

URBAN HEAT READY

COMMUNITY SURVEY ENGAGEMENT REPORT

OCTOBER 2020



Background

Surrey is Getting Hotter

Climate change projections for Metro Vancouver suggest that Surrey will experience hotter and drier summers in the years to come. Urban areas like Surrey City Centre tend to have fewer trees, shrubs and green spaces for cooling and building materials used absorb and trap heat, making urban areas hotter than surrounding rural areas. This temperature difference between urban and rural areas is called the Urban Heat Island (UHI) effect.

Increase in heat-related illness and death, energy consumption, and greenhouse gas emissions are just a few examples of adverse impacts of urban heat. Without further action and innovative solutions, the current and future impacts of urban heat on resident health and wellbeing, real estate development, grey and green infrastructure could be substantial.

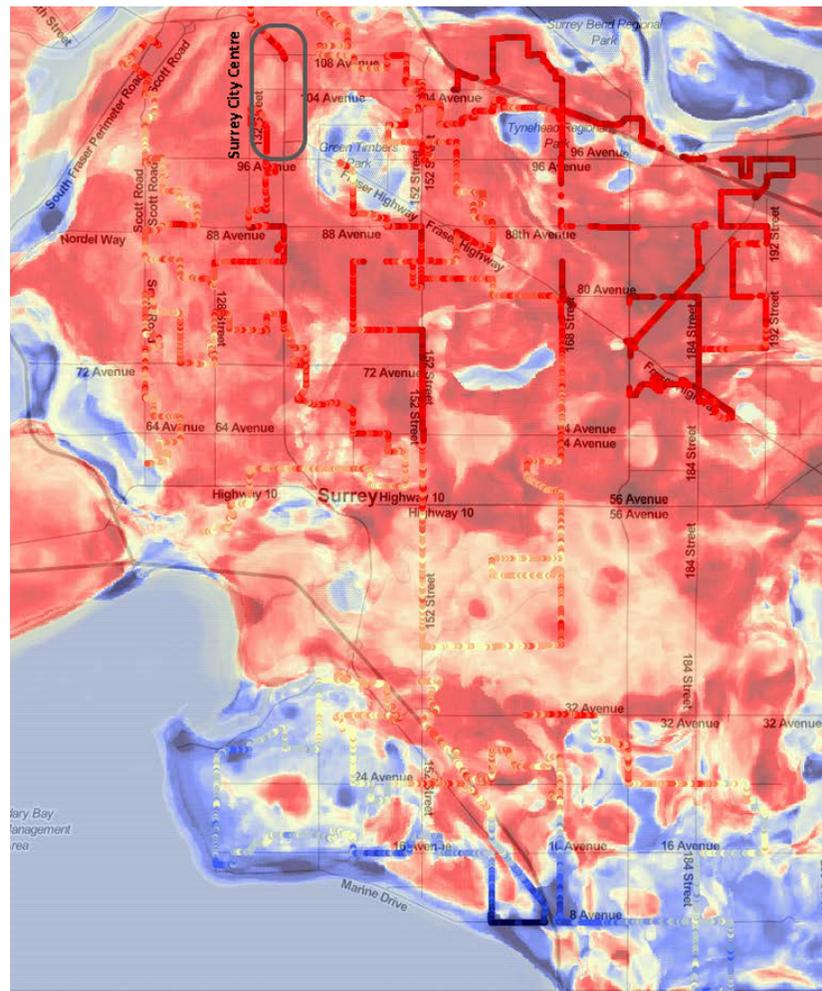
Urban Heat Ready

Urban Heat Ready is a two-year project funded by the Real Estate Foundation of BC that brings together residents, community partners, development professionals and City staff to collaborate and co-create solutions to minimize urban heat impacts in Surrey City Centre.

Why City Centre?

