

Essex County, MA

Risk-assessment baseline packet

Unit **County area 25009** 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.

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Plan clock

No county-level plan row in FEMA data

What changed since your last plan

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

SOURCES: 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: 34 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" after these cover pages.

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

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Plan clock

Plan status for every jurisdiction listed in this county

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Amesbury Town city	City	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		
Beverly city	City	No approved plan on record. Approvable pending adoption, not yet eligible	none	none	none		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Gloucester city	City	Expired on 2025-06-07	City of Gloucester Hazard Mitigation Plan 2020 Update (FEMA plan 106396)	2020-06-08	2025-06-07	-478		
Haverhill city	City	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		
Lawrence city	City	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		
Lynn city	City	Approved, expires 2028-02-15	City of Lynn Hazard Mitigation Plan 2021 Update (FEMA plan 108235)	2023-02-16	2028-02-15	505		
Methuen Town city	City	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		
Newburyport city	City	Approved, expires 2028-03-14	Newburyport Multi-Hazard Mitigation Plan June 2022 (FEMA plan 108410)	2023-03-15	2028-03-14	533		
Peabody city	City	Approved, expires 2031-09-16	2025 City of Peabody, MA Hazard Mitigation Plan (FEMA plan 111761)	2026-09-17	2031-09-16	1,814		
Salem city	City	Expired on 2025-12-08	City of Salem Hazard Mitigation Plan 2020 Update (FEMA plan 106727)	2020-12-09	2025-12-08	-294	FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Andover town	Town	No approved plan on record. Approvable pending adoption, not yet eligible	none	none	none		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Boxford town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		
Danvers town	Town	Approved, expires 2031-01-19	Town of Danvers Hazard Mitigation Plan Update (FEMA plan 111033)	2026-01-20	2031-01-19	1,574		
Essex town	Town	Approved, expires 2030-12-04	Town of Essex Hazard Mitigation Plan 2025 Update (FEMA plan 110905)	2025-12-05	2030-12-04	1,528		

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Georgetown town	Town	Approved, expires 2031-09-16	Georgetown Hazard Mitigation Plan Update (FEMA plan 111328)	2026-09-17	2031-09-16	1,814		
Groveland town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		
Hamilton town	Town	Approved, expires 2031-03-31	Town of Hamilton, MA Hazard Mitigation Plan Update (FEMA plan 111031)	2026-04-01	2031-03-31	1,645		
Ipswich town	Town	Approved, expires 2031-03-31	Town of Ipswich Hazard Mitigation Plan 2025 Update (FEMA plan 111286)	2026-04-01	2031-03-31	1,645		
Lynnfield town	Town	Approved, expires 2031-06-17	Town of Lynnfield Draft Hazard Mitigation Plan 2026Update (FEMA plan 111658)	2026-06-18	2031-06-17	1,723		
Manchester-by-the-Sea town	Town	Expired on 2023-06-07	Hazard Mitigation Plan Draft October 2017 Manchester-by-the-Sea (FEMA plan 104955)	2018-06-08	2023-06-07	-1,209		
Marblehead town	Town	Approved, expires 2029-04-29	Town of Marblehead, MA Hazard Mitigation Plan Update (FEMA plan 109608)	2024-04-30	2029-04-29	944		
Merrimac town	Town	Approved, expires 2027-02-21	Town of Merrimac Multi-Hazard Mitigation Plan August 2021 (FEMA plan 107753)	2022-02-22	2027-02-21	146		
Middleton town	Town	Expired on 2026-06-28	Town of Middleton 2020 Hazard Mitigation Plan - Municipal Vulnerability Preparedness Plan (FEMA plan 106892)	2021-06-29	2026-06-28	-92		
Nahant town	Town	Approved, expires 2027-02-27	Town of Nahant Hazard Mitigation Plan 2021 Update (FEMA plan 108008)	2022-02-28	2027-02-27	152		
Newbury town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		
North Andover town	Town	Expired on 2026-09-21	North Andover Multi-Hazard Mitigation and Municipal Vulnerability Plan (FEMA plan 107634)	2021-09-22	2026-09-21	-7		
Rockport town	Town	Expired on 2026-03-30	Hazard Mitigation Plan Rockport, Massachusetts (FEMA plan 107047)	2021-03-31	2026-03-30	-182		
Rowley town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		
Salisbury town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		
Saugus town	Town	Approved, expires 2026-10-06	Town of Saugus Hazard Mitigation Plan 2021 Update (FEMA plan 107752)	2021-10-07	2026-10-06	8		
Swampscott town	Town	Expired on 2021-08-01	Town of Swampscott Hazard Mitigation Plan 2013 Update (FEMA plan 12288)	2016-08-01	2021-08-01	-1,884	FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Topsfield town	Town	Approved, expires 2026-11-28	Town of Topsfield Hazard Mitigation Plan (FEMA plan 107754)	2021-11-29	2026-11-28	61		
Wenham town	Town	Expired on 2024-08-26	Town of Wenham Hazard Mitigation Plan and Municipal Vulnerability Preparedness Plan 2019 (FEMA plan 105880)	2019-08-27	2024-08-26	-763		
West Newbury town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,223		

