

Essex County, MA

Risk-assessment baseline packet

County FIPS: 25009 Release: 2026-10 Data as of: 2026-09-30 Storm Events data through: 2026-06-30

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

Summary

Plan status as of 2026-09-30: No county-level plan row in FEMA data.

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$124,633,913 a year), Coastal Flooding (\$19,226,111) and Hurricane (\$15,008,294).

The tables that follow are organized by the items of FEMA's Local Mitigation Plan Review Tool, Element B (B1-a to B2-c); each heading says which item its tables support.

TERMS USED

EAL: expected annual loss: FEMA's modeled average yearly loss from a hazard.

NRI: FEMA's National Risk Index (version 1.20, December 2025).

NFIP: National Flood Insurance Program.

RL, SRL: repetitive loss and severe repetitive loss: flood-insured properties with repeated claims (definitions in B2-c).

FMA, HMGP: Flood Mitigation Assistance and Hazard Mitigation Grant Program, FEMA mitigation grants.

PA: FEMA Public Assistance: disaster aid to governments and some nonprofits.

Zone-level: NOAA logged the event for a National Weather Service forecast zone, which may include parts of neighboring counties.

County-coded: NOAA logged the event to this county.

FIPS: the federal code for a place; 25009 is this area.

D0 to D4: U.S. Drought Monitor categories, from abnormally dry (D0) to exceptional drought (D4).

F/EF, EFU: Fujita and Enhanced Fujita tornado ratings; EFU is an unrated tornado.

kt, CONUS: knots (1 kt is about 1.15 mph); the contiguous United States.

CFR: Code of Federal Regulations.

A4-a, E1-a: other items of FEMA's Local Mitigation Plan Review Tool (sources, and changes since the last plan).

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

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Plan clock

No county-level plan row in FEMA data

What changed since your last plan

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

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

Plan status for every jurisdiction listed in this county: 34 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" on the following pages.

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

Plan clock

Plan status for every jurisdiction listed in this county

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
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	1,221		
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	-480		
Haverhill city	City	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,221		
Lawrence city	City	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,221		
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	503		
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	1,221		
Newburyport city	City	Approved, expires 2028-03-14	Newburyport Multi-Hazard Mitigation Plan June 2022 (FEMA plan 108410)	2023-03-15	2028-03-14	531		
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	1,812		
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	-296	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	1,221		
Danvers town	Town	Approved, expires 2031-01-19	Town of Danvers Hazard Mitigation Plan Update (FEMA plan 111033)	2026-01-20	2031-01-19	1,572		
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	1,526		
Georgetown town	Town	Approved, expires 2031-09-16	Georgetown Hazard Mitigation Plan Update (FEMA plan 111328)	2026-09-17	2031-09-16	1,812		
Groveland town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,221		
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	1,643		
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	1,643		

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
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	1,721		
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	-1,211		
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	942		
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	144		
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	-94		
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	150		
Newbury town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,221		
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	-9		
Rockport town	Town	Expired on 2026-03-30	Hazard Mitigation Plan Rockport, Massachusetts (FEMA plan 107047)	2021-03-31	2026-03-30	-184		
Rowley town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,221		
Salisbury town	Town	Approved, expires 2030-02-02	Merrimack Valley Region Multi-Hazard Mitigation Plan (FEMA plan 110138)	2025-02-03	2030-02-02	1,221		
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	6		
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	-1,886	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	59		
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	-765		
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	1,221		

Supports FEMA checklist item B1-a: hazard identification

Hazards NRI does not cover (local data needed)

- dam failure (incl. upstream dams)
- levee failure
- flash flood as its own subtype
- ice jams
- debris flows

- erosion (riverine and coastal)
- land subsidence and sinkholes
- expansive soils

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

Sources: 5, 6

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
1	Inland Flooding	Relatively 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	n/a	\$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	n/a	\$2,896,733	\$14,665,774		Storm Events does not record earthquakes.
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	n/a	\$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 and 115 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
10	Lightning	Relatively High	Relatively High	\$96,085	n/a	\$1,869,620	\$1,965,705	49	
11	Drought	Relatively Moderate	Relatively High	n/a	\$1,752,533	n/a	\$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.
13	Winter Weather	Relatively Low	Relatively Low	\$42,069	\$9	\$16,916	\$58,993	155	
14	Hail	Very Low	Very Low	\$37,881	\$139	\$14,797	\$52,817	79	

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
15	Landslide	Relatively Low	Very Low	\$2,400	n/a	\$985	\$3,385	2	
	Tsunami	Insufficient Data	Insufficient Data	n/a	n/a	n/a	n/a	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).

