

Middlesex County, MA

Risk-assessment baseline packet

County FIPS: 25017 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 (\$224,395,539 a year), Hurricane (\$30,095,131) and Earthquake (\$24,253,681).

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; 25017 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: 58 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
Cambridge city	City	Approved, expires 2030-04-15	City of Cambridge Natural Hazard Mitigation Plan 2023 Update (FEMA plan 109827)	2025-04-16	2030-04-15	1,293		
Devens CDP	Unincorporated	Expired on 2021-05-23	Montachusett Region Natural Hazard Mitigation Plan 2015 Update (FEMA plan 101692)	2016-05-24	2021-05-23	-1,956	FEMA tracker shows a plan awaiting revisions	
Everett city	City	Approved, expires 2027-04-03	Everett Hazard Mitigation Plan 2021 Update (FEMA plan 107723)	2022-04-04	2027-04-03	185		
Framingham city	City	Approved, expires 2028-03-26	City of Framingham, MA Hazard Mitigation Plan Update (FEMA plan 108884)	2023-03-27	2028-03-26	543		
Lowell city	City	Expired on 2026-06-20	City of Lowell 2020 Hazard Mitigation Plan - Municipal Vulnerability Preparedness Plan (FEMA plan 106877)	2021-06-21	2026-06-20	-102		
Malden city	City	Approved, expires 2027-12-08	City of Malden Hazard Mitigation Plan 2022 Update (FEMA plan 108512)	2022-12-09	2027-12-08	434		
Marlborough city	City	Approved, expires 2029-06-13	City of Marlborough Draft Hazard Mitigation Plan 2024 Update (FEMA plan 109404)	2024-06-14	2029-06-13	987		
Medford city	City	Approved, expires 2031-06-11	City of Medford Hazard Mitigation Plan 2025 Update (FEMA plan 111530)	2026-06-12	2031-06-11	1,715		
Melrose city	City	Expired on 2024-06-27	Natural Hazards Mitigation Plan City of Melrose, Massachusetts (FEMA plan 105767)	2019-06-28	2024-06-27	-825		
Newton city	City	Expired on 2024-09-04	City of Newton Hazard Mitigation Plan Update 2019 (FEMA plan 105899)	2019-09-05	2024-09-04	-756		
Somerville city	City	Approved, expires 2027-01-30	City of Somerville Hazard Mitigation Plan 2022 Update (FEMA plan 107982)	2022-01-31	2027-01-30	122		
Waltham city	City	Expired on 2024-10-01	City of Waltham Hazard Mitigation Plan and Municipal Vulnerability Preparedness Plan 2019 (FEMA plan 105816)	2019-10-02	2024-10-01	-729		
Watertown Town city	City	Expired on 2024-05-07	Town of Watertown Hazard Mitigation Plan 2019 Update (FEMA plan 105624)	2019-05-08	2024-05-07	-876		
Woburn city	City	Approved, expires 2026-12-15	City of Woburn Hazard Mitigation Plan 2021 Update (FEMA plan 107772)	2021-12-16	2026-12-15	76	FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Acton town	Town	Approved, expires 2030-01-09	Town of Acton Hazard Mitigation Plan Update 2024 (FEMA plan 110092)	2025-01-10	2030-01-09	1,197		
Arlington town	Town	Expired on 2025-06-08	Town of Arlington MA Hazard Mitigation Plan 2020 Update (FEMA plan 106513)	2020-06-09	2025-06-08	-479		
Ashby town	Town	Approved, expires 2027-08-23	Town of Ashby 2021 Hazard Mitigation-Municipal Vulnerability Preparedness (HM-MVP) Plan (FEMA plan 107758)	2022-08-24	2027-08-23	327		
Ashland town	Town	Approved, expires 2031-05-27	Town of Ashland Hazard Mitigation Plan 2025 Update (FEMA plan 111529)	2026-05-28	2031-05-27	1,700		
Ayer town	Town	Expired on 2021-05-23	Montachusett Region Natural Hazard Mitigation Plan 2015 Update (FEMA plan 101692)	2016-05-24	2021-05-23	-1,956		

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Bedford town	Town	Approved, expires 2027-11-01	2022 Bedford, MA Hazard Mitigation Plan Update and Municipal Vulnerability Preparedness Summary of Findings (FEMA plan 107995)	2022-11-02	2027-11-01	397		
Belmont town	Town	Expired on 2026-05-31	Town of Belmont 2020 Hazard Mitigation - Municipal Vulnerability Preparedness Plan (FEMA plan 106674)	2021-06-01	2026-05-31	-122		
Billerica town	Town	Approved, expires 2027-03-20	Billerica Multi-Hazard Mitigation Plan (FEMA plan 107564)	2022-03-21	2027-03-20	171		
Boxborough town	Town	Approved, expires 2029-10-15	Town of Boxborough, MA Hazard Mitigation Plan Update April 2024 (FEMA plan 109890)	2024-10-16	2029-10-15	1,111		
Burlington town	Town	Approved, expires 2031-06-25	Burlington Hazard Mitigation Plan (FEMA plan 111425)	2026-06-26	2031-06-25	1,729		
Carlisle town	Town	Approved, expires 2026-12-07	Town of Carlisle Hazard Mitigation Plan 2021 Update (FEMA plan 107767)	2021-12-08	2026-12-07	68		
Chelmsford town	Town	Expired on 2025-12-29	Hazard Mitigation Plan 2020 Update Chelmsford, Massachusetts (FEMA plan 106710)	2020-12-30	2025-12-29	-275		
Concord town	Town	Approved, expires 2028-04-04	Town of Concord Hazard Mitigation Plan 2022 Update (FEMA plan 108785)	2023-04-05	2028-04-04	552		
Dracut town	Town	Expired on 2026-09-09	Hazard Mitigation Plan Update Town of Dracut, Massachusetts (FEMA plan 107188)	2021-09-10	2026-09-09	-21		
Dunstable town	Town	Approved, expires 2030-01-21	Town of Dunstable Hazard Mitigation Plan (HMP) 2024 Update and Municipal Vulnerability Preparedness (MVP) Summary of Findings Report (FEMA plan 110197)	2025-01-22	2030-01-21	1,209		
Groton town	Town	Expired on 2025-12-29	Town of Groton 2020 Hazard Mitigation Plan (HMP) - Municipal Vulnerability Preparedness (MVP) Plan (FEMA plan 106885)	2020-12-30	2025-12-29	-275		
Holliston town	Town	Approved, expires 2031-01-05	Town of Holliston All-Hazards Mitigation Plan 2025 Update (FEMA plan 111184)	2026-01-06	2031-01-05	1,558		
Hopkinton town	Town	Expired on 2025-12-07	Town of Hopkinton 2020 Hazard Mitigation - Municipal Vulnerability Preparedness Plan (FEMA plan 106675)	2020-12-08	2025-12-07	-297		
Hudson town	Town	Approved, expires 2029-06-03	Town of Hudson, MA Hazard Mitigation Plan Update 2023 (FEMA plan 109301)	2024-06-04	2029-06-03	977		
Lexington town	Town	Expired on 2025-04-28	Town of Lexington Hazard Mitigation Plan Update (FEMA plan 106101)	2020-04-29	2025-04-28	-520	FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Lincoln town	Town	Expired on 2023-05-24	Town of Lincoln Draft Hazard Mitigation Plan (FEMA plan 11147)	2018-05-25	2023-05-24	-1,225		
Littleton town	Town	Approved, expires 2030-07-20	Town of Littleton Hazard Mitigation Plan 2024 Update (FEMA plan 110511)	2025-07-21	2030-07-20	1,389		
Maynard town	Town	Approved, expires 2029-08-27	2024 Hazard Mitigation Plan Update, Town of Maynard, Massachusetts (FEMA plan 109745)	2024-08-28	2029-08-27	1,062		
Natick town	Town	Approved, expires 2030-05-05	Town of Natick 2024 Hazard Mitigation Plan (FEMA plan 110450)	2025-05-06	2030-05-05	1,313		
North Reading town	Town	Approved, expires 2027-03-03	Hazard Mitigation Plan Update Town of North Reading, Massachusetts (FEMA plan 108018)	2022-03-04	2027-03-03	154		
Pepperell town	Town	Expired on 2026-09-19	Town of Pepperell 2020 HMP Update (FEMA plan 107603)	2021-09-20	2026-09-19	-11		
Reading town	Town	Approved, expires 2029-04-11	Town of Reading, MA Hazard Mitigation Plan Update July 2023 (FEMA plan 109326)	2024-04-12	2029-04-11	924		
Sherborn town	Town	Expired on 2024-03-18	Sherborn, MA Hazard Mitigation Plan (FEMA plan 105570)	2019-03-19	2024-03-18	-926		