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

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 <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
1	Inland Flooding	Relatively High	Relatively High	\$123,504,644	\$27,597	\$1,101,672	\$124,633,913	145		
2	Coastal Flooding	Very High	Very High	\$19,202,600		\$23,505	\$19,226,111	51		
3	Hurricane	Relatively High	Relatively High	\$14,249,379	\$303,061	\$455,854	\$15,008,294	3		
4	Earthquake	Relatively Moderate	Relatively Moderate	\$11,769,040		\$2,896,733	\$14,665,774			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	\$4,053,018	\$363	\$5,238,098	\$9,291,479	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
6	Cold Wave	Relatively Moderate	Relatively Moderate	\$2,463	\$4,930	\$3,768,382	\$3,775,775	3		
7	Heat Wave	Relatively Moderate	Relatively Moderate	\$4	\$5,212	\$3,705,885	\$3,711,101	5		
8	Ice Storm	Very High	Very High	\$2,391,005		\$195,757	\$2,586,762	1		
9	Strong Wind	Relatively High	Relatively High	\$694,191	\$1	\$1,296,081	\$1,990,273	473		Includes 73 High Wind records and 115 Strong Wind records, event types the NRI definition of this hazard leaves out.
10	Lightning	Relatively High	Relatively High	\$96,085		\$1,869,620	\$1,965,705	49		
11	Drought	Relatively Moderate	Relatively High		\$1,752,533		\$1,752,533	9		
12	Wildfire	Very Low	Very Low	\$74,537	\$11	\$8,570	\$83,117	0		Declared 1 time; no Storm Events record of this type. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
13	Winter Weather	Relatively Low	Relatively Low	\$42,069	\$9	\$16,916	\$58,993	155		

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
14	Hail	Very Low	Very Low	\$37,881	\$139	\$14,797	\$52,817	79		
15	Landslide	Relatively Low	Very Low	\$2,400		\$985	\$3,385	2		
	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 173
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.	99 of 173
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	173 of 173
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	23 of 173
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.	173 of 173
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	173 of 173
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	173 of 173
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.	173 of 173

Hazard	Location	Census tracts rated <i>rated of all tracts</i>
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	173 of 173
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.	173 of 173
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.	170 of 173
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	173 of 173
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	173 of 173
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.	173 of 173
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 173
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 173
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.	143 of 173
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	173 of 173

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)	51, 2002 to 2025 (50 zone-level)		Coastal Flood, 2013-02-09, \$5,800,000 property; \$0 crops, reported for the zone (2013 dollars); NWS zone MAZ007 (EASTERN ESSEX), zone-level: may include parts of neighboring counties		Event records naming member places: Salisbury town (1 record). Zone-level records (50) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	3, 2015 to 2016 (3 zone-level)	2 days; 2 with a recorded value	2 consecutive days, 2016-02-13 to 2016-02-14, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Wind chill: in event narratives only; local data required.
Frost/Freeze (outside NRI Cold Wave definition)	crop damage	0					Temperature: in event narratives only; local data required.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Drought	US Drought Monitor D-scale	9, 2012 to 2017 (9 zone-level)	20 days to 204 days (median 112 days); 2 with a recorded value	204 days (about 6.7 months), 2016-07-05 to 2017-01-24, a run of 7 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)	98, 1957 to 2023	0.75 in to 3.5 in (median 1 in); 97 with a recorded value	3.5 in hail, 1965-08-28	Hail, 2006-07-11, \$150,000 property; crops not reported (2006 dollars)	Event records naming member places: Peabody city (10 records), Lynn city (9 records), Haverhill city (6 records), Newburyport city (4 records), Salisbury town (4 records), Beverly city (3 records), Georgetown town (3 records), Ipswich town (3 records), Middleton town (3 records), Salem city (3 records); and 10 more member places (see the XLSX file).	
Excessive Heat, Heat	heat index (narratives)	5, 2010 to 2018 (5 zone-level)	1 day to 2 days (median 1 day); 4 with a recorded value	2 consecutive days, 2010-07-06 to 2010-07-07, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Heat index: in event narratives only; local data required.
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	3, 2011 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, 2011-08-28, \$1,600,000 property; \$0 crops, reported for the zone (2011 dollars); NWS zone MAZ007 (EASTERN ESSEX), 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)	1, 2008 to 2008 (1 zone-level)		Ice Storm, 2008-12-11, \$2,000,000 property; \$0 crops, reported for the zone (2008 dollars); NWS zone MAZ006 (WESTERN ESSEX), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Ice thickness: in event narratives only; local data required.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Flash Flood, Flood, Lakeshore Flood	damage and flood days (FIRM for depth)	145, 1996 to 2025 (8 zone-level)		Flash Flood, 2001-03-22, \$10,000,000 property; crops not reported (2001 dollars)		Event records naming member places: Lynn city (9 records), Lawrence city (8 records), Peabody city (8 records), Beverly city (4 records), Newbury town (4 records), Andover town (3 records), Ipswich town (3 records), Lynnfield town (3 records), North Andover town (3 records), Salem city (3 records); and 9 more member places (see the XLSX file). Zone-level records (8) 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)	2, 2010 to 2014 (1 zone-level)		Debris Flow, 2014-12-09, \$50,000 property; \$0 crops (2014 dollars)		Event records naming member places: Topsfield town (1 record). Zone-level records (1) apply countywide.	Physical measure: in event narratives only; local data required.
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	49, 1997 to 2023		Lightning, 2014-09-06, \$0 property; \$0 crops (2014 dollars), 2 direct deaths	Lightning, 2004-05-24, \$200,000 property; crops not reported (2004 dollars)	Event records naming member places: Haverhill city (4 records), Marblehead town (4 records), Andover town (3 records), Ipswich town (3 records), Gloucester city (2 records), Lynn city (2 records), Merrimac town (2 records), Peabody city (2 records), Danvers town (1 record), Georgetown town (1 record); and 5 more member places (see the XLSX file).	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)	188, 1996 to 2025 (188 zone-level)	28 kt (32 mph) to 69 kt (79 mph) (median 46 kt (53 mph)); 140 with a recorded value	69 kt (79 mph) measured gust, High Wind, 2019-10-17; NWS zone MAZ007 (EASTERN ESSEX), zone-level: may include parts of neighboring counties	High Wind, 2006-02-17, \$500,000 property; crops not reported, reported for the zone (2006 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	
Thunderstorm Wind	wind speed (kt and mph)	346, 1956 to 2025	39 kt (45 mph) to 100 kt (115 mph) (median 50 kt (58 mph)); 306 with a recorded value	100 kt (115 mph), measurement type not recorded, Thunderstorm Wind, 1962-06-11	Thunderstorm Wind, 1994-08-13, \$5,000,000 property; crops not recorded (1994 dollars)	Event records naming member places: Lynn city (17 records), Peabody city (13 records), Haverhill city (11 records), Marblehead town (9 records), Newbury town (9 records), Ipswich town (8 records), Newburyport city (8 records), Topsfield town (8 records), Beverly city (7 records), Merrimac town (7 records); and 20 more member places (see the XLSX file).	

