



Community Engagement Summary Report

October 2021

Climate Change
Action Strategy



Highlights and Key Messages

Executive Summary

The City of Surrey is developing a Climate Change Action Strategy (CCAS). The CCAS is intended to build on existing strategic plans and outline a “roadmap” to reach the City’s GHG targets of net zero community greenhouse gas (GHG) emissions and absolute zero corporate emissions prior to 2050, as well as to improve resilience to climate change impacts.

Public engagement took place from early May to the end of June 2021, and included information shared on the project website, an online survey, a virtual open house event, and a communication and social media campaign. This report summarizes the results of this process, while engagement with First Nations and stakeholders is ongoing and will be summarized at a future date.

Two complementary approaches were implemented for the online survey: an opt-in survey that was made available to all community members; and a “statistical survey” designed to gather input that is statistically significant and broadly representative of the community demographics. In this latter approach a third-party research firm deployed the questionnaire to 1,030 Surrey residents from a randomly selected list, matching key demographic characteristics of the community. The survey included quality control mechanisms and balancing of the sample group to match the census profile, by age, income level and neighbourhood, providing a statistically valid, representative sample of community opinions. This approach serves to validate and balance the opt-in survey, to ensure biases are minimized.

The survey included three main sections:

- > Relationship to Surrey (i.e. live/work/go to school in Surrey) and demographic questions;
- > Climate change concern and awareness – level of concern about climate change; knowledge of Surrey’s emissions sources; and perceived co-benefits of climate action;
- > CCAS framework – for each of the five components of the framework, the level of support for visions, key strategies and targets; topics of particular “excitement” or “concern”, and optional comment fields.

Key messages from the engagement efforts to date included the following.

- > **More than eight in ten Surrey residents are concerned about climate change.** According to the statistical survey, 84% of Surrey residents are concerned about climate change, of which half are “very concerned”. These results line up with other statistical surveys in BC and across Canada over the past few years. For example, according to Abacus Data, 82% of Canadians and 83% of British Columbians rated climate change as a serious or extremely serious problem, while climate change was ranked as the top issue in the federal 2021 election in an Angus Reid poll.

> **Surrey residents support taking bold action to reduce emissions and improve resilience, consistent with the draft CCAS framework.** There was minimal opposition (on average $\leq 6\%$) and strong support (on average $> 75\%$) in the statistical survey for the visions and key strategies for all five components of the framework. On average, 73% of respondents supported the draft targets.

> **Due to the statistical rigour of the statistical survey, these results are considered representative of the community.** The findings described above are considered representative of the community, and were generally consistent across factors including neighbourhood, age group, gender, income level, and housing tenure, with no significant difference found in responses. There were some nuances among responses and factors that are discussed in Appendix C.

These results, combined with analysis of open-ended comments, also showed the following key thematic messages.

> **Resilient Zero-Carbon Neighbourhoods:** The concept of the “15-minute” city/neighbourhoods received strong support in both the Neighbourhoods and Transportation sections of the survey, with many comments expressing a desire to be able to walk, cycle or “roll” to meet more or most daily needs. This was seen as an opportunity to create more vibrant and connected communities.

> **Safe Zero-Carbon Transportation:** There is strong support for a **transportation system shift toward walking, cycling and transit, and reduced reliance on personal vehicles.** Encouraging the adoption of zero-emissions vehicles, presented within the context of this shift, was also well supported. This supports the Pillars, Bold Moves, vision and targets being advanced in the Surrey Transportation Plan, and the approved Electric Vehicle Strategy.

> **Climate-Positive Resilient Ecosystems:** Ecosystem protection and enhancement, including tree protection in particular, is a high priority and a key value for Surrey residents. This supports continued expansion and protection of the City’s green infrastructure network, as well as planting more trees in parks, along streets and in urban areas, and other actions and recommendations likely to be part of the Urban Forest Management Strategy currently being developed.

> **Healthy Zero-Carbon Buildings:** There was strong support for **zero-carbon buildings and neighbourhoods**, expressed in both the Neighbourhoods and Buildings sections of the survey. However, residents are also acutely concerned about costs and affordability.

> **Bold City Leadership:** Strong support was expressed for City leadership, although many comments also indicated a need for the City to be more bold in its accountability and commitment to action. Aligning decision-making, financial and capital planning with climate targets was seen as a critical direction in this regard. Concerns about equity, while not a specific topic of the survey, were expressed in various comments. Concerns include mobility and personal safety issues faced by people with disabilities, affordability, and the need for empowerment and participation of under-represented communities.

> Overall, the top three survey comment categories (among over 10,000 comments analysed), in order of frequency, were **general support for the framework**, a need for **environmental protection**, and the need to strengthen/accelerate climate targets, specifically interim GHG and sectoral targets.

> The final CCAS will consist of a refined and more fine-grained policy framework that responds to public and stakeholder feedback. The final framework will likely include the same five components. The “key strategies” will be refined into clear statements of the changes necessary to achieve the vision. Actions will also be specified, including “quick-start” actions that can be initiated right away, along with measures and targets to set direction and track progress.

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1 Introduction

1.1 Background

The City of Surrey is developing a Climate Change Action Strategy (CCAS). Surrey's CCAS is intended to build on existing strategic plans and outline a "roadmap" to reach Surrey's GHG targets, as well as to improve resilience to climate change impacts.

In recognition of the climate crisis, Surrey City Council declared a Climate Emergency in late 2019, and in March 2020 adopted targets for net zero community wide GHG emissions, and absolute zero corporate emissions, before 2050. Staff were also directed to prepare a Climate Change Action Strategy (CCAS) to outline a plan to achieve these targets. Beginning in the summer of 2020, staff undertook analysis and research and developed a draft CCAS framework, focusing on the biggest priorities for reducing GHG emissions, together with improving resilience. On May 10, 2021, Surrey's council approved the draft CCAS framework for community engagement. This report summarizes the methods and results of public engagement. Engagement with First Nations and stakeholders is ongoing and will be summarized at a future date.

The timeline for the CCAS is outlined on the next page. At this time, the council's approval of the final CCAS is projected for early 2022.

Climate Impacts – Latest Science

This summer's deadly heat wave¹ is just one example of an extreme weather event in Surrey that will become more common in the future as global temperatures rise. Other expected impacts include increased flooding, sea level rise, and dangerous air quality from wildfire smoke. In August 2021 the Intergovernmental Panel on Climate Change (IPCC) released the first installment of the Sixth Assessment Report, in which the climate crisis is recognized as widespread and severe, affecting all regions of the planet². The report further re-affirms that limiting global warming to 1.5 °C will require global net human-caused CO₂ emissions to decline by about 45% by 2030, and reach net zero by 2050. At the same time, the IPCC report also contains reason for hope: with decisive action the worst impacts can still be avoided; warming can be stabilized with sufficient GHG reduction; and reducing emissions has many health and economic benefits³. The importance for health is underscored in a pending joint editorial from over 200 health journals⁴ calling for urgent climate action.

1 344 people in the Fraser Health region died during the last week of June this year during a record-breaking heat wave, a 600% increase over the average ([BC.CTV News, July 6, 2021](#)); in September 2020, Metro Vancouver ranked among the world's worst air quality due to wildfire smoke.

2 Intergovernmental Panel on Climate Change (2021), [AR6 Climate Change 2021: the Physical Science Basis](#)

3 Canadian Institute for Climate choices, [5 reasons to feel some hope after reading the IPCC report on climate change](#)

4 The Guardian, Sept. 6, 2021. [More than 200 health journals call for urgent action on climate crisis.](#)

1.2 CCAS Framework

The CCAS *framework* includes preliminary policy directions in the form of visions, targets and key strategies in five priority areas of action (see Appendix A). The purpose of sharing the framework with the community was to find out the level of support for action in these areas and gather input and ideas to inform the full CCAS. The CCAS will include priority actions, and commitments for implementation, including measures, targets, and reporting.

The CCAS framework is shown in Appendix A, and is outlined on the CCAS webpage surrey.ca/climateaction, and is organized under five key components:

- > Resilient Zero-Carbon Neighbourhoods;
- > Safe Zero-Carbon Transportation;
- > Healthy Zero-Carbon Buildings;
- > Climate-Positive Resilient Ecosystems ; and
- > Bold City Leadership.

1.3 Objectives

Public engagement for the CCAS was designed to align with the City's Public Engagement Strategy.

The specific objectives for external engagement in this campaign included:

- > Build awareness about climate change and the CCAS on the part of the community;
- > Gauge support for general actions and visions;
- > Provide an opportunity for citizens to shape the CCAS; and
- > Build meaningful relationships with Surrey community and stakeholders.

Our Timeline



phase 1–SUMMER/FALL 2020
Taking Stock-Research & Analysis



phase 2–WINTER 2020/2021
Draft Framework & Internal Engagement



phase 3–SPRING/SUMMER 2021
Community Engagement



phase 4–FALL 2021
Reporting Back & Finalizing the Plan



phase 5–WINTER 2021/2022
Sharing the Draft Plan & Council Approval

2 Engagement Approaches

2.1 Overview

To achieve the above objectives, the following approaches have been undertaken to date:

COMMUNICATION:

- > Information shared on the City's website, including fact sheets, videos, and an interactive question and answer forum;
- > Marketing campaign to drive traffic to the website and survey, including social media and advertising; and
- > Direct outreach via email to key stakeholders and First Nations.

ENGAGEMENT:

- > Two public opinion surveys, as described below;
- > A virtual public open house; and
- > Individual stakeholder meetings and presentations, which are ongoing.

This report summarizes the results of the public engagement, primarily from the surveys. Engagement with First Nations and stakeholders is ongoing and will be summarized at a future date.

2.2 Survey Methods

Two types of surveys were deployed in this engagement campaign: a "non-statistical" survey and a "statistical survey". The same set of questions was used for each.

The non-statistical survey followed the conventional approach of promoting an online questionnaire via various public advertisements and communication channels (social media, radio, print ads, stakeholder networks, etc., as outlined in Appendix B), with the support of the City's contracted research services.

Secondly, a statistical survey was deployed to a *representative sample* of Surrey residents, via a third-party research firm. Random sampling and statistical methodology are used to ensure a science-based approach that reflects the profile of the community. In this case, a sample of 1,030 included a margin of error of +/- 3.05%, 19 times out of 20.

Both surveys included mandatory and optional questions. Mandatory questions included knowledge and concern about climate change; level of support for the vision, targets and key strategies for each component; and demographic questions. Optional questions included open-ended comments related to the "support" questions noted above. In the non-statistical survey respondents could choose to answer questions pertaining to one or more of the CCAS components. The statistical survey required responses to all sections, which allowed for a more consistent dataset.

What is a statistical (a.k.a. “probability”) survey?

Non-statistical (also called “non-probability”) surveys are a familiar tool and useful for the public and policy makers alike, providing an important channel for input that is open to anyone from the target community. However, one of their key limitations is a lack of statistical validity, since responses are self-selected. This remains true even if a large sample size is generated. Therefore results from this type of survey may not necessarily represent the position of the community as a whole. Climate action will require significant shifts in both the short and long term, including how the community is planned and developed, how buildings are designed and retrofitted, and how we get around, among others. It is important for Surrey City Council to have confidence that the community is behind the plan. Therefore, in addition to non-statistical survey staff also commissioned a research-based “statistical survey”.

In a statistical survey, a panel of randomly selected respondents is generated, and a variety of techniques are used to ensure quality control and statistical validity of responses. In this case the panel was recruited primarily via random telephone polling, and from this data a “balanced” panel was developed to match Surrey’s demographics as closely as possible according to age, gender, and location of residence in the city. These panel members were sent a link to complete the survey online. Since non-response can still skew results, upon submission, responses were also weighted to ensure any remaining biases were corrected for in the results, to match the Census profile as closely as possible. Similar methodology is used for scientific research, market research and political polling. Because any adult in Surrey has an equal chance of being selected for the survey, and due to the methodological rigour, statistical accuracy of the results can be reported, and the responses can be said to be representative of the community.

2.3 Engagement Events

A public virtual open house was held online on June 23, 2021. The event featured presentations from City staff and three guest speakers, who addressed climate change considerations from youth and health perspectives. Approximately 35 community members attended the event. A summary of the event is available on the project webpage.

Staff also reached out to First Nations, numerous community organizations and stakeholders directly with an invitation to present the draft CCAS framework and seek feedback. A number of meetings have been held to date and are ongoing, therefore the results of this engagement will be summarized at a future date.



3 What We Heard

3.1 Survey Response Rates and Demographics

Including both surveys, in total 2,891 responses were received, and over 13,000 individual comments were provided (Table 1).

The non-statistical survey had disproportionately higher levels of responses from South Surrey, from the 65 and older age group, and from higher income earners.

In contrast, the statistical survey more closely matched

the Census profile of the community. Furthermore, as noted above the statistical survey included weighting of responses, to further minimize biases in the demographic profile. This illustrates the value of the statistical survey methodology, to ensure results are representative of the community. A summary of demographic attributes of each survey is provided in Appendix D.

Table 1. Summary Survey responses by type – Main Survey

	NON-STATISTICAL SURVEY	STATISTICAL SURVEY	TOTAL
Method of deployment	Marketing / non-statistical (open to all)	Research panel (random selection + representative distribution/weighting)	
# of responses — partial	655	N/A	
# of responses — “complete”	1,206	1,030	
Total # surveys	1,861	1,030	2,891
# Comments	6,690	7,226	13,916

3.2 Concern and Awareness About Climate Change

Key Message: More than eight in ten Surrey residents are concerned about climate change.

According to the statistical survey, **84% of Surrey residents are concerned about climate change, of which half are “very concerned”**. Level of concern about climate change had no significant difference across Surrey neighbourhoods, age range, housing tenure and income level. These results line up with other statistical surveys in BC and across Canada over the past few years. For example, according to Abacus Data, 83% of British Columbians rated climate change as a serious or extremely serious problem⁵, while climate change was ranked as the top issue in the federal 2021 election in an Angus Reid poll⁶. The non-statistical survey indicated a higher level of concern, at 91%, of which 60% were “very concerned”.

The two most commonly cited reasons for concern about climate change, accounting for about 45% of comments in the statistical survey, include the recognition of global system impacts (ecological, social and economic), and concern for the wellbeing of future generations.

A more detailed description of comment themes shown in Figure 3.2.2. can be found in Appendix E.

It is the single most important issue of our time. It has the potential to devastate the entire planet.
~Surrey resident

I’m concerned because I’m young enough to know that it’s going to bring a significant decline in the quality of life for myself and my future children.
~Surrey resident

We need to leave the planet in better shape than we received it. For future generations.
~Surrey resident

I’m concerned about its effects on our ecosystem and economy.
~Surrey resident

5 [Abacus Data \(2019\)](#), Public Opinion Research - Climate Emergency Polling, National Survey of 2000 Canadians.