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

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

Local data needed: state and local wildfire and tsunami records (Storm Events records these hazards only in part).

Not applicable to this county per NRI, with no federal declaration and no Storm Events record since 1996: avalanche and volcanic activity. That is the evidence for leaving them out of the plan.

The state hazard mitigation plan also lists hazards for this county; FEMA asks the plan to explain any hazard it leaves out.

Supports FEMA checklist item B1-b: hazard location

Affects the whole county (national data give no location within it): Cold Wave, Drought, Hail, Heat Wave, Ice Storm, Lightning, Strong Wind and Winter Weather.

Coastal Flooding and Inland Flooding: The FEMA Flood Insurance Rate Map (FIRM) is the required location source for flooding. See the FEMA Flood Map Service Center (<https://msc.fema.gov>) for this county.

Hazards that vary within the county: highest-rated census tracts

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Earthquake	tract 2501 (Relatively Moderate, 85.1); tract 2516 (Relatively Moderate, 84.3); tract 2114.01 (Relatively Moderate, 84.1)
Hurricane	tract 2047.01 (Relatively Moderate, 85.6); tract 2544.02 (Relatively Moderate, 84.1); tract 2114.01 (Relatively Moderate, 82.9)
Landslide	tract 2131 (Relatively Low, 84.7); tract 2219.02 (Relatively Low, 83.6); tract 2181 (Relatively Low, 82.7)
Tornado	tract 2544.02 (Relatively Moderate, 66.1); tract 2515 (Relatively Moderate, 63.1); tract 2516 (Relatively Moderate, 61.6)
Tsunami	no tract has a National Risk Index rating for this hazard
Wildfire	tract 2141 (Relatively Low, 79.2); tract 2131 (Relatively Low, 78.0); tract 2691 (Relatively Low, 77.1)

Up to 3 census tracts per hazard, highest National Risk Index rating first, then highest score; a tract number is the Census tract number (for example 2501 is Census Tract 2501). FEMA's Resilience Analysis and Planning Tool maps the National Risk Index for every tract: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

Supports FEMA checklist item B1-c: hazard extent

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

Sources: 6, 7

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Coastal Flood, Storm Surge/Tide	none in data (flood depth: FIRM)	51 records, 2002 to 2025 (50 zone-level)		Coastal Flood, 2013-02-09, \$5,800,000 property; \$0 crops (2013 dollars); NWS zone MAZ007		Event records naming jurisdictions in the plan: 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 records, 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		Countywide (zone-level records).	
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	0					
Drought	U.S. Drought Monitor scale (D0 to D4)	9 records, 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		Countywide (zone-level records).	Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	hail size (inches)	98 records, 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 jurisdictions in the plan: 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 jurisdictions (see the Excel file).	
Excessive Heat, Heat	heat index (in event narratives)	5 records, 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		Countywide (zone-level records).	
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	3 records, 2011 to 2020 (3 zone-level)		Strongest recorded: Tropical Storm record, 2011-08-28, \$1,600,000 property; \$0 crops (2011 dollars); NWS zone MAZ007		Countywide (zone-level records).	Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Ice Storm	Sperry-Piltz ice scale (local data)	1 record, 2008 (1 zone-level)		Ice Storm, 2008-12-11, \$2,000,000 property; \$0 crops (2008 dollars); NWS zone MAZ006		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	145 records, 1996 to 2025 (8 zone-level)		Flash Flood, 2001-03-22, \$10,000,000 property; crops not reported (2001 dollars)		Event records naming jurisdictions in the plan: 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 jurisdictions (see the Excel file). Zone-level records (8) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage is often \$0 or blank for floods, major ones included; FEMA Public Assistance by declaration (B1-d) shows which floods cost the most.
Debris Flow	none (count and damage only)	2 records, 2010 to 2014 (1 zone-level)		Debris Flow, 2014-12-09, \$50,000 property; \$0 crops (2014 dollars)		Event records naming jurisdictions in the plan: Topsfield town (1 record). Zone-level records (1) apply countywide.	
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	49 records, 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 jurisdictions in the plan: 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 jurisdictions (see the Excel file).	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	188 records, 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	High Wind, 2006-02-17, \$500,000 property; crops not reported (zone total, 2006 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	346 records, 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 jurisdictions in the plan: 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 jurisdictions (see the Excel file).	