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Shirley town	Town	Expired on 2021-05-23	Montachusett Region Natural Hazard Mitigation Plan 2015 Update (FEMA plan 101692)	2016-05-24	2021-05-23	-1,956		
Stoneham town	Town	Approved, expires 2027-01-26	Town of Stoneham Hazard Mitigation and Municipal Vulnerability Preparedness Plan (HMP/MVP) (FEMA plan 107666)	2022-01-27	2027-01-26	118		
Stow town	Town	Expired on 2016-02-03	Stow, MA Hazard Mitigation Plan (FEMA plan 12099)	2011-02-04	2016-02-03	-3,892		
Sudbury town	Town	Expired on 2025-10-06	Town of Sudbury 2020 Hazard Mitigation Plan (FEMA plan 106711)	2020-10-07	2025-10-06	-359		
Tewksbury town	Town	Expired on 2026-01-05	Town of Tewksbury Hazard Mitigation Plan (HMP) and Municipal Vulnerability Preparedness (MVP) Plan (FEMA plan 106687)	2021-01-06	2026-01-05	-268		
Townsend town	Town	Expired on 2026-02-23	Town of Townsend 2020 Hazard Mitigation Plan (HMP) - Municipal Vulnerability Preparedness (MVP) Plan (FEMA plan 107089)	2021-02-24	2026-02-23	-219		
Tyngsborough town	Town	Expired on 2025-12-22	Town of Tyngsborough 2020 Hazard Mitigation - Municipal Vulnerability Preparedness Plan (FEMA plan 106736)	2020-12-23	2025-12-22	-282		
Wakefield town	Town	Expired on 2026-05-11	Wakefield, Massachusetts 2019 Hazard Mitigation Plan Update (FEMA plan 107017)	2021-05-12	2026-05-11	-142		
Wayland town	Town	Expired on 2026-03-08	Town of Wayland Draft Hazard Mitigation Plan 2020 Update (FEMA plan 107044)	2021-03-09	2026-03-08	-206		
Westford town	Town	Approved, expires 2027-02-06	Westford Multi-Hazard Mitigation Plan (FEMA plan 107716)	2022-02-07	2027-02-06	129		
Weston town	Town	Expired on 2026-06-23	2020 Hazard Mitigation Plan Update Town of Weston, Massachusetts (FEMA plan 106814)	2021-06-24	2026-06-23	-99		
Wilmington town	Town	Approved, expires 2027-01-04	Hazard Mitigation Plan Update Town of Wilmington, Massachusetts (FEMA plan 107766)	2022-01-05	2027-01-04	96		
Winchester town	Town	Approved, expires 2028-08-30	All Hazards Mitigation Plan Town of Winchester, Massachusetts (FEMA plan 108542)	2023-08-31	2028-08-30	700		
Name not given in FEMA data (ID NM01_12385)	College/ University	Expired on 2021-05-12	University of Massachusetts Multi-Campus Hazard Mitigation Plan (FEMA plan 12383)	2016-05-12	2021-05-12	-1,967		
Chelmsford Water District	Water/Sewer Authority	Expired on 2025-12-29	Hazard Mitigation Plan 2020 Update Chelmsford, Massachusetts (FEMA plan 106710)	2020-12-30	2025-12-29	-275		this jurisdiction approved 2025-06-24
Tufts University	College/ University	Approved, expires 2029-11-12	Tufts University Hazard Mitigation Plan Update (FEMA plan 109906)	2024-11-13	2029-11-12	1,139		