6 [Angus Reid Institute](#), Election 44 polling results, August 19, 2021

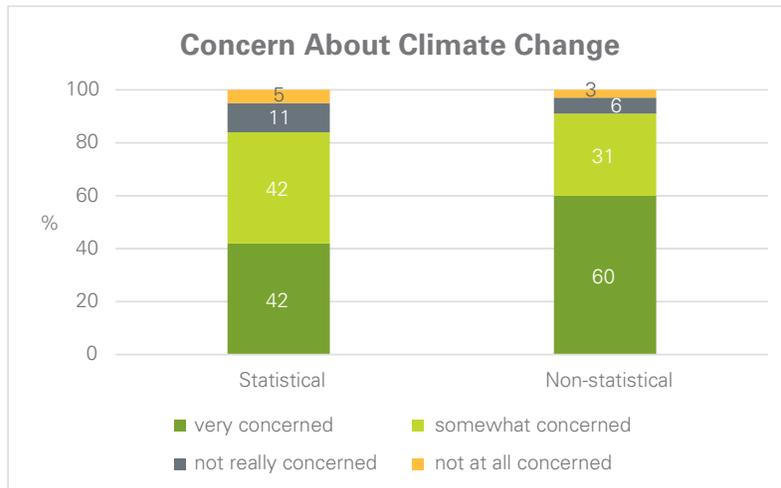


Figure 3.2.1 Concern about climate change

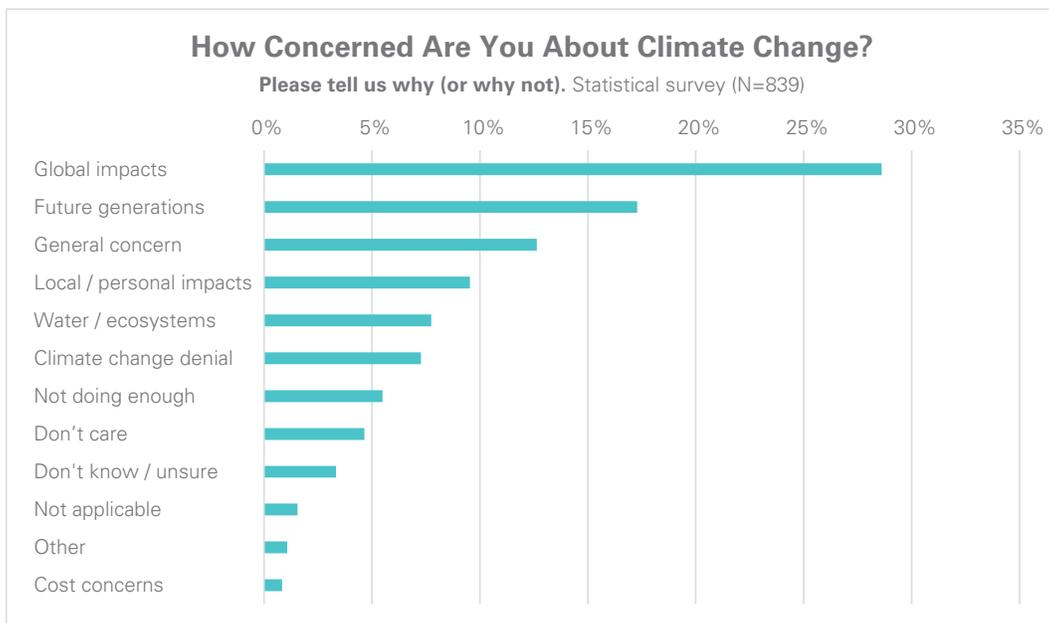


Figure 3.2.2 Reasons for concern (or lack of concern) about climate change

Key Message: There is a lack of knowledge about emissions sources, but residents make the connection between reducing emissions and improved environmental and human health.

According to the statistical survey, **55% of Surrey residents consider themselves to be “very” or “somewhat” knowledgeable about climate change.**

Respondents to the non-statistical survey indicated a higher level of knowledge.

In order to assess knowledge, respondents were asked, “From what you know, which of the following contributes the most to Surrey’s carbon pollution?”. *Cars, trucks and vehicles* was correctly cited as the largest source (46% of Surrey’s GHG emissions is from transportation), by 36% of respondents. However, a majority of respondents cited another source or stated they did not know. Surrey’s second-highest source of GHG emissions (40%) is from buildings, yet this was one of the least frequently chosen

options. These results are similar to other recent regional surveys and indicate a need for further education.

Another question in this section asked, “Aside from slowing climate change and related impacts, which of the following potential benefits of reducing carbon pollution are most important to you?” **The responses show that protecting and restoring ecosystems was the highest valued co-benefit, followed by home comfort and indoor air quality, and air quality in general.**

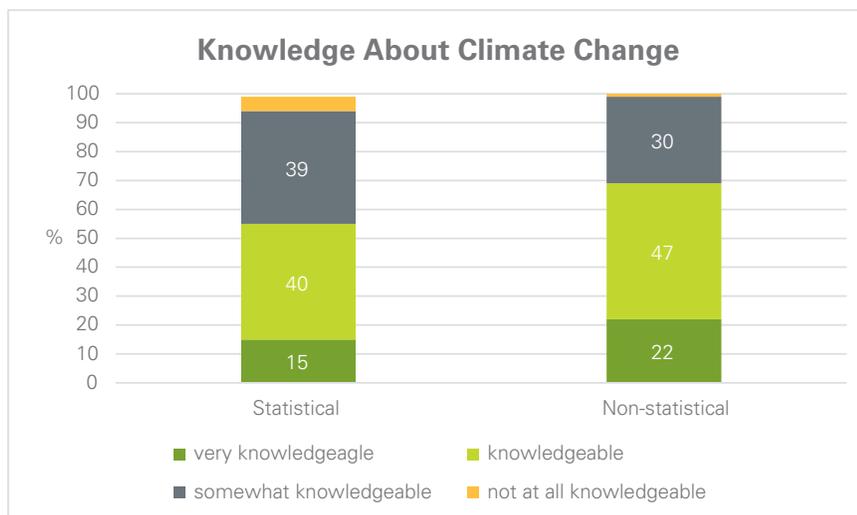


Figure 3.2.3 Level of knowledge about climate change

Climate change is affecting every part of our lives from food, weather, health, and overall quality of life.
~Surrey resident

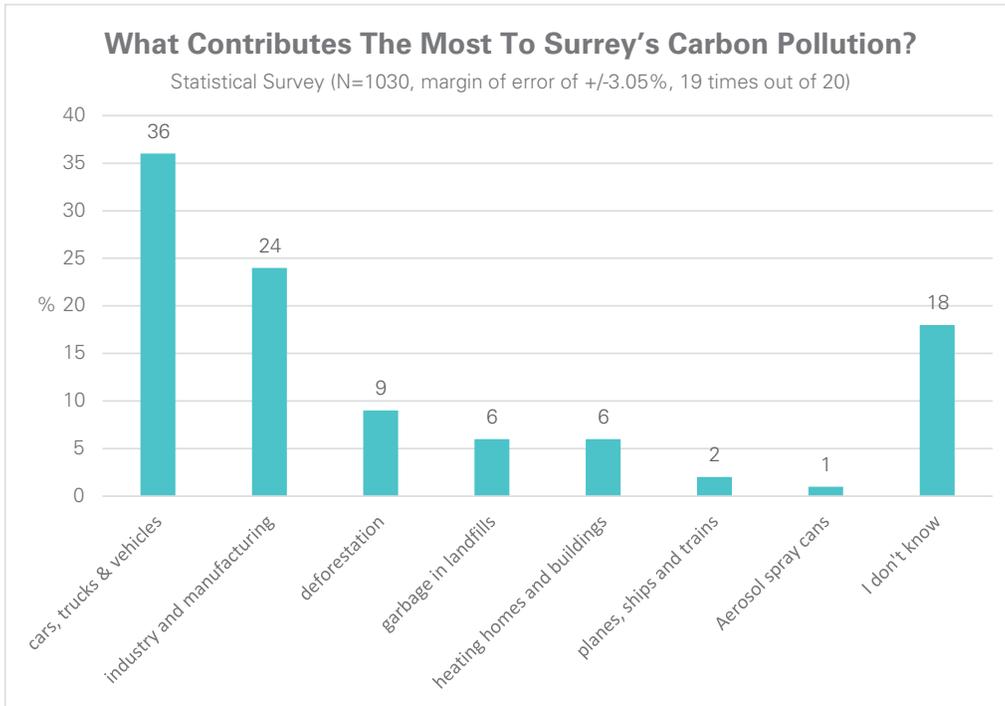


Figure 3.2.4 Perception of largest source of Surrey's carbon pollution

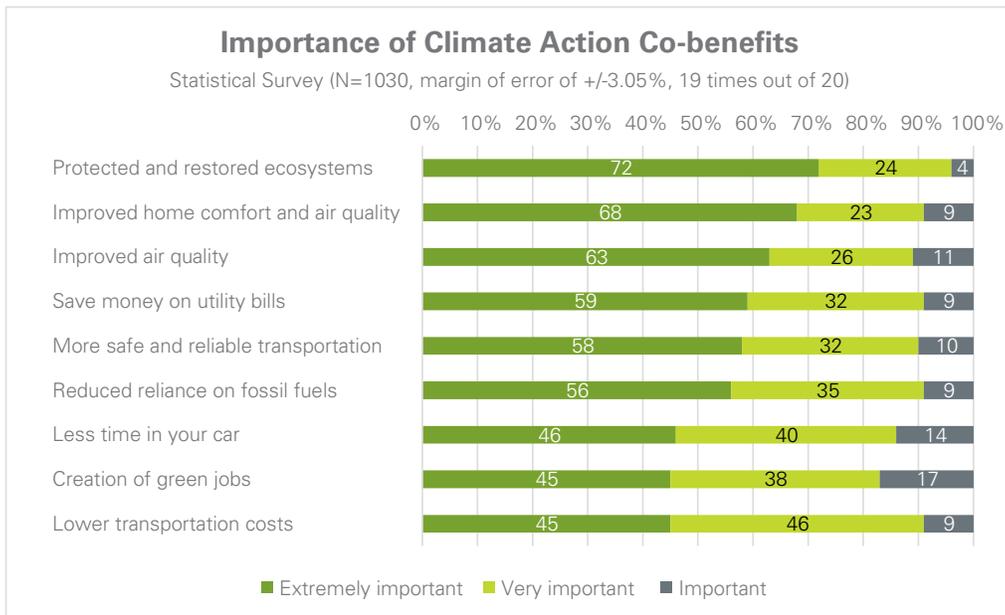


Figure 3.2.5 Co-benefits of climate action by level of importance

3.3 Level of Support for CCAS Framework

Key Message: Surrey residents support taking bold action to reduce emissions and improve resilience, consistent with the draft CCAS framework.

There was minimal opposition (on average $\leq 6\%$) and strong support (on average $>75\%$) in the statistical survey for the visions and key strategies for all five components of the framework. On average, 73% of respondents supported the draft targets. The non-statistical survey showed generally similar results but with even higher levels of support and lower levels of opposition.

- > **Vision statements:** On average, only 5% of respondents were opposed, 87% in support or neutral, and 75% in support.
- > **Key strategies:** On average, only 6% of respondents were opposed, 90% in support or neutral, and 75% in support.
- > **Targets:** On average, 10% of respondents opposed, and 73% supported the targets⁷, while 16% did not know.

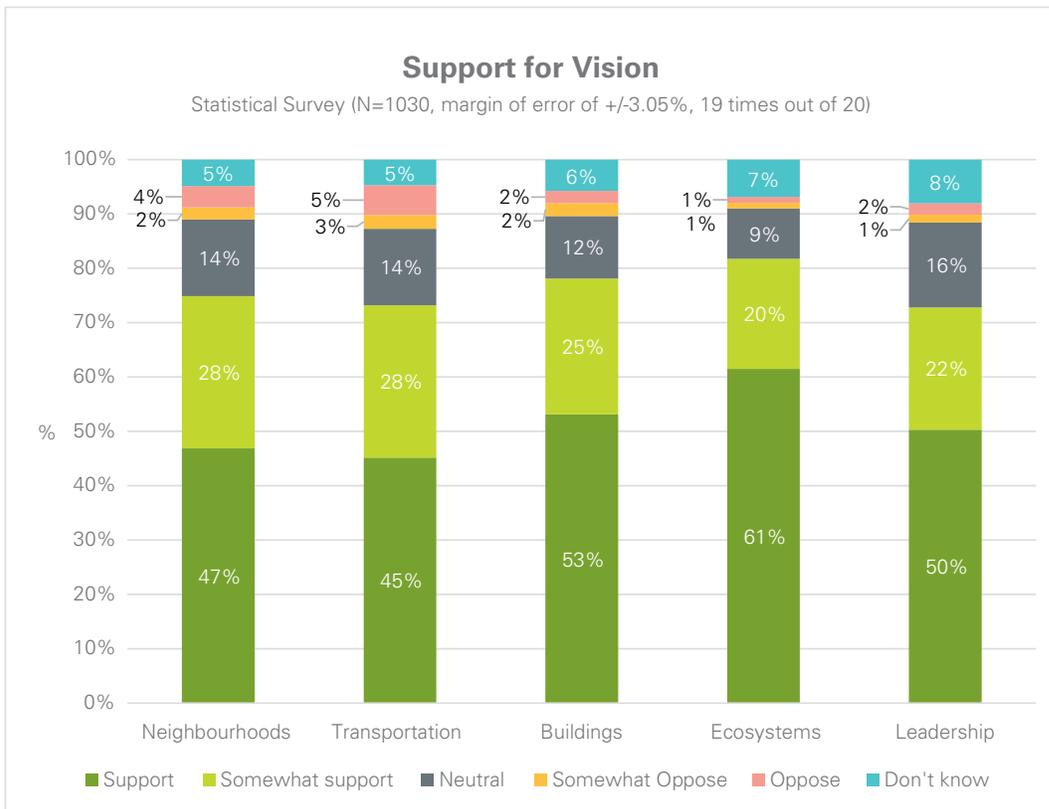


Figure 3.3.1 Support for vision statements in each component of the framework ("Do you support this vision?")

⁷ This result closely matches recent national polling, which found a large majority of Canadians (72%) think that those countries which set more ambitious climate targets and put policies in place to reach them will end up stronger economically ([Abacus, June 2021](#)).

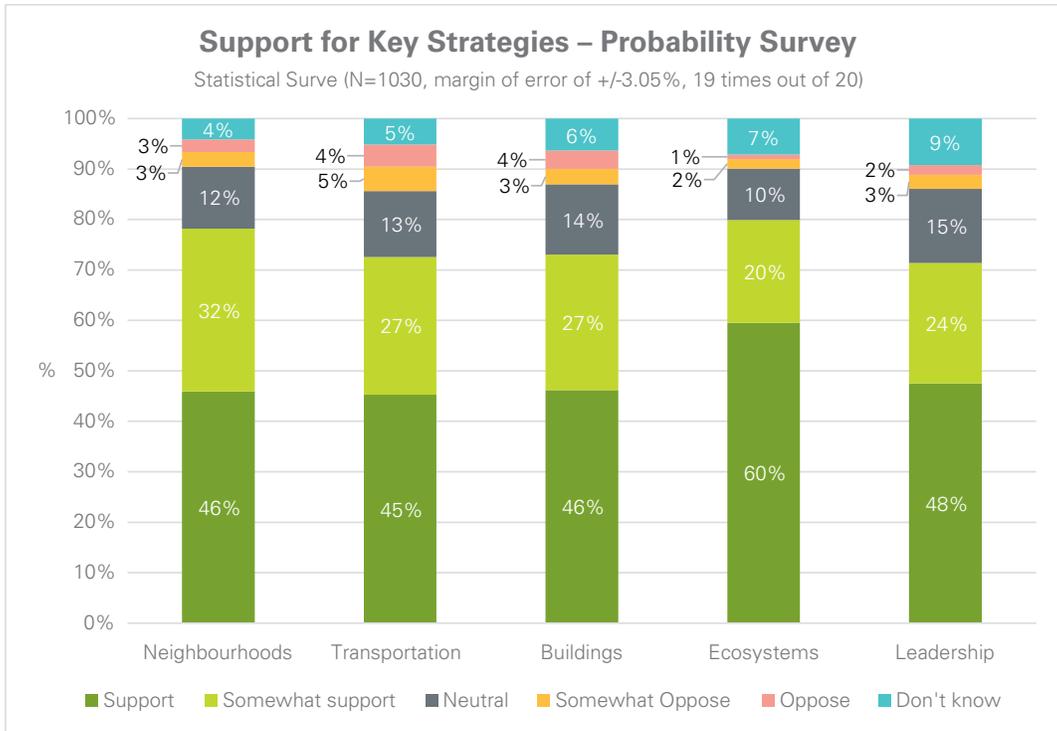


Figure 3.3.2 Support for key strategies for each component of the framework ("Do you generally support these key strategies?")

