

Philadelphia County, PA

Risk-assessment baseline packet

Unit **County area 42101** Release **2026-10** As of **2026-09-28** Storm Events data through **2026-06-30**

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

A starting point for the plan's risk assessment (FEMA Local Mitigation Plan Review Tool, Element B). It does not replace local data or FEMA review. Section headings say which FEMA review item each table supports; whether an item is satisfied is decided by the plan and its reviewers.

OPENFEMA DISCLAIMER

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

Plan clock

Status	Approved, expires 2031-06-03	Plan	City of Philadelphia Hazard Mitigation Plan (FEMA plan 110755)
Approved	2026-06-04	Expires	2031-06-03
As of	2026-09-28	Days	1,709 days to expiry

Also approved under plan 108236 (City of Philadelphia Hazard Mitigation Plan, expires 2027-05-18). FEMA's plan status map shows one plan per jurisdiction and may show one of these; this packet uses the approved plan that expires last.

Plan clock from the consolidated city-county government plan (Philadelphia city). FEMA plan data has no separate county-level row for this county.

What changed since your last plan (approved 2026-06-04)

New federal declarations	none (0 declaration rows; 0 counted incidents)	Storm Events records since approval	17 (data through 2026-06-30)
Repetitive loss now	FMA RL 4, SRL 35 (44 CFR 77.2); any definition: 142	Repeat-flood change	First release: no prior release to compare.

SOURCES: FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API); FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API); NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>; FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

Plan status for every jurisdiction listed in this county

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry	Update underway	Notes
						<i>negative = days since expiry</i>		
Philadelphia city	City	Approved, expires 2031-06-03	City of Philadelphia Hazard Mitigation Plan (FEMA plan 110755)	2026-06-04	2031-06-03	1,709		Also approved under plan 108236 (City of Philadelphia Hazard Mitigation Plan, expires 2027-05-18). FEMA's plan status map shows one plan per jurisdiction and may show one of these; this packet uses the approved plan that expires last.

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

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

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Supports B1-a: hazards

Hazards NRI does not cover: check locally

- dam failure (incl. upstream dams)
 - levee failure
 - flash flood as its own subtype
 - ice jams
- debris flows
 - erosion (riverine and coastal)
 - land subsidence and sinkholes
 - expansive soils

The 18 National Risk Index hazards, ranked by expected annual loss (EAL)

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings modeled dollars per year	EAL agriculture modeled dollars per year	EAL population equivalence statistical value of life and injury, \$13.7M per life, not property damage	EAL total (see note) modeled dollars per year	Storm Events records since 1996 count	Evidence for an omission NRI Not Applicable, no declaration and no Storm Events record since 1996	Storm Events coverage note
1	Inland Flooding	Very High	Relatively High	\$262,808,562	\$565	\$3,248,009	\$266,057,136	246		
2	Heat Wave	Very High	Very High	\$1,316	\$10	\$256,418,109	\$256,419,434	137		
3	Cold Wave	Very High	Very High	\$12,115	under \$1	\$57,028,375	\$57,040,490	33		Includes 1 Frost/Freeze record, event types the NRI definition of this hazard leaves out.
4	Earthquake	Relatively High	Relatively High	\$24,823,117		\$16,806,461	\$41,629,578			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
5	Tornado	Relatively High	Relatively High	\$6,605,994	\$5	\$14,496,551	\$21,102,550	6		
6	Hurricane	Relatively High	Relatively High	\$11,522,453	\$1,537	\$496,730	\$12,020,719	3		
7	Strong Wind	Relatively High	Relatively High	\$640,350	\$1	\$2,860,443	\$3,500,793	427		Includes 41 High Wind records and 104 Strong Wind records, event types the NRI definition of this hazard leaves out.
8	Coastal Flooding	Relatively High	Relatively High	\$2,618,897		\$182,935	\$2,801,833	58		
9	Hail	Relatively High	Relatively Moderate	\$2,003,804	\$144	\$51,189	\$2,055,138	37		
10	Winter Weather	Very High	Very High	\$192,166	under \$1	\$1,743,016	\$1,935,182	207		Includes 5 Sleet records, event types the NRI definition of this hazard leaves out.

