-c: hazard extent, page 7
- 7. B1-d: previous occurrences, page 9
- 8. B1-e: probability of future events, page 13
- 9. B1-f: hazards that vary across jurisdictions, page 16
- 10. B2-a and B2-b: vulnerability and potential impacts, page 19
- 11. B2-a: vulnerability (county context), page 20
- 12. B2-c: repetitive loss properties, page 21
- 13. Sources, what the plan adds, disclaimer and citation, page 23

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: 29 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
Cleona borough	Organized Borough	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-04-01
Cornwall borough	Organized Borough	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-04-08
Jonestown borough	Organized Borough	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-06
Lebanon city	City	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-26
Mount Gretna borough	Organized Borough	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-12
Myerstown borough	Organized Borough	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-13
Palmyra borough	Organized Borough	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-04-09
Richland borough	Organized Borough	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-13
Annville township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-08-06
Bethel township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-08
East Hanover township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-01-29
Heidelberg township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-27
Jackson township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-03-04
Millcreek township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-14
North Annville township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-05-13
North Cornwall township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-20
North Lebanon township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-19
North Londonderry township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-20
South Annville township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-07-10

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry	Notes
						negative = days since expiry	
South Lebanon township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-03-26
South Londonderry township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-03-12
Swatara township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-08
Union township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-08-14
West Cornwall township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-12
West Lebanon township	Township	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-02-05
Cornwall-Lebanon School District	School/School District	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-09-16
Lebanon School District	School/School District	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2025-01-21
Northern Lebanon School District	School/School District	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2025-06-03
Palmyra Area School District	School/School District	Approved, expires 2029-01-22	Lebanon County Hazard Mitigation Plan (FEMA plan 109075)	2024-01-23	2029-01-22	845	this jurisdiction approved 2024-11-21

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	\$25,729,903	\$385,645	\$588,528	\$26,704,076	77	
2	Hurricane	Relatively Moderate	Relatively Moderate	\$3,549,632	\$1,250,990	\$133,917	\$4,934,539	1	
3	Tornado	Relatively Moderate	Relatively Moderate	\$1,481,049	\$4,596	\$1,146,144	\$2,631,788	8	
4	Strong Wind	Relatively High	Relatively High	\$364,272	\$49,544	\$1,505,975	\$1,919,791	260	Includes 21 High Wind and 4 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
5	Earthquake	Relatively Low	Relatively Low	\$1,455,393	n/a	\$391,379	\$1,846,772		Storm Events does not record earthquakes.
6	Cold Wave	Relatively Low	Relatively Moderate	\$29	\$7,014	\$1,568,684	\$1,575,727	4	
7	Heat Wave	Relatively Low	Relatively Low	\$1	\$2,848	\$1,240,569	\$1,243,418	12	
8	Lightning	Relatively High	Relatively High	\$21,127	n/a	\$1,027,500	\$1,048,627	2	
9	Drought	Relatively Moderate	Relatively Moderate	n/a	\$526,405	n/a	\$526,405	11	
10	Winter Weather	Relatively High	Relatively High	\$64,686	\$167	\$417,332	\$482,186	67	
11	Hail	Relatively Low	Relatively Low	\$31,738	\$132,851	\$611	\$165,200	47	