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Tornado	Enhanced Fujita (Fujita before Feb 2007)	12 records, 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 (whole path, pre-1996), 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 jurisdiction in the plan.	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).
Tsunami	none (count and damage only)	0					
Wildfire	acres burned (local data)	0					
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	155 records, 1996 to 2026 (155 zone- level)		Heavy Snow, 1997-04-01, \$2,500,000 property; crops not reported (1997 dollars); NWS zone MAZ006		Countywide (zone-level records).	

Where a hazard names more than 10 jurisdictions, the table lists the 10 with the most records; every one is in the Excel file, sheet "B1-c Extent".

In event narratives only (local data needed): wind chill, temperature, heat index, ice thickness, acres burned and snow depth; any physical measure of debris flow, lightning and tsunami.

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records from zones that no NWS zone-county file places in this county (mostly before 2020) are not counted here (the Methods page explains the zone matching).

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

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 40 declarations covering 31 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

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

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2023-09-15	2023-09-15	EM-3599-MA	Emergency	Hurricane Lee	Hurricane	no Public Assistance recorded	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	no Public Assistance recorded		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		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
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	no Public Assistance recorded		
2011-11-01	2011-10-29	EM-3343-MA	Emergency	Severe Storm	Hazard not mapped (severe storm title names no single hazard); not counted	no Public Assistance recorded		
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	no Public Assistance recorded		
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	no Public Assistance recorded		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		
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	no Public Assistance recorded		
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		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
1996-10-25	1996-10-20	DR-1142-MA	Major disaster	Extreme Weather Conditons and Flooding	Inland Flooding	no Public Assistance recorded		
1996-10-23	1996-10-20	EM-3119-MA	Emergency	Extreme Weather Conditions and Flooding	Inland Flooding	no Public Assistance recorded		same incident as DR-1142
1996-01-24	1996-01-07	DR-1090-MA	Major disaster	Blizzard of 96	Winter Weather	no Public Assistance recorded		
1993-03-16	1993-03-13	EM-3103-MA	Emergency	Blizzards, High Winds & Record Snowfall	Winter Weather	no Public Assistance recorded		
1992-12-21	1992-12-11	DR-975-MA	Major disaster	Winter Coastal Storm	Coastal Flooding	no Public Assistance recorded		
1991-11-04	1991-10-30	DR-920-MA	Major disaster	Coastal Storm	Coastal Flooding	no Public Assistance recorded		
1991-08-26	1991-08-19	DR-914-MA	Major disaster	Hurricane Bob	Hurricane	no Public Assistance recorded		
1987-04-18	1987-03-30	DR-790-MA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1985-10-28	1985-09-27	DR-751-MA	Major disaster	Hurricane Gloria	Hurricane	no Public Assistance recorded		
1981-12-03	1981-12-03	DR-650-MA	Major disaster	Urban Fire	Wildfire	no Public Assistance recorded		
1978-02-10	1978-02-06	DR-546-MA	Major disaster	Coastal Storms, Flood, Ice & Snow	Coastal Flooding	no Public Assistance recorded		
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	no Public Assistance recorded		

County Public Assistance: applicants the FEMA record places in this county, including any state agencies FEMA files there; statewide rows are listed on the state page; federal share obligated, nominal dollars.

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
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, so they are listed on every county page in the state and not counted with county rows. Local data needed: whether each one affected this county.

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.

Public Assistance filed under this county for declarations that do not list it: 1 row, \$5,323.31

Sources: 2, 3

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.