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records since 1996 <i>count</i>	Evidence for an omission <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
11	Lightning	Relatively High	Relatively High	\$12,252		\$1,488,047	\$1,500,298	11		
12	Ice Storm	Relatively High	Relatively High	\$411,084		\$577,669	\$988,753	2		
13	Wildfire	Very Low	Very Low	\$7,330	under \$1	\$1,474	\$8,805	1		
14	Landslide	Relatively Low	Very Low	\$7,158		\$9	\$7,168	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
15	Drought	Very Low	Very Low		\$4,120		\$4,120	46		
	Avalanche	Not Applicable	Not Applicable					0	NRI rates avalanche Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Tsunami	Insufficient Data	Insufficient Data					0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	Volcanic Activity	Not Applicable	Not Applicable					0	NRI rates volcanic activity Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.

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

SOURCES
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Check your state hazard mitigation plan's hazard list for this county; explain any hazard you drop.

Supports B1-b: location

Where each hazard occurs

Hazard	Location	Census tracts rated <i>rated of all tracts</i>
Avalanche	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 408
Coastal 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.	35 of 408
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	408 of 408

Hazard	Location	Census tracts rated <i>rated of all tracts</i>
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	18 of 408
Earthquake	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	408 of 408
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	408 of 408
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	408 of 408
Hurricane	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	408 of 408
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	408 of 408
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.	408 of 408
Landslide	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	363 of 408
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	408 of 408
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	408 of 408
Tornado	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	408 of 408
Tsunami	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 408
Volcanic Activity	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 408
Wildfire	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	73 of 408
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	408 of 408

SOURCE
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Supports B1-c: extent

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

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Avalanche	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Coastal Flood, Storm Surge/ Tide	none in data (FIRM for depth)	58, 1996 to 2024 (58 zone-level)		Coastal Flood, 2011-04-16, \$100,000 property; \$0 crops, reported for the zone (2011 dollars); NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Flood depth: see the FEMA Flood Insurance Rate Map.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	32, 1996 to 2022 (32 zone-level)	1 day to 16 days (median 1 day); 27 with a recorded value	16 consecutive days, 2003-01-14 to 2003-01-29, 3 direct deaths, zone-level	Cold/Wind Chill, 2015-02-20, \$250,000 property; \$0 crops, reported for the zone (2015 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	Wind chill: in event narratives only; local data required. Cold/Wind Chill records from May to September (a frost night, not a cold wave) are counted but not used for the longest run.
Frost/Freeze (outside NRI Cold Wave definition)	crop damage	1, 2007 to 2007 (1 zone-level)		No crop damage reported in 1 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Temperature: in event narratives only; local data required.
Drought	US Drought Monitor D-scale	46, 1997 to 2010 (46 zone-level)	1 day to 385 days (median 11 days); 18 with a recorded value	385 days (about 12.6 months), 2001-11-06 to 2002-11-25, a run of 15 consecutive Storm Events drought records, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					No Storm Events record; local data required (e.g., USGS).
Hail	hail size (inches)	45, 1978 to 2023	0.75 in to 1.75 in (median 0.88 in); 45 with a recorded value	1.75 in hail, 2009-03-29; same size also recorded on 1978-08-11, 1994-06-29, 1995-05-29, 2006-08-25		Event records naming member places: Philadelphia city (18 records).	