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
12	Ice Storm	Relatively Low	Relatively Low	\$48,965	n/a	\$68,186	\$117,151	6	
13	Wildfire	Very Low	Very Low	\$8,302	\$30	\$1,110	\$9,442	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
14	Landslide	Relatively Low	Very Low	\$2,457	n/a	\$1,113	\$3,570	0	Declared 1 time; no Storm Events record of this type.
15	Avalanche	Very Low	Very Low	\$0	n/a	\$100	\$100	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 wildfire 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: 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>
Avalanche	tract 21 (Very Low, 18.2); tract 20 (Very Low, 14.3); tract 22 (Very Low, 12.0)
Earthquake	tract 34 (Relatively Low, 76.2); tract 1 (Relatively Low, 76.0); tract 35 (Relatively Low, 75.7)
Hurricane	tract 21 (Relatively Moderate, 88.9); tract 23 (Relatively Moderate, 86.7); tract 30 (Relatively Moderate, 85.7)
Landslide	tract 20 (Relatively Low, 91.9); tract 31 (Relatively Low, 89.4); tract 21 (Relatively Low, 88.7)
Tornado	tract 21 (Relatively Moderate, 68.8); tract 30 (Relatively Moderate, 65.5); tract 1 (Relatively Moderate, 64.0)
Wildfire	tract 20 (Very Low, 65.8); tract 21 (Very Low, 64.1); tract 30 (Very Low, 61.1)

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 21 is Census Tract 21). 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
Avalanche	none (count and damage only)	0					
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	4 records, 2007 to 2025 (4 zone-level)	2 days; 3 with a recorded value	2 consecutive days, 2025-01-21 to 2025-01-22, zone-level		Countywide (zone-level records).	
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	0					
Drought	U.S. Drought Monitor scale (D0 to D4)	11 records, 1997 to 2025 (11 zone-level)	1 day to 190 days (median 31.5 days); 4 with a recorded value	190 days (about 6.2 months), 2024-11-05 to 2025-05-13, a run of 7 consecutive Storm Events drought records, zone-level		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)	55 records, 1956 to 2023	0.75 in to 2 in (median 0.94 in); 54 with a recorded value	2 in hail, 1956-06-10	Hail, 2000-10-04, \$5,000 property; crops not reported (2000 dollars)	Event records naming jurisdictions in the plan: Lebanon city (8 records), Myerstown borough (5 records), Palmyra borough (4 records), Richland borough (3 records), Annville township (2 records), East Hanover township (2 records), Mount Gretna borough (1 record).	
Excessive Heat, Heat	heat index (in event narratives)	12 records, 1999 to 2025 (12 zone-level)	1 day to 4 days (median 2 days); 10 with a recorded value	4 consecutive days, 2006-07-31 to 2006-08-03, zone-level		Countywide (zone-level records).	
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	1 record, 2003 (1 zone-level)		Strongest recorded: Tropical Storm record, 2003-09-18 to 2003-09-19, damage not reported; NWS zone PAZ059		Countywide (zone-level records).	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, 1998 to 2009 (6 zone-level)		No damage reported in 6 records.		Countywide (zone-level records).	

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)	77 records, 1996 to 2025 (19 zone-level)		Flood, 2011-09-07, \$2,000,000 property; \$0 crops (2011 dollars), 1 direct death		Event records naming jurisdictions in the plan: Lebanon city (9 records), East Hanover township (3 records), Palmyra borough (3 records), Cleona borough (2 records), Cornwall borough (2 records), Richland borough (2 records), West Lebanon township (2 records), Annville township (1 record), Jonestown borough (1 record). Zone-level records (19) 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)	2 records, 1996 to 2005		Lightning, 2005-07-17, damage not reported, 21 direct injuries		No event record names a jurisdiction in the plan.	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	25 records, 1996 to 2025 (25 zone-level)	39 kt (45 mph) to 61 kt (70 mph) (median 52 kt (60 mph)); 22 with a recorded value	61 kt (70 mph) measured gust, High Wind, 2017-10-29; NWS zone PAZ059	High Wind, 2009-02-12, \$25,000 property; crops not reported (zone total, 2009 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	300 records, 1957 to 2026	43 kt (49 mph) to 100 kt (115 mph) (median 51 kt (59 mph)); 228 with a recorded value	100 kt (115 mph) estimated, Thunderstorm Wind, 2002-06-27		Event records naming jurisdictions in the plan: Lebanon city (43 records), Palmyra borough (18 records), Annville township (14 records), Myerstown borough (12 records), East Hanover township (8 records), Cornwall borough (6 records), Jonestown borough (5 records), Mount Gretna borough (5 records), Richland borough (5 records), North Cornwall township (2 records); and 1 more jurisdiction (see the Excel file).	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	19 records, 1957 to 2021	F/EF0 to F/EF3 (median F/EF1); 19 with a recorded value	F3 tornado, 1970-06-18, 1.9 mi path length (whole path, pre-1996), 880 yd wide, \$2,500,000 property; crops not recorded (1970 dollars), 1 direct death, 5 direct injuries	Tornado, 2004-07-14, \$18,000,000 property; crops not reported (2004 dollars)	Event records naming jurisdictions in the plan: East Hanover township (1 record), Palmyra borough (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).

