

Armstrong County, PA

Risk-assessment baseline packet

County FIPS: 42005 Release: 2026-10 Data as of: 2026-09-30 Storm Events data through: 2026-06-30

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Summary

Plan status as of 2026-09-30: Approved, expires 2030-11-02. Plan: Armstrong County Hazard Mitigation Plan (FEMA plan 109082), approved 2025-11-03. Since the plan was approved on 2025-11-03: no new hazard declaration and 6 NOAA Storm Events records; details under "What changed since your last plan". Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$25,676,505 a year), Tornado (\$637,226) and Lightning (\$517,064). 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; 42005 is this area.
D0 to D4: U.S. Drought Monitor categories, from abnormally dry (D0) to exceptional drought (D4).
F/EF, EFU: Fujita and Enhanced Fujita tornado ratings; EFU is an unrated tornado.
kt, CONUS: knots (1 kt is about 1.15 mph); the contiguous United States.
CFR: Code of Federal Regulations.
A4-a, E1-a: other items of FEMA's Local Mitigation Plan Review Tool (sources, and changes since the last plan).
Dollars: nominal (as reported, labeled with the year), not adjusted for inflation.

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Plan clock

Status:	Approved, expires 2030-11-02	Plan:	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)
Approved:	2025-11-03	Days to expiry:	1,494

What changed since your last plan (approved 2025-11-03)

New federal declarations:	none	Storm Events records since approval:	6 records (data through 2026-06-30)
Repetitive loss now:	FMA RL 9, SRL 5 (44 CFR 77.2); any definition: 53	Repeat-flood change:	this release sets the baseline count.

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

Plan status for every jurisdiction listed in this county: 43 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 <i>negative = days since expiry</i>	Update underway	Notes
Armstrong County	County	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-22
Apollo borough	Organized Borough	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Applewold borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-11
Atwood borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-10
Dayton borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-10
Elderton borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-17
Ford City borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-24
Ford Cliff borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-06
Kittanning borough	Organized Borough	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Leechburg borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-16
Manorville borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-01
North Apollo borough	Organized Borough	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Parker city	City	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Rural Valley borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-08
South Bethlehem borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		
West Kittanning borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-05
Worthington borough	Organized Borough	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-01
Bethel township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Boggs township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		
Bradys Bend township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-03
Burrell township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-04
Cadogan township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-05
Cowanshannock township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2026-01-05
East Franklin township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-18
Gilpin township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Hovey township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Madison township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-11
Mahoning township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-18
Manor township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-03
North Buffalo township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-12
Parks township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-15
Perry township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Pine township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-01
Plumcreek township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-10
Rayburn township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-01
Redbank township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-09
South Bend township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		
South Buffalo township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-15
Sugarcreek township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Valley township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-12-01
Washington township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-10

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Wayne township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	Armstrong County Hazard Mitigation Plan (FEMA plan 109082), pending adoption here	2025-11-03 by FEMA; not yet adopted here	2030-11-02 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
West Franklin township	Township	Approved, expires 2030-11-02	Armstrong County Hazard Mitigation Plan (FEMA plan 109082)	2025-11-03	2030-11-02	1,494		this jurisdiction approved 2025-11-11

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	\$25,644,590	\$454	\$31,460	\$25,676,505	83	
2	Tornado	Relatively Low	Relatively Low	\$449,601	\$1,255	\$186,370	\$637,226	3	
3	Lightning	Relatively Moderate	Relatively Moderate	\$3,358	n/a	\$513,706	\$517,064	1	
4	Strong Wind	Relatively Low	Relatively Low	\$160,736	\$1,289	\$132,127	\$294,152	300	Includes 18 High Wind and 3 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
5	Hail	Relatively Low	Relatively Low	\$140,172	\$7,331	\$5,960	\$153,462	68	
6	Heat Wave	Very Low	Very Low	under \$1	\$5	\$139,218	\$139,223	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).