Excessive Heat, Heat	heat index (narratives)	137, 1996 to 2026 (137 zone-level)	1 day to 10 days (median 2 days); 111 with a recorded value	10 consecutive days, 2002-08-11 to 2002-08-20, 8 direct deaths, zone-level	Excessive Heat, 2011-06-08, \$25,000 property; \$0 crops, reported for the zone (2011 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	Heat index: in event narratives only; local data required. Heat records from November to March (unseasonable warmth, not a heat wave) are counted but not used for the longest run.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	3, 2008 to 2020 (3 zone-level)		Strongest recorded (records with damage, a wind speed or direct casualties first, then storm type, category and wind): Tropical Storm record, 2011-08-27 to 2011-08-28, \$10,000 property; \$0 crops, reported for the zone (2011 dollars); NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Storm Events files every zone of a storm's episode under the storm's event type and category, so a Hurricane (Typhoon) record, especially an inland or remnant one, does not by itself mean hurricane-force winds here; read the damage and wind columns.
Ice Storm	Sperry-Piltz (local data)	2, 2011 to 2014 (2 zone-level)		No damage reported in 2 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Ice thickness: in event narratives only; local data required.
Flash Flood, Flood, Lakeshore Flood	damage and flood days (FIRM for depth)	246, 1996 to 2026 (20 zone-level)		Flash Flood, 2021-09-01, \$60,000,000 property; \$0 crops (2021 dollars)		Event records naming member places: Philadelphia city (34 records). Zone-level records (20) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage can be \$0 or blank even for a major flood, so the worst record here may not be the worst flood; compare FEMA Public Assistance by declaration in B1-d.
Debris Flow	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	11, 1999 to 2014		Lightning, 2009-08-02, \$100,000 property; \$0 crops (2009 dollars)		Event records naming member places: Philadelphia city (5 records).	Storm Events lists lightning with damage or casualties; physical measure in event narratives only; local data required.
High Wind and Strong Wind (outside NRI Strong Wind definition)	wind speed (kt and mph)	145, 1996 to 2026 (145 zone-level)	29 kt (33 mph) to 61 kt (70 mph) (median 42 kt (48 mph)); 116 with a recorded value	61 kt (70 mph) measured gust, High Wind, 2012-10-29; NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties	High Wind, 2003-09-18, \$3,020,000 property; crops not reported, reported for the zone (2003 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Thunderstorm Wind	wind speed (kt and mph)	339, 1969 to 2026	43 kt (49 mph) to 87 kt (100 mph) (median 51 kt (59 mph)); 299 with a recorded value	87 kt (100 mph), measurement type not recorded, Thunderstorm Wind, 1992-08-11	Thunderstorm Wind, 1994-06-19, \$5,000,000 property; crops not recorded (1994 dollars)	Event records naming member places: Philadelphia city (78 records).	
Tornado	Enhanced Fujita (F before Feb 2007)	12, 1958 to 2021	F/EF0 to F/EF3 (median between F/EF1 and F/EF2); 12 with a recorded value	EF3 tornado, 2021-07-29, 0.62 mi within this county, 530 yd wide, property not reported; \$0 crops (2021 dollars)	Tornado, 1991-08-03, \$2,500,000 property; crops not recorded (1991 dollars)	Event records naming member places: Philadelphia city (1 record).	From 1996 on, tornado records are per-county segments and length is the path length within this county (NWS Instruction 10-1605); records before 1996 may give the whole path length, including the path outside this county, and before 1996 a tornado is listed once, under the county where it began, with the whole path's rating; counties farther along the path may not list it. Length is not used to rank tornadoes.
Tsunami	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					Physical measure: in event narratives only; local data required.
Wildfire	acres burned (local data)	1, 2002 to 2002 (1 zone-level)		No damage reported in 1 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Acres burned: in event narratives only; local data required.
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall local)	207, 1996 to 2026 (207 zone-level)		Winter Storm, 2003-02-16, \$4,000,000 property; crops not reported, reported for the zone (2003 dollars), 2 direct deaths, 1 direct injury (reported for the zone); NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Snow depth: in event narratives only; local data required.