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)	0					
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	67 records, 1996 to 2026 (67 zone-level)		No damage reported in 67 records.		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 avalanche, 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.

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 19 declarations covering 14 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
2020-03-30	2020-01-20	DR-4506-PA	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$7,714,996.61	
2020-03-13	2020-01-20	EM-3441-PA	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded	same incident as DR-4506
2016-03-23	2016-01-22	DR-4267-PA	Major disaster	Severe Winter Storm and Snowstorm	Winter Weather	\$527,555.29	
2012-10-29	2012-10-26	EM-3356-PA	Emergency	Hurricane Sandy	Hurricane	no Public Assistance recorded	
2011-09-12	2011-09-03	DR-4030-PA	Major disaster	Tropical Storm Lee	Inland Flooding (primary); also designated: Hurricane	\$2,273,808.82	
2011-09-08	2011-09-03	EM-3340-PA	Emergency	Remnants of Tropical Storm Lee	Inland Flooding (primary); also designated: Hurricane	no Public Assistance recorded	same incident as DR-4030
2010-04-16	2010-02-05	DR-1898-PA	Major disaster	Severe Winter Storms and Snowstorms	Winter Weather	\$360,612.25	
2006-06-30	2006-06-23	DR-1649-PA	Major disaster	Severe Storms, Flooding, and Mudslides	Inland Flooding; Landslide	\$303,025.33	

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Notes
						<i>federal share obligated, nominal dollars</i>	
2005-09-10	2005-08-29	EM-3235-PA	Emergency	Hurricane Katrina	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded	
2004-09-19	2004-09-17	DR-1557-PA	Major disaster	Tropical Depression Ivan	Hurricane	\$286,191.70	
2004-09-19	2004-09-08	DR-1555-PA	Major disaster	Severe Storms and Flooding Associated with Tropical Depression Frances	Hurricane; Inland Flooding: designated for Hazard Mitigation only (no Public or Individual Assistance for this county); not counted	PA not declared for this county	
2003-03-14	2003-02-14	EM-3180-PA	Emergency	Snow	Winter Weather	\$190,484.03	
1996-01-21	1996-01-19	DR-1093-PA	Major disaster	Severe Storms and Flooding	Inland Flooding	PA not declared for this county	
1996-01-13	1996-01-06	DR-1085-PA	Major disaster	Blizzard of 96	Winter Weather	no Public Assistance recorded	
1994-03-10	1994-01-04	DR-1015-PA	Major disaster	Severe Winter Storms	Winter Weather	no Public Assistance recorded	
1993-03-16	1993-03-13	EM-3105-PA	Emergency	Severe Snowfall & Winter Storm	Winter Weather	no Public Assistance recorded	
1976-10-20	1976-10-20	DR-523-PA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded	
1975-09-26	1975-09-26	DR-485-PA	Major disaster	Severe Storms, Heavy Rains & Flooding	Inland Flooding	no Public Assistance recorded	
1972-06-23	1972-06-23	DR-340-PA	Major disaster	Tropical Storm Agnes	Inland Flooding (primary); also designated: Hurricane	no Public Assistance recorded	

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
2003-08-23	2003-07-21	DR-1485-PA	Major disaster	Severe Storms, Tornadoes, and Flooding	Inland Flooding; Tornado
1959-01-23	1959-01-23	DR-89-PA	Major disaster	Floods	Inland Flooding
1956-08-09	1956-08-09	DR-61-PA	Major disaster	Storm	Hazard not mapped (severe storm title names no single hazard); not counted
1956-05-21	1956-05-21	DR-58-PA	Major disaster	Severe Storm	Hazard not mapped (severe storm title names no single hazard); not counted
1956-03-15	1956-03-15	DR-51-PA	Major disaster	Flood	Inland Flooding
1955-08-20	1955-08-20	DR-40-PA	Major disaster	Floods & Rains	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.