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
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			Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	98			1	0		1955 to 2026-06-30	
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 and 115 Strong Wind records.
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

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
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	

Notable Storm Events records

Sources: 1, 6, 7

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Deaths, injuries <i>direct only</i>	Location	Why listed
2019-10-17	High Wind	69 kt (79 mph) measured gust	\$0 property; \$0 crops (zone total, 2019 dollars)	0, 0	NWS zone MAZ007 (EASTERN ESSEX), zone-level	B1-c worst recorded: High Wind and Strong Wind
2016-02-13	Extreme Cold/Wind Chill		\$0 property; \$0 crops (zone total, 2016 dollars)	0, 0	NWS zone MAZ007 (EASTERN ESSEX), zone-level	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
2013-02-09	Coastal Flood		\$5,800,000 property; \$0 crops (zone total, 2013 dollars)	0, 0	NWS zone MAZ007 (EASTERN ESSEX), zone-level	B1-c worst recorded: Coastal Flood, Storm Surge/Tide
2011-08-28	Tropical Storm		\$1,600,000 property; \$0 crops (zone total, 2011 dollars)	0, 0	NWS zone MAZ007 (EASTERN ESSEX), zone-level	B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression
2010-07-06	Heat		\$0 property; \$0 crops (zone total, 2010 dollars)	0, 0	NWS zone MAZ006 (WESTERN ESSEX), zone-level	B1-c worst recorded: Excessive Heat, Heat
2008-12-11	Ice Storm		\$2,000,000 property; \$0 crops (zone total, 2008 dollars)	0, 0	NWS zone MAZ006 (WESTERN ESSEX), zone-level	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 (whole path, pre-1996), 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 Excel file, sheet "B1-d Storm Events history" (1,067 rows).

Location is the place NOAA recorded, as written in its data; it need not be a jurisdiction in this plan.

Local data needed: state-declared emergencies, from your state emergency management agency (federal data do not include them).

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

Supports FEMA checklist item B1-e: probability of future events

Probability: FEMA annualized frequency and descriptor per hazard

Sources: 5, 6

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
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	Storm Events event-days in 2 of 30 years, 1996 to 2025 (6.67%)	16.5	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	8.48	event-days per year	about 8.48 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	259	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
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	No descriptor (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	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	52.2	2005-11-12 to 2024-11-12 (19 years)	countywide	
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 in B1-d.
Ice Storm	1.46	event-days per year	about 1.46 days per year	Possible	Storm Events event-days in 1 of 30 years, 1996 to 2025 (3.33%)	65	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	2.68	event-days per year	about 2.68 days per year	Likely	Storm Events event-days in 24 of 30 years, 1996 to 2025 (80%)	75	1996 to 2023 (28 years)	see B1-f	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Landslide	0.253	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 descriptor: no Storm Events record 1996 to 2025
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 descriptor: no Storm Events record 1996 to 2025
Winter Weather	15.1	event-days per year	about 15.1 days per year	Highly likely	Storm Events 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) is the National Risk Index v1.20 (December 2025) estimate of how often a hazard affects this county in a year; it is not recorded events divided by years, and its unit differs by hazard (events, event-days, or days with a lightning strike per year). For earthquake, wildfire, coastal flooding and tsunami the value is the chance (or number of events) at a location in the county, not across the county, so no "1 in N years" is given and the descriptor comes from Storm Events where it has a record (none for earthquake). The Methods page gives each hazard's method, from FEMA's National Risk Index Technical Documentation v1.20.

Where NRI gives event-days, the descriptor comes from the share of years with a Storm Events record; NRI's source records more events, so the two differ.

Descriptor scale used in this packet (defined per unit)

Sources: 5, 6

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

Intensity bands: historical frequency (Storm Events)

Source: 6

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	32	30	1.07
Hail	2.00 in+	1996 to 2025	1	30	0.0333
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	271	30	9.03
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	5	30	0.167
Thunderstorm Wind (counted as NRI Strong Wind)	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

The bands show how often events of each severity were recorded in this county, to profile how severe events have been (FEMA's probability item asks for the range of intensities).

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

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

Supports FEMA checklist item B1-f: hazards that vary across jurisdictions

Range of census tract risk within the county

Source: 5

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
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
Drought	23 of 173	76.0	92.4	97.3	Relatively Moderate 12, Relatively Low 10, Very Low 1, No Rating 150
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
Heat Wave	173 of 173	5.1	26.7	61.7	Relatively Moderate 3, Relatively Low 139, Very Low 31
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
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
Strong Wind	173 of 173	13.8	36.2	63.3	Relatively Moderate 11, Relatively Low 158, Very Low 4
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
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

Drought: Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range mostly reflects where crop and livestock value is.