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
7	Earthquake	Very Low	Very Low	\$83,221	n/a	\$27,586	\$110,808		Storm Events does not record earthquakes.
8	Hurricane	Very Low	Very Low	\$58,083	\$26,732	\$3,091	\$87,906	0	Declared 3 times; no Storm Events record of this type.
9	Cold Wave	Very Low	Very Low	\$509	\$15,580	\$50,570	\$66,659	8	
10	Landslide	Relatively Low	Relatively Low	\$5,616	n/a	\$25,271	\$30,887	0	Declared 1 time; no Storm Events record of this type.
11	Ice Storm	Relatively Low	Relatively Low	\$3,594	n/a	\$23,744	\$27,338	10	
12	Wildfire	Very Low	Very Low	\$7,050	\$9	\$1,522	\$8,580	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
13	Winter Weather	Very Low	Very Low	\$1,226	\$5	\$2,273	\$3,503	75	
14	Avalanche	Very Low	Very Low	under \$1	n/a	\$686	\$686	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Drought	No Rating	No Expected Annual Losses	n/a	\$0	n/a	\$0	2	

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

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

Local data needed: state and local landslide and wildfire 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 9503 (Very Low, 45.1); tract 9501 (Very Low, 44.7); tract 9508 (Very Low, 42.4)
Earthquake	tract 9505 (Very Low, 30.8); tract 9501 (Very Low, 27.4); tract 9507 (Very Low, 26.9)
Hurricane	tract 9501 (Relatively Low, 54.0); tract 9517 (Very Low, 51.0); tract 9507 (Very Low, 50.4)
Landslide	tract 9508 (Relatively Moderate, 97.0); tract 9501 (Relatively Moderate, 96.3); tract 9517 (Relatively Moderate, 96.2)
Tornado	tract 9505 (Relatively Low, 49.7); tract 9512 (Relatively Low, 47.8); tract 9503 (Relatively Low, 47.8)
Wildfire	tract 9517 (Relatively Low, 70.1); tract 9512 (Very Low, 66.2); tract 9516 (Very Low, 65.6)

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 9503 is Census Tract 9503). 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	8 records, 2009 to 2025 (8 zone-level)	1 day to 3 days (median 2 days); 8 with a recorded value	3 consecutive days, 2025-01-20 to 2025-01-22, zone-level		Countywide (zone-level records).	
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	0					

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Drought	U.S. Drought Monitor scale (D0 to D4)	2 records, 1999 (2 zone-level)	61 days; 1 with a recorded value	61 days (2 months), 1999-08-01 to 1999-09-30, a run of 2 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)	72 records, 1983 to 2025	0.75 in to 1.75 in (median 1 in); 72 with a recorded value	1.75 in hail, 2025-05-04; same size also recorded on 1985-05-31, 2001-04-09, 2004-08-19, 2013-08-07, 2014-07-08, 2019-05-28, 2024-08-06	Hail, 2019-05-28, \$5,000 property; \$0 crops (2019 dollars)	Event records naming jurisdictions in the plan: West Kittanning borough (4 records), Dayton borough (3 records), Ford City borough (3 records), Kittanning borough (3 records), Apollo borough (2 records), Bradys Bend township (2 records), Elderton borough (2 records), Mahoning township (2 records), South Bethlehem borough (2 records), Atwood borough (1 record); and 2 more jurisdictions (see the Excel file).	
Excessive Heat, Heat	heat index (in event narratives)	0					
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)	10 records, 1996 to 2016 (10 zone-level)		Ice Storm, 1997-11-13, \$2,000 property; crops not reported (1997 dollars); NWS zone PAZ022		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	83 records, 1996 to 2026 (12 zone-level)		Flood, 2004-09-17, \$4,000,000 property; crops not reported (2004 dollars), 1 direct injury (reported for the zone); NWS zone PAZ022		Event records naming jurisdictions in the plan: Apollo borough (7 records), Kittanning borough (6 records), West Kittanning borough (5 records), Leechburg borough (3 records), Cadogan township (1 record), Dayton borough (1 record), Ford City borough (1 record), South Bend township (1 record), South Bethlehem borough (1 record), Worthington borough (1 record). Zone-level records (12) 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					