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
Avalanche	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Cold Wave	4			1	0		1996 to 2026-06-30	
Drought	11			7	0		1996 to 2026-06-30	
Earthquake	0			0	0			Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	55			5	0		1955 to 2026-06-30	
Heat Wave	12			3	0		1996 to 2026-06-30	
Hurricane	1			0	4		1996 to 2026-06-30	
Ice Storm	6			0	0		1996 to 2026-06-30	
Inland Flooding	77			5	6		1996 to 2026-06-30	
Landslide	0			0	1		1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Lightning	2			0	0		1996 to 2026-06-30	
Strong Wind	325			47	0		1955 to 2026-06-30	Includes 21 High Wind and 4 Strong Wind records.
Tornado	19			0	0		1950 to 2026-06-30	
Wildfire	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Winter Weather	67			11	6		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
2025-01-21	Cold/Wind Chill		\$0 property; \$0 crops (zone total, 2025 dollars)	0, 0	NWS zone PAZ059 (LEBANON), zone-level	within last 5 years	B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2024-11-05	Drought		\$0 property; \$0 crops (zone total, 2024 dollars)	0, 0	NWS zone PAZ059 (LEBANON), zone-level	within last 5 years	B1-c worst recorded: Drought
2017-10-29	High Wind	61 kt (70 mph) measured gust	\$0 property; \$0 crops (zone total, 2017 dollars)	0, 0	NWS zone PAZ059 (LEBANON), zone-level		B1-c worst recorded: High Wind and Strong Wind
2011-09-07	Flood		\$2,000,000 property; \$0 crops (2011 dollars)	1, 0	LAWN to NEWMANSTOWN		deaths or injuries recorded
2006-09-02	Strong Wind	40 kt (46 mph) estimated sustained	damage not reported	1, 0	NWS zone PAZ059 (LEBANON), zone-level		deaths or injuries recorded
2006-07-31	Heat		damage not reported	0, 0	NWS zone PAZ059 (LEBANON), zone-level		B1-c worst recorded: Excessive Heat, Heat
2005-07-17	Lightning		damage not reported	0, 21	LICKDALE		B1-c worst recorded: Lightning
2004-07-14	Tornado	F3, 7.5 mi within this county, 500 yd wide	\$18,000,000 property; crops not reported (2004 dollars)	0, 0	CAMPBELLTOWN		B1-c most damaging: Tornado
2003-09-18	Tropical Storm		damage not reported	0, 0	NWS zone PAZ059 (LEBANON), zone-level		B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression
2002-06-27	Thunderstorm Wind	100 kt (115 mph) estimated	\$250,000 property; crops not reported (2002 dollars)	0, 0	FREDERICKSBURG		B1-c worst recorded: Thunderstorm Wind
1970-06-18	Tornado	F3, 1.9 mi path length (whole path, pre-1996), 880 yd wide	\$2,500,000 property; crops not recorded (1970 dollars)	1, 5	location not recorded		deaths or injuries recorded
1956-06-10	Hail	2 in	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Hail