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records are placed with NWS zone-county files, which exist from 2020 on; an earlier record is placed by its zone number in the nearest later file only when its zone name matches that file, records from zones NWS renumbered are placed by name or left out, and a record whose zone is in no known file is left out of every count, so counts before 2020 can be low. Some current zones are also missing from the NWS files, so recent counts can be low too.

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

SOURCESNOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>**Supports B1-d: previous occurrences**

Declaration rows

25

Counted incidents

18**Federal disaster declarations for this county**

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2021-09-10	2021-08-31	DR-4618-PA	Major disaster	REMNANTS OF HURRICANE IDA	Hurricane	\$6,369,013.81		
2020-03-30	2020-01-20	DR-4506-PA	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$207,580,025.47		
2020-03-13	2020-01-20	EM-3441-PA	Emergency	COVID-19	Non-natural, not counted	none found		same incident as DR-4506
2016-03-23	2016-01-22	DR-4267-PA	Major disaster	SEVERE WINTER STORM AND SNOWSTORM	Winter Weather	\$7,727,794.43		
2014-02-06	2014-02-04	EM-3367-PA	Emergency	SEVERE WINTER STORM	Ice Storm	none found		
2013-01-10	2012-10-26	DR-4099-PA	Major disaster	HURRICANE SANDY	Hurricane	\$2,233,706.80		
2012-10-29	2012-10-26	EM-3356-PA	Emergency	HURRICANE SANDY	Hurricane	none found		same incident as DR-4099
2011-09-12	2011-09-03	DR-4030-PA	Major disaster	TROPICAL STORM LEE	Inland Flooding (primary); also designated: Hurricane	\$141,597.24		FEMA's declaration record does not list Public Assistance, but FEMA's PA project summaries show obligations for this county
2011-09-08	2011-09-03	EM-3340-PA	Emergency	REMNANTS OF TROPICAL STORM LEE	Inland Flooding (primary); also designated: Hurricane	\$301,818.34		same incident as DR-4030
2011-09-03	2011-08-26	DR-4025-PA	Major disaster	HURRICANE IRENE	Hurricane	\$4,775,537.27		
2011-08-29	2011-08-26	EM-3339-PA	Emergency	HURRICANE IRENE	Hurricane	none found		same incident as DR-4025
2010-04-16	2010-02-05	DR-1898-PA	Major disaster	SEVERE WINTER STORMS AND SNOWSTORMS	Winter Weather	\$7,476,703.74		
2005-09-10	2005-08-29	EM-3235-PA	Emergency	HURRICANE KATRINA	Hurricane: evacuation support, not a local hazard event; not counted	\$3,120,197.10		
2004-09-19	2004-09-17	DR-1557-PA	Major disaster	TROPICAL DEPRESSION IVAN	Hurricane	PA not declared for this county		
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		
2004-08-06	2004-07-27	DR-1538-PA	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	PA not declared for this county		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	
						<i>federal share obligated, nominal dollars</i>	Flags Notes
2003-03-14	2003-02-14	EM-3180-PA	Emergency	SNOW	Winter Weather	\$4,832,498.94	
1999-09-18	1999-09-16	DR-1294-PA	Major disaster	HURRICANE FLOYD MAJOR DISASTER DECLARATIONS	Hurricane	\$1,511,337.51	
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	none found	
1994-03-10	1994-01-04	DR-1015-PA	Major disaster	SEVERE WINTER STORMS	Winter Weather	none found	
1993-03-16	1993-03-13	EM-3105-PA	Emergency	SEVERE SNOWFALL & WINTER STORM	Winter Weather	none found	
1972-06-23	1972-06-23	DR-340-PA	Major disaster	TROPICAL STORM AGNES	Inland Flooding (primary); also designated: Hurricane	none found	
1971-09-18	1971-09-18	DR-312-PA	Major disaster	FLOODS	Inland Flooding	none found	
1965-08-18	1965-08-18	DR-206-PA	Major disaster	WATER SHORTAGE	Drought	none found	

County Public Assistance: applicants the FEMA record places in this county, including any state agencies FEMA files there; statewide rows are listed on the state page; federal share obligated, nominal dollars. Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

SOURCES

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Statewide declarations

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
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. Listed on every county page in the state; not counted with county rows.

SOURCE

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

Public Assistance filed under this county for declarations that do not list it: 1 row, \$4,317,276.81

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-1383-PA	2001-06-21	TROPICAL STORM ALLISON	Southeastern Pennsylvania Transportation Authority (Philadelphia County)	\$4,317,276.81

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

SOURCES

FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

Previous occurrences by hazard, with explicit no-event rows

Hazard	Storm Events records <i>full period</i>	Since plan approval records	During plan review records	Last 5 years records	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	58	0	0	10	0	0	1996 to 2026-06-30	
Cold Wave	33	0	0	1	0	0	1996 to 2026-06-30	Includes 1 Frost/Freeze record, event types the NRI definition of this hazard leaves out.
Drought	46	0	0	0	1	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		No Storm Events record; local data required (e.g., USGS).
Hail	45	0	0	6	0	0	1955 to 2026-06-30	
Heat Wave	137	1	5	13	0	0	1996 to 2026-06-30	
Hurricane	3	0	0	0	7	0	1996 to 2026-06-30	
Ice Storm	2	0	0	0	1	0	1996 to 2026-06-30	
Inland Flooding	246	6	13	37	5	0	1996 to 2026-06-30	
Landslide	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Lightning	11	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	484	10	17	65	0	0	1955 to 2026-06-30	Includes 41 High Wind records and 104 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	12	0	0	0	0	0	1950 to 2026-06-30	
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events

Hazard	Storm Events records <i>full period</i>	Since plan approval <i>records</i>	During plan review <i>records</i>	Last 5 years <i>records</i>	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Volcanic Activity	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	1	0	0	0	0	0	1996 to 2026-06-30	
Winter Weather	207	0	7	24	6	0	1996 to 2026-06-30	Includes 5 Sleet records, event types the NRI definition of this hazard leaves out.