Surrey City Centre has been selected as the project's focus neighbourhood as it is:

- One of the hottest neighbourhoods in Surrey as identified in a 2017 summer heat mapping campaign
- Home to many of Surrey's most at-risk populations
- Rapidly growing and densifying

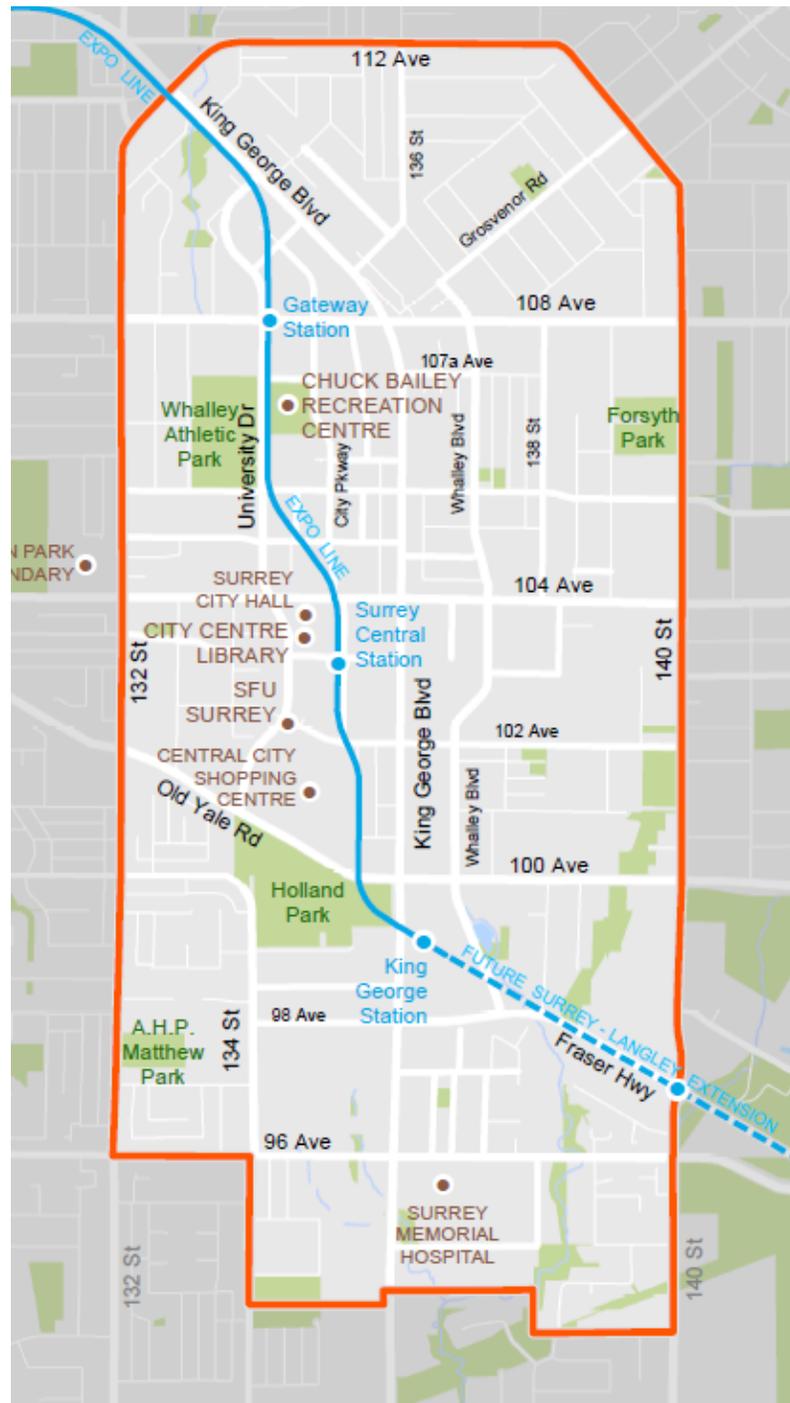


Background

Community Survey

As part of the project's community engagement campaign, we invited Surrey residents to participate in a survey. The survey was promoted on social media, sent to CitySpeaks panel members living in City Centre and through various City eNews publications, and through delivery of postcards to over 16,000 residents living in City Centre. The purpose of the survey was to better understand how residents experience urban heat in City Centre and what could help residents stay cool in their home and neighbourhood during high summer temperatures. The input allows us to better understand community cooling needs and existing cooling solutions and best practices in the community, generate ideas on how to develop and urbanize with heat in mind, and build the foundations towards collaborating with community members to co-create lasting solutions to urban heat in Surrey.

The survey was live from August 25th, 2020 to October 16th, 2020 and received a total of 967 responses.



Background

Survey Limitations

The survey was distributed broadly to capture feedback from all Surrey residents. Results therefore do not exclusively reflect City Centre resident voices.

The survey was administered during the COVID-19 pandemic. While residents were prompted to answer the survey based on their summer experiences before the pandemic, it is possible that residents shared their feedback while considering the realities of COVID-19 restrictions (e.g. facility closure, physical distancing, etc.).