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	\$222,851,007	\$300,453	\$1,244,080	\$224,395,539	247	
2	Hurricane	Relatively High	Relatively High	\$28,587,279	\$566,257	\$941,595	\$30,095,131	3	
3	Earthquake	Relatively Moderate	Relatively Moderate	\$19,326,479	n/a	\$4,927,202	\$24,253,681		Storm Events does not record earthquakes.
4	Cold Wave	Relatively High	Relatively High	\$5,971	\$13,491	\$9,048,894	\$9,068,356	3	
5	Tornado	Relatively Moderate	Relatively High	\$7,749,719	\$986	\$1,221,397	\$8,972,103	4	
6	Heat Wave	Relatively Moderate	Relatively Moderate	\$10	\$11,116	\$8,521,973	\$8,533,099	5	
7	Ice Storm	Very High	Very High	\$7,233,070	n/a	\$621,140	\$7,854,210	3	
8	Strong Wind	Relatively High	Relatively High	\$770,066	\$607	\$2,617,152	\$3,387,825	791	Includes 80 High Wind and 143 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
9	Lightning	Relatively High	Very High	\$335,408	n/a	\$2,427,073	\$2,762,481	63	
10	Drought	Relatively Moderate	Relatively Moderate	n/a	\$1,683,077	n/a	\$1,683,077	13	
11	Coastal Flooding	Relatively Low	Relatively Low	\$416,286	n/a	\$1,710	\$417,996	0	Declared 1 time; no Storm Events record of this type.
12	Wildfire	Relatively Low	Relatively Low	\$238,759	\$45	\$29,359	\$268,163	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
13	Winter Weather	Relatively Moderate	Relatively Moderate	\$50,258	\$16	\$96,565	\$146,838	194	
14	Hail	Very Low	Very Low	\$82,553	\$483	\$23,959	\$106,995	160	

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	Very Low	Very Low	\$202	n/a	\$2,116	\$2,319	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
	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, landslide 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 3311.02 (Relatively Moderate, 84.1); tract 3682 (Relatively Moderate, 83.8); tract 3165 (Relatively Moderate, 83.2)
Hurricane	tract 3537 (Relatively Moderate, 87.4); tract 3591 (Relatively Moderate, 84.9); tract 3311.02 (Relatively Moderate, 84.1)
Landslide	tract 3261.02 (Relatively Low, 83.0); tract 3001 (Relatively Low, 82.9); tract 3882 (Very Low, 75.1)
Tornado	tract 3591 (Relatively Moderate, 54.7); tract 3311.02 (Relatively Low, 52.7); tract 3165 (Relatively Low, 51.2)
Tsunami	no tract has a National Risk Index rating for this hazard
Wildfire	tract 3261.01 (Relatively Low, 86.0); tract 3621 (Relatively Low, 84.8); tract 3281 (Relatively Low, 84.7)

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 3311.02 is Census Tract 3311.02). 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)	0					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)	1 day to 2 days (median 1.5 days); 2 with a recorded value	2 consecutive days, 2015-02-15 to 2015-02-16, 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)	13 records, 2012 to 2017 (13 zone-level)	34 days to 274 days (median 154 days); 2 with a recorded value	274 days (about 9.0 months), 2016-07-05 to 2017-04-04, a run of 11 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)	183 records, 1955 to 2025	0.75 in to 2.25 in (median 0.88 in); 183 with a recorded value	2.25 in hail, 1988-06-22	Hail, 2004-08-20, \$50,000 property; crops not reported (2004 dollars)	Event records naming jurisdictions in the plan: Townsend town (11 records), Stow town (7 records), Billerica town (6 records), Framingham city (6 records), Hudson town (6 records), Lexington town (6 records), Tewksbury town (6 records), Dracut town (5 records), Marlborough city (5 records), Newton city (5 records); and 28 more jurisdictions (see the Excel file).	
Excessive Heat, Heat	heat index (in event narratives)	5 records, 2010 to 2025 (5 zone-level)	2 days to 4 days (median 2 days); 3 with a recorded value	4 consecutive days, 2025-06-22 to 2025-06-25, 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, \$3,200,000 property; \$0 crops (2011 dollars); NWS zone MAZ005		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)	3 records, 1998 to 2008 (3 zone-level)		Ice Storm, 2008-12-11, \$3,000,000 property; \$0 crops (2008 dollars); NWS zone MAZ026		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	247 records, 1996 to 2025 (22 zone-level)		Flood, 2010-03-14, \$26,430,000 property; \$0 crops (2010 dollars)		Event records naming jurisdictions in the plan: Framingham city (13 records), Waltham city (9 records), Cambridge city (7 records), Natick town (7 records), Wilmington town (5 records), Concord town (4 records), Lowell city (4 records), Winchester town (4 records), Ashland town (3 records), Billerica town (3 records); and 29 more jurisdictions (see the Excel file). Zone-level records (22) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage is often \$0 or blank for floods, major ones included; FEMA Public Assistance by declaration (B1-d) shows which floods cost the most.
Debris Flow	none (count and damage only)	0					
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	63 records, 1996 to 2025		Lightning, 2000-06-27, damage not reported, 1 direct death, 3 direct injuries	Lightning, 2001-06-17, \$400,000 property; crops not reported (2001 dollars)	Event records naming jurisdictions in the plan: Marlborough city (6 records), Wilmington town (4 records), Burlington town (3 records), Concord town (3 records), Lowell city (3 records), Tewksbury town (3 records), Bedford town (2 records), Cambridge city (2 records), Framingham city (2 records), Natick town (2 records); and 12 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)	223 records, 1996 to 2025 (223 zone-level)	27 kt (31 mph) to 69 kt (79 mph) (median 45 kt (52 mph)); 177 with a recorded value	69 kt (79 mph) estimated gust, High Wind, 2019-02-25; NWS zone MAZ014	High Wind, 2006-02-17, \$700,000 property; crops not reported (zone total, 2006 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	632 records, 1957 to 2026	40 kt (46 mph) to 87 kt (100 mph) (median 50 kt (58 mph)); 593 with a recorded value	87 kt (100 mph) estimated gust, Thunderstorm Wind, 2020-05-15; same speed and measurement basis also recorded on 2014-07-07	Thunderstorm Wind, 2012-07-18, \$350,000 property; \$0 crops (2012 dollars)	Event records naming jurisdictions in the plan: Concord town (23 records), Natick town (15 records), Groton town (14 records), Acton town (13 records), Marlborough city (13 records), Medford city (13 records), Hopkinton town (12 records), Billerica town (11 records), Dracut town (11 records), Westford town (11 records); and 40 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)	21 records, 1955 to 2025	F/EF0 to F/EF3 (median F/EF1); 21 with a recorded value	F3 tornado, 1974-09-29, 33 yd wide, \$250,000 property; crops not recorded (1974 dollars), 1 direct injury; same rating, casualties and property damage also recorded on 1970-10-03	Tornado, 1972-07-21, \$2,500,000 property; crops not recorded (1972 dollars)	Event records naming jurisdictions in the plan: Stow town (2 records), Concord town (1 record), Hudson town (1 record), Marlborough city (1 record).	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).
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)	194 records, 1996 to 2026 (194 zone- level)		Heavy Snow, 1996-01-07, \$1,500,000 property; crops not reported (1996 dollars); NWS zone MAZ005		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: 35 declarations covering 27 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	\$601,534,674.43		
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	\$10,779,440.29		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance		Flags	Notes
						federal share obligated,	nominal dollars		
2015-04-13	2015-01-26	DR-4214-MA	Major disaster	Severe Winter Storm, Snowstorm, and Flooding	Inland Flooding; Winter Weather	\$14,653,904.90			
2013-04-19	2013-02-08	DR-4110-MA	Major disaster	Severe Winter Storm, Snowstorm, and Flooding	Inland Flooding; Winter Weather	\$9,611,906.27			
2013-04-17	2013-04-15	EM-3362-MA	Emergency	Explosions	Non-natural, not counted	\$958,027.47			
2012-10-28	2012-10-27	EM-3350-MA	Emergency	Hurricane Sandy	Hurricane	no Public Assistance recorded			
2012-01-06	2011-10-29	DR-4051-MA	Major disaster	Severe Storm and Snowstorm	Winter Weather	\$4,428,613.50			
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			same incident as DR-4051
2011-08-26	2011-08-26	EM-3330-MA	Emergency	Hurricane Irene	Hurricane	\$1,591,158.25			
2011-03-07	2011-01-11	DR-1959-MA	Major disaster	Severe Winter Storm and Snowstorm	Winter Weather	\$6,425,978.61			
2010-09-02	2010-09-01	EM-3315-MA	Emergency	Hurricane Earl	Hurricane	\$20,187.74			
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	\$6,041,985.83			
2009-01-05	2008-12-11	DR-1813-MA	Major disaster	Severe Winter Storm and Flooding	Ice Storm	\$4,250,711.21			
2008-12-13	2008-12-11	EM-3296-MA	Emergency	Severe Winter Storm	Winter Weather	no Public Assistance recorded			same incident as DR-1813
2006-05-25	2006-05-12	DR-1642-MA	Major disaster	Severe Storms and Flooding	Inland Flooding	\$2,876,595.32			
2005-11-10	2005-10-07	DR-1614-MA	Major disaster	Severe Storms and Flooding	Inland Flooding	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	\$7,829,566.19			
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	\$6,259,910.99			
2003-03-11	2003-02-17	EM-3175-MA	Emergency	Snow	Winter Weather	\$4,532,737.03			
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	\$4,850,071.83			
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	no Public Assistance recorded			

