

Middlesex town, VT

Risk-assessment baseline packet (county-level sections from Washington County)

Unit **Vermont town 5002344500** Release **2026-10** As of **2026-09-28** Storm Events data through **2026-06-30**

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

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

OPENFEMA DISCLAIMER

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

Plan clock

Status	Approved, expires 2030-01-15	Plan	Middlesex, Vermont 2024 Local Hazard Mitigation Plan (FEMA plan 110173)
Approved	2025-01-16	Expires	2030-01-15
As of	2026-09-28	Days	1,205 days to expiry

What changed since your last plan (approved 2025-01-16)

New federal declarations	none (0 declaration rows; 0 counted incidents)	Storm Events records since approval (Washington County, county-level)	29 (data through 2026-06-30)
Repetitive loss now (this town)	FMA RL 0, SRL 0 (44 CFR 77.2); any definition: 4	Repeat-flood change	First release: no prior release to compare.

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

Plan status for this town

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry	Update underway	Notes
						<i>negative = days since expiry</i>		
Middlesex town	Town	Approved, expires 2030-01-15	Middlesex, Vermont 2024 Local Hazard Mitigation Plan (FEMA plan 110173)	2025-01-16	2030-01-15	1,205		

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

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

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Supports B1-a: hazards

Inherited from Washington County, county-level (county FIPS 50023); scope: whole section.

Hazards NRI does not cover: check locally

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

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

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings modeled dollars per year	EAL agriculture modeled dollars per year	EAL population equivalence statistical value of life and injury, \$13.7M per life, not property damage	EAL total (see note) modeled dollars per year	Storm Events records since 1996 count	Evidence for an omission NRI Not Applicable, no declaration and no Storm Events record since 1996	Storm Events coverage note
1	Inland Flooding	Relatively Low	Relatively Moderate	\$17,072,085	\$81,512	\$477,764	\$17,631,361	84		
2	Cold Wave	Relatively Low	Relatively Moderate	\$385	\$15,338	\$1,004,489	\$1,020,212	30		Includes 3 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
3	Lightning	Relatively Moderate	Relatively Moderate	\$43,545		\$636,071	\$679,616	8		
4	Heat Wave	Relatively Low	Relatively Low	under \$1	\$50,249	\$586,578	\$636,827	8		
5	Hurricane	Relatively Low	Relatively Low	\$536,131	\$40,851	\$24,340	\$601,321	0		Declared 4 times; no Storm Events record of this type.
6	Earthquake	Very Low	Relatively Low	\$343,022		\$60,884	\$403,906			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
7	Landslide	Relatively Moderate	Relatively Moderate	\$23,839		\$342,500	\$366,339	0		Declared 3 times; no Storm Events record of this type. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
8	Strong Wind	Relatively Low	Relatively Low	\$139,150	\$2,334	\$144,246	\$285,730	205		Includes 16 High Wind records and 34 Strong Wind records, event types the NRI definition of this hazard leaves out.

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL total <i>(see note) modeled dollars per year</i>	Storm Events records since 1996 <i>count</i>	Evidence for an omission <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
9	Winter Weather	Relatively Moderate	Relatively High	\$130,541	\$66	\$144,853	\$275,460	317		
10	Tornado	Very Low	Very Low	\$30,416	\$122	\$127,612	\$158,150	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
11	Ice Storm	Relatively Low	Relatively Low	\$101,712		\$12,305	\$114,017	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
12	Hail	Very Low	Very Low	\$5,254	\$4,238	\$39,889	\$49,381	55		
13	Wildfire	Very Low	Very Low	\$8,414	\$3	\$788	\$9,205	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
14	Avalanche	Very Low	Very Low	\$0		\$537	\$537	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Drought	No Rating	No Expected Annual Losses		\$0		\$0	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Coastal Flooding	Not Applicable	Not Applicable					0	NRI rates coastal flooding Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Tsunami	Not Applicable	Not Applicable					0	NRI rates tsunami Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	Volcanic Activity	Not Applicable	Not Applicable					0	NRI rates volcanic activity Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.

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

SOURCES

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

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

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

Supports B1-b: location

Inherited from Washington County, county-level (county FIPS 50023); scope: whole section.

