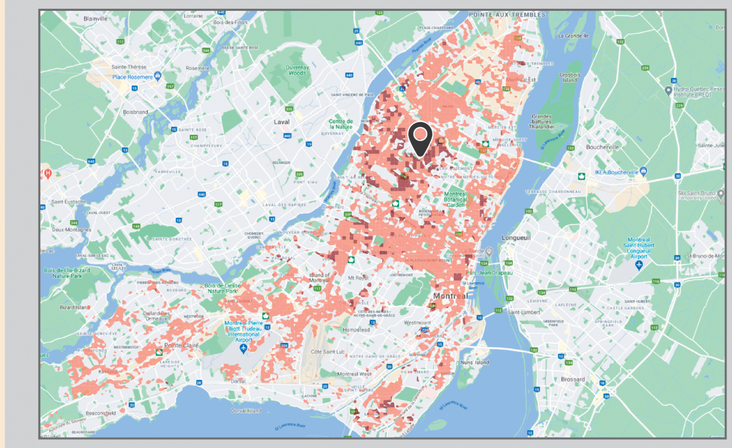
Collective Cooldown

Heat island awareness installation

Installations would be placed in high traffic public spaces.



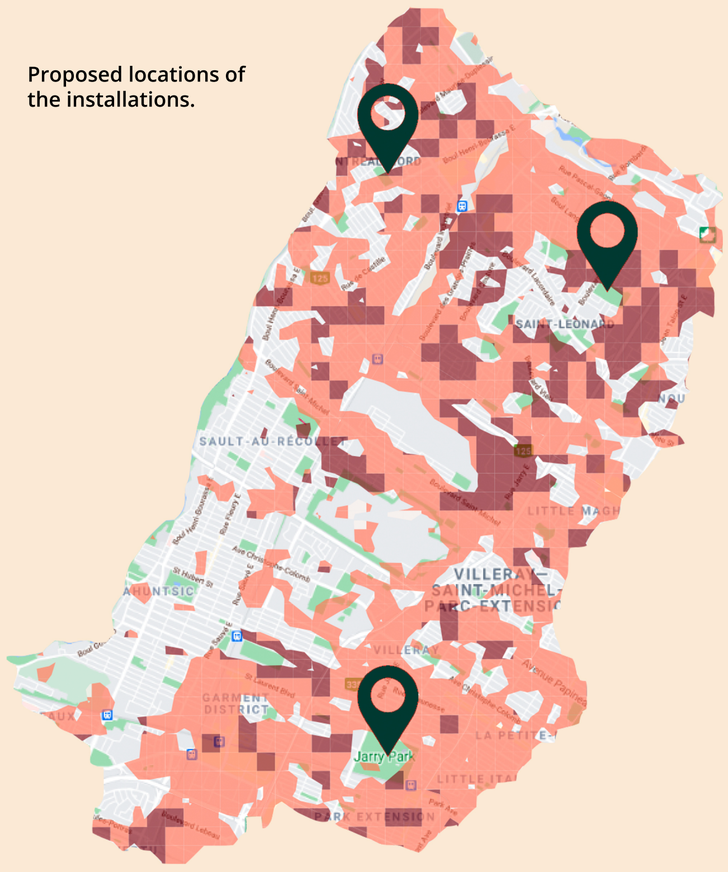
Closeup of the panel. An interactive map and general information bring awareness of urban heat islands to the user.

Panel information sourced from "Urban Heat Island Mitigation Strategies" by the Institut National de Santé Publique du Québec.

What is it?

Collective Cooldown is an interactive installation that encourages Montreal residents living in areas susceptible to heat waves to help combat urban heat islands using open data collected by the city. The installation uses heat map data to bring awareness to residents who may not know they are living in an urban heat island, proposes realistic and accessible community strategies for mitigating this issue, and offers a visualization of the different temperatures of different neighborhoods within the same city.

When a location on the interactive map is selected, the thermometer displays the temperature difference between this location and the current location of the user.



Proposed locations of the installations.

Refroidissement Collectif

Installation de sensibilisation aux îlots de chaleur

How does it work?

During the summer, the installation is placed in three outdoor public spaces chosen using the city's open data on areas susceptible to heat waves. The spaces, largely in the north-eastern sector of the city, are high-traffic areas in the epicentres of Montreal's heat islands:

- Parc Delorme, H1P 1N5
- Parc Jarry, H2R 2W1
- Parc Saint-Laurent, H1G 4Y8

The installation is composed of an educational panel with interactive elements, and a thermometer displaying the temperature of the selected area.

The panel offers some general information on heat islands and a localized map that allows users to visualize their neighborhood's susceptibility using the city's data. The installation raises awareness on the fact that there are different temperatures within the same city, and that some neighbourhoods are more affected by heat islands than others.

It also includes three possible actions residents can take to help cool down their neighborhood.

The LED thermometer and interactive buttons are powered using solar energy from a panel above the installation. This panel also provides shade to the user. Excess power generated by this panel will be used to power the installation at night as well as to charge a user's mobile device using a socket on the side of the installation, encouraging citizens to approach and spend time reading the information.

What is new and distinctive about this project?

This installation uses the city's data to encourage residents to be part of the solution by offering concrete community actions to mitigate the issue of heat islands. The eye-catching and interactive nature of this project, as well as its placement in heavily trafficked public spaces, makes it a highly accessible solution for democratizing the city's data. The simplicity of the interactive panel also makes it family friendly, allowing children to interact with the open data and ask questions about their neighborhood and environment.

Outcomes:

In addition to creating increased community awareness of heat islands, this project also empowers citizens to be a key part of positive changes in their neighborhoods, and demonstrates the potential of collective action. The highly visible installation also creates a perceived collaboration between the city of Montreal and its citizens in tackling environmental issues.

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