



CITY OF CALGARY
RECEIVED
 IN COUNCIL CHAMBER
FEB 08 2023
 ITEM: 7.1 EM2023-0045
Distribution
 CITY CLERK'S DEPARTMENT

Risk Level is determined utilizing the Overall Consequence Score and Likelihood Level.



Critical Infrastructure Failure

A description of the hazard and threat being assessed.

RISK LEVEL
High

A failure of the systems, facilities, utilities, services, etc. that are essential to the basic functioning and well-being of society. They are frequently caused by a trigger event (ex. severe weather) but can occur due to human or technological issues.

Risk Trend is a risk modifier built into the risk assessment process in order to account for the dynamic nature of risk. Increasing, stable or decreasing.

CONSEQUENCE LIKELIHOOD RISK TREND HIGH-RISK SEASONS



JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC

Overall Consequence Score is the average of the impact scores for the five dimensions under assessment - People, Economy, Environment, Social Fabric, and City Services - using the probable worst-case scenario for the hazard or threat occurring in high-risk areas, during the high-risk season, and with all current controls in place.

- RISK ANALYSIS**
- Critical Infrastructure failures occur frequently and are likeliest during the high-risk seasons of other hazards
 - They are commonly a secondary impact of those primary trigger events but can also occur independently
 - Critical infrastructure interdependency elevates the risk of cascading knock-on effects to the health, safety, and economic well-being of impacted communities
 - Primary impacts include the loss of heat, power, gas, communications, water, and other lifeline utilities
 - A critical infrastructure failure can impact any area of Calgary but the most exposed locations are those with a high-density of people, livelihoods, critical services,



The highest risk seasons for the hazard or threat are highlighted in red.

Likelihood reflects the probability that both the emergency event and the estimated consequences (e.g. deaths, injuries, etc.) occur.

Key findings from the risk analysis, including a description of the measures taken to prepare and any risk trends influencing the risk.

Impact score for each of the five assessed dimensions. Impact severity increases from the centre ring to the outside ring. Scores are also included for reference.