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	1 record, 1998		Lightning, 1998-08-24, \$10,000 property; crops not reported (1998 dollars)		Event records naming jurisdictions in the plan: Ford City borough (1 record).	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	21 records, 1997 to 2022 (21 zone-level)	35 kt (40 mph) to 55 kt (63 mph) (median 50 kt (58 mph)); 18 with a recorded value	55 kt (63 mph) estimated gust, High Wind, 2008-09-14; same speed and measurement basis also recorded on 2003-02-23, 2003-03-08; NWS zone PAZ022		Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	348 records, 1968 to 2025	48 kt (55 mph) to 85 kt (98 mph) (median 50 kt (58 mph)); 239 with a recorded value	85 kt (98 mph), measurement type not recorded, Thunderstorm Wind, 1999-06-02, 1 direct injury	Thunderstorm Wind, 2024-10-06, \$2,500,000 property; \$0 crops (2024 dollars)	Event records naming jurisdictions in the plan: Kittanning borough (29 records), West Kittanning borough (19 records), Apollo borough (16 records), Ford City borough (14 records), Dayton borough (8 records), Elderton borough (8 records), Worthington borough (8 records), Leechburg borough (7 records), Bradys Bend township (6 records), Applewold borough (4 records); and 7 more jurisdictions (see the Excel file).	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	11 records, 1951 to 2022	F/EF0 to F/EF4 (median between F/EF1 and F/EF2); 10 with a recorded value	F4 tornado, 1980-06-03, 2.3 mi path length (whole path, pre-1996), 33 yd wide, \$250,000,000 property; crops not recorded (1980 dollars), 120 direct injuries		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).
Wildfire	acres burned (local data)	0					
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	75 records, 1996 to 2026 (75 zone-level)		Winter Storm, 2008-02-01, \$10,000 property; \$0 crops (2008 dollars); NWS zone PAZ022		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: 17 declarations covering 13 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Notes
2020-03-30	2020-01-20	DR-4506-PA	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$263,531.95	
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
2012-10-29	2012-10-26	EM-3356-PA	Emergency	Hurricane Sandy	Hurricane	no Public Assistance recorded	
2010-04-16	2010-02-05	DR-1898-PA	Major disaster	Severe Winter Storms and Snowstorms	Winter Weather	\$272,996.17	
2006-06-30	2006-06-23	DR-1649-PA	Major disaster	Severe Storms, Flooding, and Mudslides	Inland Flooding; Landslide	\$194,019.83	
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	\$1,430,597.08	
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	
1996-07-26	1996-07-19	DR-1130-PA	Major disaster	Severe Storms, Flooding, and Tornadoes	Inland Flooding (primary); also designated: Tornado	no Public Assistance recorded	
1996-01-21	1996-01-19	DR-1093-PA	Major disaster	Severe Storms and Flooding	Inland Flooding	no Public Assistance recorded	
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	
1984-08-27	1984-08-27	DR-721-PA	Major disaster	Severe Storms & Flooding	Inland Flooding	PA not declared for this county	
1980-08-19	1980-08-19	DR-629-PA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded	

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Notes
						<i>federal share obligated, nominal dollars</i>	
1980-06-13	1980-06-13	EM-3081-PA	Emergency	Severe Storms & Tornadoes	Tornado	PA not declared for this county	
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.

Public Assistance filed under this county for declarations that do not list it: 1 row, \$1,987.97

Sources: 2, 3

FEMA number	Declared	Title	Applicant	PA obligated
				<i>federal share obligated, nominal dollars</i>
EM-3180-PA	2003-03-14	Snow	West Leechburg, Borough of (Armstrong County)	\$1,987.97

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

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	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Cold Wave	8	0	1	2	0	0	1996 to 2026-06-30	
Drought	2	0	0	0	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.