The full list is in the Excel file, sheet "B1-d Storm Events history" (579 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
Avalanche	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1994 to 2023 (30 years)	see B1-f	0.01 is NRI's minimum avalanche frequency for a county in an avalanche susceptibility zone; NRI records no avalanche here, so the descriptor reflects the floor, not local events.
Cold Wave	1.16	event-days per year	about 1.16 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	22	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	1.12	event-days per year	about 1.12 days per year	Likely	Storm Events event-days in 5 of 30 years, 1996 to 2025 (16.7%)	77	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.00135	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.135%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	2.51	events per year	about 2.51 per year	Highly likely	FEMA annualized frequency (modeled)	95.3 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	5.05	event-days per year	about 5.05 days per year	Likely	Storm Events event-days in 6 of 30 years, 1996 to 2025 (20%)	76	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.0769	events per year	about 1 in 13 years	Possible	FEMA annualized frequency (modeled)	18	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	1.09	event-days per year	about 1.09 days per year	Likely	Storm Events event-days in 6 of 30 years, 1996 to 2025 (20%)	74	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	1.86	event-days per year	about 1.86 days per year	Likely	Storm Events event-days in 21 of 30 years, 1996 to 2025 (70%)	52	1996 to 2023 (28 years)	see B1-f	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Landslide	0.225	events per year (modeled)	about 1 in 4 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	35.1	days per year with a strike	about 35.1 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	5.9	events per year	about 5.9 per year	Highly likely	FEMA annualized frequency (modeled)	225	1986 to 2023 (38 years)	countywide	
Tornado	0.204	events per year	about 1 in 5 years	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.0000247	annual probability at a location	chance a given location in the county burns in a year: 0.00247%		Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No descriptor: no Storm Events record 1996 to 2025
Winter Weather	12.4	event-days per year	about 12.4 days per year	Likely	Storm Events event-days in 25 of 30 years, 1996 to 2025 (83.3%)	235	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	22	30	0.733
Hail	2.00 in+	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	205	30	6.83
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	9	30	0.3
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	11	30	0.367
Tornado	EF0-1	1996 to 2025	6	30	0.2
Tornado	EF2-3	1996 to 2025	2	30	0.0667
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	
Avalanche	4 of 33	12.0	13.1	18.2	Very Low 4, Not Applicable 29
Cold Wave	33 of 33	29.7	48.5	61.6	Relatively Moderate 18, Relatively Low 15
Drought	25 of 33	67.5	82.9	96.7	Relatively Moderate 6, Relatively Low 10, Very Low 9, No Rating 8
Earthquake	33 of 33	43.0	63.0	76.2	Relatively Low 33
Hail	33 of 33	13.3	29.7	72.3	Relatively Moderate 2, Relatively Low 13, Very Low 18
Heat Wave	33 of 33	20.0	49.4	66.3	Relatively Moderate 10, Relatively Low 23
Hurricane	33 of 33	65.4	80.5	88.9	Relatively Moderate 22, Relatively Low 11
Ice Storm	33 of 33	17.5	39.9	59.9	Relatively Low 23, Very Low 10
Inland Flooding	33 of 33	15.6	63.4	94.8	Relatively High 9, Relatively Moderate 17, Relatively Low 7
Landslide	33 of 33	14.1	56.7	91.9	Relatively Low 8, Very Low 25
Lightning	33 of 33	51.0	81.7	93.0	Relatively High 19, Relatively Moderate 14
Strong Wind	33 of 33	56.7	81.0	90.6	Relatively High 16, Relatively Moderate 17
Tornado	33 of 33	36.3	53.1	68.8	Relatively Moderate 16, Relatively Low 17
Wildfire	33 of 33	21.8	51.9	65.8	Very Low 33
Winter Weather	33 of 33	68.1	87.9	94.6	Relatively High 29, Relatively Moderate 4

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.