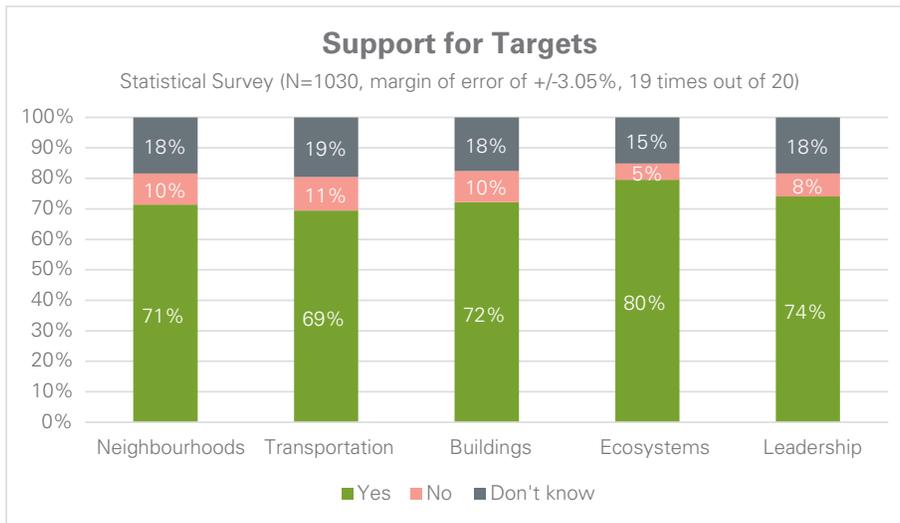
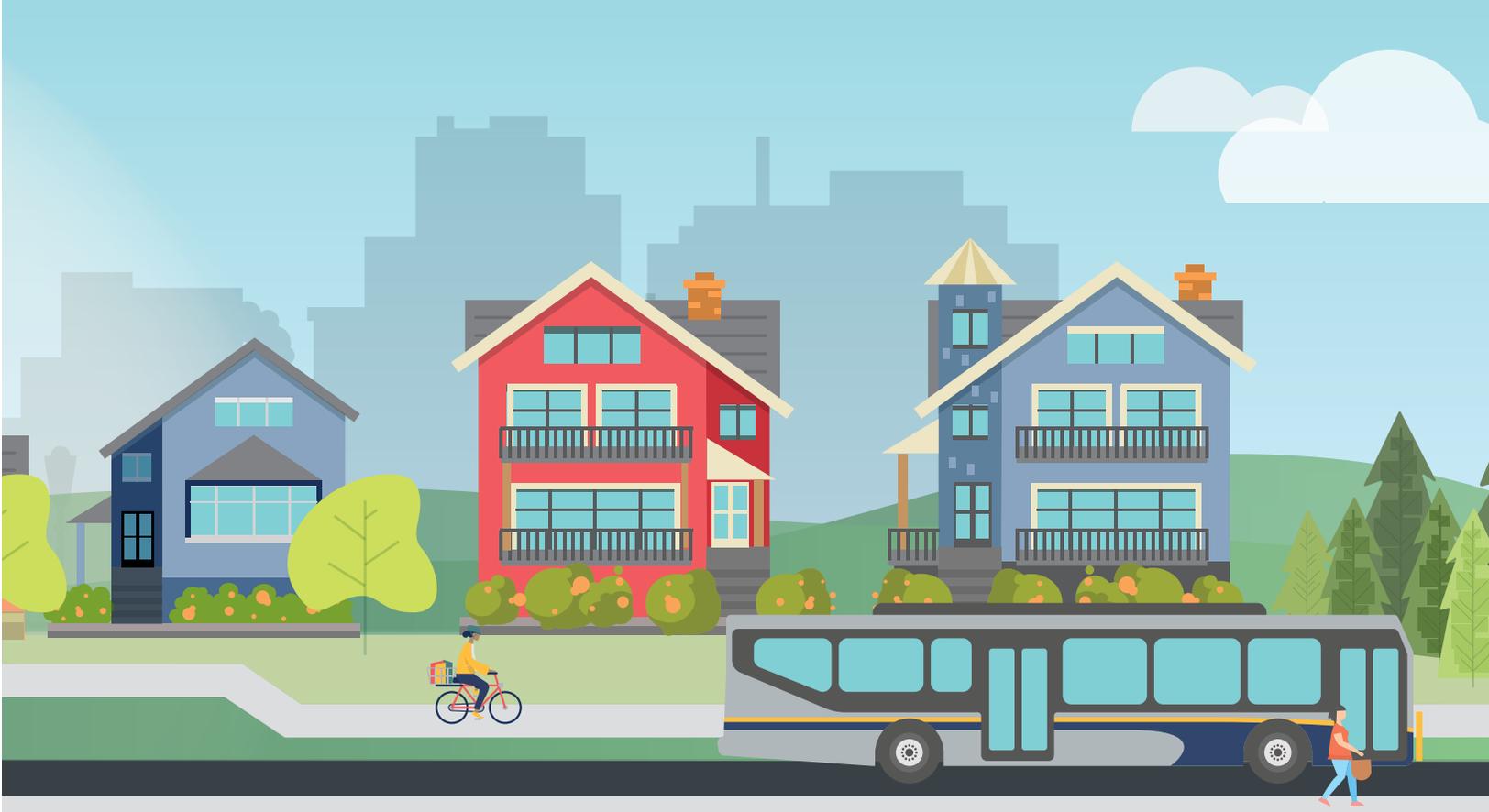


Figure 3.3.3 Support for targets ("Do you generally support setting targets like these?")



3.4 Analysis & Themes

Key Message: Due to the rigour of the statistical survey, these results are considered representative of the community.

The survey results, combined with analysis of open-ended comments and feedback from the public virtual open house, showed the following key thematic messages.

The findings below reflect the level of support for the vision, key strategies, and targets, as summarized in the previous section. Furthermore, open-ended comments associated with vision/strategies/targets were analysed by grouping them into themes. This includes the questions in the following table, designed to identify specific issues, opportunities and concerns associated with the key strategies.

I'm worried that water level will continue to rise, wildlife will continue to be endangered, temperature rising globally, air quality will get worse.
~Surrey resident

I want a safe world for future generations
~Surrey resident

3.4.1 Land Use and the 15-Minute City

Key Message: The concept of the “15-minute” city/ neighbourhoods resonated strongly, with many comments expressing a desire to be able to walk, cycle or “roll” to meet most daily needs.

A 15-minute neighbourhood is one where most daily needs can be met within a short walk, roll or cycle trip from home, and that is connected to other parts of the city (such as job centres) with frequent and reliable transit. For the purpose of the survey, “daily needs” were defined as frequent transit, grocery stores, childcare, pharmacy, schools, neighbourhood park, health care, retail shopping, and civic facilities (e.g., community centre). The Surrey Transportation Plan engagement is seeking to further understand and prioritize residents’ desire for proximity to these amenities. Support for this concept was seen in both CCAS surveys, where it was seen as an opportunity to create more vibrant and connected communities, with the pandemic having revealed the importance of access to local amenities.

The statistical survey also showed the following specific results:

- > Overall, the vision, key strategies and targets for neighbourhoods, which emphasize a shift toward 15-minute neighbourhoods with safe walking/cycling and connected by frequent transit, were well supported and registered levels of opposition of only 6% (vision), 6% (strategies) and 10% (targets).
- > The Resilient Zero-Carbon Neighbourhoods strategy to *align all City land use policies and regulations with our climate targets* was the top-ranked strategy respondents were “most excited about”. This key strategy includes several directions for creating more compact and complete communities through “infill” development with diverse types of housing, through changes to land use planning and zoning.
- > Similarly, the Safe Zero-Carbon Transportation strategy to *reduce the need to travel as far in the first place, with “15-minute” neighbourhoods* generated the most excitement.

- > Some concerns were raised about higher density development and costs related to housing, illustrating a need for communication about the intent of policy shifts, the benefits for the environment and health, and how affordability will be integrated.
- > Themes describing the benefits of local living, reduced car dependence, a desire for better infrastructure for walking/cycling, and general support for the framework, were among the most prevalent comments associated with both of the questions noted above.

The feedback, including the statistical survey, shows clear support for accelerating the shift to denser, mixed-use neighbourhoods that reduce the need for driving by meeting people’s needs close to home and making transit more convenient.

It’s innovative and forward moving and will be healthier for us all to create environment friendly neighborhoods
~Surrey resident

Community is about seeing the people that walk and work and live around you
~Surrey resident

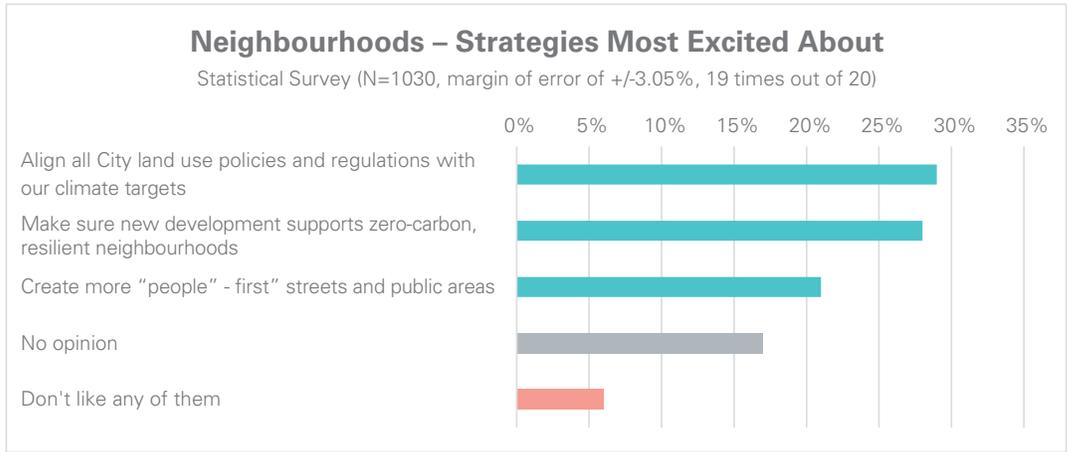


Figure 3.4.1.1 Strategies that generated the most "excitement" - Neighbourhoods

Table 3.4.1.2. Neighbourhoods - Most frequent themes - optional comments explaining reason for choice of key strategy "most excited about", compiled from both surveys (not representative; includes only those themes exceeding 5% of comments)

WHICH KEY STRATEGY ARE YOU MOST EXCITED ABOUT? PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 617 COMMENTS
Generally support – A step in the right direction, support, concerned about climate change, will personally benefit	15%
Health / Zero carbon buildings – positive – Health benefits (physical/mental), reduced air pollution; climate and health benefits of zero carbon buildings	13%
Local living – Access to shopping local services, shopping etc., walkable neighbourhoods, less time spent driving; more time at home	8%

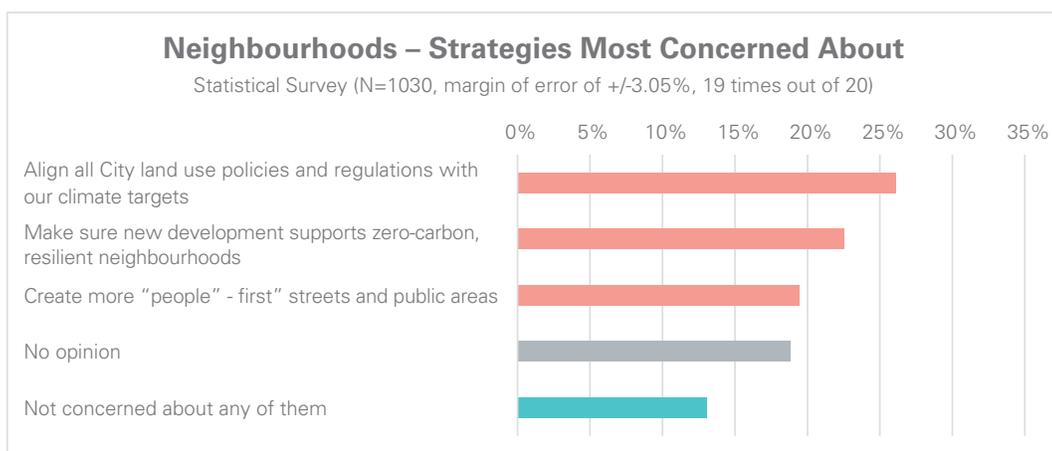


Figure 3.4.1.3 Strategies that generated the most “concern” - Neighbourhoods

TABLE 3.4.1.4. Neighbourhoods - Most frequent themes - optional comments explaining reason for choice of key strategy “most concerned about”, compiled from both surveys (not representative; includes only those themes exceeding 5% of comments)

WHICH KEY STRATEGY ARE YOU MOST CONCERNED ABOUT PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 388 COMMENTS
Development impacts – e.g. too much development, impacts on environment, too many condos, opposed to higher density etc.	13%
Cost concerns – e.g. Uncertainty/concerns about costs to taxpayers, impacts on affordability, cost of housing, etc.	12%
City actions are not currently aligned e.g. City is not doing this now, heading in wrong direction, need to align policies; city-wide action not just select areas, etc.	10%
Distrust in government – e.g. Dissatisfaction with / distrust in city government, or government in general, don’t believe this is sincere, threat to personal freedom, etc.	10%
Environmental protection – e.g. Care about/importance of nature, protect ecosystems/ environment, etc.	7%

3.4.2 Shifting to Walking/Rolling, Cycling and Transit

Key Message: There is strong support for a transportation system shift toward walking, cycling and transit, and reduced reliance on personal vehicles.

Consistent with the priorities of the Surrey Transportation Plan and the adopted Electric Vehicle Strategy, the CCAS framework outlines the transportation shift needed for climate action by prioritizing walking, cycling, and transit and over personal vehicles. Situated in this context, electrification of vehicles is also important for achieving the climate targets. Feedback received in the surveys shows strong support for these directions, and supports the Bold Moves, vision and targets being advanced in the Surrey Transportation Plan, as well as implementation of the Electric Vehicle Strategy.

In particular, the statistical survey showed the following results:

Overall, the vision, key strategies and targets for transportation, which emphasize a significant shift toward walking, cycling and transit, and reduced reliance on personal vehicles, were well supported and registered levels of opposition of only 8% (vision), 9% (strategies) and 11% (targets).

Reducing the need to travel with 15-minute neighbourhoods was the #1 key strategy that most respondents were excited about. Comments in response to this question indicated that reasons for “excitement” about the key strategies include emissions and air pollution reduction, health, and lifestyle (i.e., convenience, local living).

> An analysis of all open-ended comments from the Transportation section (over 1,500) from the statistical survey showed that statements of general support, and for shifting to walking/cycling and transit and reducing car dependence, were the most frequently mentioned (representing over 40% of comments).

Some comments, in both the surveys also suggested the transportation goals could be strengthened with the addition of encouraging shared mobility (e.g., car-share), and noted the need for transportation system improvements and neighbourhood design to ensure a focus on accessibility for seniors and people with disabilities.