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
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		
1991-08-26	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		

School districts and special districts in this county: \$25,882,541.13 (included in the county total above). Public Assistance matched by applicant name to the school districts and special districts FEMA lists as plan participants in this county. They have no row of their own in the jurisdiction table, so their total is listed here. These dollars are already included in the county PA column of the declarations table (the FEMA record places each applicant in this county), so this line is not added to it.

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: 6 rows, \$339,828.91

Sources: 2, 3

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-4651-MA	2022-04-18	Severe Winter Storm and Snowstorm	Tufts University	\$29,181.22
DR-4097-MA	2012-12-19	Hurricane Sandy	Massachusetts National Guard	\$175,254.87
EM-3264-MA	2005-10-19	Severe Storms and Flooding	Massachusetts National Guard	\$9,871.71
EM-3264-MA	2005-10-19	Severe Storms and Flooding	Department of Fire Services	\$10,195.10
EM-3153-MA	1999-12-06	Warehouse Fire.	Massachusetts National Guard	\$9,154.55
EM-3153-MA	1999-12-06	Warehouse Fire.	Department of Fire Services	\$106,171.46

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	0			0	1		1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Cold Wave	3			0	0		1996 to 2026-06-30	
Drought	13			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	183			3	0		1955 to 2026-06-30	
Heat Wave	5			1	0		1996 to 2026-06-30	
Hurricane	3			0	6		1996 to 2026-06-30	
Ice Storm	3			0	1		1996 to 2026-06-30	
Inland Flooding	247			48	10		1996 to 2026-06-30	
Landslide	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Lightning	63			5	0		1996 to 2026-06-30	
Strong Wind	855			117	0		1955 to 2026-06-30	Includes 80 High Wind and 143 Strong Wind records.

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
Tornado	21			1	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
Wildfire	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Winter Weather	194			20	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	Flags	Why listed
2025-06-22	Excessive Heat		\$0 property; \$0 crops (zone total, 2025 dollars)	0, 3	NWS zone MAZ005 (WESTERN MIDDLESEX), zone-level	within last 5 years	B1-c worst recorded: Excessive Heat, Heat
2021-03-26	Strong Wind	43 kt (49 mph) estimated gust	\$500 property; \$0 crops (zone total, 2021 dollars)	1, 2	NWS zone MAZ026 (NORTHWEST MIDDLESEX COUNTY), zone-level		deaths or injuries recorded
2020-05-15	Thunderstorm Wind	87 kt (100 mph) estimated gust	\$250,000 property; \$0 crops (2020 dollars)	0, 0	HOVEY CORNER		B1-c worst recorded: Thunderstorm Wind
2019-02-25	High Wind	69 kt (79 mph) estimated gust	\$20,000 property; \$0 crops (zone total, 2019 dollars)	0, 0	NWS zone MAZ014 (SOUTHEAST MIDDLESEX), zone-level		B1-c worst recorded: High Wind and Strong Wind
2016-07-05	Drought		\$0 property; \$0 crops (zone total, 2016 dollars)	0, 0	NWS zone MAZ005 (WESTERN MIDDLESEX), zone-level		B1-c worst recorded: Drought
2015-02-15	Extreme Cold/Wind Chill		\$0 property; \$0 crops (zone total, 2015 dollars)	0, 0	NWS zone MAZ005 (WESTERN MIDDLESEX), zone-level		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2011-08-28	Tropical Storm		\$3,200,000 property; \$0 crops (zone total, 2011 dollars)	0, 0	NWS zone MAZ005 (WESTERN MIDDLESEX), zone-level		B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression
2010-03-14	Flood		\$26,430,000 property; \$0 crops (2010 dollars)	0, 0	HOLLISTON to HOVEY CORNER		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2008-12-11	Ice Storm		\$3,000,000 property; \$0 crops (zone total, 2008 dollars)	0, 0	NWS zone MAZ026 (NORTHWEST MIDDLESEX COUNTY), zone-level		B1-c worst recorded: Ice Storm
2000-06-27	Lightning		damage not reported	1, 3	WESTFORD		deaths or injuries recorded
1998-03-12	Winter Weather		damage not reported	2, 0	NWS zone MAZ005 (WESTERN MIDDLESEX), zone-level		deaths or injuries recorded
1974-09-29	Tornado	F3, 33 yd wide	\$250,000 property; crops not recorded (1974 dollars)	0, 1	location not recorded		B1-c worst recorded: Tornado