The survey was administered online and not in person due to COVID-19 limitations. Therefore, some residents may not have been aware of the survey.

Finally, the survey does not sufficiently capture feedback from marginalized communities in Surrey (e.g. homeless population).

Key Takeaways

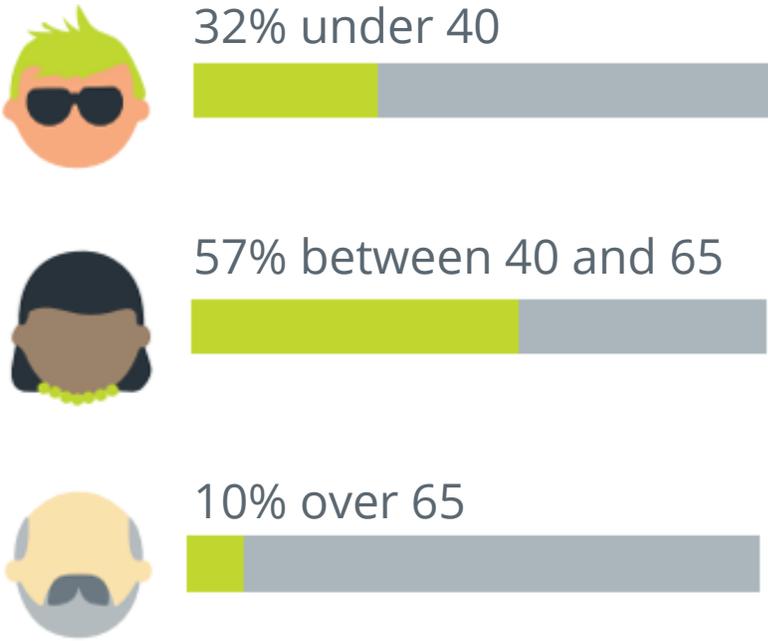
- Residents are becoming increasingly aware and concerned with high summer temperatures in City Centre.
- Homes in Surrey may not be adequately designed to withstand high summer temperatures, resulting in discomfort for residents and impacting their quality of life.
- Residents prefer to stay home than go outside in the summer to stay cool.
- Majority residents do not have access to air conditioning units in their home. (This matters because air conditioning units are an effective heat adaptation strategy, air conditioning unit prevalence is connected to lower heat-related mortality risk.)
- Residents with access to air conditioning units are likely to use it as a way to cool down in the summer.
- Residents with no access to air conditioning units rely heavily on fans and shading to stay cool in their home as well as opening windows, cold showers and drinks.
- Outside of their home, residents are most likely to go to parks, green spaces and malls or shopping centres to cool down when it is very hot outside.
- Majority residents are unable to stay comfortable in City Centre on a hot summer day given existing tools and amenities available to them.
- Opportunity for the City to address urban heat in City Centre to increase citizens' satisfaction with the services we deliver.
- Residents would like to see more trees, parks and green spaces, "depaving", shaded benches and spaces, misters, fountains and other features in City Centre.
- For buildings in City Centre, residents would like to see more green or cool roofs, cooling or green walls, and other cooling building design and features.

Participant Summary

There were approximately 1000 survey responses.



