

COUNCIL REPORT

Report Date: February 11, 2025

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RTS No.: 17809
VanRIMS No.: 08-2000-20
Meeting Date: March 12, 2025
Submit comments to Council

TO: Standing Committee on City Finance and Services

FROM: General Manager of Planning, Urban Design and Sustainability

SUBJECT: Disaster Resilience & Innovation Funding Program Grant Application

Recommendations

A. THAT Council direct staff to submit a funding application for up to \$215,000 for the "Reducing Extreme Heat Risk in Existing Multifamily Buildings Project" through the Provincial Disaster Resilience & Innovation Funding (DRIF) program.

B. THAT Council endorses the Project scope of work as presented.

Purpose and Executive Summary

The purpose of this report is to seek Council's approval to submit a funding application for \$215,000 to the Province's Disaster Resilience & Innovation Funding (DRIF) Program for the "Reducing Extreme Heat Risk in Existing Multifamily Buildings" Project. If the application is successful, the DRIF funding will be used to identify where in Vancouver residents living in multifamily buildings are most at risk from extreme heat and how the City and other partners can reduce this risk. As part of the DRIF process, the Province requires a Council resolution confirming Council's support for the Project and proceeding with the funding application.

Council Authority/Previous Decisions

On March 13, 2024, Council approved the <u>Climate Change Adaptation Strategy</u> which incorporates updated climate projections, objectives, and a suite of actions focused on the main climate-related hazards facing Vancouver, including extreme heat.

On March 13, 2024, Council received a summary of the <u>Hazard, Risk and Vulnerability Analysis</u> which is a high-level study of the hazards that may impact Vancouver and their potential consequences to people, property, environment, economy and critical infrastructure. Extreme heat is one of the two highest risk hazards for Vancouver.

On June 11, 2024, Council approved a <u>request</u> to the Province to amend the Vancouver Charter to enable Council to enact by-laws requiring buildings to maintain a maximum indoor air temperature, in order to improve safety of building residents during heat events.

On November 27, 2024, Council passed a motion to call upon the Province to adopt measures to ensure climate-resilient, thermally safe housing for residents across the City, including advocating for a 'Right to Cool' in the *Strata Property Act* and additional incentives to support residents in multifamily residential buildings.

City Manager's Comments

The City Manager concurs with the foregoing recommendations.

Context and Background

The Provincial Disaster Resilience & Innovation Funding (DRIF) program supports First Nations and local governments to improve resilience to disasters and hazards. The City is applying for funding under the DRIF funding stream for non-structural risk reduction projects that support long-term disaster risk reduction and climate adaptation planning. The DRIF Program has a two-stage application process. The City's application for the "Reducing Extreme Heat Risk in Multifamily Buildings" project ('the Project') has passed the initial stage and the City has been invited to submit a full application. The Province expects to confirm successful applications by March 31, 2025. As part of the application process, a Council resolution confirming Council's support for the Project and for proceeding with a funding application is required.

Discussion

The City's 2024-25 Climate Change Adaptation Strategy (CCAS) aims to reduce Vancouver's risk from climate impacts while protecting people, ecosystems, infrastructure, and services from changes, including more frequent and longer extreme heat events. Complementary to the CCAS, the City's 2024 Hazard, Risk and Vulnerability Analysis (HRVA) outlines the impact of various hazards on people, the environment, economy, and infrastructure. The HRVA identified extreme heat as one of two highest risk hazards to Vancouver. Key findings from both the CCAS and the HRVA confirmed that 1) there are disproportionate impacts and inequities in the experience of extreme heat, and 2) the work to retrofit existing buildings is complex, intersecting with affordability and other key urban challenges.

Climate projections show that compared to the 1990's, Vancouver can expect three times as many days over 25°C (42 days annually) and nine times as many days over 30°C (9 days annually) by the 2050s, and more frequent and longer heatwaves which increase overall extreme heat risks for residents.¹

Extreme heat and human health

The 2021 heat dome event was a period with record-breaking temperatures that resulted in 619 heat-related deaths across BC, with 117 deaths occurring in Vancouver. Of these deaths, 98% occurred indoors, with 40% occurring in private homes in multifamily buildings, and most decedents were in homes without adequate cooling systems². This was BC's deadliest environmental disaster to date and highlighted the dangers of prolonged exposure to hot indoor environments to health and well-being. Recent research confirms that exposure to higher temperatures creates stress on the human body that accumulates and leads to heat-related

¹ Curry, CL; Sobie, SR; Climate Projections for the City of Vancouver, Highlights Report, Pacific Climate Impacts Consortium, University of Victoria, Victoria, BC., 2023, link

² BC Coroners Service; Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021; June 2022; link

illnesses and mortality, especially for older adults (aged 60+), people with chronic disease, people experiencing mental illness, schizophrenia, depression, anxiety, substance use disorders, people with limited mobility, people who are pregnant, infants and young children.

"Reducing Extreme Heat Risk in Multifamily Buildings" Project

Based on the above, staff have developed a project that includes:

- Create a mapping tool that will identify which multifamily buildings in Vancouver are more exposed to high temperatures and where residents who are most vulnerable to extreme heat live.
- Using the mapping tool, identify four to six multifamily building types that experts will
 evaluate to confirm the causes of overheating and retrofit barriers.
- Develop solutions to make multifamily buildings safer in future extreme heat events. The solutions will include both mechanical and passive cooling approaches.
- Identify options to implement those solutions.

The DRIF funding will support all consulting costs required to undertake this Project. The outputs of the mapping tool and consultant work, in collaboration with the interest holders, including residents, building owners, and maintenance experts, will be used to create a five-year work plan with actions the City and others can take to reduce extreme heat risk for Vancouver residents who are most vulnerable to extreme heat in existing multifamily buildings. This work plan will identify effective risk reduction projects, policy, regulation, advocacy and/or incentive programs that staff will bring to Council for consideration in the future.

The Project will include work to evaluate implementation opportunities and challenges of a maximum indoor air temperature by-law in the City's Standards of Maintenance By-law, as considered by Council on June 11, 2024 as part of the "Improving the Effectiveness of Standards of Maintenance (SOM) By-law" report. This work also supports Council's November 27, 2024 motion "Advocating for Climate-Resilient Housing Standards in Response to Extreme Heat Events" as it can offer guidance on any future Provincial incentives for heat pumps or passive cooling measures to support those who are most vulnerable to extreme heat. Lastly, this work will support neighbourhood-scale extreme heat resilience work and align with the recommendations of the 2024 HRVA to reduce the extreme heat risk.

Financial Implications

The DRIF program covers 100% of eligible costs up to the approved project maximum of \$215,000. If this application is successful, the grant will be used to procure external consults to create the mapping tool and to complete technical studies to evaluate risk reduction options.

Legal Implications

If the funding application is approved, the City will be invited to enter into a Shared Cost Agreement with the Province that outlines the terms and conditions associated with the funding.

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