The full list is in the Excel file, sheet "B1-d Storm Events history" (1,590 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	6.16	events per year at a location (modeled)	about 6.2 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	1.85	event-days per year	about 1.85 days per year	Possible	Storm Events event-days in 2 of 30 years, 1996 to 2025 (6.67%)	35.1	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	7.12	event-days per year	about 7.12 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	266	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.00197	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.197%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	2.3	events per year	about 2.3 per year	Highly likely	FEMA annualized frequency (modeled)	87.2 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	5.7	event-days per year	about 5.7 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	95.6	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.161	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	2.7	event-days per year	about 2.7 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	182	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	4.25	event-days per year	about 4.25 days per year	Highly likely	Storm Events event-days in 28 of 30 years, 1996 to 2025 (93.3%)	119	1996 to 2023 (28 years)	see B1-f	
Landslide	0.555	events per year (modeled)	about 0.55 per year	Likely	FEMA annualized frequency (modeled)	not shown	modeled	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
Lightning	21.6	days per year with a strike	about 21.6 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.971	events per year	about 0.97 per year	Likely	FEMA annualized frequency (modeled)	37	1986 to 2023 (38 years)	countywide	
Tornado	0.176	events per year	about 1 in 6 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	0.000168	annual probability at a location	chance a given location in the county burns in a year: 0.0168%		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	17.2	event-days per year	about 17.2 days per year	Highly likely	Storm Events event- days in 30 of 30 years, 1996 to 2025 (100%)	326	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	70	30	2.33
Hail	2.00 in+	1996 to 2025	4	30	0.133
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	536	30	17.9
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	7	30	0.233
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	20	30	0.667
Tornado	EF0-1	1996 to 2025	4	30	0.133
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	58 of 357	69.8	77.4	96.0	Relatively High 1, Relatively Moderate 4, Relatively Low 29, Very Low 24, No Rating 299
Cold Wave	357 of 357	15.4	31.3	56.6	Relatively Moderate 12, Relatively Low 342, Very Low 3
Drought	33 of 357	73.3	91.4	96.9	Relatively Moderate 15, Relatively Low 14, Very Low 4, No Rating 324
Earthquake	356 of 357	0.2	59.4	84.1	Relatively Moderate 14, Relatively Low 302, Very Low 40, No Rating 1
Hail	357 of 357	0.1	5.9	20.6	Very Low 357
Heat Wave	357 of 357	1.3	27.5	62.3	Relatively Moderate 6, Relatively Low 292, Very Low 59
Hurricane	357 of 357	14.1	72.1	87.4	Relatively Moderate 50, Relatively Low 304, Very Low 3
Ice Storm	356 of 357	0.1	79.7	96.2	Relatively High 50, Relatively Moderate 183, Relatively Low 105, Very Low 18, No Rating 1
Inland Flooding	356 of 357	0.1	38.9	94.8	Relatively High 26, Relatively Moderate 107, Relatively Low 153, Very Low 70, No Rating 1
Landslide	351 of 357	8.6	39.1	83.0	Relatively Low 2, Very Low 349, No Rating 6
Lightning	356 of 357	0.1	33.1	63.4	Relatively Moderate 26, Relatively Low 293, Very Low 37, No Rating 1
Strong Wind	357 of 357	0.2	30.2	57.9	Relatively Moderate 2, Relatively Low 311, Very Low 44
Tornado	357 of 357	0.2	30.8	54.7	Relatively Moderate 1, Relatively Low 197, Very Low 159
Tsunami	0 of 357				Insufficient Data 357
Wildfire	225 of 357	18.7	42.0	86.0	Relatively Low 35, Very Low 190, No Rating 132
Winter Weather	357 of 357	10.6	21.3	31.5	Relatively Low 302, Very Low 55

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
Cambridge city	City	Approved, expires 2030-04-15	FMA RL 0, SRL 0; any 3	\$13,670,132.40	18 total; 0 since its plan	Includes \$10,035,008.19 for declarations not counted as hazard incidents (DR-4496-MA, EM-3362-MA).
Devens CDP	Unincorporated	Expired on 2021-05-23		no Public Assistance recorded	0 total; 0 since its plan	No NFIP community ID on this jurisdiction's plan row.
Everett city	City	Approved, expires 2027-04-03	FMA RL 0, SRL 0; any 2	\$5,052,296.14	2 total; 0 since its plan	Includes \$3,784,644.66 for declarations not counted as hazard incidents (DR-4496-MA).
Framingham city	City	Approved, expires 2028-03-26	FMA RL 0, SRL 1; any 17	\$6,771,412.49	31 total; 2 since its plan	Includes \$3,918,930.42 for declarations not counted as hazard incidents (DR-4496-MA).
Lowell city	City	Expired on 2026-06-20	FMA RL 1, SRL 0; any 26	\$7,390,744.60	15 total; 3 since its plan	Includes \$3,736,179 for declarations not counted as hazard incidents (DR-4496-MA).
Malden city	City	Approved, expires 2027-12-08	FMA RL 0, SRL 0; any 5	\$1,478,868.96	7 total; 0 since its plan	Includes \$227,862.82 for declarations not counted as hazard incidents (DR-4496-MA).
Marlborough city	City	Approved, expires 2029-06-13	FMA RL 0, SRL 0; any 1	\$2,077,427.71	27 total; 1 since its plan	Includes \$150,590.69 for declarations not counted as hazard incidents (DR-4496-MA).
Medford city	City	Approved, expires 2031-06-11	FMA RL 0, SRL 0; any 4	\$1,997,095.74	18 total; 0 since its plan	Includes \$507,816.71 for declarations not counted as hazard incidents (DR-4496-MA).
Melrose city	City	Expired on 2024-06-27	FMA RL 0, SRL 2; any 11	\$2,861,763.81	4 total; 2 since its plan	Includes \$761,351.13 for declarations not counted as hazard incidents (DR-4496-MA).
Newton city	City	Expired on 2024-09-04	FMA RL 0, SRL 3; any 47	\$6,422,611.80	14 total; 4 since its plan	Includes \$1,008,253.64 for declarations not counted as hazard incidents (DR-4496-MA).
Somerville city	City	Approved, expires 2027-01-30	FMA RL 0, SRL 1; any 5	\$6,095,205.25	10 total; 1 since its plan	Includes \$4,611,755.68 for declarations not counted as hazard incidents (DR-4496-MA).
Waltham city	City	Expired on 2024-10-01	FMA RL 0, SRL 0; any 14	\$4,080,320.55	13 total; 0 since its plan	Includes \$206,457.40 for declarations not counted as hazard incidents (DR-4496-MA, EM-3362-MA).
Watertown Town city	City	Expired on 2024-05-07	FMA RL 0, SRL 1; any 1	no Public Assistance recorded	0 total; 0 since its plan	
Woburn city	City	Approved, expires 2026-12-15	FMA RL 0, SRL 1; any 5	\$2,125,569.65	3 total; 0 since its plan	Includes \$430,882.09 for declarations not counted as hazard incidents (DR-4496-MA, EM-3362-MA).
Acton town	Town	Approved, expires 2030-01-09	FMA RL 0, SRL 0; any 5	\$718,110.56	18 total; 0 since its plan	Includes \$160,257.29 for declarations not counted as hazard incidents (DR-4496-MA).
Arlington town	Town	Expired on 2025-06-08	FMA RL 0, SRL 1; any 39	\$1,723,155.93	13 total; 1 since its plan	Includes \$92,843.36 for declarations not counted as hazard incidents (DR-4496-MA, EM-3362-MA).
Ashby town	Town	Approved, expires 2027-08-23	FMA RL 0, SRL 0; any 0	\$965,987.22	9 total; 2 since its plan	Includes \$153,267.38 for declarations not counted as hazard incidents (DR-4496-MA).
Ashland town	Town	Approved, expires 2031-05-27	FMA RL 0, SRL 0; any 1	\$748,970.53	13 total; 0 since its plan	