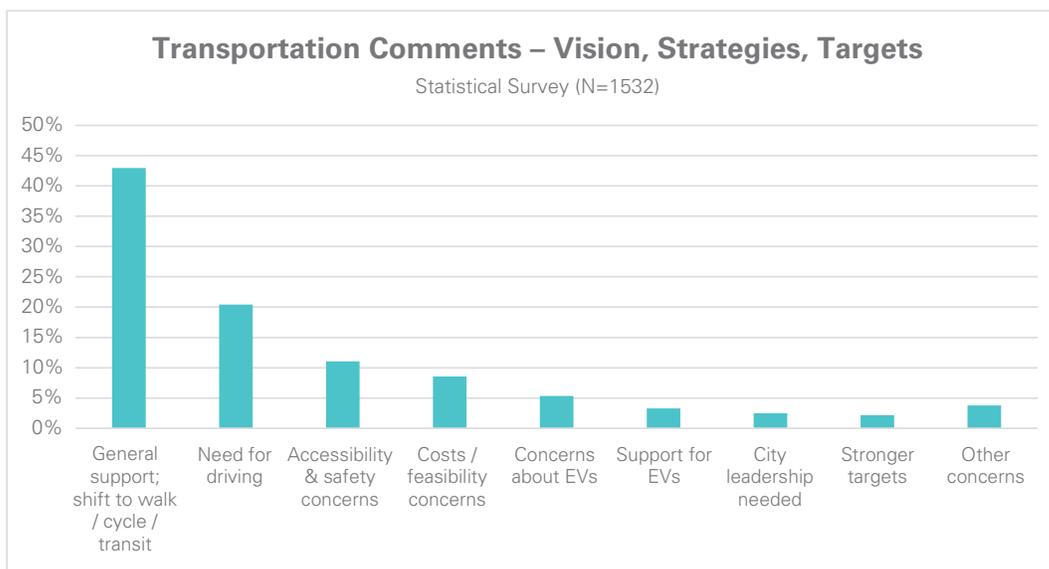


Figure 3.4.2.1 Themes from all transportation related open-ended questions in statistical survey

One of the key strategies intended to test public appetite for reducing and repurposing parking for other public uses was: “Optimize parking policies to encourage active modes, transit, and sustainable use of public space.”⁸

Although restricting and pricing parking can be politically divisive, the response in this survey suggests that opposition may not be as high as often assumed.

- > As noted above, overall support was high for the transportation vision and strategies, which indicate a shift to prioritizing walking, cycling and transit over personal vehicles.
- > The number of respondents who selected the parking-related strategy as the one they were “most concerned about” was less than 20%, whereas those who selected “no opinion” or “Not concerned about any of them” together accounted for a higher proportion, about 33% of responses.

> Only 12% of comments in response to this question indicated specific concern about this topic.

In addition, a broad shift in mode choice to walking/cycling/transit in the transportation system is supported by the frequency of comments across both surveys overall, as noted in section 3.5.

As stated in the CCAS Transportation fact sheet, “Surrey was [first] designed as a suburb, in a time when getting around by car was the norm. As a result, the things we need for daily life are often spread far apart, and not easily or safely reached on foot or by bike...” **The responses to this section of the survey suggest that public opinion supports accelerating Surrey’s evolution toward a city that more closely resembles the 2050 vision, where people are not reliant on personal vehicles, more daily needs are close to home, and safe walking, cycling and transit connects a network of 15-minute neighbourhoods.**

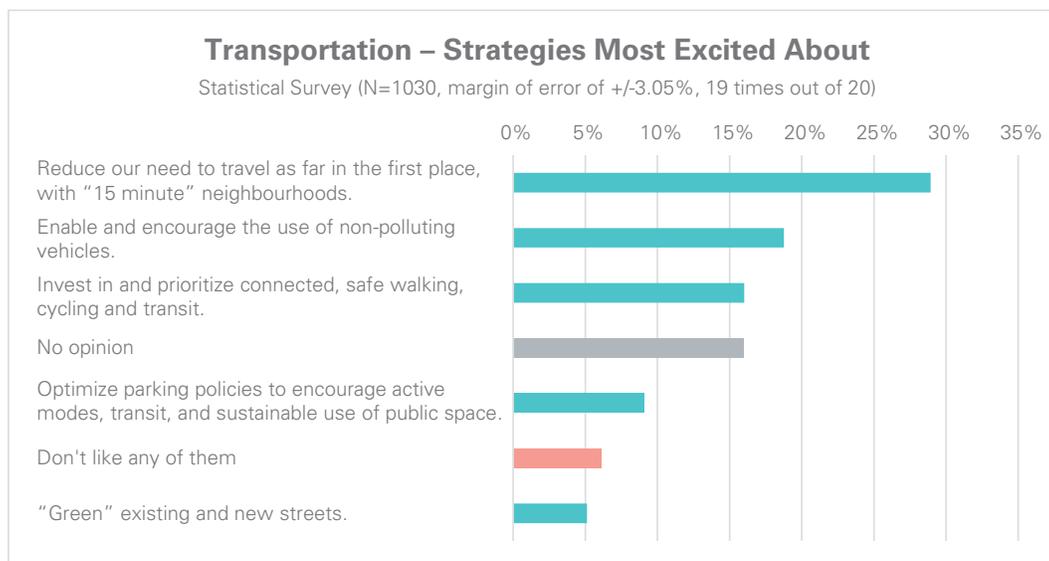


Figure 3.4.2.2 Strategies in order of percentage of respondents indicating it as the one they were “most excited about”

What is not to like? Healthy, safe, and clean. What a dream!
~Surrey resident

⁸ Explanatory notes provided in survey: “Parking costs us a lot. Parking garages are expensive to build and add to the cost of housing. According to a recent study, one in three parking stalls in Surrey City Centre apartments is sitting vacant. It also takes up a lot of space on city streets that we could use for other things – like goods delivery, bus priority lanes, bike paths, trees, and play areas. We can consider reducing the amount of parking supplied in new development, especially near transit. And we can rethink how we price and design parking in public space so that it’s more fair for everyone.”

TABLE 3.4.2.3 Most Frequent Comment Themes - Key strategies most excited about (pooled results, statistical and non-statistical surveys, total 543 comments)

WHICH KEY STRATEGY ARE YOU MOST EXCITED ABOUT? PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 543 COMMENTS
Reduce car dependence – (Reduce car dependence, less driving, alternative transportation modes, reduce congestion, less speeding, improve road safety; fewer cars parked on public streets)	12%
Generally support – (A step in the right direction, support, concerned about climate change, will personally help)	11%
Electric vehicles – positive – (environmental benefits, reduce pollution from ICE / fossil fuel vehicles; pollution-free cars, transition to EV is getting easier/increasing)	10%
Accessibility – positive – (Improves accessibility for basic needs/services; improves sidewalks/walkability/safety for pedestrians, seniors; improves access to other cities, etc.)	10%
Transit – positive – (Benefits of using transit - cost, speed, convenience etc. need more transit (coverage/scheduling))	10%
Cycling – positive – (Need more/connected bike paths, improve access/safety for cycling, health benefits etc.)	9%
Health – positive – Improve physical/mental health, reduce air pollution, better air quality, working from home/less commuting, etc.	9%
Local living – Access to shopping local services, shopping etc., walkable neighbourhoods, less time spent driving; more time at home	8%

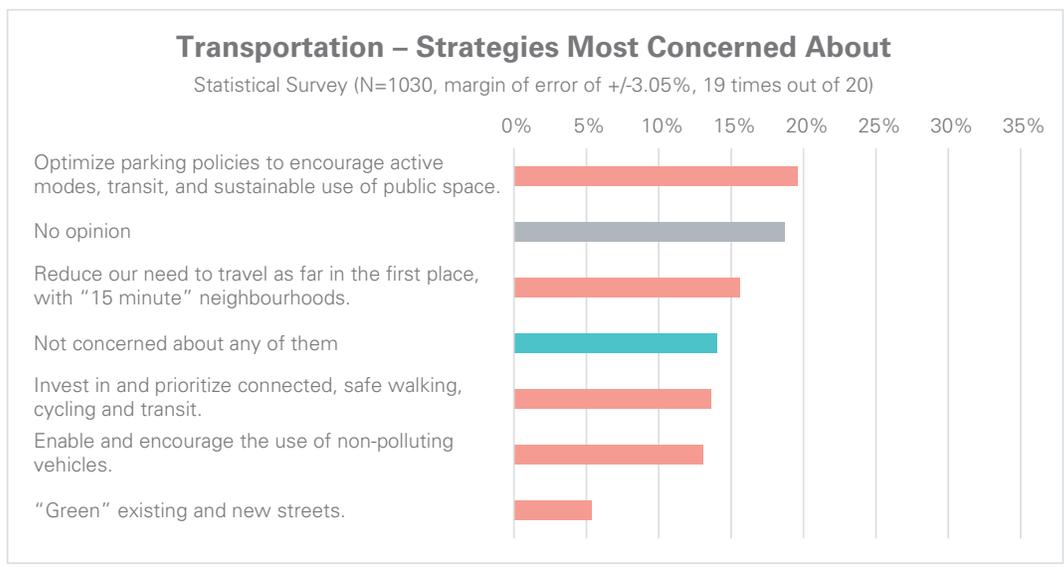


Figure 3.4.2.4 Strategies in order of percentage of respondents indicating it as the the one they were "most concerned about"

If we can walk/cycle to most of the places we go, we will be more "green"and we will also be more fit!
 ~Surrey resident

Table 3.4.2.5. Transportation - Most frequent themes - optional comments explaining reason for choice of key strategy “most concerned about”, compiled from both surveys (not representative; includes only those themes exceeding 5% of comments)

WHICH KEY STRATEGY ARE YOU MOST CONCERNED ABOUT? PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 551 COMMENTS
Protect/provide more parking – Want more/free parking, concerned about loss of parking, difficulty finding parking may lead to more driving, etc.	12%
Generally support – A step in the right direction, support, concerned about climate change, will personally help	12%
Electric Vehicles – negative – Affordability, lack of charging infrastructure, safety concerns, concerns about battery reliability, distance covered, recycling, etc.	10%
Traffic/driving – positive – Pro-car e.g., cars/driving is necessary, convenient, efficient etc.	8%



This is all really important. This would be a desirable city to live in.
~Surrey resident

This is fabulous as greenery helps reduce heat and flooding as water is absorbed by the trees and shrubs.
~Surrey resident

3.4.3 Ecosystem Protection and Enhancement

Key Message: Ecosystem protection and enhancement, including tree protection in particular, is a high priority and a key value for Surrey residents.

As a rapidly growing and urbanizing city, Surrey has both challenges and opportunities for ecosystem protection and enhancement. Public responses indicate that residents highly value Surrey’s ecosystems and greenspaces, and are concerned about issues such as environmental impacts of development and road building.

- > In the non-statistical survey, the Ecosystems section was the most popular theme chosen by respondents (in the statistical survey, response to all five sections was mandatory).
- > The Ecosystems vision, strategies and targets had the highest levels of support, and lowest opposition, among all the topics. Overall, levels of opposition reached only 2% (vision), 3% (strategies) and 5% (targets).

- > In response to the question *which key strategy are you most concerned about*, the option “I have no concerns about any of them” was the top choice with over 25% of responses.
- > Across all the comments in the statistical survey (over 10,000 analysed), the theme of “environmental protection” was the most commonly cited, after general statements of support.
- > Loss of trees was one of the prevalent concerns associated with comments about development impacts.

These responses highlight the importance that the natural environment has for Surrey residents.

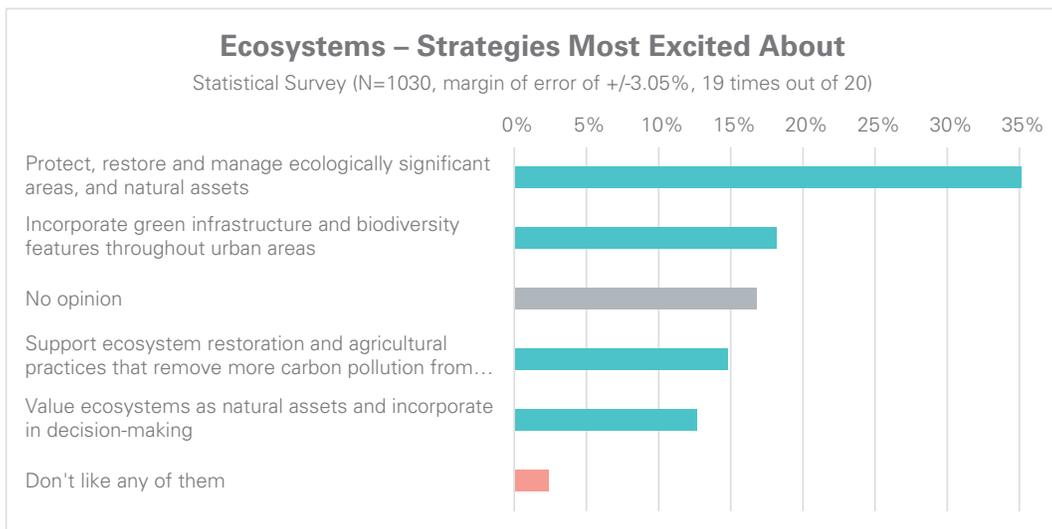


Figure 3.4.3.1 Strategies in order of percentage of respondents indicating it as the one they were "most excited about"

Table 3.4.3.2. Ecosystems – Most frequent themes - optional comments explaining reason for choice of key strategy “most excited about”, compiled from both surveys (not representative; includes only those themes exceeding 5% of comments)

WHICH KEY STRATEGY ARE YOU MOST EXCITED ABOUT? PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 466 COMMENTS
Environmental protection – Care about/importance of nature, protect ecosystems/environment	35%
Generally support – Step in the right direction, support, concerned about climate change, will personally help	20%
Health – positive – Improve physical/mental health, reduce air pollution, better air quality	8%
Development – Too much development, want to stop/slow development, development impacts on environment, too many condos, opposed to higher density, etc.	8%

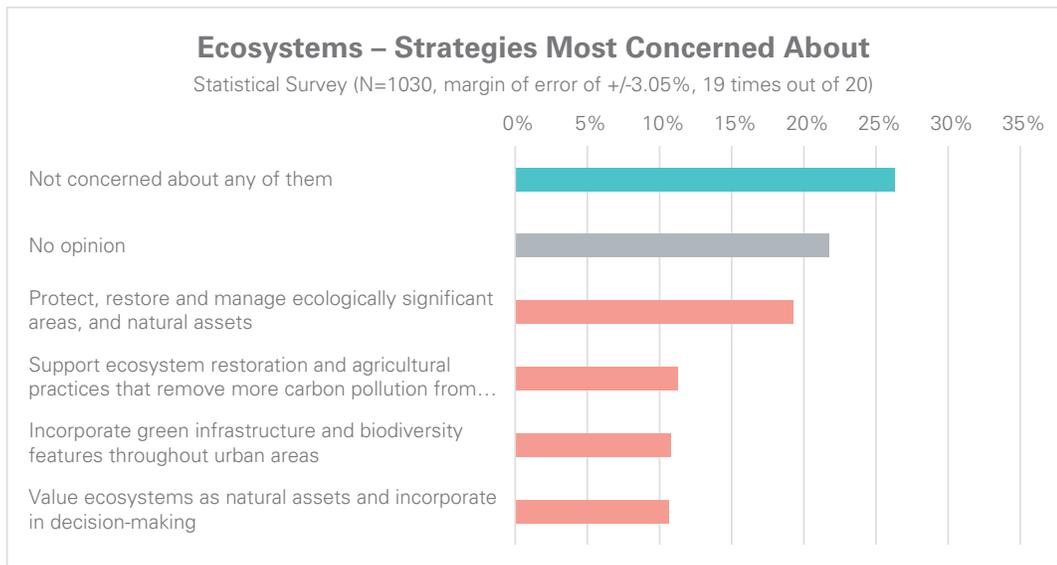


Figure 3.4.3.3 Strategies in order of percentage of respondents indicating it as the one they were "most concerned about"

Table 3.4.3.4. Ecosystems – Most frequent themes - optional comments explaining reason for choice of key strategy “most concerned about”, compiled from both surveys (not representative; includes only those themes exceeding 5% of comments)

WHICH KEY STRATEGY ARE YOU MOST EXCITED ABOUT? PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 445 COMMENTS
Environmental protection – Care about/importance of nature, protect ecosystems/ environment	26%
Generally support – Step in the right direction, support, concerned about climate change, will personally help	17%
Development impacts – Too much development, want to stop/slow development, development impacts on environment, too many condos, opposed to higher density, etc.	10%
Health – positive – Improve physical/mental health, reduce air pollution, better air quality	6%

3.4.4 Zero-Carbon Buildings and Neighbourhoods

Key Message: There is strong support for zero-carbon buildings and neighbourhoods.