SOURCES

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>

Notable Storm Events records

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2021-09-01	Flash Flood		\$60,000,000 property; \$0 crops (2021 dollars)	0, 0	WAYNE JCT to ROXBOROUGH		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2021-07-29	Tornado	EF3, 0.62 mi within this county, 530 yd wide	property not reported; \$0 crops (2021 dollars)	0, 0	BYBERRY		B1-c worst recorded: Tornado
2012-10-29	High Wind	61 kt (70 mph) measured gust	\$400,000 property; \$0 crops, reported for the zone (2012 dollars)	0, 0	NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2011-08-27	Tropical Storm		\$10,000 property; \$0 crops, reported for the zone (2011 dollars)	0, 0	NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression
2011-07-21	Excessive Heat		\$0 property; \$0 crops, reported for the zone (2011 dollars)	22, 48	NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		deaths or injuries recorded
2011-04-16	Coastal Flood		\$100,000 property; \$0 crops, reported for the zone (2011 dollars)	0, 0	NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Coastal Flood, Storm Surge/Tide
2009-03-29	Hail	1.75 in	\$0 property; \$0 crops (2009 dollars)	0, 0	TORRESDALE		B1-c worst recorded: Hail
2003-01-14	Cold/Wind Chill		damage not reported	3, 0	NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2002-08-11	Heat		damage not reported	8, 0	NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Excessive Heat, Heat
1999-07-04	Heat		damage not reported	58, 124	NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		deaths or injuries recorded

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
1997-07-12	Heat		damage not reported	23, 50	NWS zone PAZ071 (PHILADELPHIA), zone-level: may include parts of neighboring counties		deaths or injuries recorded
1992-08-11	Thunderstorm Wind	87 kt (100 mph), measurement type not recorded	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Thunderstorm Wind

The full list is in the XLSX file, sheet "B1-d Storm Events history" (1,285 rows).

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records are placed with NWS zone-county files, which exist from 2020 on; an earlier record is placed by its zone number in the nearest later file only when its zone name matches that file, records from zones NWS renumbered are placed by name or left out, and a record whose zone is in no known file is left out of every count, so counts before 2020 can be low. Some current zones are also missing from the NWS files, so recent counts can be low too.

SOURCES

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

State-declared emergencies are not in federal data. Add them from your state emergency management agency.

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

Supports B1-e: probability

Probability: FEMA annualized frequency and descriptor per hazard

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche		events per year					1994 to 2023 (30 years)	see B1-f	Not Applicable in NRI for this county; no descriptor.
Coastal Flooding	3.69	events per year at a location (modeled)	about 3.7 per year at a given location in the county	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	Descriptor from NRI: the rate at a location is 1 or more a year, so the county rate is at least that.
Cold Wave	0.791	event-days per year	about 0.791 days per year	Likely	event-days in 13 of 30 years, 1996 to 2025 (43.3%)	15	2005-11-12 to 2024-11-12 (19 years)	countywide	Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.

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
Drought	5.76	event-days per year	about 5.76 days per year	Likely	event-days in 10 of 30 years, 1996 to 2025 (33.3%)	161	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI gives about 5.76 drought event-days a year here (its annualized frequency over 25.25 years; not its event count divided by the years), but Storm Events has a record in only 10 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Earthquake	0.00162	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.162%			not shown	modeled	see B1-f	Descriptor not assigned: the NRI value is the chance at a location in the county, not how often the hazard affects the county, and Storm Events does not record earthquakes.
Hail	2.51	events per year	about 2.51 per year	Highly likely	FEMA annualized frequency (modeled)	95.4 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	11.1	event-days per year	about 11.1 days per year	Highly likely	event-days in 27 of 30 years, 1996 to 2025 (90%)	125	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.092	events per year	about 1 in 11 years	Possible	FEMA annualized frequency (modeled)	16	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are counted separately in B1-d and need not match.
Ice Storm	1.44	event-days per year	about 1.44 days per year	Possible	event-days in 2 of 30 years, 1996 to 2025 (6.67%)	97	1946-12-31 to 2014-02-12 (67 years)	countywide	NRI gives about 1.44 ice storm event-days a year here (its annualized frequency over 67 years; not its event count divided by the years), but Storm Events has a record in only 2 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Inland Flooding	5.82	event-days per year	about 5.82 days per year	Highly likely	event-days in 30 of 30 years, 1996 to 2025 (100%)	163	1996 to 2023 (28 years)	see B1-f	
Landslide	0.0578	events per year (modeled)	about 1 in 17 years	Possible	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	35.7	days per year with a strike	about 35.7 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Strong Wind	7.04	events per year	about 7.04 per year	Highly likely	FEMA annualized frequency (modeled)	268	1986 to 2023 (38 years)	countywide	
Tornado	0.073	events per year	about 1 in 14 years	Possible	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami		annual probability at the most exposed location (used in place of a county value)			Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No Storm Events record of this hazard, 1996 to 2025; descriptor not assigned (the NRI value is the chance at a location in the county, not how often the hazard affects the county)
Volcanic Activity		annual probability				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Wildfire	0.0000915	annual probability at a location	chance a given location in the county burns in a year: 0.00915%	Possible	Storm Events records in 1 of 30 years, 1996 to 2025 (3.33%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI: the NRI value is the chance at a location in the county, not how often the hazard affects the county.
Winter Weather	10.5	event-days per year	about 10.5 days per year	Highly likely	event-days in 29 of 30 years, 1996 to 2025 (96.7%)	200	2005-11-12 to 2024-11-12 (19 years)	countywide	

