

Risk Assessment

The Risk Assessment is a tool that allows us to compare the values of hazards against one another in order to prioritize what hazards are most likely to affect the county and to what extent. The Summit County Hazard Prevention Subcommittee will be tasked with the job of rating the overall risks associated with each hazard. The subcommittee was established by The Summit County Emergency Management Executive Committee on August 15, 2002. The Summit County Hazard Prevention Subcommittee will have the following representatives:

**Summit County Emergency Management Agency (facilitator)
Summit County Office of Community and Economic Development
Summit County Engineer Office
Summit County Building Department
Summit County Health Department
Township Association
Mayors Association
Summit County Soil and Water Conservancy
NEFCO (Regional Planning)
AMATS (Transportation)
Home Builders Association
Housing Network
Akron Regional Development Board
Akron Area Board of Realtors
The Ohio State University Extension
The League of Women Voters Akron Area
EPA**

The subcommittee will assess the hazard risk of Summit County through eight risk assessment factors. The factors used in the assessment tool include, Historical Occurrence, Likelihood of Occurrence, Size of the Incident, Indirect Damage, Warning Time, Population Impact, Fiscal Effects, and Response Time. The background research for the Risk Assessment involved the collection of historical, demographic, and geographical data. Each factor will be assigned a numerical risk value based on a scale of even numbers ranging between 2 and 8. For each hazard category, the sum totals for all factor values are then added up to obtain the hazards overall risk to the county.

Summit County Hazard Vulnerability Assessment Criteria

1.) Historical Occurrence

This estimate is based on the historical evidence contained in the Historic Hazard Profile.

<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
Few	Marginal	Significant	Many

Few: Between 0 and 10 occurrences in the last 50 years.

Marginal: Between 11 and 20 occurrences in the last 50 years.

Significant: Between 21 and 30 occurrences in the last 50 years.

Many: 31 or more occurrences in the last 50 years.

2.) Likelihood of Occurrence

Estimate the likelihood of each type of hazard occurring in Summit County. This estimate is based on the expertise of the subcommittee and their knowledge of the county and is not tied to historic data.

Assessing the potential threat from a hazard to a specific location could pose planning challenges. Although helpful in an objective analysis, historic data may have limitations. The potential for a threat may exist, but the lack of occurrences yields little or no data, making an analysis difficult. Historic data may not account for changes in land use, which may increase or decrease the vulnerability of a geographic area.

<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
Unlikely	Possible	Likely	Highly Likely

Unlikely: It is unlikely to have an incident within the next ten years.

Possible: It is possible to have an incident within the next ten years.

Likely: It is likely to have an incident within the next ten years.

Highly Likely: It is highly likely to have an incident in the next ten years.

3.) Size of Incident

Community Disaster – A large-scale emergency where a single community will operate under existing mutual aid or automatic response system.

County Disaster – When the threat to lives, property, and the environment depletes the resources of a community beyond ordinary practice. May also include mass casualty incidents or those involving two or more political sub divisions. Summit County has declared a disaster.

State Declared Disaster – A disaster where resources from outside Summit County are necessary. State declares a disaster in Summit County.

Federal Declared Disaster - A disaster where resources from the federal government are needed. Federal government declares a disaster in Summit County.

<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
Community	County	State	Federal

4.) Indirect Damage

This effect has also been called a secondary event. For example, an earthquake could cause a dam to fail, which in turn could cause flooding to homes and businesses. In this example, the earthquake (the original hazard) caused another hazard to occur (Flooding from the dam failure).

<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
No Possibility	Some Possibility	Much Possibility	High Possibility

No Possibility: It is determined that this hazard could not initiate another hazard throughout the course of the event.

Some Possibility: There is a least a chance that one or two hazards may be caused as the result of the original event.

Much Possibility: There is a likely chance that 3 or 4 hazards may be caused as the result of the original event.

High Possibility: There is a strong chance that more than 4 hazards can be potentially caused as a result of the original event.

5.) Warning Time

Warning Time has an effect on both the Population and Fiscal Impacts of a hazard. The lead time required to protect lives and property from a hazard varies greatly with each particular event. For example, drought may develop so slowly that there is time to dig a well, but flash floods can occur with no warning at all.

<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
Long (Over 60 Minutes)	Medium (31-60 Minutes)	Short (15-30 Minutes)	Short-None (Under 15)

6.) Population Impact

Population Impact refers to the number of people affected via deaths and injuries that can be expected if a particular event occurs.

<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
No Casualties	Low (1-11)	Medium (12-24)	High (25+)

7.) Fiscal Effects

Refers to the monetary losses suffered in an event. This type of vulnerability can vary greatly between communities based on economic, geographic, demographic, and legal considerations. For example: subdivisions that rigorously enforce floodplain regulations are likely to suffer far fewer fiscal effects than those permitting home and business construction in floodplains.

<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>
Minimum (\$0-\$10,000)	Low (\$10,000-\$50,000)	Medium (\$50,001-\$100,000)	High (Over \$100,000)

Summit County Hazard Prevention Subcommittee

Hazard Analysis

Name	Agency	Flood	Tornado	Earthquake	Drought	Disease	Landslide	Winter	Fire	Haz-Mat	Utilities	Transportation	Civil	Terrorism	Nuclear
Torio	Home Builders	44	54	52	52	50	46	50	48	52	54	52	40	46	52
White	Engineer	42	54	28	30	44	46	44	30	42	28	36	30	44	52
Palagyi	AMATS	40	50	42	32	40	28	34	34	44	32	36	38	58	54
DeChant	Summit Development	48	48	24	38	38	38	36	30	44	36	38	38	50	42
Tuttle	Summit County Health	36	50	42	38	42	24	34	40	42	26	36	22	42	46
Hadley	NEFCO	46	48	48	26	38	42	44	28	38	36	34	32	44	50
Miller	EPA	38	46	42	24	36	26	34	42	40	24	36	42	42	46
Colopy	Housing Network	38	36	44	52	0	0	52	2	56	42	34	32	0	0
Wyatt	OSU Extension	36	50	42	34	32	36	36	28	44	32	32	26	46	46
Tiller	Summit Building	26	44	42	25	50	24	38	32	36	34	28	24	54	50
Keck	LWVAA	41	47	40	36	33	37	39	36	42	36	35	35	43	43
Ritter	Soil and Water	36	52	34	32	22	28	40	32	40	38	36	22	44	52
Bowman	Greater Akron Chamber	34	46	36	38	34	32	40	28	40	36	34	34	48	48

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