Where each hazard occurs

Hazard	Location	Census tracts rated <i>rated of all tracts</i>
Avalanche	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	8 of 20
Coastal Flooding	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 20
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 20
Earthquake	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	20 of 20
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
Hurricane	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	20 of 20
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
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.	20 of 20
Landslide	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	20 of 20
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
Tornado	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	20 of 20
Tsunami	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 20
Volcanic Activity	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 20
Wildfire	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	20 of 20
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20

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

Supports B1-c: extent

Inherited from Washington County, county-level (county FIPS 50023); scope: whole section.

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

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	Where in the county	Note
Avalanche	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Coastal Flood, Storm Surge/ Tide	none in data (FIRM for depth)	0					Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	27, 1996 to 2026 (27 zone-level)	1 day to 28 days (median 2 days); 26 with a recorded value	28 days, 2015-02-01 to 2015-02-28, from 1 monthly summary record (a monthly summary record covers most or all of a month; it does not count days at wave conditions), zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Wind chill: in event narratives only; local data required.
Frost/Freeze (outside NRI Cold Wave definition)	crop damage	3, 2005 to 2023 (3 zone-level)		Frost/Freeze, 2023-05-18, \$300,000 crop damage, reported for the zone (2023 dollars); NWS zone VTZ008 (WASHINGTON), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Temperature: in event narratives only; local data required.
Drought	US Drought Monitor D-scale	0					Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					No Storm Events record; local data required (e.g., USGS).
Hail	hail size (inches)	64, 1961 to 2025	0.25 in to 2.75 in (median 1 in); 63 with a recorded value	2.75 in hail, 2007-07-09	Hail, 2010-07-21, \$20,000 property; \$0 crops (2010 dollars)	Event records naming places in the county (county page list): Northfield town (7 records), East Montpelier town (4 records), Fayston town (4 records), Waitsfield town (4 records), Warren town (4 records), Duxbury town (3 records), Waterbury town (3 records), Barre town (2 records), Berlin town (2 records), Cabot town (2 records); and 8 more places (see the XLSX file).	

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	Where in the county	Note
Excessive Heat, Heat	heat index (narratives)	8, 1998 to 2025 (8 zone-level)	1 day to 6 days (median 2 days); 4 with a recorded value	6 consecutive days, 2018-07-01 to 2018-07-06, 1 direct death, zone-level	Heat, 2012-03-17, \$0 property; \$1,000,000 crops, reported for the zone (2012 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	Heat index: in event narratives only; local data required. Heat records from November to March (unseasonable warmth, not a heat wave) are counted but not used for the longest run.
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					Storm Events files every zone of a storm's episode under the storm's event type and category, so a Hurricane (Typhoon) record, especially an inland or remnant one, does not by itself mean hurricane-force winds here; read the damage and wind columns.
Ice Storm	Sperry-Piltz (local data)	0					Ice thickness: in event narratives only; local data required.
Flash Flood, Flood, Lakeshore Flood	damage and flood days (FIRM for depth)	84, 1996 to 2025 (9 zone-level)		Flash Flood, 2023-07-11, \$100,000,000 property; \$0 crops (2023 dollars), 1 direct death		Event records naming places in the county (county page list): Middlesex town (9 records), Barre town (7 records), Duxbury town (6 records), Fayston town (6 records), Montpelier city (6 records), Northfield town (6 records), Warren town (4 records), Woodbury town (4 records), Roxbury town (3 records), Waitsfield town (3 records); and 9 more places (see the XLSX file). Zone-level records (9) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage can be \$0 or blank even for a major flood, so the worst record here may not be the worst flood; compare FEMA Public Assistance by declaration in B1-d.
Debris Flow	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	8, 1996 to 2013		Lightning, 1996-06-12, damage not reported, 1 direct death, 1 direct injury	Lightning, 2012-05-29, \$150,000 property; \$0 crops (2012 dollars)	Event records naming places in the county (county page list): Barre city (3 records), Barre town (3 records), Montpelier city (2 records), Cabot town (1 record), Marshfield town (1 record), Marshfield village (1 record), Waitsfield town (1 record).	Storm Events lists lightning with damage or casualties; physical measure in event narratives only; local data required.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	Where in the county	Note
High Wind and Strong Wind (outside NRI Strong Wind definition)	wind speed (kt and mph)	50, 1996 to 2026 (49 zone-level)	35 kt (40 mph) to 52 kt (60 mph) (median 41.5 kt (48 mph)); 42 with a recorded value	52 kt (60 mph) estimated gust, High Wind, 2022-12-23; NWS zone VTZ008 (WASHINGTON), zone-level: may include parts of neighboring counties		Event records naming places in the county (county page list): Worcester town (1 record). Zone-level records (49) apply countywide.	
Thunderstorm Wind	wind speed (kt and mph)	179, 1964 to 2026	40 kt (46 mph) to 85 kt (98 mph) (median 50 kt (58 mph)); 135 with a recorded value	85 kt (98 mph) estimated gust, Thunderstorm Wind, 2004-11-25, 1 direct injury	Thunderstorm Wind, 2018-06-18, \$100,000 property; \$0 crops (2018 dollars)	Event records naming places in the county (county page list): Barre town (14 records), Duxbury town (13 records), Northfield town (13 records), Barre city (12 records), Plainfield town (9 records), Berlin town (8 records), Warren town (8 records), Woodbury town (8 records), Calais town (7 records), Marshfield town (7 records); and 10 more places (see the XLSX file).	
Tornado	Enhanced Fujita (F before Feb 2007)	0					From 1996 on, tornado records are per-county segments and length is the path length within this county (NWS Instruction 10-1605); records before 1996 may give the whole path length, including the path outside this county, and before 1996 a tornado is listed once, under the county where it began, with the whole path's rating; counties farther along the path may not list it. Length is not used to rank tornadoes.
Tsunami	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					Physical measure: in event narratives only; local data required.
Wildfire	acres burned (local data)	0					Acres burned: in event narratives only; local data required.
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall local)	317, 1996 to 2026 (317 zone-level)		Heavy Snow, 2007-02-14, \$300,000 property; \$0 crops, reported for the zone (2007 dollars); NWS zone VTZ008 (WASHINGTON), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Snow depth: in event narratives only; local data required.