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Tornado	Enhanced Fujita (F before Feb 2007)	12, 1951 to 1991	F/EF0 to F/EF2 (median F/EF1); 12 with a recorded value	F2 tornado, 1956-11-21, 0.8 mi path length (records before 1996 may include the whole path; rating and listing come from the county where the tornado began), 17 yd wide, \$25,000 property; crops not recorded (1956 dollars)	Tornado, 1968-07-01, \$250,000 property; crops not recorded (1968 dollars)	No event record names a member place.	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)	0					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)	155, 1996 to 2026 (155 zone-level)		Heavy Snow, 1997-04-01, \$2,500,000 property; crops not reported, reported for the zone (1997 dollars); NWS zone MAZ006 (WESTERN ESSEX), 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.

Where a hazard names more than 10 member places, the table lists the 10 with the most records; every place is in the XLSX file, sheet "B1-c Extent".

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.

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>

Supports B1-d: previous occurrences

Declaration rows

40

Counted incidents

31

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

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
2023-09-15	2023-09-15	EM-3599-MA	Emergency	HURRICANE LEE	Hurricane	none found	within last 5 years	
2020-03-27	2020-01-20	DR-4496-MA	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$64,585,288.24		
2020-03-13	2020-01-20	EM-3438-MA	Emergency	COVID-19	Non-natural, not counted	none found		same incident as DR-4496
2018-07-19	2018-03-13	DR-4379-MA	Major disaster	SEVERE WINTER STORM AND SNOWSTORM	Winter Weather	\$4,382,888.92		
2018-06-25	2018-03-02	DR-4372-MA	Major disaster	SEVERE WINTER STORM AND FLOODING	Inland Flooding; Winter Weather	\$10,612,002.12		
2015-04-13	2015-01-26	DR-4214-MA	Major disaster	SEVERE WINTER STORM, SNOWSTORM, AND FLOODING	Inland Flooding; Winter Weather	\$7,985,271.59		
2013-04-19	2013-02-08	DR-4110-MA	Major disaster	SEVERE WINTER STORM, SNOWSTORM, AND FLOODING	Inland Flooding; Winter Weather	\$12,748,048.36		
2012-10-28	2012-10-27	EM-3350-MA	Emergency	HURRICANE SANDY	Hurricane	none found		
2011-11-01	2011-10-29	EM-3343-MA	Emergency	SEVERE STORM	Hazard not mapped (severe storm title names no single hazard); not counted	none found		
2011-08-26	2011-08-26	EM-3330-MA	Emergency	HURRICANE IRENE	Hurricane	\$374,351.47		
2011-03-07	2011-01-11	DR-1959-MA	Major disaster	SEVERE WINTER STORM AND SNOWSTORM	Winter Weather	\$3,477,530.44		
2010-09-02	2010-09-01	EM-3315-MA	Emergency	HURRICANE EARL	Hurricane	\$22,040.92		
2010-05-03	2010-05-01	EM-3312-MA	Emergency	WATER MAIN BREAK	Non-natural, not counted	none found		
2010-03-29	2010-03-12	DR-1895-MA	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$2,727,538.83		
2009-01-05	2008-12-11	DR-1813-MA	Major disaster	SEVERE WINTER STORM AND FLOODING	Ice Storm	\$1,446,069.08		
2008-12-13	2008-12-11	EM-3296-MA	Emergency	SEVERE WINTER STORM	Winter Weather	none found		same incident as DR-1813
2007-05-16	2007-04-15	DR-1701-MA	Major disaster	SEVERE STORMS AND INLAND AND COASTAL FLOODING	Coastal Flooding	\$1,478,832.80		
2006-05-25	2006-05-12	DR-1642-MA	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$13,982,572.53		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2005-11-10	2005-10-07	DR-1614-MA	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding: designated for Hazard Mitigation only (no Public or Individual Assistance for this county); not counted	PA not declared for this county		
2005-09-13	2005-08-29	EM-3252-MA	Emergency	HURRICANE KATRINA EVACUATION	Hurricane: evacuation support, not a local hazard event; not counted	none found		
2005-02-17	2005-01-22	EM-3201-MA	Emergency	RECORD AND/OR NEAR RECORD SNOW	Winter Weather	\$4,231,028.12		