High support was expressed in both the Neighbourhoods and Buildings sections of the survey, along with an interest in encouraging the use of renewable energy at the neighbourhood and building scale. However, residents are also acutely concerned about costs and affordability.

- > Overall, the vision, key strategies and targets for buildings, which emphasize phasing out fossil fuels used for heating in buildings and improving energy efficiency, were strongly supported and registered levels of opposition of only 4% (vision), 7% (strategies) and 10% (targets).
- > The Neighbourhoods key strategy “Make sure new development supports zero-carbon, resilient neighbourhoods” was among the two that generated the highest level of excitement in this category. This key strategy includes “Require and encourage new neighbourhoods to use only renewable energy, provide cooling and air filtration; and have outdoor spaces that reduce urban heat and absorb rainwater.”
- > The Buildings key strategy “Require new buildings to use only low-carbon, renewable energy (e.g. electricity) for heating and hot water as soon as possible” was selected by the most respondents as the one they are most excited about.

- > The leading reasons for excitement about this strategy, noted the benefits of higher quality, clean-energy buildings, and the cost-effectiveness of requiring higher standards at the outset. In addition, the health benefits of zero-carbon buildings were highlighted as a prominent theme in the comments for Neighbourhoods.
- > Survey respondents did not single out any of the Buildings key strategies for particular concern, with “no concerns” and “no opinion” accounting for the majority of responses to the concern question.
- > Among those that expressed concerns, cost was most the commonly mentioned theme in the comments.

This feedback indicates that residents appreciate the benefits of high performance, zero-carbon buildings not only for reducing carbon pollution, but also for other co-benefits.

Better insulation and more efficient heating/cooling will make for more comfortable buildings overall.
~Surrey resident

Table 3.4.4.1. Buildings – Most frequent themes - optional comments explaining reason for choice of key strategy “most excited about”, compiled from both surveys (not representative; includes only those themes exceeding 5% of comments)

WHICH KEY STRATEGY ARE YOU MOST EXCITED ABOUT? PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 378 COMMENTS
Zero carbon building construction & retrofits – positive – Benefits of/support for zero-carbon/ green buildings, eliminate emissions from the start, renewable energy; energy efficiency; phase out gas	28%
Cost concerns – Uncertainty/ concerns about costs to taxpayers, cost/benefit analysis, impacts on affordability, cost of housing, etc.	16%
Generally support – A step in the right direction, support, concerned about climate change, will personally help	12%

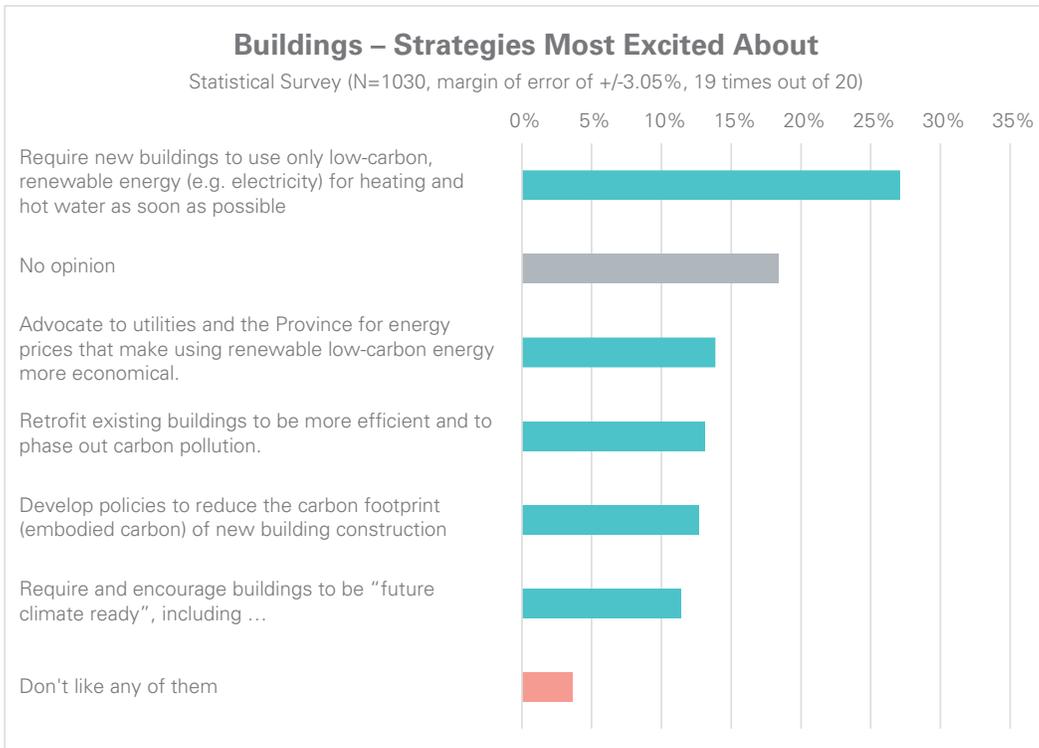


Figure 3.4.4.2 Strategies in order of percentage of respondents indicating it as the one they were "most excited about"

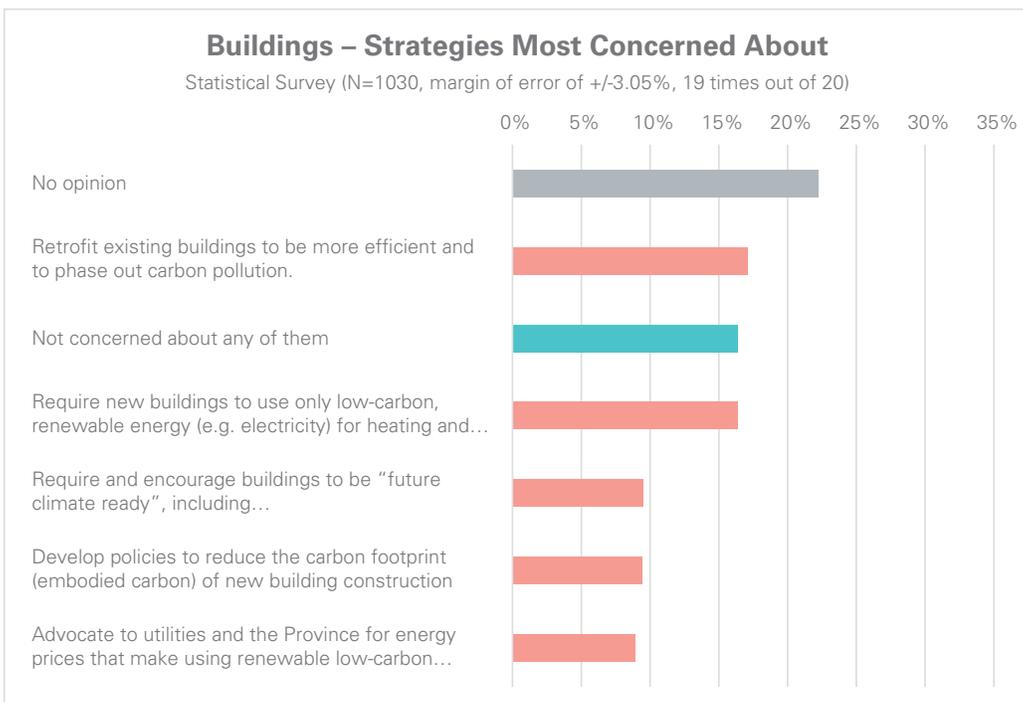


Figure 3.4.4.3 Strategies in order of percentage of respondents indicating it as the one they were "most concerned about"

Table 3.4.4.4. Buildings – Most frequent themes - optional comments explaining reason for choice of key strategy “most concerned about”, compiled from both surveys (not representative; includes only those themes exceeding 5% of comments)

WHICH KEY STRATEGY ARE YOU MOST EXCITED ABOUT? PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 408 COMMENTS
Cost concerns – Uncertainty/concerns about costs to taxpayers, cost/benefit analysis, impacts on affordability, cost of housing, etc.	36%
Generally support – A step in the right direction, support, concerned about climate change, will personally help	14%
Zero carbon building construction & retrofits – negative – Cost/affordability, practicality of retrofitting old buildings, and making new buildings zero-carbon/efficient	10%
Zero carbon building construction & retrofits – positive – Benefits of/support for zero-carbon/green buildings, eliminate emissions from the start, electric heating; energy efficiency; get rid of gas	5%



3.4.5 City Leadership and Partnerships

Residents support the City leading and partnering with others to enable system-wide changes in support of reducing emissions and improving resilience to climate change.

The Leadership section of the survey indicated general support, low levels of concern, and specifically a call for the City to take a leading and coordinating role.

> Overall, the vision, key strategies and targets for City leadership, including in corporate operations as well as community partnerships, were well supported and registered levels of opposition of only 3% (vision), 5% (strategies) and 8% (targets).

- > The response “no opinion” ranked as the top response to both questions about excitement/concerns. The comment theme indicating “general support” was the most prevalent in response to these questions.
- > Some comments opined that these directions for the City were not sufficiently “bold”, instead representing a minimum standard.
- > Some concerns about costs and sincerity of government were also noted, indicating that the City has the opportunity to demonstrate commitment to action through strengthened targets, and early on-the-ground actions.
- > Some comments during the public virtual open house also noted the importance of equity and inclusion, and strengthening relations with First Nations.



Figure 3.4.5.1 Strategies in order of percentage of respondents indicating it as the one they were "most excited about"

Table 3.4.5.2. City Leadership – Most frequent themes - optional comments explaining reason for choice of key strategy “most excited about”, compiled from both surveys (not representative; includes only those themes exceeding 5% of comments)

WHICH KEY STRATEGY ARE YOU MOST EXCITED ABOUT? PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 360 COMMENTS
Generally support – Step in the right direction, support, concerned about climate change, will personally help	27%
Environmental protection – Care about/importance of nature, protect ecosystems/ environment	10%
City-wide leadership needed – City needs to lead; change at a big scale, work across jurisdictions, commitment, etc.	9%
Cost concerns – Uncertainty/concerns about costs to taxpayers, impacts on affordability, cost of housing, etc.	6%

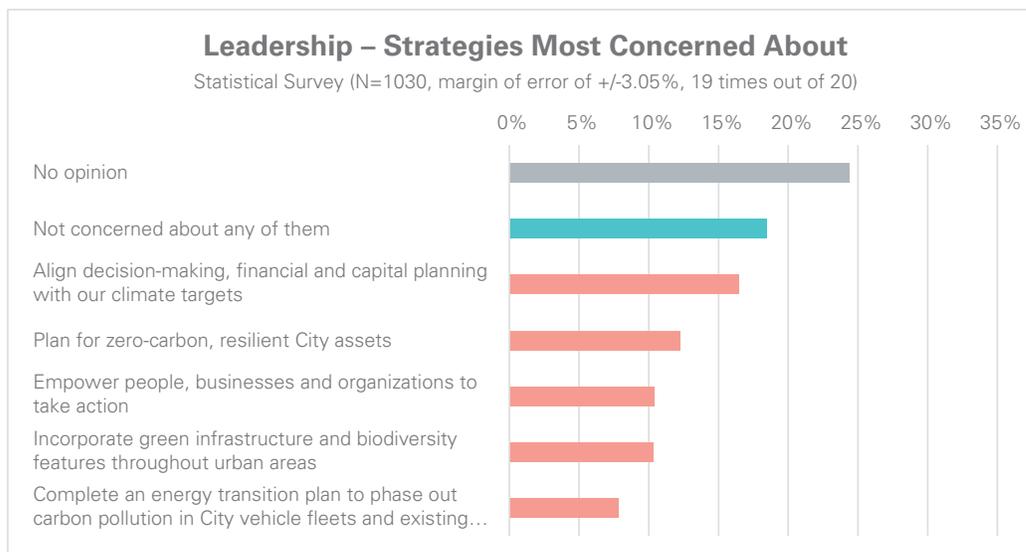


Figure 3.4.5.3 Strategies in order of percentage of respondents indicating it as the one they were "most concerned about"

Table 3.4.5.4. City Leadership – Most frequent themes - optional comments explaining reason for choice of key strategy “most concerned about”, compiled from both surveys (not representative; includes only those themes exceeding 5% of comments)

WHICH KEY STRATEGY ARE YOU MOST CONCERNED ABOUT? PLEASE TELL US WHY (OR WHY NOT IF NONE)?	% OF 367 COMMENTS
Generally support – step in the right direction, support, concerned about climate change, will personally help	23%
Cost concerns – Uncertainty/ concerns about costs to taxpayers, cost/benefit analysis, impacts on affordability, cost of housing, etc.	20%
Distrust in government – e.g. Dissatisfaction with / distrust in city government, or government in general, don't believe this is sincere, etc.	10%
City actions are not currently aligned – City is not doing this now, heading in wrong direction, need to align policies; city-wide action not just select areas, etc.	5%

4 Overall Comments and Concerns

4.1 Survey Comment Themes

Comments covering all five sections of the two surveys were analysed by themes. While not a representative selection of views⁹, these themes can broadly indicate the tone of the comments. Some of the top themes, as shown in the Figure below include:

- > Statements of general support or indications that “nothing was missing” from targets and strategies accounted for the largest single category by a wide margin.
- > The theme of “environmental protection”, indicating care and concern for the natural environment and ecosystems.

- > The concern that targets needed to be strengthened, including both interim GHG targets, and shorter term, more detailed and specific sectoral targets. This concern was also prevalent in the public virtual open house.
 - > Support for a shift in the transportation system away from dependence on cars, and improving the transit system.
 - > This included doubts expressed about the sincerity and commitment of Surrey city council to taking the bold actions proposed, concerns about government restrictions in general, and a desire for more accountability and transparency in decision making
- The full distribution of these and other comment themes is provided in the Figure below.