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

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

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

SOURCES

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

Supports B1-d: previous occurrences

Inherited from Washington County, county-level (county FIPS 50023); scope: declarations, statewide block and Storm Events history.

Declaration rows 33 Counted incidents 29

Federal disaster declarations for this county

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2024-08-20	2024-07-09	DR-4810-VT	Major disaster	SEVERE STORM, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide	\$27,686,889.61	during plan review, check whether your last plan included it; within last 5 years	
2024-08-08	2024-08-08	EM-3609-VT	Emergency	TROPICAL DEPRESSION DEBBY	Hurricane	none found	during plan review, check whether your last plan included it; within last 5 years	
2023-07-14	2023-07-07	DR-4720-VT	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide	\$133,022,376.46	within last 5 years	
2023-07-10	2023-07-09	EM-3595-VT	Emergency	FLOODING	Inland Flooding	none found	within last 5 years	same incident as DR-4720
2023-03-20	2022-12-22	DR-4695-VT	Major disaster	SEVERE STORM AND FLOODING	Inland Flooding	\$1,404,124.35	within last 5 years	
2021-08-22	2021-08-22	EM-3567-VT	Emergency	TROPICAL STORM HENRI	Hurricane	none found		
2020-04-08	2020-01-20	DR-4532-VT	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$344,375,933.51		
2020-03-13	2020-01-20	EM-3437-VT	Emergency	COVID-19	Non-natural, not counted	none found		same incident as DR-4532
2020-01-17	2019-10-31	DR-4474-VT	Major disaster	SEVERE STORM AND FLOODING	Inland Flooding	\$1,856,573.71		
2019-06-14	2019-04-15	DR-4445-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$2,886,301.79		
2018-01-02	2017-10-29	DR-4356-VT	Major disaster	SEVERE STORM AND FLOODING	Inland Flooding	\$797,556.42		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2017-08-16	2017-06-29	DR-4330-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$5,315,972.38		
2015-02-03	2014-12-09	DR-4207-VT	Major disaster	SEVERE WINTER STORM	Winter Weather	\$683,998.41		
2014-06-11	2014-04-15	DR-4178-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$740,567.97		
2013-08-02	2013-06-25	DR-4140-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$2,113,577.50		
2011-11-08	2011-05-20	DR-4043-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$241,066.93		
2011-09-01	2011-08-27	DR-4022-VT	Major disaster	TROPICAL STORM IRENE	Hurricane	\$39,503,827.61		
2011-08-29	2011-08-26	EM-3338-VT	Emergency	HURRICANE IRENE	Hurricane	none found		same incident as DR-4022
2011-07-08	2011-05-26	DR-4001-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$5,634,948.61		
2011-06-15	2011-04-23	DR-1995-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$7,837,564.51		
2008-09-12	2008-07-21	DR-1790-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$741,767.08		
2007-08-03	2007-07-09	DR-1715-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$1,097,752.82		
1999-11-10	1999-09-16	DR-1307-VT	Major disaster	TROPICAL STORM FLOYD	Hurricane; Inland Flooding	\$111,969.48		
1998-06-30	1998-06-17	DR-1228-VT	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	none found		
1997-07-25	1997-07-15	DR-1184-VT	Major disaster	EXCESSIVE RAINFALL, HIGH WINDS, AND FLOODING	Inland Flooding	none found		
1996-02-13	1996-01-19	DR-1101-VT	Major disaster	ICE JAMS AND FLOODING	Inland Flooding (primary); also designated: Winter Weather	none found		
1995-08-16	1995-08-04	DR-1063-VT	Major disaster	EXCESSIVE RAINFALL, FLOODING	Inland Flooding	none found		
1992-03-18	1992-03-11	DR-938-VT	Major disaster	HEAVY RAINS, ICE JAMS & FLOODING	Inland Flooding	none found		
1990-07-25	1990-07-04	DR-875-VT	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1989-09-11	1989-08-04	DR-840-VT	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1984-06-18	1984-06-06	DR-712-VT	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
1976-08-05	1976-08-05	DR-518-VT	Major disaster	SEVERE STORMS, HIGH WINDS & FLOODING	Inland Flooding (primary); also designated: Strong Wind	none found		
1973-07-06	1973-07-06	DR-397-VT	Major disaster	SEVERE STORMS, FLOODING, & LANDSLIDES	Inland Flooding (primary); also designated: Landslide	none found		