2004-04-21	2004-04-01	DR-1512-MA	Major disaster	FLOODING	Inland Flooding	PA not declared for this county		
2004-01-15	2003-12-06	EM-3191-MA	Emergency	SNOW	Winter Weather	\$3,238,171.92		
2003-03-11	2003-02-17	EM-3175-MA	Emergency	SNOW	Winter Weather	\$2,104,703.93		
2001-04-10	2001-03-05	DR-1364-MA	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	PA not declared for this county		
2001-03-28	2001-03-05	EM-3165-MA	Emergency	SNOW	Winter Weather	\$2,812,649.90		
1998-06-23	1998-06-13	DR-1224-MA	Major disaster	HEAVY RAINS AND FLOODING	Inland Flooding	PA not declared for this county		
1996-10-25	1996-10-20	DR-1142-MA	Major disaster	EXTREME WEATHER CONDITONS AND FLOODING	Inland Flooding	none found		
1996-10-23	1996-10-20	EM-3119-MA	Emergency	EXTREME WEATHER CONDITIONS AND FLOODING	Inland Flooding	none found		same incident as DR-1142
1996-01-24	1996-01-07	DR-1090-MA	Major disaster	BLIZZARD OF 96	Winter Weather	none found		
1993-03-16	1993-03-13	EM-3103-MA	Emergency	BLIZZARDS, HIGH WINDS & RECORD SNOWFALL	Winter Weather	none found		
1992-12-21	1992-12-11	DR-975-MA	Major disaster	WINTER COASTAL STORM	Coastal Flooding	none found		
1991-11-04	1991-10-30	DR-920-MA	Major disaster	COASTAL STORM	Coastal Flooding	none found		
1991-08-26	1991-08-19	DR-914-MA	Major disaster	HURRICANE BOB	Hurricane	none found		
1987-04-18	1987-03-30	DR-790-MA	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1985-10-28	1985-09-27	DR-751-MA	Major disaster	HURRICANE GLORIA	Hurricane	none found		
1981-12-03	1981-12-03	DR-650-MA	Major disaster	URBAN FIRE	Wildfire	none found		
1978-02-10	1978-02-06	DR-546-MA	Major disaster	COASTAL STORMS, FLOOD, ICE & SNOW	Coastal Flooding	none found		
1972-09-28	1972-09-28	DR-357-MA	Major disaster	TOXIC ALGAE IN COASTAL WATERS	Fishing Losses: economic loss, not a physical hazard event; non-natural, not counted	PA not declared for this county		
1972-03-06	1972-03-06	DR-325-MA	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	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
1955-08-20	1955-08-20	DR-43-MA	Major disaster	HURRICANE & FLOODS	Hurricane (primary); also designated: Inland Flooding		
1954-09-02	1954-09-02	DR-22-MA	Major disaster	HURRICANES	Hurricane (primary); also designated: Inland Flooding		
1953-06-11	1953-06-11	DR-7-MA	Major disaster	TORNADO	Tornado		

FEMA recorded these with designated area Statewide and no county. Listed on every county page in the state; not counted with county rows.

1 Fire Management declaration (1995-09-12 to 1995-09-12) FEMA filed as Statewide with no county; each names one local fire. Listed on the state page.

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, \$5,323.31

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-4051-MA	2012-01-06	SEVERE STORM AND SNOWSTORM	Bridgewell, Inc.	\$5,323.31

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		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	51			7	4		1996 to 2026-06-30	
Cold Wave	3			0	0		1996 to 2026-06-30	
Drought	9			0	0		1996 to 2026-06-30	
Earthquake	0			0	0			No Storm Events record; local data required (e.g., USGS).
Hail	98			1	0		1955 to 2026-06-30	

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
Heat Wave	5			0	0		1996 to 2026-06-30	
Hurricane	3			0	6		1996 to 2026-06-30	
Ice Storm	1			0	1		1996 to 2026-06-30	
Inland Flooding	145			16	11		1996 to 2026-06-30	
Landslide	2			0	0		1996 to 2026-06-30	
Lightning	49			3	0		1996 to 2026-06-30	
Strong Wind	534			39	0		1955 to 2026-06-30	Includes 73 High Wind records and 115 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	12			0	0		1950 to 2026-06-30	
Tsunami	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Volcanic Activity	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	0			0	1		1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Winter Weather	155			15	12		1996 to 2026-06-30	

