# BC Climate Resilience Summit 2025 Vancouver, Robson Square March 3<sup>rg</sup>/4<sup>th</sup>

# Capital Regional District



### Climate Impacts in the Capital Region

Hotter summer temperatures, with more extreme heat days and heatwaves

Less rain and more dry days in the summer months

Warmer winter temperatures, less frequent frost, and less snowfall

) More precipitation falling in fall, winter and spring

) Longer-lasting and more frequent extreme rainfall events

#### **Capital Regional District** Climate Projections (2024)



		High Emissions Scenario			
		1990s	2041-2070 ("2050s")		
	Impact Driver	Median	Low	Median	High
	Hottest Summer Day	28.6°C	30.9°C	31.4°C	33.8°C
EXTREMI	Number of >25°C days per year	10	24	32	57
*(	Number of >16°C nights per year	0	5	8	29
	Longest annual heatwave (in days)	2-3	3	4	9
	Number of heat wave days	0-1	4	7	21



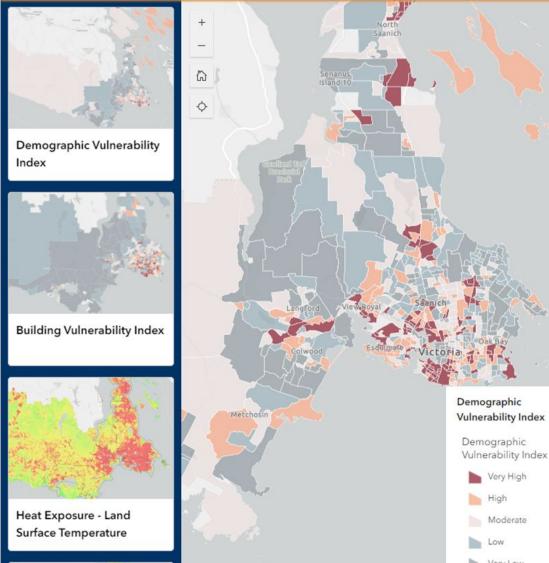
# Capital Region Extreme Heat Information Portal

Access Regional Heat Map

Learn More



#### **CCD** Regional Heat Map



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#### About

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The Demographic Vulnerability Index allows

planners and residents to explore and understand

Capital Region

Introduction What is Extreme Heat

Making a difference...together

*(i)* 

What is a Heat Dome Extreme Heat Contributions How Often Heat exposure

CRD

Sur

Making a differ

#### What is extreme heat?

The BC Centre for Disease Control defines extreme heat as summertime temperatures that are hotter and/or more humid than average for a particular location. For the capital region, a heat warning is issued when two or more consecutive days of daytime maximum temperatures are expected to reach 29°C or warmer, and nighttime minimum temperatures are not expected to fall below 16°C.<sup>iv</sup>

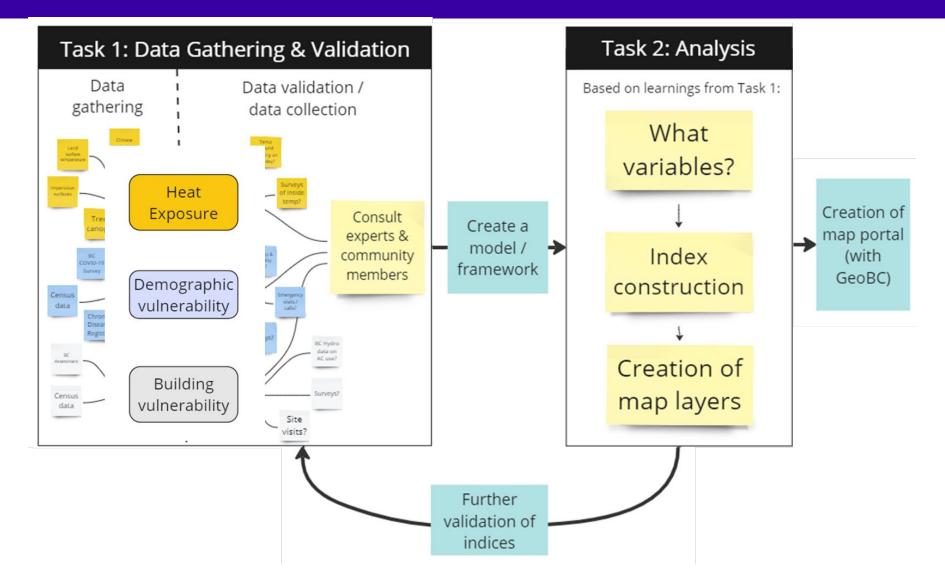
#### What is a heat dome?

A heat dome is an extreme heat event occurring when a high-pressure system traps heat near the surface of the earth Heat Dome High-pressure atmospheric conditions combine to act as a dome on the atmosphere.