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

The County Public Assistance column is the whole county's, including any state agencies FEMA files there; this town's own matched Public Assistance is in the per-member block (B1-f).

SOURCES

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

Statewide declarations

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
1964-03-17	1964-03-17	DR-164-VT	Major disaster	FLOODING	Inland Flooding		
1963-11-27	1963-11-27	DR-160-VT	Major disaster	DROUGHT & IMPENDING FREEZE	Drought		

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

SOURCE

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

Public Assistance filed under this county for declarations that do not list it: 23 rows, \$2,494,258.50

FEMA number	Declared	Title	Applicant	PA obligated
				<i>federal share obligated, nominal dollars</i>
DR-4826-VT	2024-09-26	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Vermont Agency of Transportation	\$368,977.97
DR-4770-VT	2024-04-19	SEVERE WINTER STORM	Vermont Agency of Transportation	\$40,319.07
DR-4762-VT	2024-03-02	SEVERE STORM AND FLOODING	Washington Electric COOP INC	\$19,411.08
DR-4762-VT	2024-03-02	SEVERE STORM AND FLOODING	Vermont Agency of Transportation	\$149,740.79
DR-4744-VT	2023-10-06	SEVERE STORMS AND FLOODING	Vermont Agency of Transportation	\$52,535.65
DR-4621-VT	2021-09-29	SEVERE STORM AND FLOODING	Vermont Agency of Transportation	\$226,075.16
DR-4380-VT	2018-07-30	SEVERE STORM AND FLOODING	Washington Electric COOP INC	\$115,962.72
DR-4232-VT	2015-07-29	SEVERE STORM AND FLOODING	BOLTON (TOWN OF)	\$201,355.07
DR-4163-VT	2014-01-29	SEVERE WINTER STORMS	Vermont Agency of Transportation	\$717,163.88
DR-4120-VT	2013-06-13	SEVERE STORMS AND FLOODING	Vermont Agency of Transportation	\$44,018.30
DR-4066-VT	2012-06-22	SEVERE STORM, TORNADO, AND FLOODING	Vermont Agency of Transportation	\$22,132.80
DR-1951-VT	2010-12-22	SEVERE STORM	Vermont Agency of Transportation	\$28,204.83
DR-1816-VT	2009-01-14	SEVERE WINTER STORM	Vermont Agency of Transportation	\$34,846.03
DR-1784-VT	2008-08-15	SEVERE STORMS, A TORNADO, AND FLOODING	Vermont Agency of Transportation	\$14,170.83