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
2019-10-17	High Wind	69 kt (79 mph) measured gust	\$0 property; \$0 crops, reported for the zone (2019 dollars)	0, 0	NWS zone MAZ007 (EASTERN ESSEX), zone-level: may include parts of neighboring counties		B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2016-02-13	Extreme Cold/ Wind Chill		\$0 property; \$0 crops, reported for the zone (2016 dollars)	0, 0	NWS zone MAZ007 (EASTERN ESSEX), zone-level: may include parts of neighboring counties		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2014-09-06	Lightning		\$0 property; \$0 crops (2014 dollars)	2, 0	CONOMO PT		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
2013-02-09	Coastal Flood		\$5,800,000 property; \$0 crops, reported for the zone (2013 dollars)	0, 0	NWS zone MAZ007 (EASTERN ESSEX), zone-level: may include parts of neighboring counties		B1-c worst recorded: Coastal Flood, Storm Surge/Tide
2011-08-28	Tropical Storm		\$1,600,000 property; \$0 crops, reported for the zone (2011 dollars)	0, 0	NWS zone MAZ007 (EASTERN ESSEX), zone-level: may include parts of neighboring counties		B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression
2010-07-06	Heat		\$0 property; \$0 crops, reported for the zone (2010 dollars)	0, 0	NWS zone MAZ006 (WESTERN ESSEX), zone-level: may include parts of neighboring counties		B1-c worst recorded: Excessive Heat, Heat
2008-12-11	Ice Storm		\$2,000,000 property; \$0 crops, reported for the zone (2008 dollars)	0, 0	NWS zone MAZ006 (WESTERN ESSEX), zone-level: may include parts of neighboring counties		B1-c worst recorded: Ice Storm
2008-06-20	Lightning		\$0 property; \$0 crops (2008 dollars)	1, 1	HAVERHILL ARPT		deaths or injuries recorded
2006-05-13	Flood		\$7,000,000 property; crops not reported (2006 dollars)	2, 0	COUNTYWIDE		deaths or injuries recorded
2001-03-22	Flash Flood		\$10,000,000 property; crops not reported (2001 dollars)	0, 0	METHUEN		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
1962-06-11	Thunderstorm Wind	100 kt (115 mph), measurement type not recorded	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Thunderstorm Wind
1956-11-21	Tornado	F2, 0.8 mi path length (records before 1996 may include the whole path; rating and listing come from the county where the tornado began), 17 yd wide	\$25,000 property; crops not recorded (1956 dollars)	0, 0	location not recorded		B1-c worst recorded: Tornado

The full list is in the XLSX file, sheet "B1-d Storm Events history" (1,067 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.

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

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	8.13	events per year at a location (modeled)	about 8.1 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	1.38	event-days per year	about 1.38 days per year	Possible	event-days in 2 of 30 years, 1996 to 2025 (6.67%)	16.5	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 1.38 cold wave event-days a year here (its annualized frequency over 19 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. Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.
Drought	8.48	event-days per year	about 8.48 days per year	Likely	event-days in 3 of 30 years, 1996 to 2025 (10%)	259	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI gives about 8.48 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 3 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	0.0021	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.21%			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	1.79	events per year	about 1.79 per year	Highly likely	FEMA annualized frequency (modeled)	72.1 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	5.07	event-days per year	about 5.07 days per year	Likely	event-days in 3 of 30 years, 1996 to 2025 (10%)	52.2	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 5.07 heat wave event-days a year here (its annualized frequency over 19 years; not its event count divided by the years), but Storm Events has a record in only 3 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.

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
Hurricane	0.165	events per year	about 1 in 6 years	Likely	FEMA annualized frequency (modeled)	60	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	1.46	event-days per year	about 1.46 days per year	Possible	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	65	1946-12-31 to 2014-02-12 (67 years)	countywide	NRI gives about 1.46 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 1 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	2.68	event-days per year	about 2.68 days per year	Likely	event-days in 24 of 30 years, 1996 to 2025 (80%)	75	1996 to 2023 (28 years)	see B1-f	
Landslide	0.253	events per year (modeled)	about 1 in 4 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	19.4	days per year with a strike	about 19.4 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.749	events per year	about 0.75 per year	Likely	FEMA annualized frequency (modeled)	19	1986 to 2023 (38 years)	countywide	
Tornado	0.121	events per year	about 1 in 8 years	Likely	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	0.0000883	annual probability at a location	chance a given location in the county burns in a year: 0.00883%		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)

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
Winter Weather	15.1	event-days per year	about 15.1 days per year	Highly likely	event-days in 30 of 30 years, 1996 to 2025 (100%)	180	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
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	32	30	1.07
Hail	2.00 in+	1996 to 2025	1	30	0.0333
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	271	30	9.03
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	5	30	0.167
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	9	30	0.3
Tornado	EF0-1	1996 to 2025	0	30	0
Tornado	EF2-3	1996 to 2025	0	30	0
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 <i>rated of all</i>	Risk score min <i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Avalanche	0 of 173				Not Applicable 173	
Coastal Flooding	99 of 173	70.4	90.7	99.9	Very High 6, Relatively High 23, Relatively Moderate 23, Relatively Low 27, Very Low 20, No Rating 74	
Cold Wave	173 of 173	20.1	30.3	52.3	Relatively Moderate 3, Relatively Low 170	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	23 of 173	76.0	92.4	97.3	Relatively Moderate 12, Relatively Low 10, Very Low 1, No Rating 150	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	173 of 173	25.8	64.0	85.1	Relatively Moderate 18, Relatively Low 146, Very Low 9	
Hail	173 of 173	1.3	6.6	20.7	Very Low 173	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.