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Ayer town	Town	Expired on 2021-05-23	FMA RL 0, SRL 0; any 0	\$512,904.82	10 total; 3 since its plan	Includes \$68,053.92 for declarations not counted as hazard incidents (DR-4496-MA).
Bedford town	Town	Approved, expires 2027-11-01	FMA RL 0, SRL 2; any 13	\$1,648,363.54	5 total; 0 since its plan	Includes \$641,091.31 for declarations not counted as hazard incidents (DR-4496-MA).
Belmont town	Town	Expired on 2026-05-31	FMA RL 0, SRL 0; any 2	\$2,428,089.82	9 total; 1 since its plan	Includes \$823,537.20 for declarations not counted as hazard incidents (DR-4496-MA, EM-3362-MA).
Billerica town	Town	Approved, expires 2027-03-20	FMA RL 2, SRL 3; any 48	\$2,205,810.16	20 total; 1 since its plan	Includes \$461,519.36 for declarations not counted as hazard incidents (DR-4496-MA).
Boxborough town	Town	Approved, expires 2029-10-15	FMA RL 0, SRL 0; any 0	\$276,652.08	5 total; 0 since its plan	
Burlington town	Town	Approved, expires 2031-06-25	FMA RL 0, SRL 0; any 8	\$1,385,601.44	10 total; 0 since its plan	Includes \$71,413.28 for declarations not counted as hazard incidents (DR-4496-MA).
Carlisle town	Town	Approved, expires 2026-12-07	FMA RL 0, SRL 0; any 0	\$828,270.56	3 total; 1 since its plan	Includes \$488,207.99 for declarations not counted as hazard incidents (DR-4496-MA).
Chelmsford town	Town	Expired on 2025-12-29	FMA RL 0, SRL 2; any 7	\$1,956,156.78	0 total; 0 since its plan	Includes \$35,445.23 for declarations not counted as hazard incidents (DR-4496-MA).
Concord town	Town	Approved, expires 2028-04-04	FMA RL 0, SRL 2; any 5	\$1,723,543.40	32 total; 1 since its plan	Includes \$633,907.29 for declarations not counted as hazard incidents (DR-4496-MA).
Dracut town	Town	Expired on 2026-09-09	FMA RL 0, SRL 0; any 2	\$1,161,652.23	18 total; 3 since its plan	Includes \$19,920.09 for declarations not counted as hazard incidents (DR-4496-MA).
Dunstable town	Town	Approved, expires 2030-01-21	FMA RL 0, SRL 0; any 0	\$392,503.07	2 total; 1 since its plan	Includes \$57,026.62 for declarations not counted as hazard incidents (DR-4496-MA).
Groton town	Town	Expired on 2025-12-29	FMA RL 0, SRL 0; any 0	\$1,233,641.95	17 total; 1 since its plan	Includes \$245,848.96 for declarations not counted as hazard incidents (DR-4496-MA, EM-3362-MA).
Holliston town	Town	Approved, expires 2031-01-05	FMA RL 0, SRL 0; any 4	\$1,024,125.62	13 total; 0 since its plan	Includes \$386,560.47 for declarations not counted as hazard incidents (DR-4496-MA).
Hopkinton town	Town	Expired on 2025-12-07	FMA RL 0, SRL 0; any 0	\$1,175,455.41	17 total; 2 since its plan	Includes \$160,253.16 for declarations not counted as hazard incidents (DR-4496-MA, EM-3362-MA).
Hudson town	Town	Approved, expires 2029-06-03	FMA RL 0, SRL 0; any 0	\$1,732,485.09	15 total; 3 since its plan	Includes \$559,901.39 for declarations not counted as hazard incidents (DR-4496-MA).
Lexington town	Town	Expired on 2025-04-28	FMA RL 0, SRL 0; any 5	\$2,527,982.36	13 total; 1 since its plan	Includes \$632,368.41 for declarations not counted as hazard incidents (DR-4496-MA).
Lincoln town	Town	Expired on 2023-05-24	FMA RL 0, SRL 0; any 1	\$743,975.96	4 total; 1 since its plan	Includes \$281,588.37 for declarations not counted as hazard incidents (DR-4496-MA).
Littleton town	Town	Approved, expires 2030-07-20	FMA RL 0, SRL 0; any 1	\$740,605.47	11 total; 0 since its plan	Includes \$158,667.75 for declarations not counted as hazard incidents (DR-4496-MA).
Maynard town	Town	Approved, expires 2029-08-27	FMA RL 0, SRL 0; any 0	\$596,850.33	6 total; 0 since its plan	Includes \$46,528.83 for declarations not counted as hazard incidents (DR-4496-MA).