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
Hail	72	0	2	15	0	0	1955 to 2026-06-30	
Heat Wave	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Hurricane	0	0	0	0	3	0	1996 to 2026-06-30	No Storm Events records of this type; 3 federal declared incidents (see declarations table)
Ice Storm	10	0	0	0	0	0	1996 to 2026-06-30	
Inland Flooding	83	1	7	15	6	0	1996 to 2026-06-30	
Landslide	0	0	0	0	1	0	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Lightning	1	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	369	0	11	45	0	0	1955 to 2026-06-30	Includes 18 High Wind and 3 Strong Wind records.
Tornado	11	0	0	1	2	0	1950 to 2026-06-30	
Wildfire	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Winter Weather	75	5	0	22	4	0	1996 to 2026-06-30	

Notable Storm Events records

Sources: 1, 6, 7

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Deaths, injuries <i>direct only</i>	Location	Flags	Why listed
2025-05-04	Hail	1.75 in	\$0 property; \$0 crops (2025 dollars)	0, 0	GIRTY	in the 12 months before plan approval; within last 5 years	B1-c worst recorded: Hail
2025-01-20	Cold/Wind Chill		\$0 property; \$0 crops (zone total, 2025 dollars)	0, 0	NWS zone PAZ022 (ARMSTRONG), zone-level	in the 12 months before plan approval; within last 5 years	B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2021-07-16	Thunderstorm Wind	50 kt (58 mph) estimated gust	\$0 property; \$0 crops (2021 dollars)	0, 1	ALADDIN		deaths or injuries recorded
2008-09-14	High Wind	55 kt (63 mph) estimated gust	\$500,000 property; \$0 crops (zone total, 2008 dollars)	0, 0	NWS zone PAZ022 (ARMSTRONG), zone-level		B1-c worst recorded: High Wind and Strong Wind
2008-02-01	Winter Storm		\$10,000 property; \$0 crops (zone total, 2008 dollars)	0, 0	NWS zone PAZ022 (ARMSTRONG), zone-level		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
2004-09-17	Flood		\$4,000,000 property; crops not reported (zone total, 2004 dollars)	0, 1	NWS zone PAZ022 (ARMSTRONG), zone-level		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
1999-08-01	Drought		damage not reported	0, 0	NWS zone PAZ022 (ARMSTRONG), zone-level		B1-c worst recorded: Drought
1999-06-02	Thunderstorm Wind	85 kt (98 mph), measurement type not recorded	\$250,000 property; crops not reported (1999 dollars)	0, 1	ELDERTON		B1-c worst recorded: Thunderstorm Wind
1998-08-24	Lightning		\$10,000 property; crops not reported (1998 dollars)	0, 0	FORD CITY		B1-c worst recorded: Lightning
1997-11-13	Ice Storm		\$2,000 property; crops not reported (zone total, 1997 dollars)	0, 0	NWS zone PAZ022 (ARMSTRONG), zone-level		B1-c worst recorded: Ice Storm
1980-06-03	Tornado	F4, 2.3 mi path length (whole path, pre-1996), 33 yd wide	\$250,000,000 property; crops not recorded (1980 dollars)	0, 120	location not recorded		deaths or injuries recorded
1978-07-23	Tornado	no rating recorded, 33 yd wide	\$250,000 property; crops not recorded (1978 dollars)	0, 2	location not recorded		deaths or injuries recorded