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-1778-VT	2008-07-15	SEVERE STORMS AND FLOODING	Vermont Agency of Transportation	\$5,924.02
DR-1698-VT	2007-05-04	SEVERE STORMS AND FLOODING	WASHINGTON ELECTRIC COOPERATIVE	\$78,936.49
DR-1698-VT	2007-05-04	SEVERE STORMS AND FLOODING	Vermont Agency of Transportation	-\$4,117.42 (net of deobligations)
DR-1559-VT	2004-09-23	SEVERE STORMS AND FLOODING	Vermont Agency of Transportation	-\$8,785.87 (net of deobligations)
DR-1488-VT	2003-09-12	SEVERE STORMS AND FLOODING	Vermont Agency of Transportation	-\$3,807.77 (net of deobligations)
DR-1428-VT	2002-07-12	SEVERE STORMS AND FLOODING	Vermont Agency of Transportation	\$15,114.34
EM-3167-VT	2001-04-10	SNOW	Vermont Agency of Transportation	\$328,114.37
DR-1358-VT	2001-01-18	SEVERE STORMS AND FLOODING	Vermont Agency of Transportation	\$28,452.60
DR-1336-VT	2000-07-27	SEVERE STORMS AND FLOODING	Vermont Agency of Transportation	\$19,513.56

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

SOURCES

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

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

Previous occurrences by hazard, with explicit no-event rows

Hazard	Storm Events records <i>full period</i>	Since plan approval records	During plan review records	Last 5 years records	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Cold Wave	30	3	0	9	0	0	1996 to 2026-06-30	Includes 3 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
Drought	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Earthquake	0	0	0	0	0	0		No Storm Events record; local data required (e.g., USGS).
Hail	64	1	0	1	0	0	1955 to 2026-06-30	
Heat Wave	8	1	0	1	0	0	1996 to 2026-06-30	
Hurricane	0	0	0	0	4	0	1996 to 2026-06-30	No Storm Events records of this type; 4 federal declared incidents (see declarations table)
Ice Storm	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Inland Flooding	84	2	4	13	25	0	1996 to 2026-06-30	
Landslide	0	0	0	0	3	0	1996 to 2026-06-30	No Storm Events records of this type; 3 federal declared incidents (see declarations table)

Hazard	Storm Events records <i>full period</i>	Since plan approval <i>records</i>	During plan review <i>records</i>	Last 5 years <i>records</i>	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Lightning	8	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	229	8	4	27	1	0	1955 to 2026-06-30	Includes 16 High Wind records and 34 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	0	0	0	0	0	0	1950 to 2026-06-30	No recorded events, 1950 to 2026-06-30, NOAA NCEI Storm Events
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Volcanic Activity	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Winter Weather	317	14	10	45	2	0	1996 to 2026-06-30	

SOURCES

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

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

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

Notable Storm Events records

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2023-07-11	Flash Flood		\$100,000,000 property; \$0 crops (2023 dollars)	1, 0	MONTPELIER JCT to SOUTH BARRE	within last 5 years	deaths or injuries recorded
2023-05-18	Frost/Freeze		\$0 property; \$300,000 crops, reported for the zone (2023 dollars)	0, 0	NWS zone VTZ008 (WASHINGTON), zone-level: may include parts of neighboring counties	within last 5 years	B1-c worst recorded: Frost/Freeze (outside NRI Cold Wave definition)
2022-12-23	High Wind	52 kt (60 mph) estimated gust	\$450,000 property; \$0 crops, reported for the zone (2022 dollars)	0, 0	NWS zone VTZ008 (WASHINGTON), zone-level: may include parts of neighboring counties	within last 5 years	B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2018-07-01	Heat		\$0 property; \$0 crops, reported for the zone (2018 dollars)	1, 0	NWS zone VTZ008 (WASHINGTON), zone-level: may include parts of neighboring counties		deaths or injuries recorded
2018-06-18	Thunderstorm Wind	70 kt (81 mph) estimated gust	\$100,000 property; \$0 crops (2018 dollars)	0, 0	WAITSFIELD		B1-c most damaging: Thunderstorm Wind
2015-02-01	Cold/Wind Chill		\$0 property; \$0 crops, reported for the zone (2015 dollars)	0, 0	NWS zone VTZ008 (WASHINGTON), zone-level: may include parts of neighboring counties		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2012-05-29	Lightning		\$150,000 property; \$0 crops (2012 dollars)	0, 0	CABOT		B1-c most damaging: Lightning