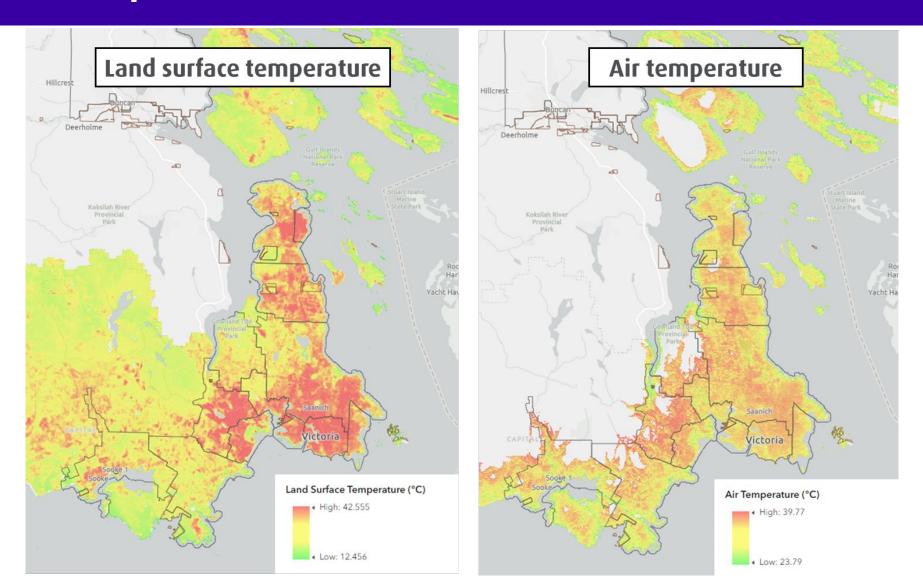
Warm air rises in a process called convection, but is subsequently pushed back down towards the earth due to the cold, dense air flowing above in the atmostphere.

 Cold air belts from the poles trap the warm air and push it downward, resulting in heat waves.