Age of Participants



Relationship to City Centre



42% live in City Centre

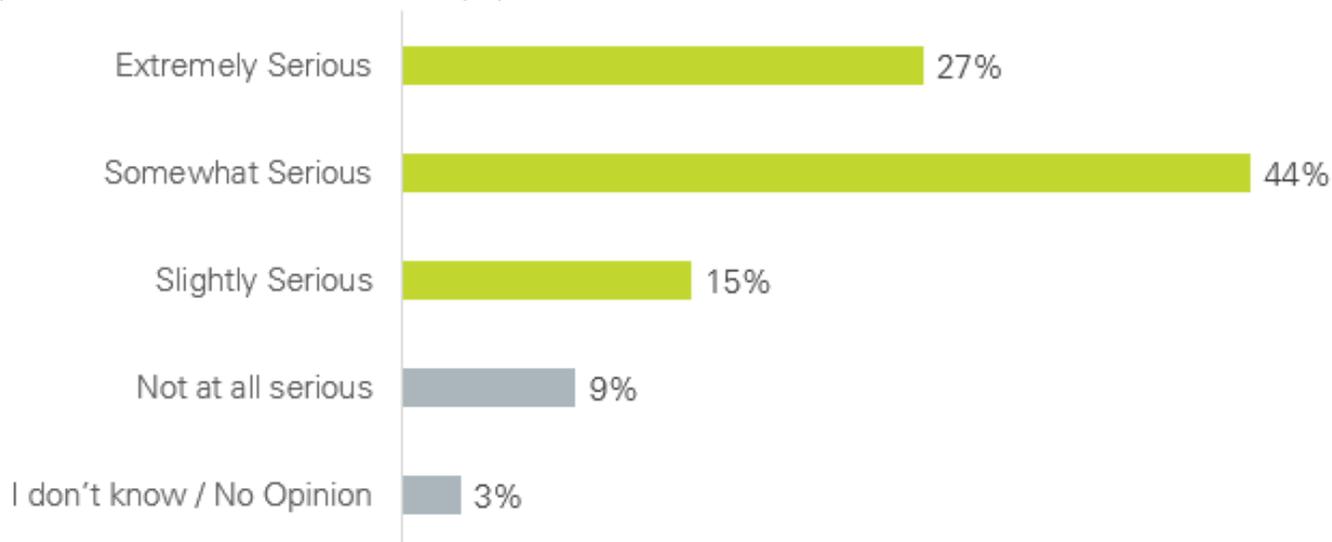


71% work in or regularly visit City Centre

Survey Results

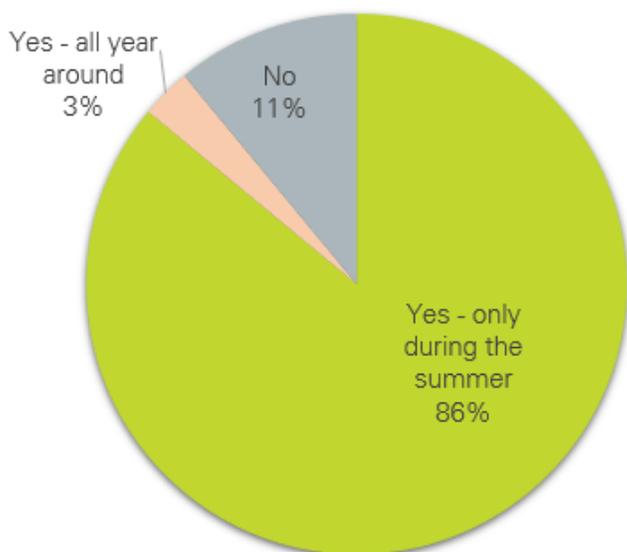
How would you rate the seriousness of extreme heat (high temperatures) in Surrey City Centre?

Participants could select one of the following options.



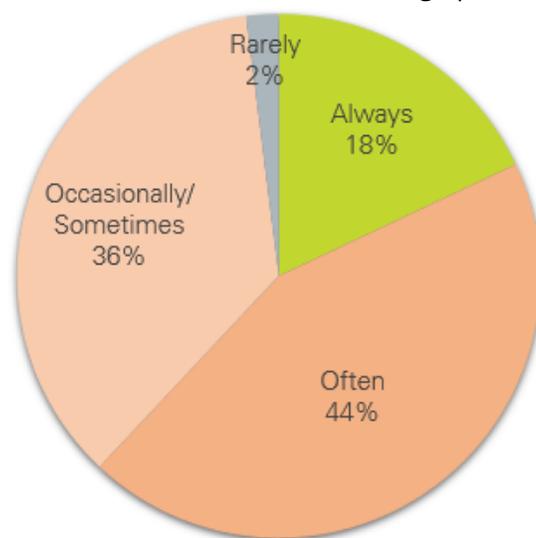
Do you ever feel very hot and uncomfortable in your home due to summer temperatures?

Participants could select one of the following options.



How often do you feel this way during the summer in your home?