FEMA annualized frequency (modeled) comes from the National Risk Index v1.20 (December 2025). It is not recorded events divided by years, and what it measures depends on the hazard. For most hazards it estimates how often the hazard affects this county each year: it counts events or event-days (drought, heat wave, cold wave, winter weather, ice storm and inland flooding are in days per year; lightning is the number of days per year with a recorded cloud-to-ground strike, from the NOAA Storm Prediction Center daily lightning climatology); it may count events in the surrounding area (hail, strong wind, tornado, hurricane and ice storm use a 49 km grid and buffers) and is averaged over the county's area; and some hazards use a minimum value for places with no recorded event. Earthquake, wildfire and coastal flooding are different: FEMA computes them for each census block and averages them over the county, so the value is the chance (for coastal flooding, the modeled number of floods per year) at a location in the county, which is lower than the chance that the hazard strikes somewhere in the county. Earthquake is the chance of at least minor-damage shaking (U.S. Geological Survey model); wildfire is the chance that a location burns in a large fire (U.S. Forest Service burn probability); coastal flooding comes from FEMA flood zones and NOAA high-tide flooding, so it can be above 1 where high-tide flooding is frequent. Tsunami is the value at the county's most exposed location, from recorded events and modeled return periods. For these four hazards the packet gives no "1 in N years" and takes the descriptor from Storm Events (none for earthquake) unless the value is 1 or more a year. Landslide is a U.S. Geological Survey modeled county rate spread by slope susceptibility. Volcanic activity is the chance that a volcano affecting the county erupts in a year. Drought counts only extreme and exceptional drought (D3 and D4). Source: FEMA, National Risk Index Technical Documentation v1.20, sections 5.2.2 (Table 5), 5.2.3, 7.4, 10.4, 16.5, 17.1, 17.3.1, 17.5, 20.3.1, 21.4, 22.4 and 6 to 23.

SOURCES
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Descriptor scale used in this packet (defined per unit)

Unit	Descriptor	Definition
events per year	Highly likely	1 or more per year
events per year	Likely	about once in 1 to 10 years

Unit	Descriptor	Definition
events per year	Possible	about once in 10 to 100 years
events per year	Unlikely	less than once in 100 years
annual probability	Likely	10% to under 100% chance in a given year
annual probability	Possible	1% to under 10% chance in a given year
annual probability	Unlikely	under 1% chance in a given year
event-days (share of years)	Highly likely	event-days recorded in 90% or more of years
event-days (share of years)	Likely	event-days recorded in 10% to under 90% of years
event-days (share of years)	Possible	event-days recorded in some years but under 10% of years
lightning strike-days	Highly likely	cloud-to-ground strikes on 1 or more days per year

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Intensity bands: historical frequency (Storm Events)

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	15	30	0.5
Hail	2.00 in+	1996 to 2025	0	30	0
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	260	30	8.67
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	1	30	0.0333
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	7	30	0.233
Tornado	EF0-1	1996 to 2025	3	30	0.1
Tornado	EF2-3	1996 to 2025	3	30	0.1
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

Hail smaller than 1 inch is not counted: on 2010-01-05 the National Weather Service raised its severe-hail threshold from 3/4 inch to 1 inch, so smaller reports became less common after 2009 (NWS Service Change Notice 09-52). NRI hail frequency uses a 0.75 inch threshold.

SOURCE

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Optional: future conditions. Not a required item in the 2025 FEMA Local Mitigation Planning Policy Guide; some states ask for it. The federal Climate Mapping for Resilience and Adaptation (CMRA) site gives county exposure to future climate conditions.