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2012-03-17	Heat		\$0 property; \$1,000,000 crops, reported for the zone (2012 dollars)	0, 0	NWS zone VTZ008 (WASHINGTON), zone-level: may include parts of neighboring counties		B1-c most damaging: Excessive Heat, Heat
2007-07-09	Hail	2.75 in	\$20,000 property; \$0 crops (2007 dollars)	0, 0	DUXBURY		B1-c worst recorded: Hail
2007-02-14	Heavy Snow		\$300,000 property; \$0 crops, reported for the zone (2007 dollars)	0, 0	NWS zone VTZ008 (WASHINGTON), zone-level: may include parts of neighboring counties		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
2004-11-25	Thunderstorm Wind	85 kt (98 mph) estimated gust	\$20,000 property; crops not reported (2004 dollars)	0, 1	MARSHFIELD		B1-c worst recorded: Thunderstorm Wind
1996-06-12	Lightning		damage not reported	1, 1	BARRE		deaths or injuries recorded

The full list is in the XLSX file, sheet "B1-d Storm Events history" (740 rows).

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

SOURCES

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

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

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

Supports B1-e: probability

Inherited from Washington County, county-level (county FIPS 50023); scope: whole section.

Probability: FEMA annualized frequency and descriptor per hazard

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1994 to 2023 (30 years)	see B1-f	0.01 is NRI's minimum avalanche frequency for a county in an avalanche susceptibility zone; NRI records no avalanche here, so the descriptor reflects the floor, not local events.
Coastal Flooding		events per year at a location (modeled)				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.

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
Cold Wave	4.26	event-days per year	about 4.26 days per year	Likely	event-days in 12 of 30 years, 1996 to 2025 (40%)	81	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 4.26 cold wave event-days a year here (its annualized frequency over 19 years; not its event count divided by the years), but Storm Events has a record in only 12 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together. Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.
Drought	0	event-days per year	none modeled		event-days in 0 of 30 years, 1996 to 2025 (0%)	0	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	No recorded event-days, 1996 to 2025; descriptor not assigned
Earthquake	0.00133	annual probability at a location	chance a given location in the county has at least minor- damage shaking in a year: 0.133%			not shown	modeled	see B1-f	Descriptor not assigned: the NRI value is the chance at a location in the county, not how often the hazard affects the county, and Storm Events does not record earthquakes.
Hail	1.35	events per year	about 1.35 per year	Highly likely	FEMA annualized frequency (modeled)	51.2 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	0.737	event-days per year	about 0.737 days per year	Likely	event-days in 6 of 30 years, 1996 to 2025 (20%)	14	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.0434	events per year	about 1 in 23 years	Possible	FEMA annualized frequency (modeled)	14	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are counted separately in B1-d and need not match.
Ice Storm	0.246	event-days per year	about 0.246 days per year		event-days in 0 of 30 years, 1996 to 2025 (0%)	17	1946-12-31 to 2014-02-12 (67 years)	countywide	No recorded event-days, 1996 to 2025; descriptor not assigned
Inland Flooding	2.25	event-days per year	about 2.25 days per year	Likely	event-days in 26 of 30 years, 1996 to 2025 (86.7%)	63	1996 to 2023 (28 years)	see B1-f	
Landslide	1.54	events per year (modeled)	about 1.54 per year	Highly 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	21.8	days per year with a strike	about 21.8 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.876	events per year	about 0.88 per year	Likely	FEMA annualized frequency (modeled)	34	1986 to 2023 (38 years)	countywide	
Tornado	0.0425	events per year	about 1 in 24 years	Possible	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami		annual probability at the most exposed location (used in place of a county value)				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Volcanic Activity		annual probability				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Wildfire	0.000014	annual probability at a location	chance a given location in the county burns in a year: 0.0014%		Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No Storm Events record of this hazard, 1996 to 2025; descriptor not assigned (the NRI value is the chance at a location in the county, not how often the hazard affects the county)
Winter Weather	22	event-days per year	about 22 days per year	Highly likely	event-days in 30 of 30 years, 1996 to 2025 (100%)	419	2005-11-12 to 2024-11-12 (19 years)	countywide	

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

SOURCES

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

Descriptor scale used in this packet (defined per unit)

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

SOURCES

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

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

Intensity bands: historical frequency (Storm Events)