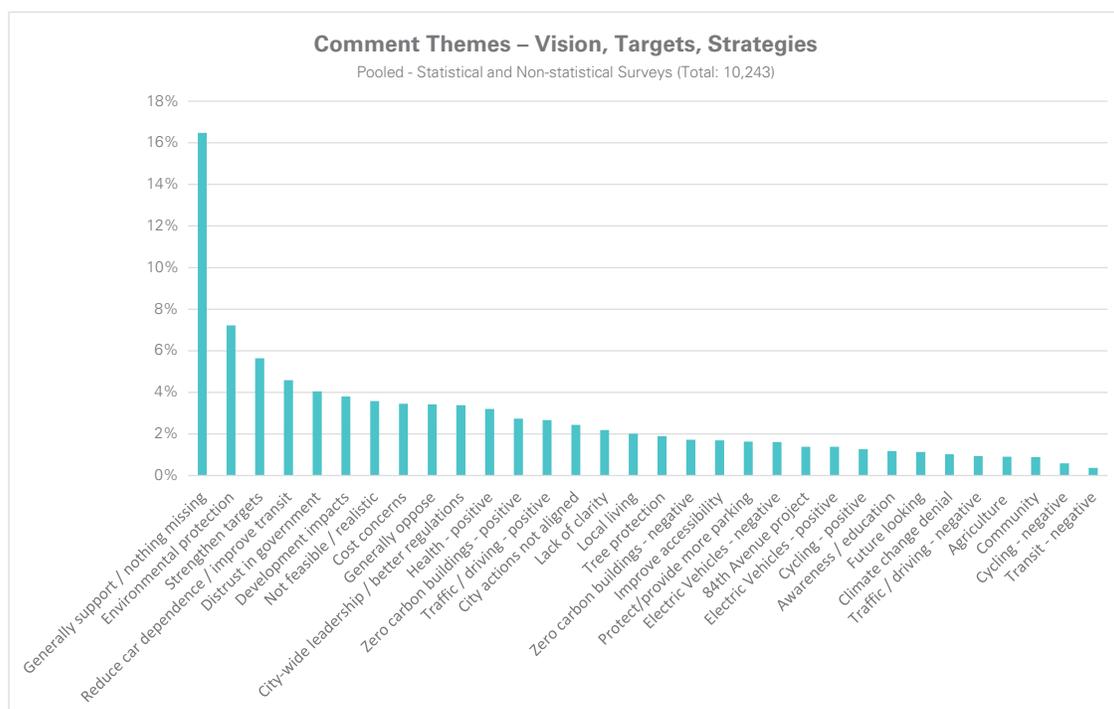


Figure 3.4.5.5 Themes from all transportation related open-ended questions in statistical survey.

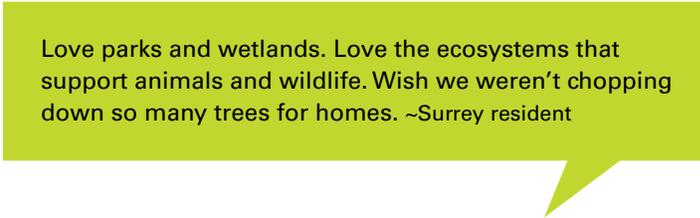
9 Caution in interpreting these results quantitatively is needed because: similar comments by the same individual across multiple questions can skew results; many respondents chose not to comment; categorization into themes an imprecise exercise; results from both surveys are combined.

4.2 Concerns

Overall, levels of support for the direction and content of the CCAS framework were high, and the statistical survey provides confidence to staff and Surrey City Council that the plan is on the right track. A policy framework that proposes significant change from the status quo will inevitably elicit some opposing views. Nevertheless, understanding and, where possible, responding to some of the more common concerns can strengthen the development and implementation of the plan.

Some of these include the following.

- > **Accountability and urgent action** – Many of the comments indicating “general support” also signaled anxiety about the need to act urgently to the climate crisis, and frustration about lack of progress to date. This was also seen in comments calling for strengthening targets and providing specific commitments, often related to a desire to see on-the-ground action, as well as measures to ensure follow-through on high-level goals and visions.
- > **Costs and affordability** – This was a prevalent theme in several sections of the surveys, and particularly in relation to buildings and housing affordability.
- > **Development impacts** – Concerns about development included direct environmental impacts such as land clearing and road building, and related impacts such as increased vehicle traffic.
- > **Feasibility and mis-aligned actions** – Some comments noted agreement with the general vision being put forward but questioned whether it is feasible to make such big changes. Some also critiqued the City for currently heading in the wrong direction.



Love parks and wetlands. Love the ecosystems that support animals and wildlife. Wish we weren't chopping down so many trees for homes. ~Surrey resident

5 Conclusion and Next Steps

The Climate Change Action Strategy (CCAS) framework, developed as a precursor to the full strategy currently in development, was shared with the community in the summer of 2021. The framework consists of five key components, each with a vision, key strategies and targets. Collectively, the framework conveys system-wide changes that are necessary for reaching the City’s adopted climate targets and improving resilience and adaptation to climate impacts. Public engagement included a broad communications campaign, an opt-in public survey, and a statistical survey, and a public virtual open house. Feedback received through these channels indicates a high level of public concern for climate change, and strong support for the directions outlined in the CCAS framework.

Once decision-making is aligned with climate goals, the good effects will ripple out. This is key for all the other areas.
~Surrey resident

Just focus on making the environmentally friendly options easy, affordable and accessible.
~Surrey resident

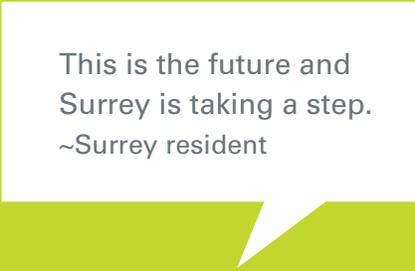
The final CCAS will consist of a refined and more fine-grained policy framework that builds on the initial framework and responds to public feedback as well as to stakeholder input, which is ongoing at this time. The final framework is likely to include the same five components with similar vision statements, and supported by a hierarchy of policy directions or “shifts” that clearly state the changes necessary to achieve the vision. Actions will also be specified, including “quick-start” actions that can be initiated right away, along with measures and targets to set direction and track progress.

Based on the community feedback received to date, the CCAS will prioritize the following shifts:

- > Align land use planning policies & regulations with climate goals.
- > Align transportation planning with climate goals to enable mode shift to walk/roll/cycle and transit.
- > Manage ecosystems for carbon sequestration and climate resilience.
- > Accelerate the transition to zero-carbon resilient new and existing buildings.
- > Support community empowerment, including improving equity and relations with First Nations.

Staff are reaching out to and engaging directly with additional groups and stakeholders, to both gather additional input as well as to establish relationships for long-term implementation of the CCAS. Comprehensive internal engagement is also underway to ensure the organization is aligned and committed to embedding climate action across all critical business areas.

The final CCAS will likely be advanced for Surrey City Council approval in early 2022.



This is the future and
Surrey is taking a step.
~Surrey resident

Appendix A

CCAS Framework Shared in Surveys

Vision Statements

Resilient Zero-Carbon Neighbourhoods: Surrey residents can meet their daily needs within a safe and easy walk, cycle or transit ride from home. Most neighbourhoods have a mix of different types of homes, shops and businesses. Networks of safe bike paths, sidewalks and frequent transit connect neighbourhoods. Trees and lush vegetation support biodiversity, cool the air and absorb rainwater. These public spaces are inclusive and welcoming to all.

Safe Zero-Carbon Transportation: Everyone can access their daily needs easily and safely without the need for a car. Frequent transit and safe walking and cycling infrastructure support and connect complete communities. All vehicles are free from carbon pollution. Streets are safe, welcoming spaces that prioritize walking, cycling and transit, and include green features and places to gather.

Healthy Zero-Carbon Buildings: All buildings are healthy, energy efficient, and don't emit carbon pollution. They are comfortable year-round and help to protect us from the impacts of climate change.

Climate-Positive Resilient Ecosystems: Surrey's ecosystems – like forests, streams and wetlands - are healthy, resilient and well managed. They are valued for services like storing carbon, reducing flooding, and cleaning the air and water. Abundant parks, and green infrastructure like street trees and rain-gardens, support biodiversity and provide beautiful places for people to enjoy nature throughout the city.

Bold City Leadership: The City of Surrey is a leader in putting equitable climate action at the heart of our decision making. City-owned vehicles, buildings and infrastructure are free of carbon pollution and prepared for climate change impacts. Supported by the City and other partners, the community is aware, empowered and engaged in climate action. These actions set a path for many others to follow, and support a thriving, local green economy.

The following draft and future targets were shared with the public. These targets are proposed to be refined and additional targets (e.g. for intervening years) may be added.

RESILIENT ZERO-CARBON NEIGHBOURHOODS

- > 75% to 90% of households can access most of their daily needs within a safe 15-minute walk, cycle or transit trip from their home by 2050.
- > “Daily needs” would likely include access to frequent or rapid transit, as well as groceries, childcare, pharmacy, neighbourhood park, health care, schools, shopping, and public facilities (library, community centre, etc.).

SAFE ZERO-CARBON TRANSPORTATION

- > **Mode share:** A growing percentage of distance traveled should be made via cycling, walking, and transit. This target should increase steadily to reach about 50 per cent by 2050.
- > **Active transportation:** Address critical gaps in the City's walking and cycling, and build the strategic cycling network connecting town centres, by 2025.
- > **Electric Vehicles:** Targets for public EV charging may include ensuring a fast-charge station is within a short drive for most residents.

HEALTHY ZERO-CARBON BUILDINGS

- > 2025: All new buildings produce zero climate pollution when operating.
- > 2030: All new large (Part 3) buildings have 40% less embodied carbon and improved resilience to climate change impacts.
- > 2050: All buildings have net zero emissions.

CLIMATE-POSITIVE RESILIENT ECOSYSTEMS

Future targets to be developed, may include:

- > Urban Forest Canopy: Expand our urban forest. Surrey is currently embarking on an Urban Forest Management Strategy, expected to be completed by the end of 2021, which will define targets that are suited to our region, and a plan to reach them.

- > Ecological Health: Assess the health and “functioning” of streams and wetlands as an indicator of overall ecosystem health and resilience.
- > Protected Area Condition and Extent: Track the health and extent of ecosystems protected within the City’s Green Infrastructure Network.

BOLD CITY LEADERSHIP

- > Every year: The City discloses our vulnerability to climate change impacts, and our progress towards our targets.
- > 2050: All City fleets are zero-emissions.
- > 2050: All City facilities are zero emissions, highly efficient, and future-climate-ready.

Key Strategies

RESILIENT ZERO-CARBON NEIGHBOURHOODS

Align all City land use policies and regulations with our climate targets.

- > Focus higher density growth in City Centre and other Town Centres to take advantage of existing infrastructure, services and amenities.
- > Allow and encourage more “urban villages” near frequent transit, with townhouses and low-rise apartments (up to six storeys) and a mix of shops and businesses, where most daily needs can be met within a 15 minute walk or cycle trip from home.
- > Allow for a wider variety of types of homes in existing neighborhoods, like duplexes, multi-plexes, and townhomes, along with small shops and businesses.

Design new neighbourhoods to meet higher climate standards.

- > Require and encourage new neighbourhoods to use only renewable energy, provide cooling and air filtration; and have outdoor spaces that reduce urban heat and absorb rainwater.
- > Focus more growth in areas that already have roads and services in place instead of clearing new land.
- > Consider updating development charges¹⁰ to account for the higher cost to service new neighbourhoods in outlying areas.

¹⁰ Development Cost Charges are fees levied on new developments to help fund the costs of expanding and upgrading the City’s road, water, drainage and sewer services, and for parkland acquisition or improvement. In some cities, developments far from the city centre pay much higher fees, to account for the greater cost of servicing these areas, while more compact growth near the centre is discounted and in that way encouraged.

¹¹ A “strategic” cycling network is one that is carefully planned to provide continuous, safe routes to common destinations across the city, and built out in a relatively short period of time to minimize gaps

> Create more “people-first” streets and public areas.

- > Make it easier for those who would like to walk, cycle or roll instead of drive, by providing safe, connected transportation paths protected from vehicle traffic.
- > Convert some streets or sections of streets to areas for people to safely walk, play, and socialize, with limited or restricted vehicle access.

SAFE ZERO-CARBON TRANSPORTATION

Reduce our need to travel as far in the first place, with “15 minute” neighbourhoods

- > Design neighbourhoods so that more everyday needs are located within a 15 minute walk or bike ride from home.

Invest in and prioritize connected and safe walking, cycling and transit

- > Work with TransLink to provide more existing and new neighbourhoods with frequent and reliable transit service.
- > Build a strategic cycling network¹¹ of safe cycling lanes protected from vehicle traffic, connecting key destinations in the city.
- > Fix critical gaps in the sidewalk network in priority growth areas.

Optimize parking policies to encourage active modes, transit, and sustainable use of public space

- > Explore options to fairly price parking in residential and commercial areas.
- > Reduce parking required in new development, in areas close to frequent transit.

Enable and encourage the use of zero-emission vehicles

- > Implement the actions in the [Surrey Electric Vehicle Strategy](#), including installing more public charging stations.
- > Encourage zero-emissions freight trucks, and smaller, non-polluting delivery vehicles in local areas, like e-cargo-bikes.
- > Offer benefits for electric bikes, such as secure storage at central locations, and rebates or tax breaks.

“Green” existing and new streets

- > Include more “green infrastructure” like street trees and raingardens¹² alongside roads, sidewalks and cycle paths, to provide shade and habitat, and to absorb rainwater.
- > Look for opportunities to narrow vehicle travel lanes, for example in residential areas to reduce vehicle speed and create more greenspace.

Healthy Zero-Carbon Buildings

Require new buildings to use only low-carbon, renewable energy (e.g. electricity) for heating and hot water as soon as possible.

- > Update [Surrey’s Energy Step Code policy](#), as and when allowed by the provincial government, to phase out fossil fuel energy in new buildings.
- > Help developers and builders access incentives, from senior governments and utilities, for new buildings that are more efficient and use only clean electricity.

Retrofit existing buildings to be more efficient and phase out carbon pollution

- > Advocate for and support senior government regulations for measuring and phasing out carbon pollution in existing buildings.
- > Support residents and businesses in retrofitting homes and buildings for example by providing information about loans and grants, and connecting them with contractors.
- > Accelerate the planned conversion of Surrey City Energy to renewable energy.

Develop policies to reduce the carbon footprint (embodied carbon) of new buildings.

- > Require developers of new large buildings like high-rises to estimate and disclose (and eventually reduce) the carbon footprint of the building.

Require and encourage new buildings to be “future climate ready”, including better cooling ability for hotter summers, and improved filtration of wildfire smoke. Advocate to utilities and the Province for energy prices that make using renewable low-carbon energy more economical.

Climate-Positive Resilient Ecosystems

Protect, restore and manage ecologically significant areas and natural assets

- > Complete an Urban Forest Management Strategy and establish targets for tree cover.
- > Build on the City’s Biodiversity Conservation Strategy to acquire, restore, and enhance more ecologically significant lands.
- > Continue to restore ecosystems on City-owned lands, like opening up and restoring streams and wetlands that were previously covered, and encourage or require developers to do so.

Incorporate green infrastructure and biodiversity features throughout urban areas

- > Incorporate green infrastructure in City projects, such as wildlife-friendly road crossings, raingardens, pervious pavement, and native plants in landscaping.
- > Improve biodiversity of City owned parks and greenspaces by including more native plants, pollinator gardens, and water-conserving landscaping features.
- > Incorporate more trees and planted areas in new developments to soak up rainfall and provide cooling, helping us moderate the impacts of climate change.

Value ecosystems as natural assets and incorporate this in decision-making

- > Estimate the financial value¹³ of our ecosystems – for services like cleaning our air and water and storing carbon – to help us make better decisions to manage them and help the City save money, just like we do for engineered assets like roads and pipes.

Support ecosystem restoration and agricultural practices that remove more carbon pollution from the air.