Supports B1-f: variation across the planning area

Range of census tract risk within the county

Hazard	Tracts rated of all	Risk score min NRI score, 0 to 100	Median	Max	Tracts by rating	Note
Avalanche	0 of 408				Not Applicable 408	
Coastal Flooding	35 of 408	69.7	85.7	98.8	Relatively High 9, Relatively Moderate 7, Relatively Low 13, Very Low 6, No Rating 373	
Cold Wave	408 of 408	15.5	79.5	94.6	Relatively High 230, Relatively Moderate 153, Relatively Low 5, Very Low 20	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Drought	18 of 408	66.9	72.3	83.6	Relatively Low 1, Very Low 17, No Rating 390	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range above mostly reflects where crop and livestock value is, not where buildings and people are. Confirm locally.
Earthquake	408 of 408	2.0	75.4	88.0	Relatively Moderate 145, Relatively Low 242, Very Low 21	
Hail	408 of 408	1.1	45.8	84.8	Relatively Moderate 2, Relatively Low 353, Very Low 53	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Heat Wave	408 of 408	1.4	98.1	99.9	Very High 324, Relatively High 62, Relatively Moderate 2, Very Low 20	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Hurricane	408 of 408	22.1	62.5	87.2	Relatively Moderate 2, Relatively Low 393, Very Low 13	
Ice Storm	408 of 408	0.1	36.1	78.3	Relatively Moderate 2, Relatively Low 235, Very Low 171	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Inland Flooding	408 of 408	0.2	53.8	99.4	Very High 9, Relatively High 71, Relatively Moderate 159, Relatively Low 136, Very Low 33	
Landslide	363 of 408	8.6	47.2	93.0	Relatively Low 16, Very Low 347, No Rating 45	
Lightning	408 of 408	0.1	25.6	50.6	Relatively Moderate 5, Relatively Low 273, Very Low 130	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Strong Wind	408 of 408	0.3	37.6	68.6	Relatively Moderate 20, Relatively Low 357, Very Low 31	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Tornado	408 of 408	1.0	49.8	81.5	Relatively High 2, Relatively Moderate 126, Relatively Low 264, Very Low 16	
Tsunami	0 of 408				Insufficient Data 408	
Volcanic Activity	0 of 408				Not Applicable 408	

Hazard	Tracts <i>rated of all</i>	Risk score min <i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Wildfire	73 of 408	18.5	28.1	73.4	Relatively Low 2, Very Low 71, No Rating 335	
Winter Weather	408 of 408	10.9	69.5	89.2	Relatively High 63, Relatively Moderate 310, Relatively Low 23, Very Low 12	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.

Rated tracts only: No Rating (score 0.0), Not Applicable and Insufficient Data tracts are counted but not used for the minimum, median and maximum.

SOURCE
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Per-member block (Starter, confirm locally)

Member	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat- flood, any definition</i>	Public Assistance matched <i>federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since the member's plan</i>	Notes
Philadelphia city	City	Approved, expires 2031-06-03	FMA RL 4, SRL 35; any 133	\$133,215,869.44	136; 0	Also approved under plan 108236 (City of Philadelphia Hazard Mitigation Plan, expires 2027-05-18). FEMA's plan status map shows one plan per jurisdiction and may show one of these; this packet uses the approved plan that expires last. Includes \$110,446,459 for declarations not counted as hazard incidents (DR-4506-PA, EM-3235-PA).

Member rows are whole NFIP communities and need not add up to the county total: a community that extends into another county is counted in full on each member row, while the county table counts only its part in this county.

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

SOURCES
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Supports B2-a and B2-b: assets and impacts

Local data required

County-level starter. The plan must describe impacts for each participant and its own assets.

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

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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2026-06-04 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Avalanche											Not Applicable in NRI for this county
Coastal Flooding	\$12,325,731,508		28,116	\$2,618,897		\$182,935	0.0212%				
Cold Wave	\$291,673,614,404	\$421,121	1,602,305	\$12,115	under \$1	\$57,028,375	under 0.0001%				
Drought		\$340,906			\$4,120		1.21% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$516,179,828,672		1,603,797	\$24,823,117		\$16,806,461	0.00481%				
Hail	\$291,673,614,404	\$421,121	1,602,305	\$2,003,804	\$144	\$51,189	0.000687%				
Heat Wave	\$291,673,614,404	\$421,121	1,602,305	\$1,316	\$10	\$256,418,109	under 0.0001%				
Hurricane	\$291,583,235,335	\$421,121	1,601,564	\$11,522,453	\$1,537	\$496,730	0.00395%				
Ice Storm	\$291,206,091,966		1,599,816	\$411,084		\$577,669	0.000141%				
Inland Flooding	\$291,554,040,317	\$11,659	10,788	\$262,808,562	\$565	\$3,248,009	n/a (see note)	\$85,000			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. EAL as % of exposure: n/a.
Landslide	\$2,267,428,590		10,067	\$7,158		\$9	0.000316%				
Lightning	\$291,673,614,404		1,602,305	\$12,252		\$1,488,047	under 0.0001%				
Strong Wind	\$291,673,614,404	\$421,121	1,602,305	\$640,350	\$1	\$2,860,443	0.00022%	\$0			
Tornado	\$291,673,614,404	\$421,121	1,602,305	\$6,605,994	\$5	\$14,496,551	0.00226%				
Tsunami											NRI publishes no building exposure for this county
Volcanic Activity											Not Applicable in NRI for this county
Wildfire	\$1,296,906,165	\$45,409	8,352	\$7,330	under \$1	\$1,474	0.000565%				
Winter Weather	\$291,673,614,404	\$421,121	1,602,305	\$192,166	under \$1	\$1,743,016	under 0.0001%				