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	34	30	1.13
Hail	2.00 in+	1996 to 2025	3	30	0.1
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	128	30	4.27
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	3	30	0.1
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	22	30	0.733
Tornado	EF0-1	1996 to 2025	0	30	0
Tornado	EF2-3	1996 to 2025	0	30	0
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

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

SOURCE

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

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

Supports B1-f: variation across the planning area

Range of census tract risk within the county

Hazard	Tracts rated of all	Risk score min NRI score, 0 to 100	Median	Max	Tracts by rating	Note
Avalanche	8 of 20	29.1	34.0	38.4	Very Low 8, Not Applicable 12	
Coastal Flooding	0 of 20				Not Applicable 20	
Cold Wave	20 of 20	26.6	45.0	65.5	Relatively Moderate 8, Relatively Low 12	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Drought	0 of 20				No Rating 20	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Earthquake	20 of 20	18.8	32.6	59.1	Relatively Low 7, Very Low 13	
Hail	20 of 20	17.5	30.1	39.6	Relatively Low 3, Very Low 17	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Heat Wave	20 of 20	10.3	37.6	63.0	Relatively Moderate 3, Relatively Low 16, Very Low 1	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Hurricane	20 of 20	53.2	58.5	68.5	Relatively Low 20	
Ice Storm	20 of 20	26.4	45.5	74.3	Relatively Moderate 2, Relatively Low 16, Very Low 2	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Inland Flooding	20 of 20	17.6	55.0	94.5	Relatively High 6, Relatively Moderate 6, Relatively Low 8	
Landslide	20 of 20	73.5	96.8	99.4	Relatively High 2, Relatively Moderate 9, Relatively Low 8, Very Low 1	
Lightning	20 of 20	44.4	79.0	95.3	Relatively High 11, Relatively Moderate 8, Relatively Low 1	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Strong Wind	20 of 20	22.1	38.7	61.0	Relatively Moderate 2, Relatively Low 18	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Tornado	20 of 20	5.6	15.4	26.4	Very Low 20	
Tsunami	0 of 20				Not Applicable 20	
Volcanic Activity	0 of 20				Not Applicable 20	
Wildfire	20 of 20	32.3	55.5	68.5	Very Low 20	
Winter Weather	20 of 20	62.4	83.9	95.4	Relatively High 15, Relatively Moderate 5	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.

County tracts, shown for context: this town's planning area is the town, which the county tracts do not split out.

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

SOURCE

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

Per-member block (Starter, confirm locally)

Member	Type	Plan status	Repetitive loss	Public Assistance matched	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	<i>federal share obligated, nominal dollars</i>	<i>all years; since the member's plan</i>	
Middlesex town	Town	Approved, expires 2030-01-15	FMA RL 0, SRL 0; any 4	\$10,317,539.52	16; 0	

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

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

SOURCES

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

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

Inherited from Washington County, county-level (county FIPS 50023); scope: NRI exposure and expected annual loss; since-plan figures use the town's own approval date.

Local data required

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

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

Washington County, county-level

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2025-01-16 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Avalanche	\$0		under 1	\$0		\$537					building exposure is 0 in NRI
Coastal Flooding											Not Applicable in NRI for this county
Cold Wave	\$14,489,142,091	\$39,567,442	59,777	\$385	\$15,338	\$1,004,489	under 0.0001%		\$0		
Drought		\$0			\$0						agriculture exposure is 0 in NRI
Earthquake	\$25,275,543,458		59,807	\$343,022		\$60,884	0.00136%				
Hail	\$14,489,142,091	\$39,567,442	59,777	\$5,254	\$4,238	\$39,889	under 0.0001%		\$0		