Risk score min						
Hazard	Tracts <i>rated of all</i>	<i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Heat Wave	173 of 173	5.1	26.7	61.7	Relatively Moderate 3, Relatively Low 139, 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.
Hurricane	173 of 173	54.8	73.2	85.6	Relatively Moderate 36, Relatively Low 137	
Ice Storm	173 of 173	22.4	71.7	95.8	Relatively High 8, Relatively Moderate 93, Relatively Low 71, Very Low 1	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	173 of 173	1.8	47.2	98.7	Very High 3, Relatively High 20, Relatively Moderate 61, Relatively Low 63, Very Low 26	
Landslide	170 of 173	9.6	50.2	84.7	Relatively Low 5, Very Low 165, No Rating 3	
Lightning	173 of 173	14.5	45.6	77.8	Relatively Moderate 63, Relatively Low 108, Very Low 2	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	173 of 173	13.8	36.2	63.3	Relatively Moderate 11, Relatively Low 158, Very Low 4	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	173 of 173	21.4	43.7	66.1	Relatively Moderate 18, Relatively Low 152, Very Low 3	
Tsunami	0 of 173				Insufficient Data 173	
Volcanic Activity	0 of 173				Not Applicable 173	
Wildfire	143 of 173	18.7	36.9	79.2	Relatively Low 16, Very Low 127, No Rating 30	
Winter Weather	173 of 173	15.2	20.3	30.8	Relatively Low 135, Very Low 38	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)

Repetitive loss						
Member	Type	Plan status	<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
Amesbury Town city	City	Approved, expires 2030-02-02	FMA RL 1, SRL 1; any 7	none found	0; 0	

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
Beverly city	City	No approved plan on record. Approvable pending adoption, not yet eligible	FMA RL 0, SRL 0; any 20	\$4,716,418.88	14; no approved plan	Includes \$2,296,028.01 for declarations not counted as hazard incidents (DR-4496-MA).
Gloucester city	City	Expired on 2025-06-07	FMA RL 0, SRL 10; any 40	\$5,088,970.30	7; 0	Includes \$1,146,732.95 for declarations not counted as hazard incidents (DR-4496-MA).
Haverhill city	City	Approved, expires 2030-02-02	FMA RL 1, SRL 0; any 14	\$4,524,714.82	23; 0	Includes \$1,302,571.06 for declarations not counted as hazard incidents (DR-4496-MA).
Lawrence city	City	Approved, expires 2030-02-02	FMA RL 1, SRL 6; any 28	\$11,193,694.67	15; 0	Includes \$8,776,628.73 for declarations not counted as hazard incidents (DR-4496-MA).
Lynn city	City	Approved, expires 2028-02-15	FMA RL 0, SRL 3; any 44	\$7,683,824.32	37; 1	Includes \$1,405,739.28 for declarations not counted as hazard incidents (DR-4496-MA).
Methuen Town city	City	Approved, expires 2030-02-02	FMA RL 0, SRL 1; any 16	none found	0; 0	
Newburyport city	City	Approved, expires 2028-03-14	FMA RL 1, SRL 3; any 29	\$1,970,835.23	13; 1	Includes \$591,901.34 for declarations not counted as hazard incidents (DR-4496-MA).
Peabody city	City	Approved, expires 2031-09-16	FMA RL 0, SRL 17; any 46	\$3,693,165.30	33; not yet covered	Includes \$408,620.26 for declarations not counted as hazard incidents (DR-4496-MA).
Salem city	City	Expired on 2025-12-08	FMA RL 1, SRL 3; any 22	\$2,156,570.52	9; 0	Includes \$387,939.87 for declarations not counted as hazard incidents (DR-4496-MA).
Andover town	Town	No approved plan on record. Approvable pending adoption, not yet eligible	FMA RL 0, SRL 4; any 29	\$3,442,723.89	13; no approved plan	Includes \$283,834.10 for declarations not counted as hazard incidents (DR-4496-MA).
Boxford town	Town	Approved, expires 2030-02-02	FMA RL 0, SRL 0; any 1	\$850,098.63	4; 0	Includes \$8,660.54 for declarations not counted as hazard incidents (DR-4496-MA).
Danvers town	Town	Approved, expires 2031-01-19	FMA RL 0, SRL 0; any 4	\$2,981,248.48	11; 0	Includes \$667,001.14 for declarations not counted as hazard incidents (DR-4496-MA).
Essex town	Town	Approved, expires 2030-12-04	FMA RL 0, SRL 4; any 10	\$273,877.42	1; 0	Includes \$64,791.75 for declarations not counted as hazard incidents (DR-4496-MA).
Georgetown town	Town	Approved, expires 2031-09-16	FMA RL 0, SRL 0; any 4	\$628,887.97	10; not yet covered	Includes \$70,829.77 for declarations not counted as hazard incidents (DR-4496-MA).
Groveland town	Town	Approved, expires 2030-02-02	FMA RL 0, SRL 0; any 0	\$508,217.86	7; 0	Includes \$8,117.52 for declarations not counted as hazard incidents (DR-4496-MA).
Hamilton town	Town	Approved, expires 2031-03-31	FMA RL 0, SRL 0; any 2	\$654,953.40	4; 0	Includes \$55,490.04 for declarations not counted as hazard incidents (DR-4496-MA).
Ipswich town	Town	Approved, expires 2031-03-31	FMA RL 0, SRL 0; any 2	\$1,145,554.12	17; 0	Includes \$105,173.81 for declarations not counted as hazard incidents (DR-4496-MA).
Lynnfield town	Town	Approved, expires 2031-06-17	FMA RL 0, SRL 0; any 3	\$1,286,216.48	11; 0	Includes \$596,832.07 for declarations not counted as hazard incidents (DR-4496-MA).