The full list is in the Excel file, sheet "B1-d Storm Events history" (631 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	3.37	event-days per year	about 3.37 days per year	Likely	Storm Events event-days in 5 of 30 years, 1996 to 2025 (16.7%)	64	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	0	event-days per year	none modeled	Possible	Storm Events event-days in 1 of 30 years, 1996 to 2025 (3.33%)	0	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI models no drought event-days here (2000 to 2025, 25.25 years; D3 and D4 only); Storm Events has a record in 1 of 30 years. The descriptor comes from Storm Events, which counts D2 drought that NRI leaves out.
Earthquake	0.000441	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.0441%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	2.65	events per year	about 2.65 per year	Highly likely	FEMA annualized frequency (modeled)	100.9 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	1.32	event-days per year	about 1.32 days per year		Storm Events event-days in 0 of 30 years, 1996 to 2025 (0%)	26	2005-11-12 to 2024-11-12 (19 years)	countywide	No Storm Events heat wave record, 1996 to 2025
Hurricane	0.0298	events per year	about 1 in 34 years	Possible	FEMA annualized frequency (modeled)	8	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	0.331	event-days per year	about 0.331 days per year	Likely	Storm Events event-days in 8 of 30 years, 1996 to 2025 (26.7%)	23	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	1.71	event-days per year	about 1.71 days per year	Likely	Storm Events event-days in 22 of 30 years, 1996 to 2025 (73.3%)	48	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	1.25	events per year (modeled)	about 1.25 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	40.5	days per year with a strike	about 40.5 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	2.36	events per year	about 2.36 per year	Highly likely	FEMA annualized frequency (modeled)	90	1986 to 2023 (38 years)	countywide	
Tornado	0.239	events per year	about 1 in 4 years	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.0000462	annual probability at a location	chance a given location in the county burns in a year: 0.00462%		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	13.5	event-days per year	about 13.5 days per year	Likely	Storm Events event-days in 25 of 30 years, 1996 to 2025 (83.3%)	256	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	47	30	1.57
Hail	2.00 in+	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	234	30	7.8
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	4	30	0.133
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	41	30	1.37
Tornado	EF0-1	1996 to 2025	2	30	0.0667
Tornado	EF2-3	1996 to 2025	1	30	0.0333
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	9 of 19	39.7	41.2	45.1	Very Low 9, Not Applicable 10
Cold Wave	19 of 19	16.9	19.3	23.2	Relatively Low 11, Very Low 8
Drought	0 of 19				No Rating 19
Earthquake	19 of 19	10.9	20.0	30.8	Very Low 19
Hail	19 of 19	41.0	52.8	65.2	Relatively Low 19
Heat Wave	19 of 19	4.0	9.0	18.9	Relatively Low 1, Very Low 18
Hurricane	19 of 19	36.1	46.1	54.0	Relatively Low 1, Very Low 18
Ice Storm	19 of 19	6.8	18.9	37.5	Relatively Low 2, Very Low 17
Inland Flooding	19 of 19	51.8	83.7	98.6	Very High 2, Relatively High 12, Relatively Moderate 5
Landslide	19 of 19	46.9	91.9	97.0	Relatively Moderate 4, Relatively Low 10, Very Low 5
Lightning	19 of 19	50.3	77.4	91.1	Relatively High 9, Relatively Moderate 10
Strong Wind	19 of 19	28.9	50.1	62.8	Relatively Moderate 6, Relatively Low 13
Tornado	19 of 19	29.3	39.0	49.7	Relatively Low 18, Very Low 1
Wildfire	19 of 19	25.6	57.8	70.1	Relatively Low 1, Very Low 18
Winter Weather	19 of 19	16.0	18.4	21.1	Relatively Low 10, Very Low 9

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, 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.

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
Armstrong County	County	Approved, expires 2030-11-02		\$31,857.62	0 total; 0 since its plan	No NFIP community ID on this jurisdiction's plan row.
Apollo borough	Organized Borough	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	25 total; no approved plan	
Applewold borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$890.63	4 total; 0 since its plan	
Atwood borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	2 total; 0 since its plan	
Dayton borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	12 total; 0 since its plan	
Elderton borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$7,821.18	10 total; 0 since its plan	
Ford City borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 1	\$43,803.13	19 total; 0 since its plan	
Ford Cliff borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$1,083.75	0 total; 0 since its plan	
Kittanning borough	Organized Borough	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 2	\$125,947.78	38 total; no approved plan	
Leechburg borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$10,076.84	11 total; 0 since its plan	
Manorville borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 2	\$4,559.80	1 total; 0 since its plan	
North Apollo borough	Organized Borough	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	\$9,395.02	0 total; no approved plan	
Parker city	City	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	1 total; no approved plan	
Rural Valley borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$10,129.92	0 total; 0 since its plan	
South Bethlehem borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	5 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>	
West Kittanning borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$8,983.73	28 total; 0 since its plan	
Worthington borough	Organized Borough	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 1	\$18,055.69	10 total; 0 since its plan	
Bethel township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 1, SRL 1; any 7	\$110,488.38	0 total; no approved plan	
Boggs township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 1	\$10,480.01	0 total; 0 since its plan	
Bradys Bend township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 3	no Public Assistance recorded	8 total; 0 since its plan	
Burrell township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$74,662.66	0 total; 0 since its plan	
Cadogan township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 1	\$2,676.66	3 total; 0 since its plan	
Cowanshannock township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$10,543.97	0 total; 0 since its plan	
East Franklin township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 3	\$47,198.90	0 total; 0 since its plan	
Gilpin township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 3, SRL 1; any 10	\$387,210.71	0 total; no approved plan	
Hovey township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	0 total; no approved plan	
Madison township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 1; any 3	no Public Assistance recorded	0 total; 0 since its plan	
Mahoning township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	3 total; 0 since its plan	
Manor township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$52,748.82	0 total; 0 since its plan	
North Buffalo township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$19,291.70	0 total; 0 since its plan	
Parks township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	0 total; 0 since its plan	