Totals since 2026-06-04 (Storm Events through 2026-06-30): 16 county-coded records, 7 with a damage value recorded (including \$0), \$85,000; 1 zone-level records, 0 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance on counted declarations none found (0 declarations, 0 with PA).

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

FEMA does not split Public Assistance by hazard. A declaration mapped to several hazards is listed under each of them with its full amount, so the per-hazard column must not be added up; the unit total counts each declaration once.

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

SOURCES
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Supports B2-a: context

County context

Measure	Value
Population	1,602,305
Building value (total, not at risk)	\$291,673,614,404
Agriculture value (total, not at risk)	\$421,121
NRI risk rating (all hazards)	Very High
Expected annual loss, buildings and agriculture, all hazards	\$311,672,980
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)	\$355,399,018
Social vulnerability rating	Very High
Community resilience rating	Relatively Moderate
NRI version	December 2025

FEMA's all-hazard expected annual loss total adds buildings, agriculture and population equivalence; the two parts are shown separately so the property figure is not read as including the statistical value of life.

SOURCE
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Supports B2-c: repetitive loss

Repetitive loss in this county, both definitions

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	4	Severe repetitive loss, FMA definition (44 CFR 77.2)	35
Repetitive loss, NFIP insurance definition	141	Severe repetitive loss, NFIP insurance definition	34

Your state NFIP coordinator's list may use the NFIP insurance definition, so its counts can be higher.

SOURCES
FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Repeat-flood properties: county and state-level rows

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	4	35	141	34	142	0	69
PHILADELPHIA, CITY OF	4	35	132	34	133	0	69
Unknown (community ID Unknown in FEMA data)	0	0	9	0	9	0	0
State level, not in this county: county not reported	0	0	1	0	1	0	0

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

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

Repeat-flood properties by plan member (NFIP community)

Member	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>	Note
Philadelphia city	420757	4	35	132	34	133	0	69	

Per-member types: XLSX sheet 'B2-c Members'.

Member rows are whole NFIP communities and need not add up to the county total: a community that extends into another county is counted in full on each member row, while the county table counts only its part in this county.

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

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

County repeat-flood properties by occupancy group

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	1	20	96	19	97	0	49
2 to 4 unit residential	0	1	9	1	9	0	4
other residential	0	2	10	2	10	0	8
non-residential	3	12	26	12	26	0	8
not reported	0	0	0	0	0	0	0

Institutional properties cannot be separated in this data: FEMA's occupancy groups have no institutional class, so they fall in non-residential or other residential in the table by occupancy group.

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

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

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites; OpenFEMA's fmaRI field description omits the Increased Cost of Compliance clause of 44 CFR 77.2(i). NFIP repetitive loss (FEMA insurance definition, nfipRI) is 2 or more claims over \$1,000 in 10 years and can drop to false when a property is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured.

Your state NFIP coordinator's list may use the NFIP insurance definition, so its counts can be higher.

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

Counts may differ from your state NFIP coordinator's list, which is the source the Handbook names.

In this county 1 property is FMA repetitive loss but not NFIP repetitive loss, and 138 properties are NFIP repetitive loss but not FMA repetitive loss.
Exact counts; no count suppression.

Sources

Every table above lists its own sources. The full list, for the plan's bibliography (FEMA review item A4-a):

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-28, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_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_Gaz_scscd_national.zip, https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx

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Corrections: to report an error, name the packet, the table and what your records show. Contact: to be added

Hazard Plain release 2026-10. As of 2026-09-28; Storm Events data through 2026-06-30. File hazard-plain_2026-10_PA_42101. Preview: automated baseline.