

Climate Risk Profile Chinatown

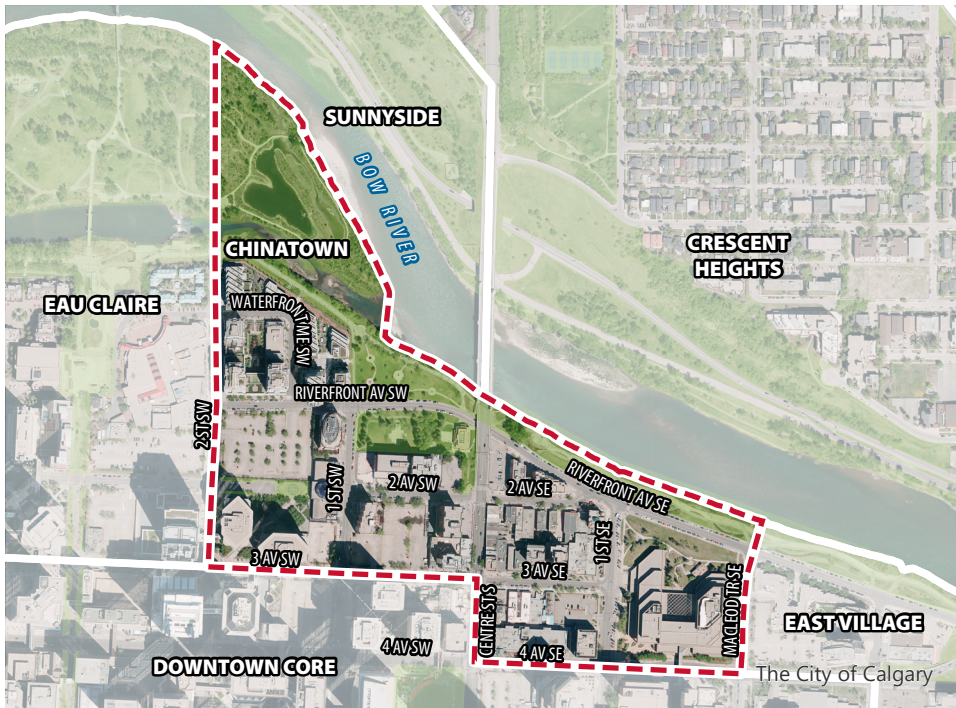
Chinatown, like all communities in Calgary, will experience impacts of climate change. The City of Calgary is creating climate risk profiles to provide a detailed understanding of climate change risks and opportunities to create climate resilience in each community in Calgary.

Climate risk is determined by three factors:

- **Climate change hazards:** Events made more intense and/or frequent by climate change that may cause loss of life, injury, health impacts, damage to property, livelihoods, services, and the environment
- **Exposure:** The presence of something of human value in a place that could be impacted by a climate change hazard
- **Vulnerability:** The characteristics of a place and people that make hazards more impactful

A risk score is assigned to each community, which reflects the relative risk of climate change in that community compared to others in Calgary.

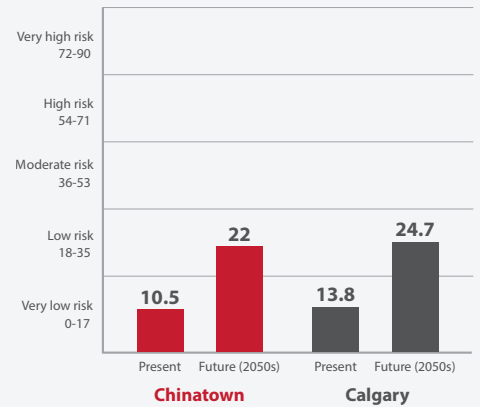
Risk is assessed for both the present and 2050. Risk in Chinatown is below the city average but is expected to rise significantly by 2050.



Legend

--- Chinatown Area Boundary

Climate Risk Score



Top climate hazards



River flooding

Floods will become more frequent due to climate change



Extreme heat

Climate change will result in more frequent, longer, and intense heatwaves



High intensity precipitation

Climate change will result in more intense rain and snow events that can cause floods

Sources of Vulnerability



Social Environment

- There are many people over 65 and under 5 in Chinatown, who may have challenges preparing and responding to disasters
- There are many people in Chinatown who do not speak English as a first language, who may have challenges getting information about climate hazards and how to respond
- Many people in Chinatown live alone



Built Environment

- There are many older dwellings and dwellings in poor condition in Chinatown
- Over half the surfaces in Chinatown are paved, which can worsen urban heat effects and floods
- Stormwater pipes and drains in Chinatown are older and therefore can handle less water and are more likely to be damaged



Natural Environment

- Chinatown has few natural areas and trees
- Park and natural spaces in Chinatown and along the Bow River are in poor condition and damaged by human activity, climate change, and recent floods

What are we doing about it?

Climate resilience direction within the Chinatown Area Redevelopment Plan related to new development, major renovation, and redevelopment projects should:

- Include climate resilient features like cooling systems, green roofs, and permeable native landscaping
- Exceed minimum landscaping requirements for trees and soft surfaced areas to reduce extreme heat and stormwater flooding;
- Not destroy healthy trees on public or private lands
- Incorporate back-up renewable power generation
- Include affordable housing units