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

The score ranks a tract against all U.S. tracts (100 = highest). The rating is FEMA's category for the tract's risk value, computed differently, so the two can disagree.

Frequency data for cold wave, drought, hail, heat wave, ice storm, lightning, strong wind and winter weather are county-wide or coarse (49 km grid or NWS zone), the same for every jurisdiction; the tract range mostly reflects where buildings and people are (crop and livestock value where a line above names agriculture).

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Amesbury Town city	City	Approved, expires 2030-02-02	FMA RL 1, SRL 1; any 7	no Public Assistance recorded	0 total; 0 since its plan	
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 total; 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 total; 0 since its plan	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 total; 0 since its plan	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 total; 0 since its plan	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 total; 1 since its plan	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	no Public Assistance recorded	0 total; 0 since its plan	
Newburyport city	City	Approved, expires 2028-03-14	FMA RL 1, SRL 3; any 29	\$1,970,835.23	13 total; 1 since its plan	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 total; 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 total; 0 since its plan	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 total; 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 total; 0 since its plan	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 total; 0 since its plan	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 total; 0 since its plan	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 total; 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 total; 0 since its plan	Includes \$8,117.52 for declarations not counted as hazard incidents (DR-4496-MA).

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Hamilton town	Town	Approved, expires 2031-03-31	FMA RL 0, SRL 0; any 2	\$654,953.40	4 total; 0 since its plan	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 total; 0 since its plan	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 total; 0 since its plan	Includes \$596,832.07 for declarations not counted as hazard incidents (DR-4496-MA).
Manchester-by-the-Sea town	Town	Expired on 2023-06-07	FMA RL 0, SRL 1; any 22	\$1,549,611.90	0 total; 0 since its plan	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 total; 0 since its plan	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 total; 1 since its plan	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 total; 2 since its plan	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 total; 0 since its plan	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 total; 0 since its plan	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 total; 2 since its plan	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 total; 0 since its plan	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 total; 0 since its plan	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 total; 0 since its plan	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 total; 0 since its plan	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 total; 1 since its plan	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 total; 2 since its plan	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 total; 1 since its plan	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 total; 0 since its plan	Includes \$70,257.80 for declarations not counted as hazard incidents (DR-4496-MA).

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

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

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

Local data needed

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

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

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

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

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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since plan <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Coastal Flooding	\$14,355,282,352	n/a	55,902	\$19,202,600	n/a	\$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	n/a	\$34,162,469	n/a	n/a	\$1,752,533	n/a	5.13% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$291,309,905,632	n/a	809,829	\$11,769,040	n/a	\$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	n/a	804,526	\$2,391,005	n/a	\$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.
Landslide	\$4,685,227,712	n/a	21,558	\$2,400	n/a	\$985	under 0.0001%				
Lightning	\$168,879,919,598	n/a	808,897	\$96,085	n/a	\$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%				
Tornado	\$168,879,919,598	\$42,315,214	808,897	\$4,053,018	\$363	\$5,238,098	0.0024%				

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since plan <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Tsunami	n/a	n/a	n/a	n/a	n/a	n/a					NRI publishes no building exposure 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.

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

NRI computes earthquake exposure on its own basis, so it exceeds the county building value in B2-a.

Supports FEMA checklist item B2-a: vulnerability (county context)

County context

Source: 5

Measure	Value
Population	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 adds buildings, agriculture and population equivalence; this table gives the property part and the population-equivalence part as separate rows.

Social vulnerability: higher means people are more likely to be harmed and slower to recover. Community resilience: lower means the community is less able to recover. High social vulnerability and low resilience both raise the NRI risk rating.

Supports FEMA checklist item B2-c: repetitive loss properties

Repetitive loss in this county, both definitions

Sources: 1, 4

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	12	Severe repetitive loss, FMA definition (44 CFR 77.2)	102
Repetitive loss, NFIP insurance definition	597	Severe repetitive loss, NFIP insurance definition	93

The state NFIP coordinator's list, the source FEMA's Handbook names, often uses the NFIP insurance definition (second row).