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Perry township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	\$27,006.11	0 total; no approved plan	
Pine township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$30,744.74	0 total; 0 since its plan	
Plumcreek township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	0 total; 0 since its plan	
Rayburn township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$74,740.60	0 total; 0 since its plan	
Redbank township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 1	\$4,809.39	0 total; 0 since its plan	
South Bend township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	3 total; 0 since its plan	
South Buffalo township	Township	Approved, expires 2030-11-02	FMA RL 5, SRL 2; any 13	\$88,842.53	0 total; 0 since its plan	
Sugarcreek township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	0 total; no approved plan	
Valley township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$46,864.31	0 total; 0 since its plan	
Washington township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 0	\$15,058.47	0 total; 0 since its plan	
Wayne township	Township	Plan 109082 approved 2025-11-03, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	\$24,627.43	0 total; no approved plan	
West Franklin township	Township	Approved, expires 2030-11-02	FMA RL 0, SRL 0; any 1	\$188,405.58	0 total; 0 since its plan	

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

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

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

Local data needed

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

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

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

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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year; not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2025-11-03 <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	\$153,832	n/a	under 1	under \$1	n/a	\$686	under 0.0001%				
Cold Wave	\$13,971,437,038	\$51,205,573	65,530	\$509	\$15,580	\$50,570	under 0.0001%				
Drought	n/a	\$0	n/a	n/a	\$0	n/a					agriculture exposure is 0 in NRI
Earthquake	\$24,035,231,120	n/a	65,558	\$83,221	n/a	\$27,586	0.000346%				
Hail	\$13,971,437,038	\$51,205,573	65,530	\$140,172	\$7,331	\$5,960	0.001%				
Heat Wave	\$13,971,437,038	\$51,205,573	65,530	under \$1	\$5	\$139,218	under 0.0001%				
Hurricane	\$13,970,805,507	\$51,202,554	65,521	\$58,083	\$26,732	\$3,091	0.000416%				
Ice Storm	\$13,971,046,007	n/a	65,526	\$3,594	n/a	\$23,744	under 0.0001%				
Inland Flooding	\$13,948,819,107	\$900,250	3,446	\$25,644,590	\$454	\$31,460	n/a (see note)	\$100,000			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	\$1,480,742,869	n/a	7,844	\$5,616	n/a	\$25,271	0.000379%				
Lightning	\$13,971,437,038	n/a	65,530	\$3,358	n/a	\$513,706	under 0.0001%				
Strong Wind	\$13,971,437,038	\$51,205,573	65,530	\$160,736	\$1,289	\$132,127	0.00115%				
Tornado	\$13,971,437,038	\$51,205,573	65,530	\$449,601	\$1,255	\$186,370	0.00322%				

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 2025-11-03 <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	\$4,974,178,275	\$23,448,392	25,233	\$7,050	\$9	\$1,522	0.000142%				
Winter Weather	\$13,971,437,038	\$51,205,573	65,530	\$1,226	\$5	\$2,273	under 0.0001%		\$0		

Totals since 2025-11-03 (Storm Events through 2026-06-30): 1 county-coded records, 1 with a damage value recorded (including \$0), \$100,000; 5 zone-level records, 5 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance: no counted declaration since the plan.