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
Manchester-by-the-Sea town	Town	Expired on 2023-06-07	FMA RL 0, SRL 1; any 22	\$1,549,611.90	0; 0	Includes \$335,220.58 for declarations not counted as hazard incidents (DR-4496-MA).
Marblehead town	Town	Approved, expires 2029-04-29	FMA RL 0, SRL 6; any 20	\$2,145,548.95	15; 0	Includes \$650,577.90 for declarations not counted as hazard incidents (DR-4496-MA).
Merrimac town	Town	Approved, expires 2027-02-21	FMA RL 0, SRL 0; any 0	\$883,238.47	11; 1	Includes \$460,930.71 for declarations not counted as hazard incidents (DR-4496-MA).
Middleton town	Town	Expired on 2026-06-28	FMA RL 0, SRL 0; any 2	\$696,003.25	11; 2	Includes \$106,325.24 for declarations not counted as hazard incidents (DR-4496-MA).
Nahant town	Town	Approved, expires 2027-02-27	FMA RL 0, SRL 15; any 47	\$3,953,602.57	4; 0	Includes \$571,870.40 for declarations not counted as hazard incidents (DR-4496-MA).
Newbury town	Town	Approved, expires 2030-02-02	FMA RL 1, SRL 1; any 19	\$679,630.31	13; 0	Includes \$73,239.43 for declarations not counted as hazard incidents (DR-4496-MA).
North Andover town	Town	Expired on 2026-09-21	FMA RL 0, SRL 0; any 5	\$2,350,099.22	9; 2	Includes \$128,000.28 for declarations not counted as hazard incidents (DR-4496-MA).
Rockport town	Town	Expired on 2026-03-30	FMA RL 1, SRL 3; any 24	\$9,353,972.32	0; 0	Includes \$323,578.38 for declarations not counted as hazard incidents (DR-4496-MA).
Rowley town	Town	Approved, expires 2030-02-02	FMA RL 0, SRL 0; any 0	\$2,059,994.19	7; 0	Includes \$10,317.65 for declarations not counted as hazard incidents (DR-4496-MA).
Salisbury town	Town	Approved, expires 2030-02-02	FMA RL 3, SRL 11; any 43	\$906,030.70	10; 0	Includes \$234,028.53 for declarations not counted as hazard incidents (DR-4496-MA).
Saugus town	Town	Approved, expires 2026-10-06	FMA RL 1, SRL 2; any 46	\$2,033,049.05	8; 0	Includes \$380,688.29 for declarations not counted as hazard incidents (DR-4496-MA).
Swampscott town	Town	Expired on 2021-08-01	FMA RL 1, SRL 9; any 49	\$1,761,927.32	8; 1	Includes \$487,225.23 for declarations not counted as hazard incidents (DR-4496-MA).
Topsfield town	Town	Approved, expires 2026-11-28	FMA RL 0, SRL 1; any 6	\$553,718.70	12; 2	Includes \$70,969.06 for declarations not counted as hazard incidents (DR-4496-MA).
Wenham town	Town	Expired on 2024-08-26	FMA RL 0, SRL 0; any 0	\$279,001.57	4; 1	Includes \$101,326.42 for declarations not counted as hazard incidents (DR-4496-MA).
West Newbury town	Town	Approved, expires 2030-02-02	FMA RL 0, SRL 1; any 1	\$643,589.19	1; 0	Includes \$70,257.80 for declarations not counted as hazard incidents (DR-4496-MA).

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.

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

- Critical facilities and lifelines per hazard
- A problem statement per 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 plan <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Avalanche											Not Applicable in NRI for this county
Coastal Flooding	\$14,355,282,352		55,902	\$19,202,600		\$23,505	0.134%				
Cold Wave	\$168,658,058,888	\$42,315,214	808,281	\$2,463	\$4,930	\$3,768,382	under 0.0001%				
Drought		\$34,162,469			\$1,752,533		5.13% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$291,309,905,632		809,829	\$11,769,040		\$2,896,733	0.00404%				
Hail	\$168,879,919,598	\$42,315,214	808,897	\$37,881	\$139	\$14,797	under 0.0001%				
Heat Wave	\$168,680,026,838	\$42,315,214	808,346	\$4	\$5,212	\$3,705,885	under 0.0001%				
Hurricane	\$168,853,718,097	\$42,315,214	808,727	\$14,249,379	\$303,061	\$455,854	0.00844%				
Ice Storm	\$167,569,838,938		804,526	\$2,391,005		\$195,757	0.00143%				
Inland Flooding	\$168,592,042,717	\$2,981,959	38,928	\$123,504,644	\$27,597	\$1,101,672	n/a (see note)				NRI counts the full building value of any census block with some flood loss; this is not the value of buildings in the floodplain. Use local FIRM overlays for B2-a/B2-b. EAL as % of exposure: n/a.
Landslide	\$4,685,227,712		21,558	\$2,400		\$985	under 0.0001%				
Lightning	\$168,879,919,598		808,897	\$96,085		\$1,869,620	under 0.0001%				
Strong Wind	\$168,879,919,598	\$42,315,214	808,897	\$694,191	\$1	\$1,296,081	0.000411%				

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 plan <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Tornado	\$168,879,919,598	\$42,315,214	808,897	\$4,053,018	\$363	\$5,238,098	0.0024%				
Tsunami											NRI publishes no building exposure for this county
Volcanic Activity											Not Applicable in NRI for this county
Wildfire	\$11,439,112,022	\$11,728,000	63,849	\$74,537	\$11	\$8,570	0.000652%				
Winter Weather	\$168,683,032,283	\$42,315,214	808,369	\$42,069	\$9	\$16,916	under 0.0001%				