Repeat-flood properties: county total and NFIP communities

Sources: 1, 4

Scope	RL, FMA properties	SRL, FMA properties	RL, NFIP properties	SRL, NFIP properties	Any category properties	Mitigated properties	Currently insured properties
County total	12	102	597	93	606	5	248
of which: Amesbury city	1	1	7	1	7	0	5
of which: Andover town	0	4	29	4	29	0	17
of which: Beverly city	0	0	20	0	20	0	8
of which: Boxford town	0	0	1	0	1	0	0
of which: Danvers town	0	0	4	0	4	0	2
of which: Essex town	0	4	10	4	10	0	2
of which: Georgetown town	0	0	4	0	4	0	1
of which: Gloucester city	0	10	38	8	40	1	19
of which: Hamilton town	0	0	2	0	2	0	0
of which: Haverhill city	1	0	14	0	14	0	6
of which: Ipswich town	0	0	2	0	2	0	0
of which: Lawrence city	1	6	28	6	28	0	10
of which: Lynn city	0	3	44	3	44	0	17
of which: Lynnfield town	0	0	3	0	3	0	1
of which: Manchester-by-the-Sea town	0	1	22	1	22	0	7
of which: Marblehead town	0	6	20	6	20	0	4
of which: Methuen city	0	1	16	1	16	0	7
of which: Middleton town	0	0	2	0	2	0	1
of which: Nahant town	0	15	46	13	47	0	21
of which: Newbury town	1	1	19	1	19	0	9
of which: Newburyport city	1	3	27	2	29	1	9
of which: North Andover town	0	0	5	0	5	0	2

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>
of which: Peabody city	0	17	46	17	46	0	15
of which: Rockport town	1	3	24	3	24	0	7
of which: Salem city	1	3	21	3	22	1	12
of which: Salisbury town	3	11	41	9	43	2	18
of which: Saugus town	1	2	46	2	46	0	19
of which: Swampscott town	1	9	48	8	49	0	26
of which: Topsfield town	0	1	6	1	6	0	2
of which: West Newbury town	0	1	1	0	1	0	1
of which: Unknown (community ID Unknown in FEMA data)	0	0	1	0	1	0	0

Repeat-flood properties by jurisdiction in the plan (NFIP community)

Sources: 1, 4

Jurisdiction	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
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
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

Jurisdiction	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
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

Counts by occupancy group for each jurisdiction are in the Excel file, sheet "B2-c Jurisdictions".

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

County repeat-flood properties by occupancy group

Sources: 1, 4

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	9	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

FEMA's occupancy groups have no institutional class; institutional properties are counted in non-residential or other residential in the table by occupancy group.

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites. NFIP repetitive loss (the FEMA insurance definition) is 2 or more claims over \$1,000 in 10 years, and a property can leave that group once it is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured. The Methods page gives the OpenFEMA field details.

Counts are aggregates of FEMA's public NFIP Multiple Loss Properties file (FEMA's data date 2026-08-02; file version 2026-08-04). No property is identified. County assignment is FEMA's geocode.

In this county 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

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

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 2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-29T162832Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
 3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
 4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
 5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-30, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
 6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-30, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
 7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-30, <https://www.weather.gov/gis/ZoneCounty>
 8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-30, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_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_unsd_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_scsd_national.zip, https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx (used to match place names and codes; no table prints its values)
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What this packet is and what the plan adds

This packet is the federal data for the plan's risk assessment (the summary on page 1 says how it is organized); the plan and FEMA's review decide whether each item is met.

The plan adds what only the community has: local data on assets, critical facilities, development and each jurisdiction's impacts; local hazard history, including state-declared emergencies; the mitigation strategy; and adoption.

How the federal data are built: National Risk Index values are FEMA's model, not counts of events. Storm Events is more complete from 1996; zone-level records are placed by forecast zone, not by location in the county. Public Assistance for a jurisdiction is matched by applicant name. The Methods page gives every rule and the known edge cases.

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Cite this: Hazard Plain (2026). Essex County, MA: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 25009). Automated baseline. <https://hazardplain.org/ma/25009/> Built from FEMA OpenFEMA, the FEMA National Risk Index and NOAA NCEI Storm Events; source versions in the packet's Sources list.

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