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	65,530
Building value (total, not at risk)	\$13,971,437,038
Agriculture value (total, not at risk)	\$51,205,573
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$26,610,415
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)	\$1,143,583
Social vulnerability rating	Relatively Moderate
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)	9	Severe repetitive loss, FMA definition (44 CFR 77.2)	5
Repetitive loss, NFIP insurance definition	52	Severe repetitive loss, NFIP insurance definition	5

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	9	5	52	5	53	0	15
of which: Ford City borough	0	0	1	0	1	0	1
of which: Freeport borough (community ID not in plan data)	0	0	4	0	4	0	2
of which: Kittanning borough	0	0	2	0	2	0	1
of which: Manorville borough	0	0	2	0	2	0	1
of which: South Buffalo township	5	2	13	2	13	0	6
of which: Bethel township	1	1	7	1	7	0	2
of which: Boggs township	0	0	1	0	1	0	0
of which: Brady's Bend township	0	0	3	0	3	0	0
of which: Cadogan township	0	0	1	0	1	0	0
of which: East Franklin township	0	0	3	0	3	0	0
of which: Gilpin township	3	1	9	1	10	0	1
of which: Madison township	0	1	3	1	3	0	0
of which: Redbank township	0	0	1	0	1	0	0
of which: West Franklin township	0	0	1	0	1	0	0
of which: Worthington borough	0	0	1	0	1	0	1
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>
Apollo borough	420092	0	0	0	0	0	0	0
Applewold borough	420093	0	0	0	0	0	0	0
Atwood borough	422297	0	0	0	0	0	0	0
Dayton borough	421211	0	0	0	0	0	0	0
Elderton borough	422668	0	0	0	0	0	0	0
Ford City borough	420094	0	0	1	0	1	0	1
Ford Cliff borough	422669	0	0	0	0	0	0	0
Kittanning borough	420096	0	0	2	0	2	0	1
Leechburg borough	420097	0	0	0	0	0	0	0
Manorville borough	420098	0	0	2	0	2	0	1
North Apollo borough	422300	0	0	0	0	0	0	0
Parker city	420099	0	0	0	0	0	0	0
Rural Valley borough	422302	0	0	0	0	0	0	0
South Bethlehem borough	420100	0	0	0	0	0	0	0
West Kittanning borough	422670	0	0	0	0	0	0	0
Worthington borough	422306	0	0	1	0	1	0	1
Bethel township	421300	1	1	7	1	7	0	2
Boggs township	421301	0	0	1	0	1	0	0
Bradys Bend township	421302	0	0	3	0	3	0	0
Burrell township	421303	0	0	0	0	0	0	0
Cadogan township	421304	0	0	1	0	1	0	0
Cowanshannock township	421230	0	0	0	0	0	0	0
East Franklin township	421305	0	0	3	0	3	0	0
Gilpin township	421306	3	1	9	1	10	0	1
Hovey township	422299	0	0	0	0	0	0	0
Madison township	421308	0	1	3	1	3	0	0
Mahoning township	422633	0	0	0	0	0	0	0
Manor township	421309	0	0	0	0	0	0	0
North Buffalo township	421310	0	0	0	0	0	0	0
Parks township	421311	0	0	0	0	0	0	0
Perry township	422301	0	0	0	0	0	0	0
Pine township	421312	0	0	0	0	0	0	0
Plumcreek township	421313	0	0	0	0	0	0	0

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>
Rayburn township	421314	0	0	0	0	0	0	0
Redbank township	421315	0	0	1	0	1	0	0
South Bend township	421214	0	0	0	0	0	0	0
South Buffalo township	421210	5	2	13	2	13	0	6
Sugarcreek township	422303	0	0	0	0	0	0	0
Valley township	421316	0	0	0	0	0	0	0
Washington township	421317	0	0	0	0	0	0	0
Wayne township	421318	0	0	0	0	0	0	0
West Franklin township	422304	0	0	1	0	1	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	9	5	44	5	45	0	14
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	1	0	1	0	0
non-residential	0	0	7	0	7	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 1 property is FMA repetitive loss but not NFIP repetitive loss, and 44 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

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

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-29T134039Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-29T162832Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-30, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-30, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-30, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-30, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_cousubs_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_place_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_unsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_elsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_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). Armstrong County, PA: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 42005). Automated baseline. <https://hazardplain.org/pa/42005/> 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