



Town of Enfield Preliminary Hazard Ranking and Results

Name: _____

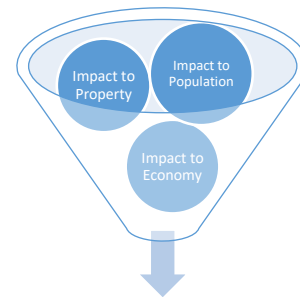
Title and Agency: _____

What is a Hazard Ranking?

A Hazard Ranking is used to understand your community’s vulnerabilities to hazards and to prioritize projects and activities for mitigation.

Hazard Ranking is determined by a number of factors including:

1. The calculated probability of a hazard occurring based on historical data
2. Impacts to people, property, and the economy based on GIS data and analysis of exposure.
3. The degree to which climate change will affect future occurrences based on best available data.
4. Adaptive Capacity is the ability your community has to respond to the hazard based on ordinances, mitigation strategies and procedures, and readiness.



What is my Hazard Ranking?

The following tables represent the calculated rankings for the hazards of concern for the County and your community. Please review the calculated rankings and indicate whether or not you want to adjust the ranking. If you are changing the ranking, please provide detail as to why you are changing the ranking.

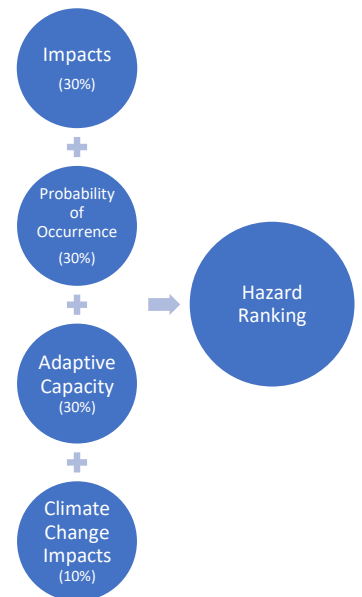




Table 1: 2017 CEPA and 2020 County Hazard Rankings

Hazards	CEPA 2017 Relative Risk Score	2020 County Hazard Ranking
Disease Outbreak	High	Medium
Drought	Medium	High
Extreme Temperature	Low	Medium
Flood	High (Flash Flood, Lake Flood, Ice Jams)	High
Harmful Algal Bloom	Not Applicable	Medium
Invasive Species	Low (Infestation)	Medium
Ground Failure*	Low (Landslide)	Low
Severe Storm	High (Tornado)	High
Severe Winter Storm	Medium	Medium
Wildfire	Medium	Medium

**As determined by the Steering Committee, Ground Failure associated with saturated soils/flooding may replace this stand-alone hazard and be included as an associated hazard under the Flood hazard.*





Table 2: Preliminary 2020 Municipal Hazard Rankings

Hazard	2020				
	Municipal				
	Preliminary 2020 Relative Risk Ranking	Adaptive Capacity (Capabilities)	Municipal Hazard Ranking	Municipal Adaptive Capacity	If adjusting the ranking, please explain why.
Disease Outbreak	Medium	Medium			
Drought	High	Medium			
Extreme Temperature	Medium	Medium			
Flood	Low	Medium			
Harmful Algal Bloom	Low	Medium			
Invasive Species	Medium	Medium			
Ground Failure	Low	Medium			
Severe Storm	High	Medium			
Severe Winter Storm	Medium	High			
Wildfire	Medium	Medium			

What goes into calculating the ranking?

The following outlines the information used to calculate the vulnerability and ranking of each hazard.

Extreme Temperature, Harmful Algal Blooms, Severe Winter Storm, Drought, and Disease Outbreak (No spatial analysis conducted).

Flood, Severe Storm, Ground Failure, and Wildfire (Spatial analysis conducted)

- Evaluate frequency of event based on past occurrences
- Determine impact based on vulnerable and impacted populations
- Estimate impact to structures and infrastructure based on nature of hazard
- Determine impact to economy based on anticipated impacts from hazard
- Assess adaptive capacity based on readiness and existing programs
- Incorporate estimated climate change impacts based on best available data