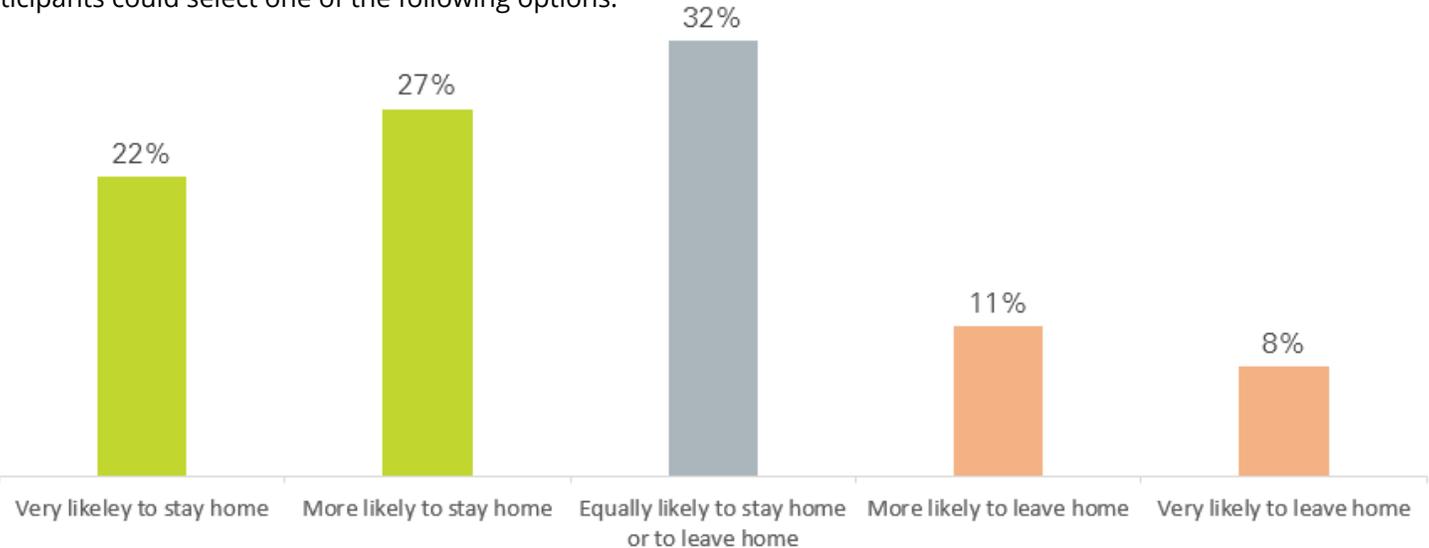
If participants answered yes to the previous question, they were asked to select one of the following options.



Survey Results

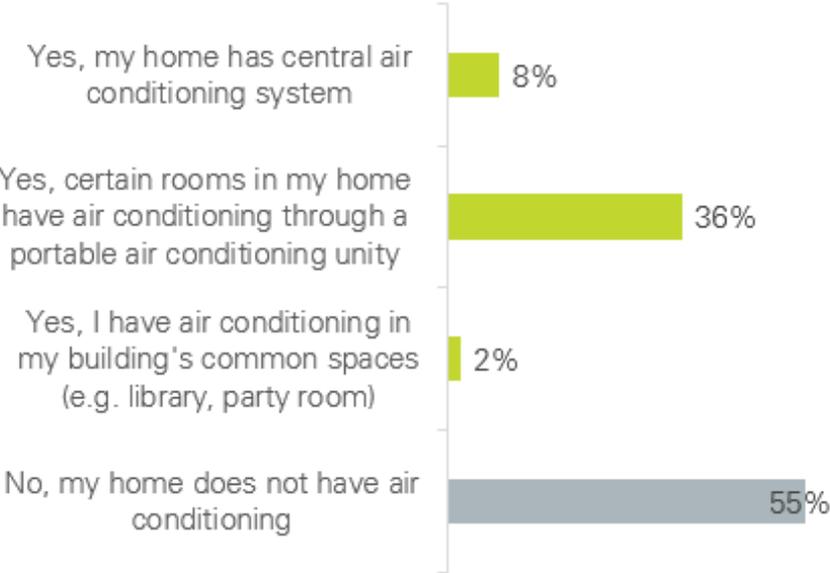
When it is very hot outside, are you more or less likely to stay home or leave home?

Participants could select one of the following options.