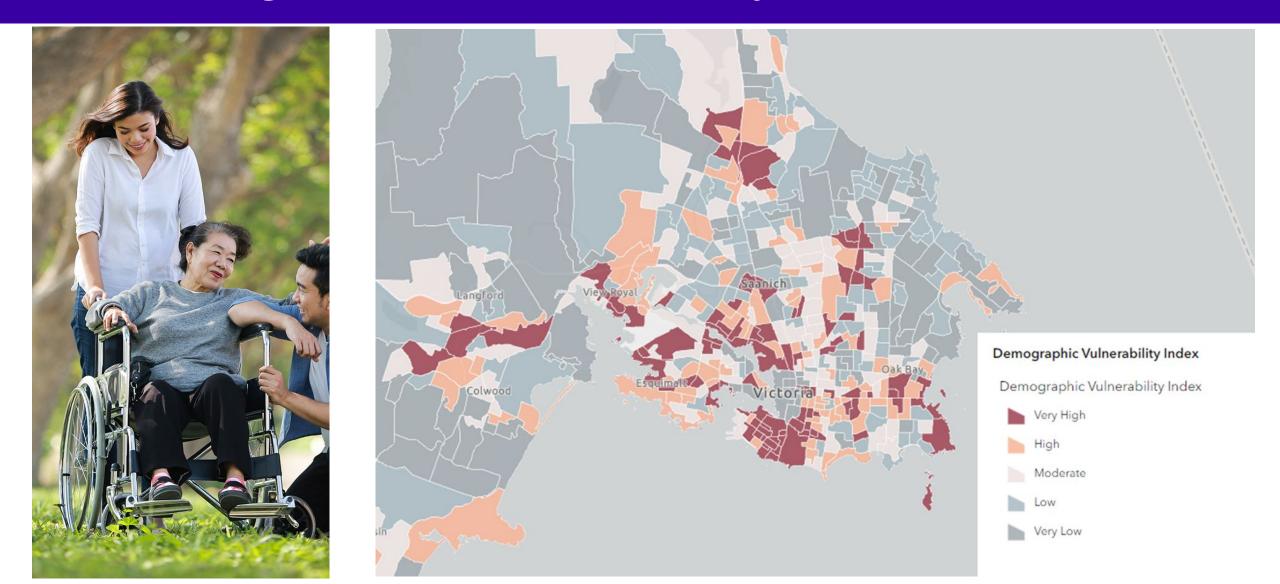
# **Project Scoping**



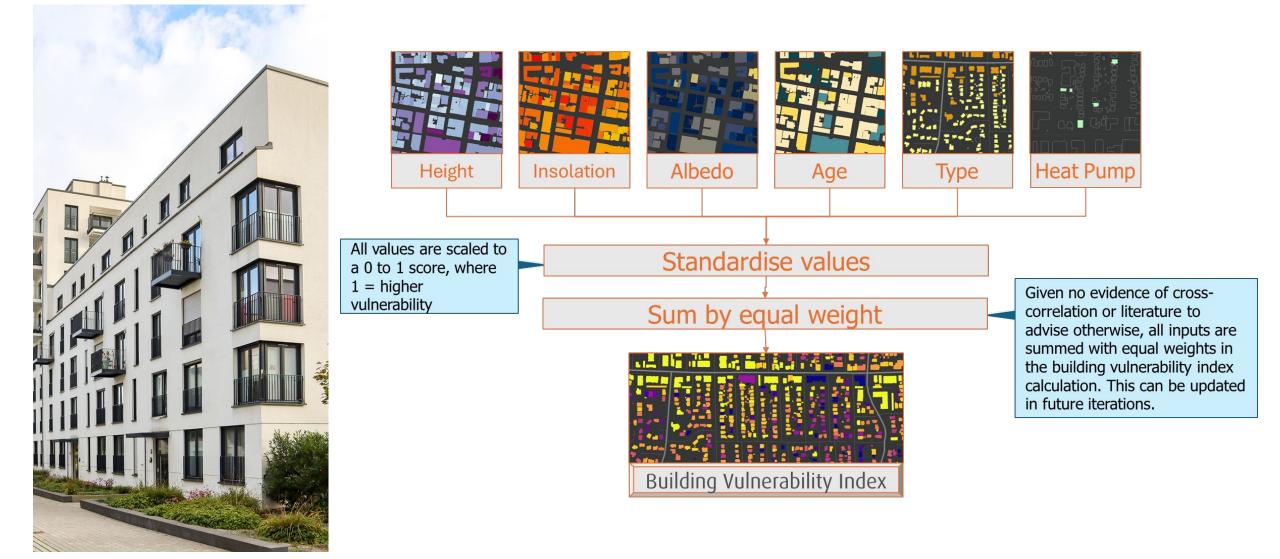
### Heat Exposure



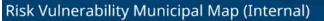
# Demographic Vulnerability

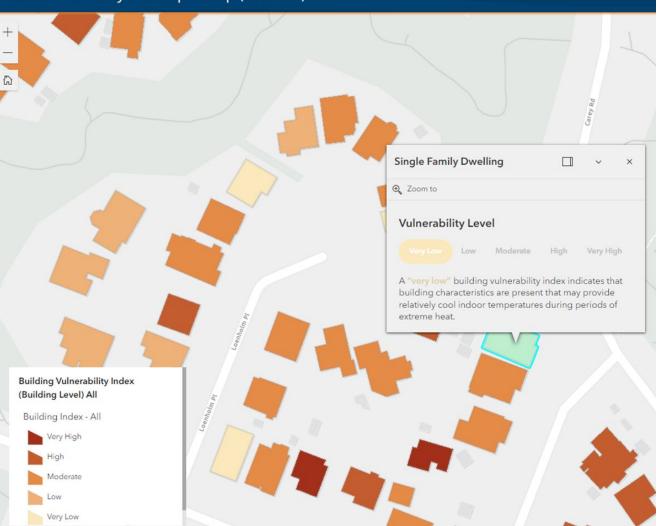


### **Building Vulnerability**



### **Building Vulnerability**





#### Portal shows capital region areas most vulnerable to extreme heat

Heat-exposure maps show urban heat islands - high concentrations of people, roads and buildings that make an area hotter- canopy cover of trees and elevation levels where ocean breezes can have a cooling effect

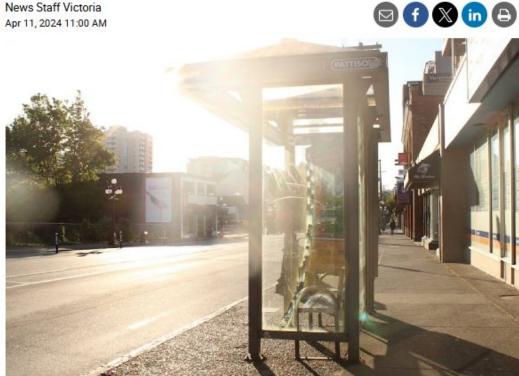


arron Kloster

#### CRD portal integrates heat disaster risk reduction, climate planning

A 2021 heat wave claimed more than 700 lives in B.C., 24 of them in the Capital Region

News Staff Victoria Apr 11, 2024 11:00 AM



The Capital Regional District hosts an online extreme heat information portal hosts information and maps to help residents and municipal planners in the 13 communities it serves. (Black Press Media file photo)

#### Greater Victoria projected to face worse heat waves, more extreme rain

Report produced for Capital Region maps out local temperature, precipitation by 2050 and beyond

Jake Romphf Mar 26, 2024 5:30 AM





The Capital Region will see more extreme rain events during the colder months as drought periods lengthen during increasingly hot summers, according to a report outlining climate projections for the region. Pictured is waves washing over Dallas Road and storm watchers in Victoria on Jan. 9, 2024. (Jake Romphf/News Staff)

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