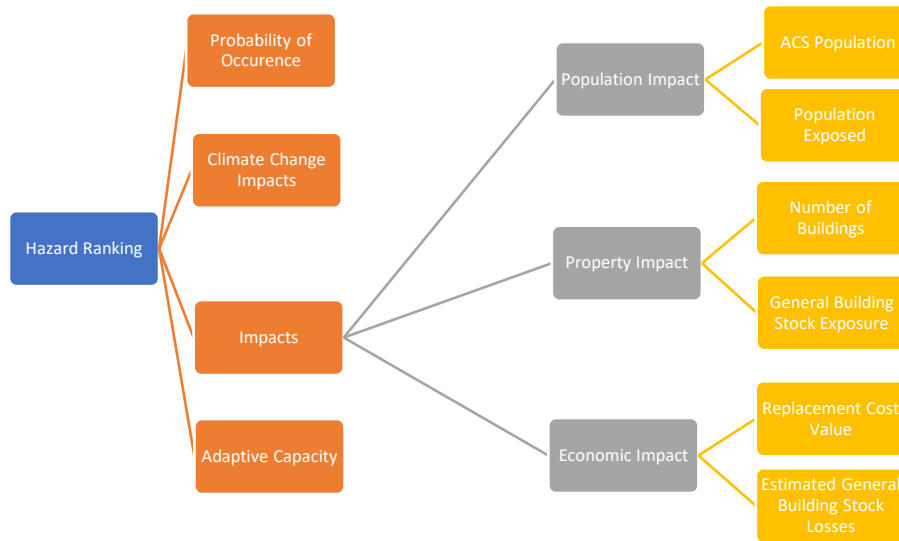


Table 3: Summary of Hazard Ranking Factor Categories

Category		Level / Category	Degree of Risk / Benchmark Value	Numeric Value	Weighted Value
Probability of Occurrence		Unlikely	A hazard event is not likely to occur or is unlikely to occur with less than a 1% annual chance probability.	0	30%
		Rare	Between 1 and 10% annual probability of a hazard event occurring.	1	
		Occasional	Between 10 and 100% annual probability of a hazard event occurring.	2	
		Frequent	100% annual probability; a hazard event may occur multiple times per year.	3	
Impact (Sum of all 3)	Population (Numeric Value x 3)	Low	14% or less of your population is exposed to a hazard with potential for measurable life safety impact, due to its extent and location.	1	30%
		Medium	15% to 29% of your population is exposed to a hazard with potential for measurable life safety impact, due to its extent and location.	2	
		High	30% or more of your population is exposed to a hazard with potential for measurable life safety impact, due to its extent and location.	3	
	Property (Numeric Value x 2)	Low	Property exposure is 14% or less of the total number of structures for your community.	1	
		Medium	Property exposure is 15% to 29% of the total number of structures for your community.	2	
		High	Property exposure is 30% or more of the total number of structures for your community.	3	
	Economy (Numeric Value x 1)	Low	Loss estimate is 9% or less of the total replacement cost for your community.	1	
		Medium	Loss estimate is 10% to 19% of the total replacement cost for your community.	2	
		High	Loss estimate is 20% or more of the total replacement cost for your community.	3	
Adaptive Capacity		Low	Weak/outdated/inconsistent plans, policies, codes/ordinances in place; no redundancies; limited to no deployable resources; limited capabilities to respond; long recovery.	3	30%
		Medium	Plans, policies, codes/ordinances in place and meet minimum requirements; mitigation strategies identified but not implemented on a widespread scale; county/jurisdiction can	2	





Category	Level / Category	Degree of Risk / Benchmark Value	Numeric Value	Weighted Value
		recover but needs outside resources; moderate county/Jurisdiction capabilities.		
	High	Plans, policies, codes/ordinances in place and exceed minimum requirements; mitigation/protective measures in place; county/jurisdiction has ability to recover quickly because resources are readily available, and capabilities are high.	1	
Climate Change	Low	No local data is available; modeling projections are uncertain on whether there is increased future risk; confidence level is low (inconclusive evidence).	1	10%
	Medium	Studies and modeling projections indicate a potential for exacerbated conditions due to climate change; confidence level is medium to high (suggestive to moderate evidence).	2	
	High	Studies and modeling projections indicate exacerbated conditions/increased future risk due to climate change; very high confidence level (strong evidence, well documented and acceptable methods).	3	

Note: A numerical value of zero is assigned if there is no impact.

**For the purposes of this exercise, "impacted" means exposed for population and property and estimated loss for economy. For non-natural hazards, although they may occur anywhere in the County, an event will not likely cause countywide impacts; therefore, impact to population was scored using an event-specific scenario.*





NFIP Statistics

Table 4: NFIP Policies, Claims and Repetitive Loss Statistics (2019 Data)

Municipality	# Repetitive Loss Properties	# Severe Repetitive Loss Properties	# Policies	# Claims (1978-2014)	Claim Amount
Caroline (T)	1	0	12	17	\$41,923.91
Cayuga Heights (V)	0	0	2	4	\$15,790.79
Danby (T)	0	0	3	0	\$0
Dryden (T)	0	0	23	9	\$93,329.29
Dryden (V)	0	0	26	18	\$109,540.13
Enfield (T)	-	-	-	-	-
Freeville (V)	1	0	7	4	\$17,760.16
Groton (T)	0	0	8	6	\$16,773.65
Groton (V)	0	0	6	14	\$620,880.83
Ithaca (C)	4	0	145	97	\$179,835.95
Ithaca (T)	0	0	37	20	\$36,215.01
Lansing (T)	8	0	34	55	\$466,075.02
Lansing (V)	0	0	7	5	\$6,588.85
Newfield (T)	0	0	9	6	\$52,254.13
Trumansburg (V)	1	0	4	2	\$810.00
Ulysses (T)	0	0	18	3	\$5,798.14
Tompkins County (Total)	16	0	341	260	\$1,663,575.86

Note:

Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA and are current as of July 31, 2020 and are summarized by Community Name. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties.

NFIP = National Flood Insurance Program

Repetitive Loss (RL) Property: A property is considered a repetitive loss property when there are two or more losses reported which were paid more than \$1,000 for each loss. The two losses must be within 10 years of each other and be at least 10 days apart. Only losses from (sic since) 1/1/1978 that are closed are considered.

Severe Repetitive Loss (SRL) Property: According to section 1361A of the National Flood Insurance Act, as amended (NFIA), 42 U.S.C. 4102a, an SRL property is defined as a residential property that is covered under an NFIP flood insurance policy and:

- Has at least four NFIP claim payments (including building and contents) over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or
- For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.
- For both of the above, at least two of the referenced claims must have occurred within any 10-year period and must be greater than 10 days apart.