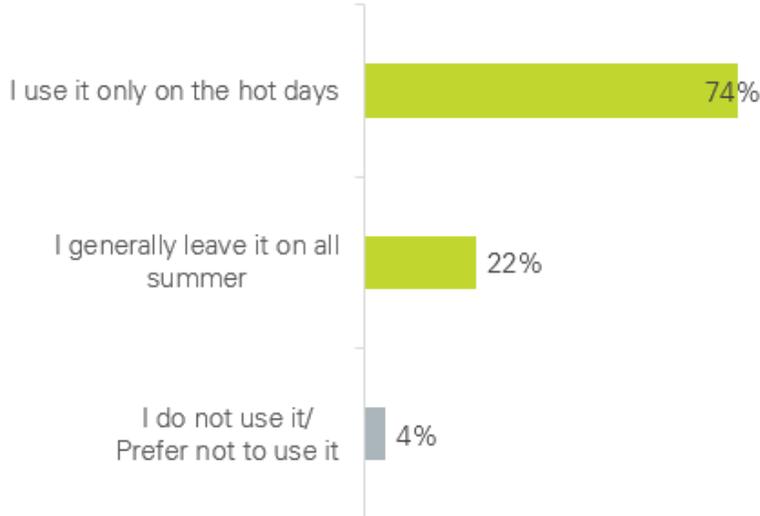
Do you have access to air conditioning in your home?

Participants could select one of the following options.



How do you use your air conditioning in the summer?

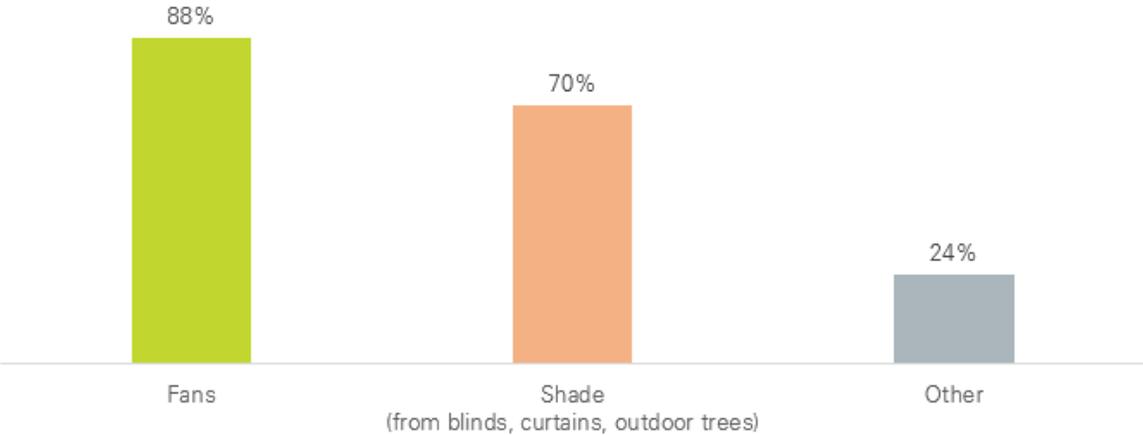
If participants answered yes to the previous question, they were asked to select one of the following options.



Survey Results

When you feel very hot in your home, which of these things help you to stay cool while indoors?

Question for respondents without access to AC. Participants could select multiple options.



For those that selected the other option in the above question, we provided a comment box and invited residents to share how they stay cool while indoors. Here are some verbatim quotes from residents.

“Hop in shower for a cold water rinse”

“Working at night when it’s cooler outside.”

“Not running appliances like ovens or dishwasher”

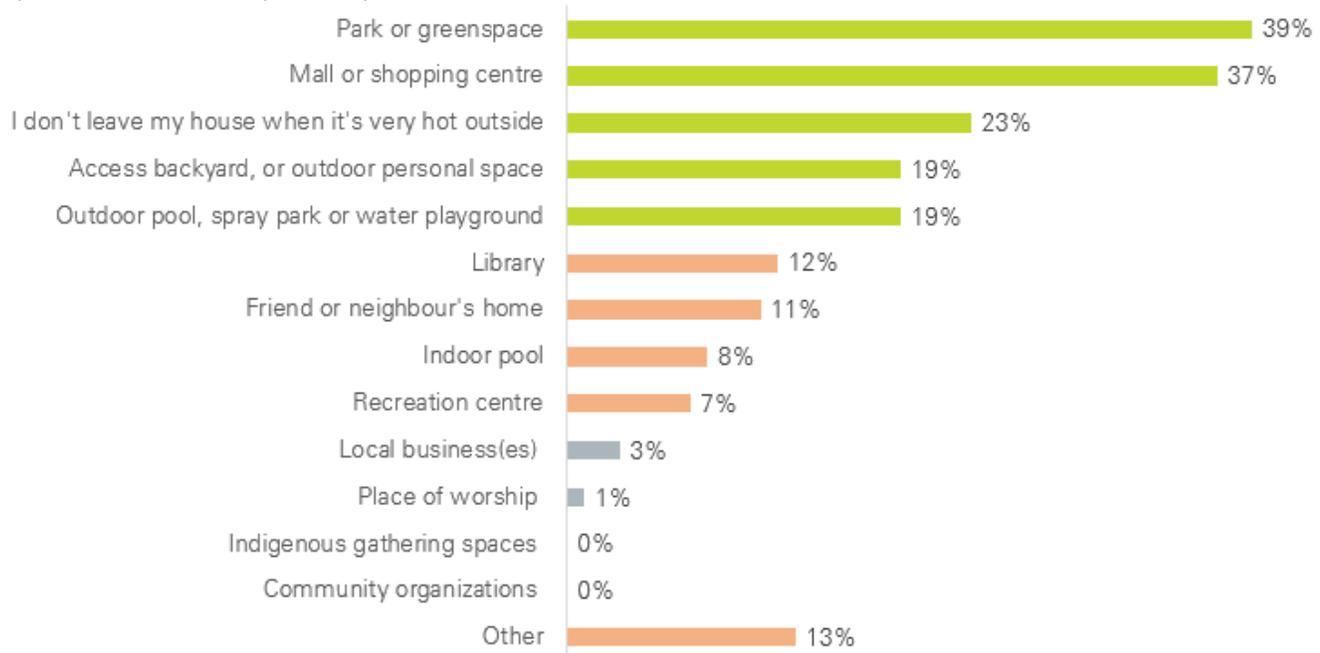
“Staying in area of house away from sun direction”