Jurisdiction	Type	Plan status	Repetitive loss	Public Assistance to this jurisdiction	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	<i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	<i>all years; since its plan</i>	
Natick town	Town	Approved, expires 2030-05-05	FMA RL 0, SRL 1; any 5	\$3,260,187.54	27 total; 0 since its plan	Includes \$1,982,596.47 for declarations not counted as hazard incidents (DR-4496-MA).
North Reading town	Town	Approved, expires 2027-03-03	FMA RL 0, SRL 1; any 24	\$1,298,098.19	10 total; 0 since its plan	Includes \$1,008.18 for declarations not counted as hazard incidents (EM-3362-MA).
Pepperell town	Town	Expired on 2026-09-19	FMA RL 0, SRL 0; any 2	\$595,184.09	5 total; 0 since its plan	Includes \$154,671.69 for declarations not counted as hazard incidents (DR-4496-MA).
Reading town	Town	Approved, expires 2029-04-11	FMA RL 0, SRL 0; any 1	\$1,978,374.45	10 total; 1 since its plan	Includes \$501,771.65 for declarations not counted as hazard incidents (DR-4496-MA).
Sherborn town	Town	Expired on 2024-03-18	FMA RL 0, SRL 0; any 1	\$435,054.95	9 total; 1 since its plan	
Shirley town	Town	Expired on 2021-05-23	FMA RL 0, SRL 0; any 1	\$507,676.84	11 total; 2 since its plan	
Stoneham town	Town	Approved, expires 2027-01-26	FMA RL 0, SRL 0; any 0	\$1,258,283.35	3 total; 0 since its plan	Includes \$406,210.30 for declarations not counted as hazard incidents (DR-4496-MA).
Stow town	Town	Expired on 2016-02-03	FMA RL 0, SRL 0; any 0	\$321,649.17	18 total; 9 since its plan	Includes \$82,635.58 for declarations not counted as hazard incidents (DR-4496-MA).
Sudbury town	Town	Expired on 2025-10-06	FMA RL 0, SRL 0; any 3	\$1,662,854.34	6 total; 0 since its plan	Includes \$347,956.88 for declarations not counted as hazard incidents (DR-4496-MA).
Tewksbury town	Town	Expired on 2026-01-05	FMA RL 0, SRL 0; any 7	\$1,608,052.83	13 total; 1 since its plan	Includes \$202,999.92 for declarations not counted as hazard incidents (DR-4496-MA).
Townsend town	Town	Expired on 2026-02-23	FMA RL 0, SRL 0; any 3	\$603,920.07	23 total; 1 since its plan	Includes \$58,811.18 for declarations not counted as hazard incidents (DR-4496-MA).
Tyngsborough town	Town	Expired on 2025-12-22	FMA RL 0, SRL 0; any 8	\$803,125.42	0 total; 0 since its plan	Includes \$141,921.55 for declarations not counted as hazard incidents (DR-4496-MA).
Wakefield town	Town	Expired on 2026-05-11	FMA RL 0, SRL 2; any 13	\$3,256,390.49	17 total; 0 since its plan	Includes \$1,047,513.69 for declarations not counted as hazard incidents (DR-4496-MA).
Wayland town	Town	Expired on 2026-03-08	FMA RL 0, SRL 0; any 5	\$1,140,743.37	10 total; 1 since its plan	Includes \$52,753.59 for declarations not counted as hazard incidents (DR-4496-MA).
Westford town	Town	Approved, expires 2027-02-06	FMA RL 0, SRL 0; any 0	\$2,085,509.32	16 total; 1 since its plan	Includes \$553,394.35 for declarations not counted as hazard incidents (DR-4496-MA).
Weston town	Town	Expired on 2026-06-23	FMA RL 0, SRL 0; any 2	\$1,534,503.01	16 total; 2 since its plan	Includes \$220,347.92 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
Wilmington town	Town	Approved, expires 2027-01-04	FMA RL 0, SRL 0; any 3	\$1,080,513.55	18 total; 0 since its plan	Includes \$112,699.92 for declarations not counted as hazard incidents (DR-4496-MA).
Winchester town	Town	Approved, expires 2028-08-30	FMA RL 0, SRL 4; any 29	\$1,167,345.13	5 total; 0 since its plan	Includes \$508,518.79 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).

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

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

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

Local data needed

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

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

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

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

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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since plan <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Coastal Flooding	\$15,164,862,040	n/a	63,356	\$416,286	n/a	\$1,710	0.00275%				
Cold Wave	\$342,960,947,223	\$81,565,210	1,629,857	\$5,971	\$13,491	\$9,048,894	under 0.0001%				
Drought	n/a	\$69,816,267	n/a	n/a	\$1,683,077	n/a	2.41% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$594,877,100,862	n/a	1,632,002	\$19,326,479	n/a	\$4,927,202	0.00325%				
Hail	\$342,960,949,790	\$81,565,210	1,629,857	\$82,553	\$483	\$23,959	under 0.0001%				

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
Heat Wave	\$342,960,947,223	\$81,565,210	1,629,857	\$10	\$11,116	\$8,521,973	under 0.0001%				
Hurricane	\$342,906,485,166	\$81,565,210	1,629,392	\$28,587,279	\$566,257	\$941,595	0.00834%				
Ice Storm	\$341,837,032,018	n/a	1,622,899	\$7,233,070	n/a	\$621,140	0.00212%				
Inland Flooding	\$342,595,990,113	\$18,607,328	29,492	\$222,851,007	\$300,453	\$1,244,080	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	\$8,195,139,296	n/a	37,124	\$202	n/a	\$2,116	under 0.0001%				
Lightning	\$342,960,949,790	n/a	1,629,857	\$335,408	n/a	\$2,427,073	under 0.0001%				
Strong Wind	\$342,960,949,790	\$81,565,210	1,629,857	\$770,066	\$607	\$2,617,152	0.000225%				
Tornado	\$342,960,949,790	\$81,565,210	1,629,857	\$7,749,719	\$986	\$1,221,397	0.00226%				
Tsunami	n/a	n/a	n/a	n/a	n/a	n/a					NRI publishes no building exposure for this county
Wildfire	\$18,561,503,452	\$25,497,889	115,084	\$238,759	\$45	\$29,359	0.00129%				
Winter Weather	\$342,960,947,223	\$81,565,210	1,629,857	\$50,258	\$16	\$96,565	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	1,629,857
Building value (total, not at risk)	\$342,960,949,790
Agriculture value (total, not at risk)	\$81,565,210
NRI risk rating (all hazards)	Relatively High
Expected annual loss, buildings and agriculture, all hazards	\$290,223,598
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)	\$31,724,216
Social vulnerability rating	Very 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)	3	Severe repetitive loss, FMA definition (44 CFR 77.2)	27
Repetitive loss, NFIP insurance definition	389	Severe repetitive loss, NFIP insurance definition	26