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2025-01-16 <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	\$14,489,142,091	\$39,567,442	59,777	under \$1	\$50,249	\$586,578	under 0.0001%		\$0		
Hurricane	\$14,383,850,127	\$39,317,280	59,403	\$536,131	\$40,851	\$24,340	0.00373%				
Ice Storm	\$14,489,142,091		59,777	\$101,712		\$12,305	0.000702%				
Inland Flooding	\$14,417,227,305	\$4,708,714	3,818	\$17,072,085	\$81,512	\$477,764	n/a (see note)	\$325,000			NRI counts the full building value of any census block with some flood loss; this is not the value of buildings in the floodplain. Use local FIRM overlays for B2-a/B2-b. EAL as % of exposure: n/a.
Landslide	\$1,425,563,349		6,160	\$23,839		\$342,500	0.00167%				
Lightning	\$14,489,142,091		59,777	\$43,545		\$636,071	0.000301%				
Strong Wind	\$14,489,142,091	\$39,567,442	59,777	\$139,150	\$2,334	\$144,246	0.00096%	\$57,000	\$10,000		Storm Events damage since the plan includes 1 zone-level Strong Wind record (\$10,000), an event type the NRI definition of this hazard leaves out.
Tornado	\$14,489,142,091	\$39,567,442	59,777	\$30,416	\$122	\$127,612	0.00021%				
Tsunami											Not Applicable in NRI for this county
Volcanic Activity											Not Applicable in NRI for this county
Wildfire	\$7,761,152,489	\$28,327,979	32,741	\$8,414	\$3	\$788	0.000108%				
Winter Weather	\$14,489,142,091	\$39,567,442	59,777	\$130,541	\$66	\$144,853	0.000901%		\$0		

Every dollar figure in this table is for the whole county; only the since-plan date is the town's own approval date.

Totals since 2025-01-16 (Storm Events through 2026-06-30): 9 county-coded records, 9 with a damage value recorded (including \$0), \$382,000; 20 zone-level records, 20 with a damage value recorded (including \$0), \$10,000 reported for the zone; Public Assistance on counted declarations none found (0 declarations, 0 with PA).

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

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

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

SOURCES

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

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

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

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

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

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

Vermont Flood Ready Atlas and ANR river corridors for town flood and erosion locations.

ERAF Flood Hazard Summary gives E911 building counts in the SFHA per town.

Vermont Dam Inventory for dams in and upstream of the town.

VEM hazard mitigation planning resources and the 2023 Vermont State Hazard Mitigation Plan. <https://vem.vermont.gov/hm-planning-resources>

Supports B2-a: context

Inherited from Washington County, county-level (county FIPS 50023); scope: whole section.

County context

Measure	Value
Population	59,777
Building value (total, not at risk)	\$14,489,142,091
Agriculture value (total, not at risk)	\$39,567,442
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$18,629,208
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)	\$3,602,856
Social vulnerability rating	Very Low
Community resilience rating	Very High
NRI version	December 2025

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

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

Supports B2-c: repetitive loss

Washington County, county-level

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	7	Severe repetitive loss, FMA definition (44 CFR 77.2)	20
Repetitive loss, NFIP insurance definition	116	Severe repetitive loss, NFIP insurance definition	20

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

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

Repeat-flood properties: county total and NFIP communities

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	7	20	116	20	119	15	74
BARRE, CITY OF	2	4	58	4	60	0	32
BERLIN, TOWN OF	0	2	6	2	6	0	3
MARSHFIELD, VILLAGE OF	0	0	1	0	1	0	1
MIDDLESEX, TOWN OF	0	0	4	0	4	0	1
MORETOWN, TOWN OF	1	0	0	0	1	0	0
NORTHFIELD, TOWN OF	0	0	2	0	2	0	1
WARREN, TOWN OF	0	0	1	0	1	0	1
WATERBURY, VILLAGE OF (community ID not in plan data)	1	1	4	1	4	0	2
WATERBURY, TOWN OF	2	5	12	5	12	0	10
PLAINFIELD, TOWN OF	1	0	5	0	5	0	3
MONTPELIER, CITY OF	0	8	23	8	23	15	20

SOURCESFEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)**Repeat-flood properties by plan member (NFIP community)**

Member	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>	Note
Middlesex town	500114	0	0	4	0	4	0	1	

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

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

SOURCESFEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)**County repeat-flood properties by occupancy group**

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	6	4	37	4	40	1	19
2 to 4 unit residential	1	4	30	4	30	0	21
other residential	0	1	6	1	6	1	3
non-residential	0	11	43	11	43	13	31
not reported	0	0	0	0	0	0	0

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

SOURCES

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

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

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

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

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

In this county 3 properties are FMA repetitive loss but not NFIP repetitive loss, and 112 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

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

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

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Cite this: Hazard Plain (2026). Middlesex town, VT: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-28; Vermont town 5002344500). Preview: automated baseline. 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: to be added

Hazard Plain release 2026-10. As of 2026-09-28; Storm Events data through 2026-06-30. File hazard-plain_2026-10_VT_5002344500. Preview: automated baseline.