“I open the door of my apartment and my balcony door so I can get air moving.”

Survey Results

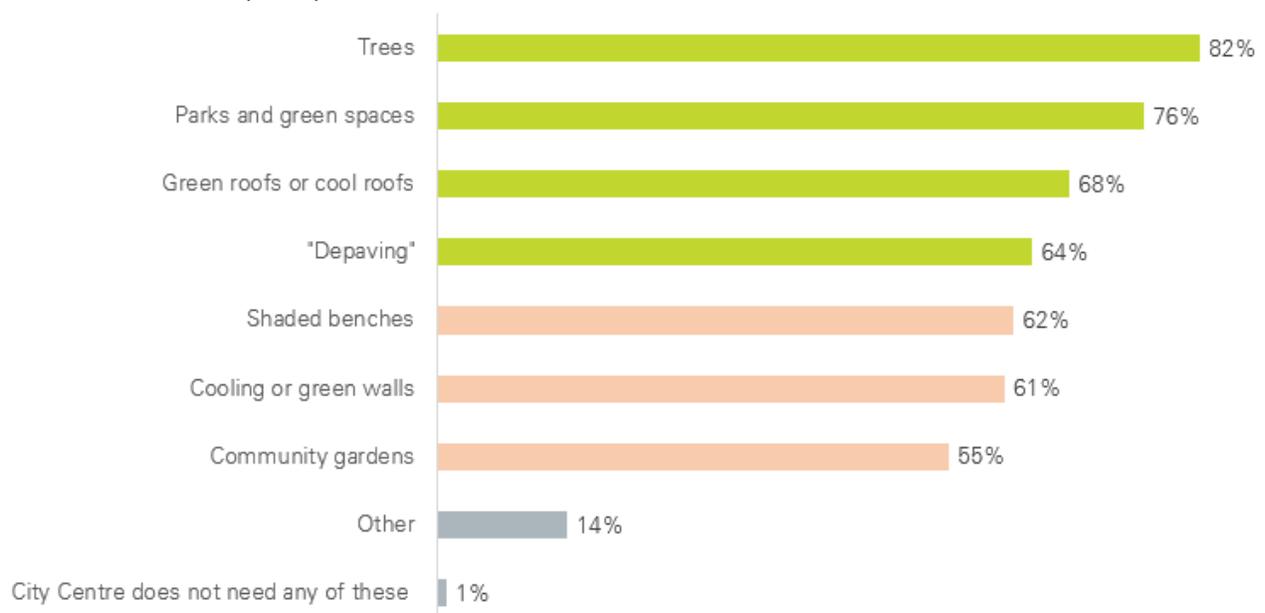
Where are you most likely to go to cool down when it is very hot outside?

Participants could select up to 3 options.



Which would you like to see more of in City Centre?

Participants could select multiple options.



Survey Results

All things considered, are you able to effectively stay comfortable in City Centre on a hot summer day by utilizing the tools and amenities that are available to you?

Participants could select one of the following options.