- > Encourage agricultural practices that increase soil carbon, restore ecosystems, and enhance local food production.
- > Look for opportunities to restore ecosystems so they remove more carbon pollution and help to balance the City’s small remaining emissions by 2050.

¹² A raingarden is a garden designed to catch and absorb rainwater that flows off hard surfaces like roads, sidewalks, and buildings. It uses special soil and plants that clean pollution in the water (like oil from cars) and allow the water to soak back into the ground. This prevents downstream waterways from being damaged from sudden “flash floods”, and protects the water quality for fish and other living things.

¹³ The City is currently completing the first step of a natural asset management plan for the Little Campbell River watershed, including an estimate of financial value. This could be expanded to other watersheds, or the entire City.

Bold City Leadership

Align decision-making, financial and capital planning with our climate targets

- > Disclose the City's climate risks, and climate actions, in our annual financial reports, following the example of leading financial institutions.
- > Develop a carbon "budget" to help us take early action and make wise decisions in how we spend and invest, without over-shooting our targets, just like a financial budget.
- > Explore policies that assign a price to carbon pollution, to help us make wise decisions such as when purchasing new vehicles or equipment.

Plan for zero-carbon, resilient City assets

- > Make sure all new City facilities are zero-carbon, highly efficient and designed for climate resilience.
- > Accelerate the transition of Surrey City Energy to 100% renewable energy, which will instantly switch existing buildings in City Centre off of fossil fuel heating.
- > Complete an energy transition plan to phase out carbon pollution in City vehicle fleets and existing buildings.
- > Develop policies for purchasing good and services that prioritize low-carbon and sustainable options.

Empower people, businesses and organizations to take action

- > Make equity central to the City's climate plan and a core consideration in decision making.
- > Work with businesses, industry, and educational partners to position the City as a leader in clean technology and expertise.
- > Explore opportunities to develop a strong green building industry in Surrey to support the zero carbon transition.

We must prioritize nature if we want to have a livable Surrey. - Surrey resident

Surrey can shine a light for other regions and show that this has positive impacts for everyone.
~ Surrey resident

I feel it's important to empower the residents to take action too and make it fun and people can all help which will lower the costs.
~ Surrey resident

We need to change our systems in order save our future.
~Surrey resident

Appendix B

Communication and Engagement Details

Surrey's Climate Change Action Strategy – Public Engagement Campaign Results

The following analysis is for the City of Surrey public engagement campaign to support the development of a Climate Change Action Strategy (CCAS). When finalized, the strategy which will set a “roadmap” for achieving Surrey City Council’s adopted GHG reduction targets of net zero community-wide emissions, and absolute corporate emissions, before 2050.

Campaign Goals and Objectives

The overarching communications goal for public engagement for CCAS was to share information, build awareness, and gauge support, from a broad range of Surrey voices, for actions within five topics, and use their ideas to help shape the CCAS, while building understanding and shared commitment towards the goal of a zero-carbon resilient community.

Timing

Engagement ran from May to June 30, 2021.

Approach

The communications approach was led by the City of Surrey Corporate Marketing and Communications Division (CMCD) which leveraged existing communication channels with the community and its stakeholders. The communication channels included:

- > City of Surrey website and engagement project page
- > Social media (Twitter, Facebook, Instagram)
- > Traditional media (newspaper ads, transit ads and billboards)
- > Newsletters and municipal updates
- > Earned media

Website

The City’s website and engagement platform received 3,389 unique page views during the campaign and featured the following materials:

- > Video content
- > Key documents and corporate reports
- > Interactive engagement opportunities like Q&A and Quick Polls
- > Survey link
- > Email subscription to project news and updates

Social Media

Organic Posts

CHANNEL	LINK CLICKS	REACH (PEOPLE)	IMPRESSIONS	ENGAGEMENTS
Facebook	40	10,990	11,233	84
Twitter	80	N/A	34,776	582
Instagram	N/A	7,843	8,233	100

Social Media Advertising

CHANNEL	LINK CLICKS	UNIQUE LINK CLICKS	REACH (PEOPLE)	IMPRESSION	COST PER CLICK	CTR (LINK CLICK/IMPRESSION)	AMOUNT SPENT
Facebook & Instagram	6,867	6,082	232,184	657,716	\$0.89	1.83%	\$4,988.26

Traditional Media Advertising

DATE	PAID MEDIA TYPE
June 3 – June 23	Surrey Now-Leader, Cloverdale Reporter and Peace Arch News
May 29 – June 25	The Link, The Voice (South Asian newspapers)
May 24 – June 30	Transit shelter ads
June 6 – June 29	Outdoor Pattison Digital Signs

Earned Media

Newspaper articles that engage with CCAS and climate change/climate action topics during the CCAS update process.

- > June 16 <https://www.peacearchnews.com/news/city-of-surrey-set-to-host-online-climate-action-panel/amp/>
- > June 26 <https://www.bclocalnews.com/news/city-of-surrey-set-to-host-online-climate-action-panel/>
- > June 16 <https://flipboard.com/@blackpressmedia/surrey-83sag8fiz/city-of-surrey-set-to-host-online-climate-action-panel---surrey-now-leader/a-TD0djhbbSsyS2vezdJLFVw%3Aa%3A3177150469-a2f29842b6%2Fsurreynowleader.com>
- > August 2 <https://www.surreynowleader.com/news/surrey-awards-1m-contract-for-nicomekl-park-design/>

Newsletters and Municipal Updates

NEWSLETTER	DATE	SUBSCRIBERS	VIEWED BY	OPEN RATE	LINK CLICKS
Your City	May 13	9,371	2,999	32%	22
Youth	June 1	4,703	1,411	30%	13
Your City	June 17	9,602	2,977	31%	7
Sustainability	June 8	6,477	2,396	37%	90
Festivals and Events	June 16	11,879	4,633	39%	2
Public Consultation	June 17	8,447	3,801	45%	75

I am excited to see safe walking streets, cycling and transit because it encourages me to feel safe every time I go out to get fresh air.
~Surrey resident

Immediate benefits achievable with this strategy would have significant impact.
~Surrey resident

Appendix C

Statistical Differences in Survey Results

Overall, the findings summarized in this report were consistent across neighbourhoods, age groups, genders, housing tenure, and income levels. There were a few subtle yet statistically significant differences among the following groups that can provide additional information for context. Statistical significance can be stated due to the scientific approach used in the statistical survey (and thus includes only this survey's results).

Knowledge and Concern

KNOWLEDGE OF CLIMATE CHANGE

- > **Age** - More respondents aged 39 years and younger classified themselves as “very knowledgeable” about climate change compared to older aged groups.
- > **Gender** - Male respondents stated a higher level of knowledge (very knowledgeable or knowledgeable) about climate change compared to female respondents.

Not only is it more environmentally friendly in the long term, but it gives the urban landscape a more pleasing appearance, encouraging citizens to physically take care of the neighbourhood if they have a sense of pride in their community.

~Surrey resident

IMPORTANCE OF CO-BENEFITS

> One question explored benefits associated with climate action, aside from reducing carbon emissions. Respondents could choose up to three benefits, and were then asked to rank them according to “extremely important / very important / important”. The following significant differences in responses were noted.

- **Age** - Respondents under 29 years valued “saving money from lower transportation costs” higher than those aged 50 and older. (19% to 27% of under-50 vs. 11% to 16% of 50 and over chose this co-benefit among their top three)
- Of those who chose this co-benefit among their top three, a higher proportion (64%) of those aged 30-39 years ranked it as “extremely important” compared to those aged 50 or older (on average 33%).

These results may reflect the fact that transportation can account for a large proportion of household costs, particularly in more suburban and car-dependent communities like Surrey¹⁴, which may be more acutely experienced by younger residents.

- > **Gender** - Female respondents valued “protected and restored ecosystems” higher than males (52% females vs. 41% males chose this co-benefit among their top three).
- > **Tenure** - Improved air quality was ranked as “extremely important” to more renters (71%) vs. homeowners (59%), among those who chose this benefit among their top three.
- > **Household income** – A higher number of respondents with household income under \$40k ranked “Saving money from lower utility bills” as “extremely important”, compared to those with incomes over \$100k (74% vs. 39%), among those who chose this as one of the top three co-benefits .

14 Metro Vancouver (2014) [Housing and Transportation Cost Burden Study](#)

Key Strategies

RESILIENT, ZERO-CARBON NEIGHBOURHOODS.

As noted above, overall support for the key strategies was high (78%) and opposition was low (6%) for the key strategies in this component of the CCAS framework. Levels of opposition did not differ significantly across the demographic factors. Relative levels of support did have some variance:

- > **By Community** - Levels of *support and somewhat support* were higher in City Centre and Whalley compared to Cloverdale and South Surrey.
- > **By Age** – Respondents aged 29 years and younger had higher levels of support for the Neighbourhoods key strategies, compared to older age groups (89% for 29 or younger, vs. an average of 74%).
 - More respondents aged 29 years and younger also chose the key strategy “Make sure all City land use policies and regulations support our climate targets” as the one they were most excited about; 42% vs. an average of 24% for older age groups.

- **By Tenure** – Levels of support between renters and homeowners were similar in the total level of support (including “support” and “somewhat support” together), however more renters chose unqualified “support”, (53%, compared to 42% for owners).
- > These responses suggest that those already living in “15-minute neighbourhoods” in town centres experience and value the benefits of local living more highly than those living in more car-dependent neighbourhoods.

CLIMATE-POSITIVE, RESILIENT ECOSYSTEMS

- > **By Age** – A higher percentage of respondents aged 29 or younger stated they support setting targets for the Ecosystems section; 88% vs. an average of 77% for the older age groups.
- > This response, together with the higher level of knowledge about climate change reported by younger age groups, suggests that younger generations are more concerned about the environment and climate change.

