MITIGATING URBAN HEAT ISLANDS

The Intersection between Built Form, Policy, & the Urban Heat Island Effect in the City of Kelowna



THE ISSUE



What is the Urban Heat Island Effect?

Urbanization has changed land use patterns worldwide, resulting in urban temperatures being 1°C to 3°C warmer than surrounding regions. This is known as the Urban Heat Island effect.

ABOUT THE PROJECT

The City of Kelowna's Climate Vulnerability and Risk Assessment identified extreme heat as one of the most significant climate hazards to the area, recognizing the built environment can exacerbate heat in Urban Centres due to the Urban Heat Island (UHI) effect. This project carefully examined the intersection between built form, policy, and UHIs, and set out how to reduce the UHI effect through planning policy and streetscape design recommendations.

PROJECT OBJECTIVES



Understand Built Forms Effect on UHI



Cost-Benefit Analysis of UHI Policies



Review Practices for Reducing UHIs



UHI Policy & Streetscape Recommendations

POLICY ACTIONS



REFLECTIVE PAVEMENTS