Hail: Agriculture is 80% 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
Cleona borough	Organized Borough	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 1	\$62,798.78	2 total; 0 since its plan	
Cornwall borough	Organized Borough	Approved, expires 2029-01-22	FMA RL 1, SRL 0; any 1	\$64,000.04	8 total; 1 since its plan	
Jonestown borough	Organized Borough	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 1	\$21,317.65	6 total; 1 since its plan	
Lebanon city	City	Approved, expires 2029-01-22	FMA RL 0, SRL 1; any 25	\$270,822.13	60 total; 1 since its plan	
Mount Gretna borough	Organized Borough	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 0	\$17,551.04	6 total; 0 since its plan	
Myerstown borough	Organized Borough	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 2	\$341,972.08	17 total; 3 since its plan	
Palmyra borough	Organized Borough	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 0	\$100,062.09	26 total; 3 since its plan	
Richland borough	Organized Borough	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 0	\$40,683.15	10 total; 1 since its plan	
Annvile township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 2	\$132,376.34	17 total; 1 since its plan	
Bethel township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 1	\$220,890.36	0 total; 0 since its plan	
East Hanover township	Township	Approved, expires 2029-01-22	FMA RL 1, SRL 4; any 7	\$118,361.54	14 total; 1 since its plan	
Heidelberg township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 0	\$153,605.18	0 total; 0 since its plan	
Jackson township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 4	\$35,640.49	0 total; 0 since its plan	
Millcreek township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 1	\$56,370.29	0 total; 0 since its plan	
North Annville township	Township	Approved, expires 2029-01-22	FMA RL 7, SRL 6; any 15	\$116,444.78	0 total; 0 since its plan	
North Cornwall township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 5	\$110,537.78	2 total; 1 since its plan	
North Lebanon township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 0	\$114,185.99	0 total; 0 since its plan	
North Londonderry township	Township	Approved, expires 2029-01-22	FMA RL 1, SRL 1; any 2	\$148,220.14	0 total; 0 since its plan	

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>	
South Annville township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 1	\$16,790.04	0 total; 0 since its plan	
South Lebanon township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 1	\$115,580.61	0 total; 0 since its plan	
South Londonderry township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 1	\$88,355.91	0 total; 0 since its plan	
Swatara township	Township	Approved, expires 2029-01-22	FMA RL 2, SRL 2; any 4	\$176,011.42	0 total; 0 since its plan	
Union township	Township	Approved, expires 2029-01-22	FMA RL 6, SRL 4; any 12	\$75,539.26	0 total; 0 since its plan	
West Cornwall township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 0	\$13,581.14	0 total; 0 since its plan	
West Lebanon township	Township	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 0	\$82,972.35	4 total; 2 since its plan	Includes \$21,144.45 for declarations not counted as hazard incidents (DR-4506-PA).

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.

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

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
Avalanche	\$0	n/a	under 1	\$0	n/a	\$100					building exposure is 0 in NRI
Cold Wave	\$32,871,171,021	\$451,687,683	143,188	\$29	\$7,014	\$1,568,684	under 0.0001%				
Drought	n/a	\$18,628,696	n/a	n/a	\$526,405	n/a	2.83% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$57,654,621,896	n/a	143,257	\$1,455,393	n/a	\$391,379	0.00252%				
Hail	\$32,871,171,021	\$451,687,683	143,188	\$31,738	\$132,851	\$611	under 0.0001%				
Heat Wave	\$32,871,171,021	\$451,687,683	143,188	\$1	\$2,848	\$1,240,569	under 0.0001%				
Hurricane	\$32,863,776,044	\$450,199,132	143,127	\$3,549,632	\$1,250,990	\$133,917	0.0108%				
Ice Storm	\$32,868,271,899	n/a	143,153	\$48,965	n/a	\$68,186	0.000149%				
Inland Flooding	\$32,864,311,674	\$26,647,162	2,156	\$25,729,903	\$385,645	\$588,528	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	\$537,971,271	n/a	2,158	\$2,457	n/a	\$1,113	0.000457%				
Lightning	\$32,871,171,021	n/a	143,188	\$21,127	n/a	\$1,027,500	under 0.0001%				
Strong Wind	\$32,871,171,021	\$451,687,683	143,188	\$364,272	\$49,544	\$1,505,975	0.00111%				
Tornado	\$32,871,171,021	\$451,687,683	143,188	\$1,481,049	\$4,596	\$1,146,144	0.00451%				