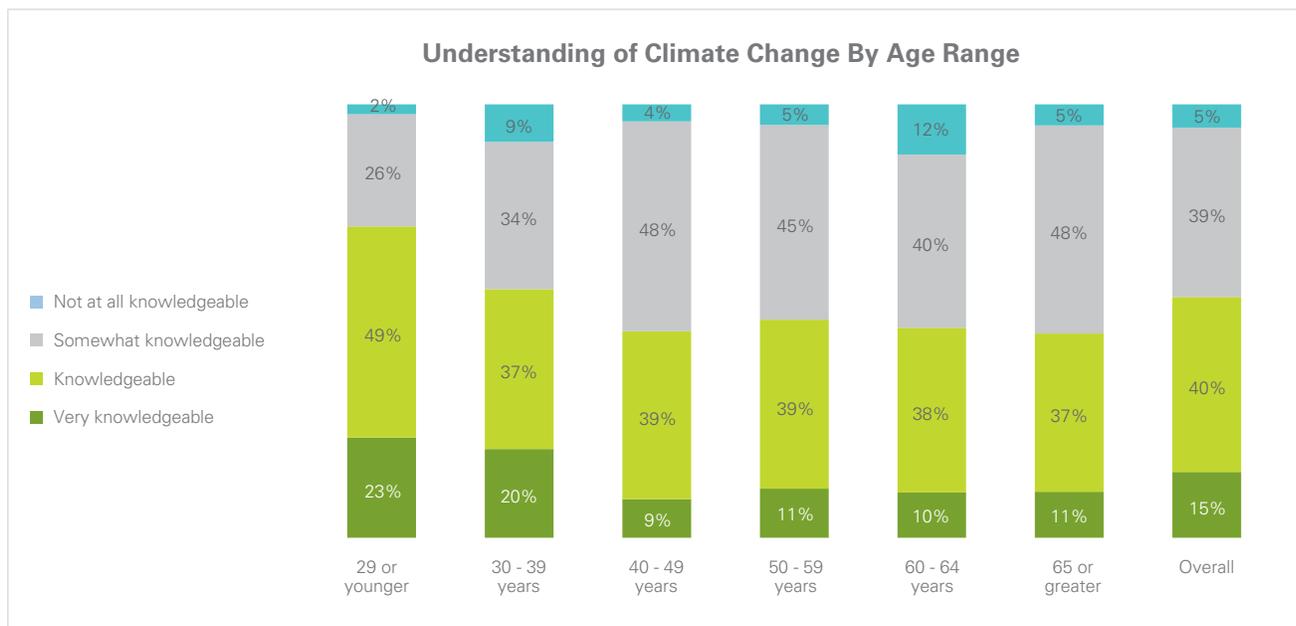


Figure 3.5.1 Understanding of climate change by age range

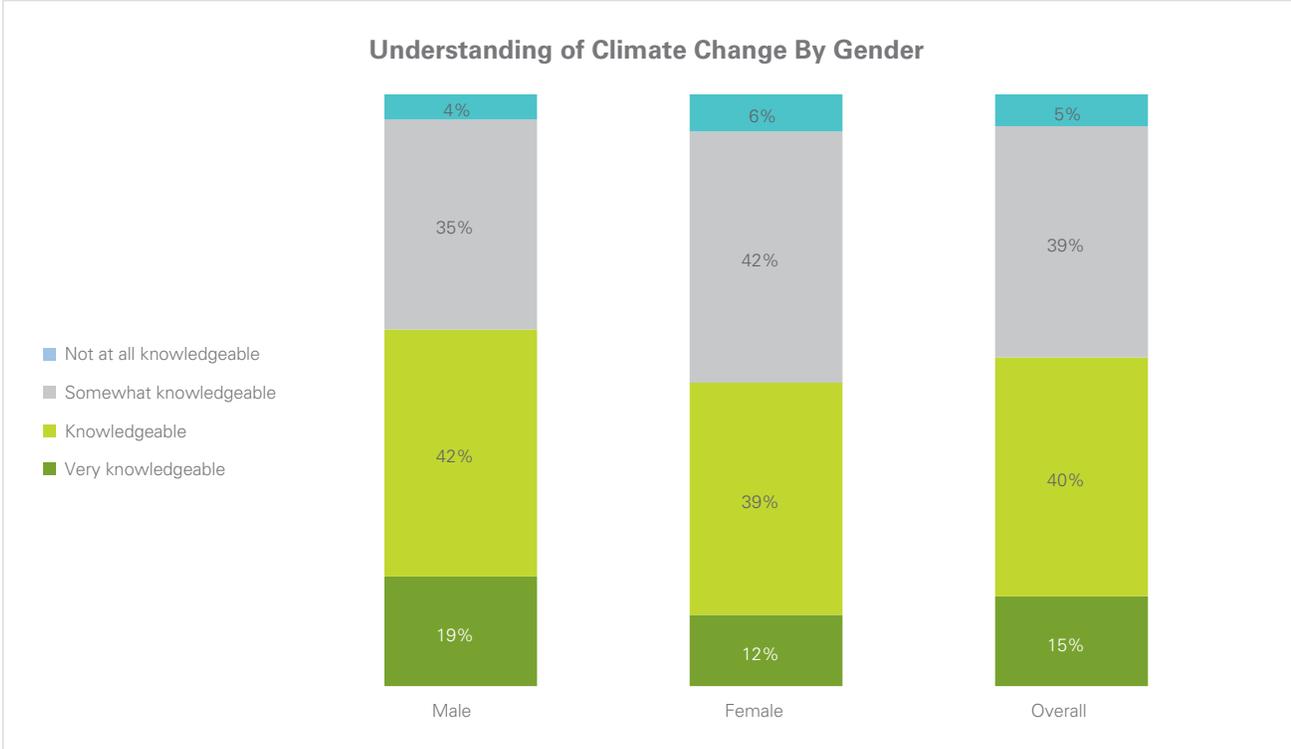


Figure 3.5.2 Understanding of climate change by gender

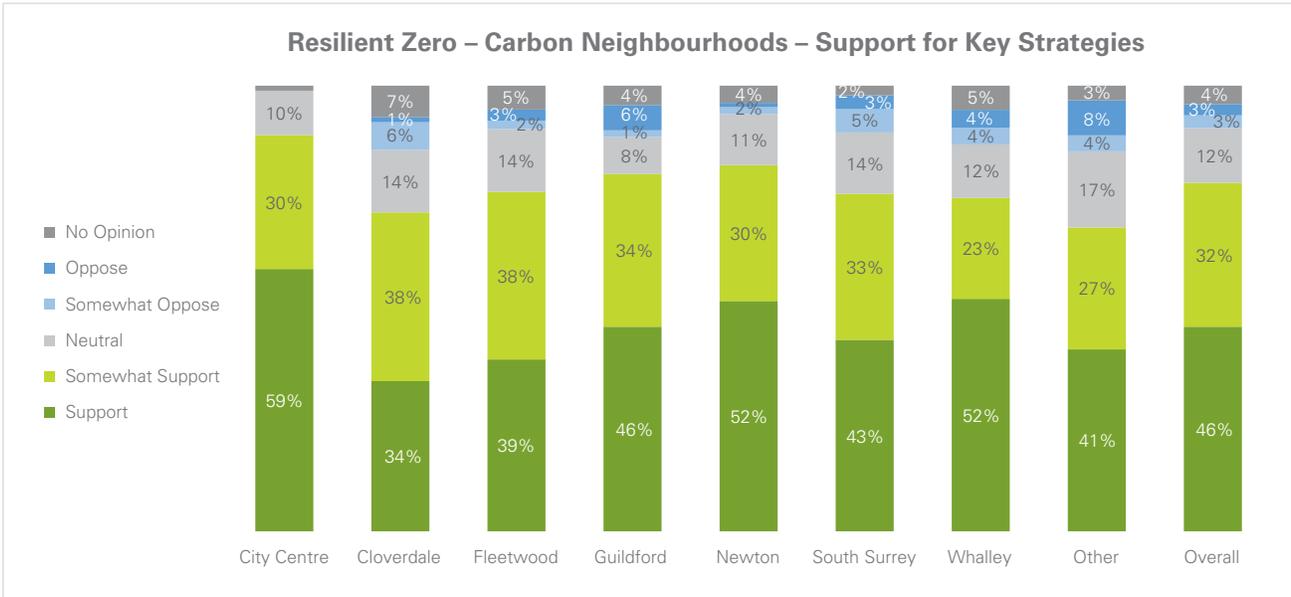


Figure 3.5.3 Support for key strategies – resilient zero – carbon neighbourhoods

Appendix D

Demographics of Survey Results

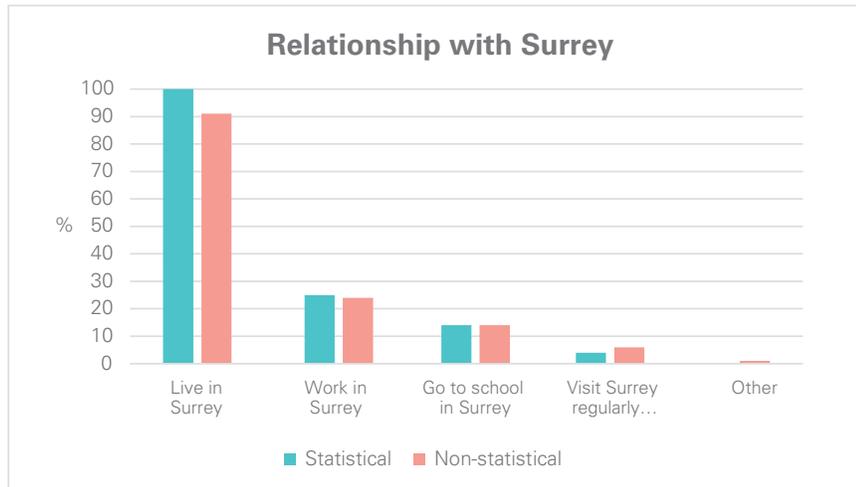


Figure 3.1.1 Relationship with Surrey

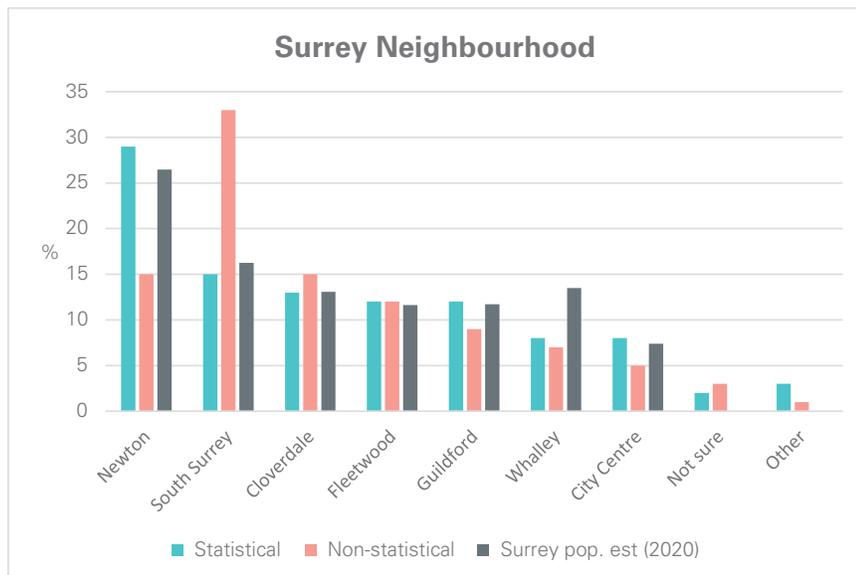


Figure 3.1.2 Geographic distribution of residents

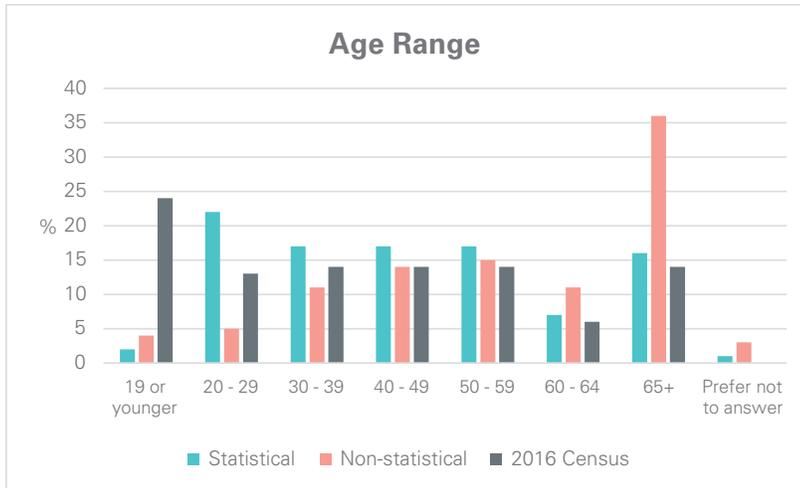


Figure 3.1.3 Age distribution

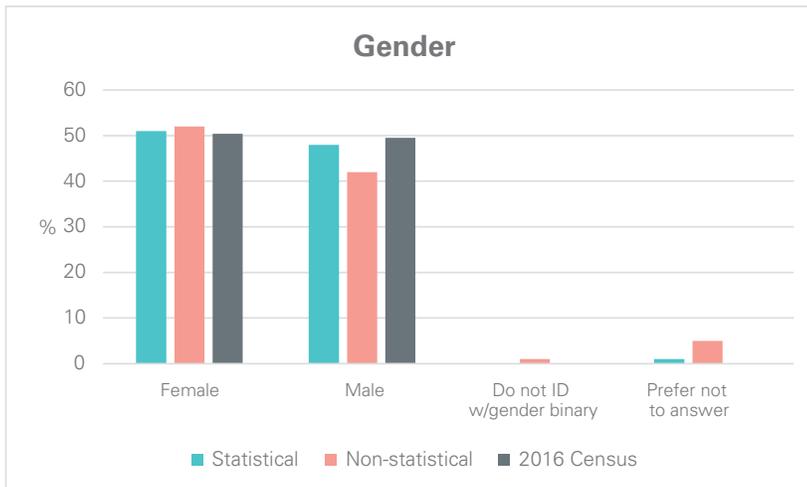


Figure 3.1.4 Gender distribution

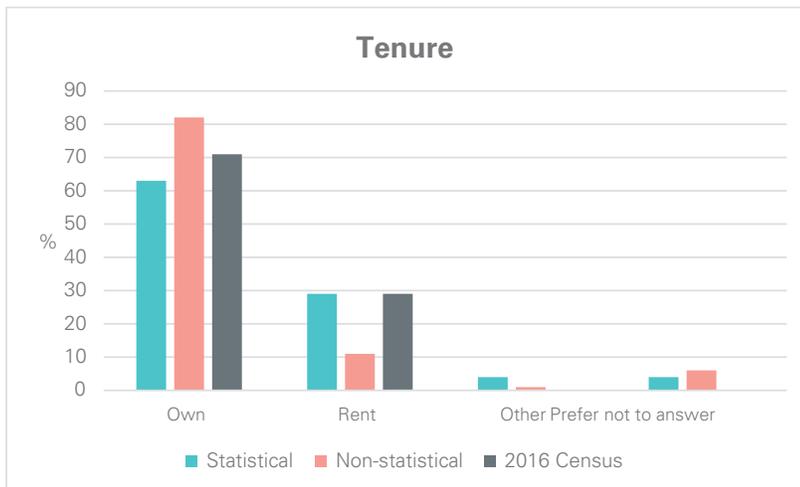


Figure 3.1.5 Housing tenure

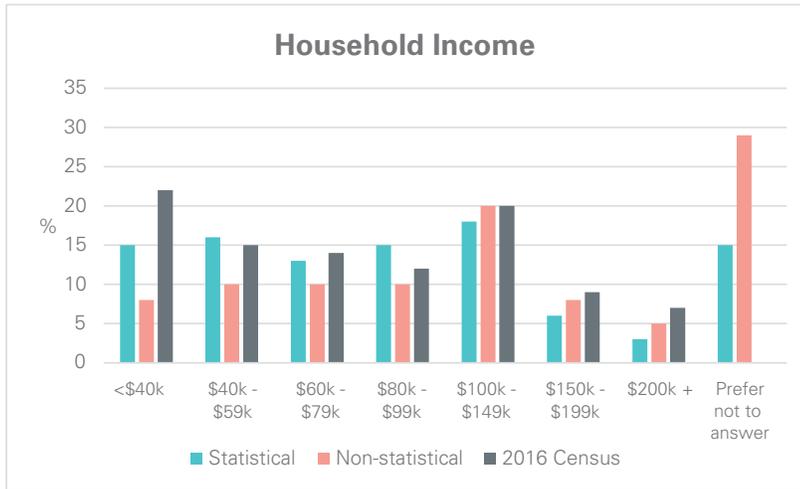


Figure 3.1.7 Household income

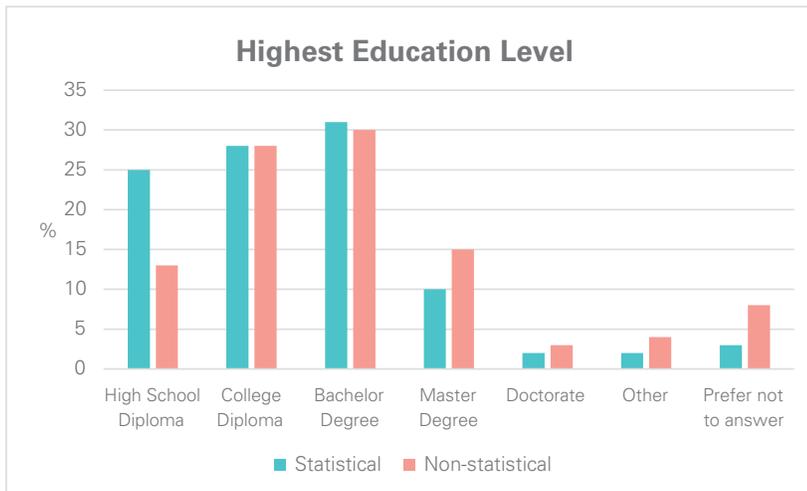


Figure 3.1.6 Education level

Appendix E

Comment Theme Descriptions

Theme	Description
Generally support / nothing missing	A step in the right direction, support, concerned about climate change, will personally help
Environmental protection	Care about/importance of nature, protect ecosystems/ environment, existing natural areas
Strengthen targets	Need stronger targets; timelines too long; more accountability; importance of action now
Reduce car dependence / improve transit	Reduce car dependence, less driving, improve alternatives, transit
Distrust in government	Dissatisfaction with / distrust in Mayor/Council, distrust in government in general, threat to personal freedoms
Development impacts	Too much development, want to stop/slow development, development impacts on environment, too many condos, opposed to higher density etc.
Not feasible / realistic	Not feasible, unrealistic, impractical, don't see how it's possible, etc.
Cost concerns	Uncertainty/concerns about costs to taxpayers, impacts on affordability, cost of housing, etc.
Generally oppose	Disagree with premise, don't care, don't understand how it helps, little benefit etc.
City-wide leadership / better regulations	City needs to lead; change at a big scale, work across jurisdictions, commitment, etc.
Health - positive	Improves physical/mental health, reduces air pollution, better air quality, COVID-related benefits, less commuting etc.
Zero carbon buildings - positive	Benefits of/support for zero-carbon/green buildings, eliminate emissions from the start, minimize carbon emissions, energy efficiency; phase out / get rid of gas
Traffic / driving - positive	Cars/driving is necessary, convenient, concern about restricting ability/choice to drive
City actions not aligned	City is not doing this now, lack of enforcement of existing bylaws, heading in wrong direction, need to align policies; city-wide action needed, etc.
Lack of clarity	Confusion about wording, wording is too vague, not enough information
Local living	Benefits of access to shopping, local services, walkable neighbourhoods, less time spent driving; more time at home; jobs close to home
Tree protection	Protect trees, concerns about tree cutting
Zero carbon buildings - negative	Cost/affordability, practicality of zero-carbon buildings and retrofits
Improve accessibility	Need to improve accessibility, improve sidewalks for pedestrians, disabled people, seniors, accommodate people who can't walk/cycle
Protect/provide more parking	Want more parking, concerned about loss/availability of parking
Electric Vehicles - negative	EVs not affordable, lack of charging infrastructure, safety concerns, lifecycle impacts, battery reliability, range, recycling etc.
84th Avenue project	84th Ave. / Bear Creek Park project
Electric Vehicles - positive	Benefits of EVs for environment, transition to EV is getting easier/increasing; need more charging, incentives
Cycling - positive	Need more/connected bike paths, improve access/safety for cycling, health benefits etc.
Awareness / education	Education/incentives, public consultation
Future looking	Need to think of the future/future generations, change how we do things, innovation

Theme	Description
Climate change denial	It's not a problem, carbon is not a pollutant, climate change is a hoax, the issue is not relevant, don't believe the science, why are we doing this, etc.
Traffic / driving - negative	Concerns re: congestion, road safety, speeding, air/noise pollution etc.
Community	More inclusive city, equity, mix of incomes, reduce inequities, create more community feel, places to gather, livable community
Cycling - negative	Cycling not practical here, oppose bike lanes
Agriculture	Concern about impacts to agriculture, food security; need to support local farming, growing food in urban areas
Transit - negative	Don't like to take transit, transit not viable

It shows a plan, leadership, and a vision for a better future for our children.
 ~Surrey resident

surrey.ca/climateaction

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