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

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	808,897
Building value (total, not at risk)	\$168,879,919,598
Agriculture value (total, not at risk)	\$42,315,214
NRI risk rating (all hazards)	Relatively High
Expected annual loss, buildings and agriculture, all hazards	\$178,213,171
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)	\$20,592,856
Social vulnerability rating	Relatively Low
Community resilience rating	Very High
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)	12	Severe repetitive loss, FMA definition (44 CFR 77.2)	102
Repetitive loss, NFIP insurance definition	597	Severe repetitive loss, NFIP insurance definition	93

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 total and NFIP communities

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	12	102	597	93	606	5	248
AMESBURY, CITY OF	1	1	7	1	7	0	5
ANDOVER, TOWN OF	0	4	29	4	29	0	17
BEVERLY, CITY OF	0	0	20	0	20	0	8
BOXFORD, TOWN OF	0	0	1	0	1	0	0
DANVERS, TOWN OF	0	0	4	0	4	0	2
ESSEX, TOWN OF	0	4	10	4	10	0	2
GEORGETOWN, TOWN OF	0	0	4	0	4	0	1
GLOUCESTER, CITY OF	0	10	38	8	40	1	19
HAMILTON, TOWN OF	0	0	2	0	2	0	0
HAVERHILL, CITY OF	1	0	14	0	14	0	6
IPSWICH, TOWN OF	0	0	2	0	2	0	0
LAWRENCE, CITY OF	1	6	28	6	28	0	10
LYNN, CITY OF	0	3	44	3	44	0	17
LYNNFIELD, TOWN OF	0	0	3	0	3	0	1
MANCHESTER-BY-THE-SEA, TOWN OF	0	1	22	1	22	0	7
MARBLEHEAD, TOWN OF	0	6	20	6	20	0	4
METHUEN, CITY OF	0	1	16	1	16	0	7
MIDDLETON, TOWN OF	0	0	2	0	2	0	1

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>
NAHANT, TOWN OF	0	15	46	13	47	0	21
NEWBURY, TOWN OF	1	1	19	1	19	0	9
NEWBURYPORT, CITY OF	1	3	27	2	29	1	9
NORTH ANDOVER, TOWN OF	0	0	5	0	5	0	2
PEABODY, CITY OF	0	17	46	17	46	0	15
ROCKPORT, TOWN OF	1	3	24	3	24	0	7
SALEM, CITY OF	1	3	21	3	22	1	12
SALISBURY, TOWN OF	3	11	41	9	43	2	18
SAUGUS, TOWN OF	1	2	46	2	46	0	19
SWAMPSCOTT, TOWN OF	1	9	48	8	49	0	26
TOPSFIELD, TOWN OF	0	1	6	1	6	0	2
WEST NEWBURY, TOWN OF	0	1	1	0	1	0	1
Unknown (community ID Unknown in FEMA data)	0	0	1	0	1	0	0

SOURCESFEMA, 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
Amesbury Town city	250075	1	1	7	1	7	0	5	
Beverly city	250077	0	0	20	0	20	0	8	
Gloucester city	250082	0	10	38	8	40	1	19	
Haverhill city	250085	1	0	14	0	14	0	6	
Lawrence city	250087	1	6	28	6	28	0	10	
Lynn city	250088	0	3	44	3	44	0	17	
Methuen Town city	250093	0	1	16	1	16	0	7	
Newburyport city	250097	1	3	27	2	29	1	9	
Peabody city	250099	0	17	46	17	46	0	15	
Salem city	250102	1	3	21	3	22	1	12	
Andover town	250076	0	4	29	4	29	0	17	
Boxford town	250078	0	0	1	0	1	0	0	
Danvers town	250079	0	0	4	0	4	0	2	
Essex town	250080	0	4	10	4	10	0	2	
Georgetown town	250081	0	0	4	0	4	0	1	
Groveland town	250083	0	0	0	0	0	0	0	

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
Hamilton town	250084	0	0	2	0	2	0	0	
Ipswich town	250086	0	0	2	0	2	0	0	
Lynnfield town	250089	0	0	3	0	3	0	1	
Manchester-by-the-Sea town	250090	0	1	22	1	22	0	7	
Marblehead town	250091	0	6	20	6	20	0	4	
Merrimac town	250092	0	0	0	0	0	0	0	
Middleton town	250094	0	0	2	0	2	0	1	
Nahant town	250095	0	15	46	13	47	0	21	
Newbury town	250096	1	1	19	1	19	0	9	
North Andover town	250098	0	0	5	0	5	0	2	
Rockport town	250100	1	3	24	3	24	0	7	
Rowley town	250101	0	0	0	0	0	0	0	
Salisbury town	250103	3	11	41	9	43	2	18	
Saugus town	250104	1	2	46	2	46	0	19	
Swampscott town	250105	1	9	48	8	49	0	26	
Topsfield town	250106	0	1	6	1	6	0	2	
Wenham town	250107	0	0	0	0	0	0	0	
West Newbury town	250108	0	1	1	0	1	0	1	

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	9	36	343	30	349	4	145
2 to 4 unit residential	0	15	95	14	97	0	39
other residential	2	10	44	10	44	0	28
non-residential	1	41	115	39	116	1	36
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 fmaRL field description omits the Increased Cost of Compliance clause of 44 CFR 77.2(i). NFIP repetitive loss (FEMA insurance definition, nfipRL) 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 3 properties are FMA repetitive loss but not NFIP repetitive loss, and 588 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_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
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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_MA_25009. Preview: automated baseline.