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 <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	3	27	389	26	391	1	134
of which: Acton town	0	0	5	0	5	0	0
of which: Arlington town	0	1	39	1	39	0	10
of which: Ashland town	0	0	1	0	1	0	0
of which: Belmont town	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>
of which: Billerica town	2	3	48	3	48	0	15
of which: Burlington town	0	0	8	0	8	0	6
of which: Cambridge city	0	0	3	0	3	0	0
of which: Chelmsford town	0	2	7	2	7	0	4
of which: Concord town	0	2	5	2	5	0	1
of which: Dracut town	0	0	2	0	2	0	0
of which: Everett city	0	0	2	0	2	0	0
of which: Framingham city	0	1	17	1	17	0	3
of which: Holliston town	0	0	4	0	4	0	1
of which: Lexington town	0	0	5	0	5	0	0
of which: Lincoln town	0	0	1	0	1	0	0
of which: Littleton town	0	0	1	0	1	0	0
of which: Lowell city	1	0	25	0	26	0	16
of which: Malden city	0	0	5	0	5	0	0
of which: Marlborough city	0	0	1	0	1	0	1
of which: Medford city	0	0	4	0	4	0	1
of which: Melrose city	0	2	11	2	11	0	3
of which: Natick town	0	1	5	1	5	0	4
of which: Newton city	0	3	47	3	47	0	11
of which: North Reading town	0	1	23	0	24	1	9
of which: Pepperell town	0	0	2	0	2	0	1
of which: Reading town	0	0	1	0	1	0	0
of which: Sherborn town	0	0	1	0	1	0	0
of which: Shirley town	0	0	1	0	1	0	0
of which: Somerville city	0	1	5	1	5	0	1
of which: Sudbury town	0	0	3	0	3	0	2
of which: Tewksbury town	0	0	7	0	7	0	1
of which: Townsend town	0	0	3	0	3	0	1
of which: Tyngsborough town	0	0	8	0	8	0	2
of which: Wakefield town	0	2	13	2	13	0	3
of which: Waltham city	0	0	14	0	14	0	5
of which: Watertown town	0	1	1	1	1	0	1
of which: Wayland town	0	0	5	0	5	0	3
of which: Weston town	0	0	2	0	2	0	0
of which: Wilmington town	0	0	3	0	3	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: Winchester town	0	4	29	4	29	0	16
of which: Woburn city	0	1	5	1	5	0	3
of which: Bedford town	0	2	13	2	13	0	7
of which: Unknown (community ID Unknown in FEMA data)	0	0	2	0	2	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>
Cambridge city	250186	0	0	3	0	3	0	0
Everett city	250192	0	0	2	0	2	0	0
Framingham city	250193	0	1	17	1	17	0	3
Lowell city	250201	1	0	25	0	26	0	16
Malden city	250202	0	0	5	0	5	0	0
Marlborough city	250203	0	0	1	0	1	0	1
Medford city	250205	0	0	4	0	4	0	1
Melrose city	250206	0	2	11	2	11	0	3
Newton city	250208	0	3	47	3	47	0	11
Somerville city	250214	0	1	5	1	5	0	1
Waltham city	250222	0	0	14	0	14	0	5
Watertown Town city	250223	0	1	1	1	1	0	1
Woburn city	250229	0	1	5	1	5	0	3
Acton town	250176	0	0	5	0	5	0	0
Arlington town	250177	0	1	39	1	39	0	10
Ashby town	250178	0	0	0	0	0	0	0
Ashland town	250179	0	0	1	0	1	0	0
Ayer town	250180	0	0	0	0	0	0	0
Bedford town	255209	0	2	13	2	13	0	7
Belmont town	250182	0	0	2	0	2	0	1
Billerica town	250183	2	3	48	3	48	0	15
Boxborough town	250184	0	0	0	0	0	0	0
Burlington town	250185	0	0	8	0	8	0	6
Carlisle town	250187	0	0	0	0	0	0	0
Chelmsford town	250188	0	2	7	2	7	0	4
Concord town	250189	0	2	5	2	5	0	1
Dracut town	250190	0	0	2	0	2	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>
Dunstable town	250191	0	0	0	0	0	0	0
Groton town	250194	0	0	0	0	0	0	0
Holliston town	250195	0	0	4	0	4	0	1
Hopkinton town	250196	0	0	0	0	0	0	0
Hudson town	250197	0	0	0	0	0	0	0
Lexington town	250198	0	0	5	0	5	0	0
Lincoln town	250199	0	0	1	0	1	0	0
Littleton town	250200	0	0	1	0	1	0	0
Maynard town	250204	0	0	0	0	0	0	0
Natick town	250207	0	1	5	1	5	0	4
North Reading town	250209	0	1	23	0	24	1	9
Pepperell town	250210	0	0	2	0	2	0	1
Reading town	250211	0	0	1	0	1	0	0
Sherborn town	250212	0	0	1	0	1	0	0
Shirley town	250213	0	0	1	0	1	0	0
Stoneham town	250215	0	0	0	0	0	0	0
Stow town	250216	0	0	0	0	0	0	0
Sudbury town	250217	0	0	3	0	3	0	2
Tewksbury town	250218	0	0	7	0	7	0	1
Townsend town	250219	0	0	3	0	3	0	1
Tyngsborough town	250220	0	0	8	0	8	0	2
Wakefield town	250221	0	2	13	2	13	0	3
Wayland town	250224	0	0	5	0	5	0	3
Westford town	250225	0	0	0	0	0	0	0
Weston town	250226	0	0	2	0	2	0	0
Wilmington town	250227	0	0	3	0	3	0	2
Winchester town	250228	0	4	29	4	29	0	16

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	2	16	285	15	287	1	107
2 to 4 unit residential	0	2	28	2	28	0	10
other residential	0	2	35	2	35	0	3
non-residential	1	7	41	7	41	0	14
not reported	0	0	0	0	0	0	0

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

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

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

In this county 1 property is FMA repetitive loss but not NFIP repetitive loss, and 387 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

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

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-29T134039Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-29T162832Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-30, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-30, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-30, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-30, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_cousubs_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_place_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_unsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_elsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_scsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scsd_national.zip), https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx (used to match place names and codes; no table prints its values)

What this packet is and what the plan adds

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

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

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

OpenFEMA disclaimer

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

Reuse, citation and corrections

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Cite this: Hazard Plain (2026). Middlesex County, MA: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 25017). Automated baseline. <https://hazardplain.org/ma/25017/> 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