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	\$6,819,190,229	\$121,084,649	31,347	\$8,302	\$30	\$1,110	0.000122%				
Winter Weather	\$32,871,171,021	\$451,687,683	143,188	\$64,686	\$167	\$417,332	0.000197%				

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	143,188
Building value (total, not at risk)	\$32,871,171,021
Agriculture value (total, not at risk)	\$451,687,683
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$35,117,644
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)	\$8,091,149
Social vulnerability rating	Relatively Low
Community resilience rating	Very High
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)	18	Severe repetitive loss, FMA definition (44 CFR 77.2)	18
Repetitive loss, NFIP insurance definition	78	Severe repetitive loss, NFIP insurance definition	14

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 properties	SRL, FMA properties	RL, NFIP properties	SRL, NFIP properties	Any category properties	Mitigated properties	Currently insured properties
County total	18	18	78	14	86	8	23
of which: Annville township	0	0	2	0	2	0	1
of which: Cleona borough	0	0	1	0	1	0	0
of which: Jonestown borough	0	0	1	0	1	0	0
of which: Lebanon city	0	1	25	1	25	0	8
of which: Millcreek township	0	0	1	0	1	0	0
of which: Myerstown borough	0	0	2	0	2	0	2
of which: North Cornwall township	0	0	5	0	5	0	5
of which: North Londonderry township	1	1	1	0	2	1	0
of which: South Annville township	0	0	1	0	1	0	0
of which: South Lebanon township	0	0	1	0	1	0	0
of which: Swatara township	2	2	4	2	4	0	0
of which: Bethel township	0	0	1	0	1	0	0
of which: Cornwall borough	1	0	1	0	1	0	0
of which: North Annville township	7	6	9	3	15	7	2
of which: East Hanover township	1	4	7	4	7	0	1
of which: South Londonderry township	0	0	1	0	1	0	0
of which: Jackson township	0	0	4	0	4	0	1
of which: Union township	6	4	11	4	12	0	3
Statewide, no county in FEMA's file	0	0	1	0	1	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>
Cleona borough	420571	0	0	1	0	1	0	0
Cornwall borough	420968	1	0	1	0	1	0	0
Jonestown borough	420572	0	0	1	0	1	0	0
Lebanon city	420573	0	1	25	1	25	0	8
Mount Gretna borough	421851	0	0	0	0	0	0	0
Myerstown borough	420575	0	0	2	0	2	0	2
Palmyra borough	420578	0	0	0	0	0	0	0
Richland borough	420579	0	0	0	0	0	0	0
Annaville township	420570	0	0	2	0	2	0	1
Bethel township	420967	0	0	1	0	1	0	0
East Hanover township	421012	1	4	7	4	7	0	1
Heidelberg township	420969	0	0	0	0	0	0	0
Jackson township	421805	0	0	4	0	4	0	1
Millcreek township	420574	0	0	1	0	1	0	0
North Annville township	420970	7	6	9	3	15	7	2
North Cornwall township	420576	0	0	5	0	5	0	5
North Lebanon township	421131	0	0	0	0	0	0	0
North Londonderry township	420577	1	1	1	0	2	1	0
South Annville township	420580	0	0	1	0	1	0	0
South Lebanon township	420581	0	0	1	0	1	0	0
South Londonderry township	421043	0	0	1	0	1	0	0
Swatara township	420582	2	2	4	2	4	0	0
Union township	421806	6	4	11	4	12	0	3
West Cornwall township	420583	0	0	0	0	0	0	0
West Lebanon township	421166	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	18	18	67	14	75	8	21
2 to 4 unit residential	0	0	1	0	1	0	0
other residential	0	0	2	0	2	0	1
non-residential	0	0	8	0	8	0	1
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 6 properties are FMA repetitive loss but not NFIP repetitive loss, and 66 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)

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). Lebanon County, PA: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 42075). Automated baseline. <https://hazardplain.org/pa/42075/> 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