

Table 6-1. Probability of Natural Hazard Event Occurrence for Various Periods of Time

Length of Period (Years)	Frequency – Recurrence Interval					
	10-Year	25-Year	50-Year	100-Year	500-Year	700-Year
1	10%	4%	2%	1%	0.2%	0.1%
10	65%	34%	18%	10%	2%	1%
20	88%	56%	33%	18%	4%	3%
25	93%	64%	40%	22%	5%	4%
30	96%	71%	45%	26%	6%	4%
50	99+%	87%	64%	39%	10%	7%
70	99.94+%	94%	76%	51%	13%	10%
100	99.99+%	98%	87%	63%	18%	13%

The percentages shown represent the probabilities of one or more occurrences of an event of a given magnitude or larger within the specified period. The formula for determining these probabilities is $P_n = 1 - (1 - P_a)^n$, where P_a = the annual probability and n = the length of the period.

The bold blue text in the table reflects the numbers used in the example in this section.