

#### Introduction

From February 4 to February 28, 2021, the Township of Billings used a carbon emission simulation exercise powered by Ethelo to gather public feedback in order to help evaluate which climate solutions should be implemented, to strategically respond to and mitigate climate change. The purpose of this program was to give residents a say in ensuring the solutions to be implemented are chosen in a fair, effective way, with proven community buy-in.

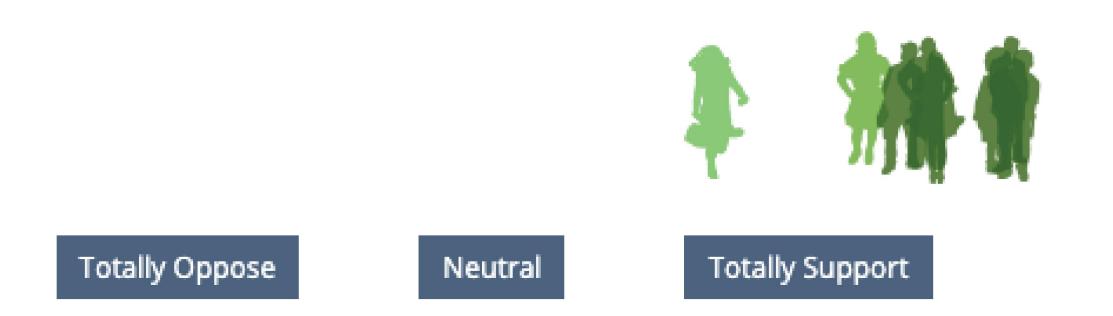
- The process educated residents on aspects of the Township's various proposed solutions, such as their associated difficultly level and the potential efficacy of implementing each solution.
- Ethelo used the results to generate a particular set of climate actions that are predicted to have the most community support.

#### Overview

Based on community members' input, Ethelo was able to identify key elements of an ambitious Climate Action Plan that will meet a 50% greenhouse gas reduction target and is widely supported by a broad cross section of community members.

**5,969 tonnes** of greenhouse gas could be reduced within this set of options.

**Difficulty score of 3.83** out of 10. This plan is considered fairly easy and achievable overall.



**Extremely Popular.** The distribution of support shows how happy people are with the plan overall.

#### 188 community members

voted in the public engagement process

#### Overview

Support is the average values of the votes, where the value of a totally opposing vote is 0 and a totally supportive vote is 100.

Service Area	Support
Municipal Buildings	
50% = 21 tonnes GHG	79%
<b>Energy Efficiency</b>	
50% = 3,230 tonnes of GHG	76%
Personal Vehicles	
50% = 2,274 tonnes GHG	71%
Municipal Vehicles	
75% = 58 tonnes GHG	58%
Composting	
50% = 386 tonnes of GHG	76%

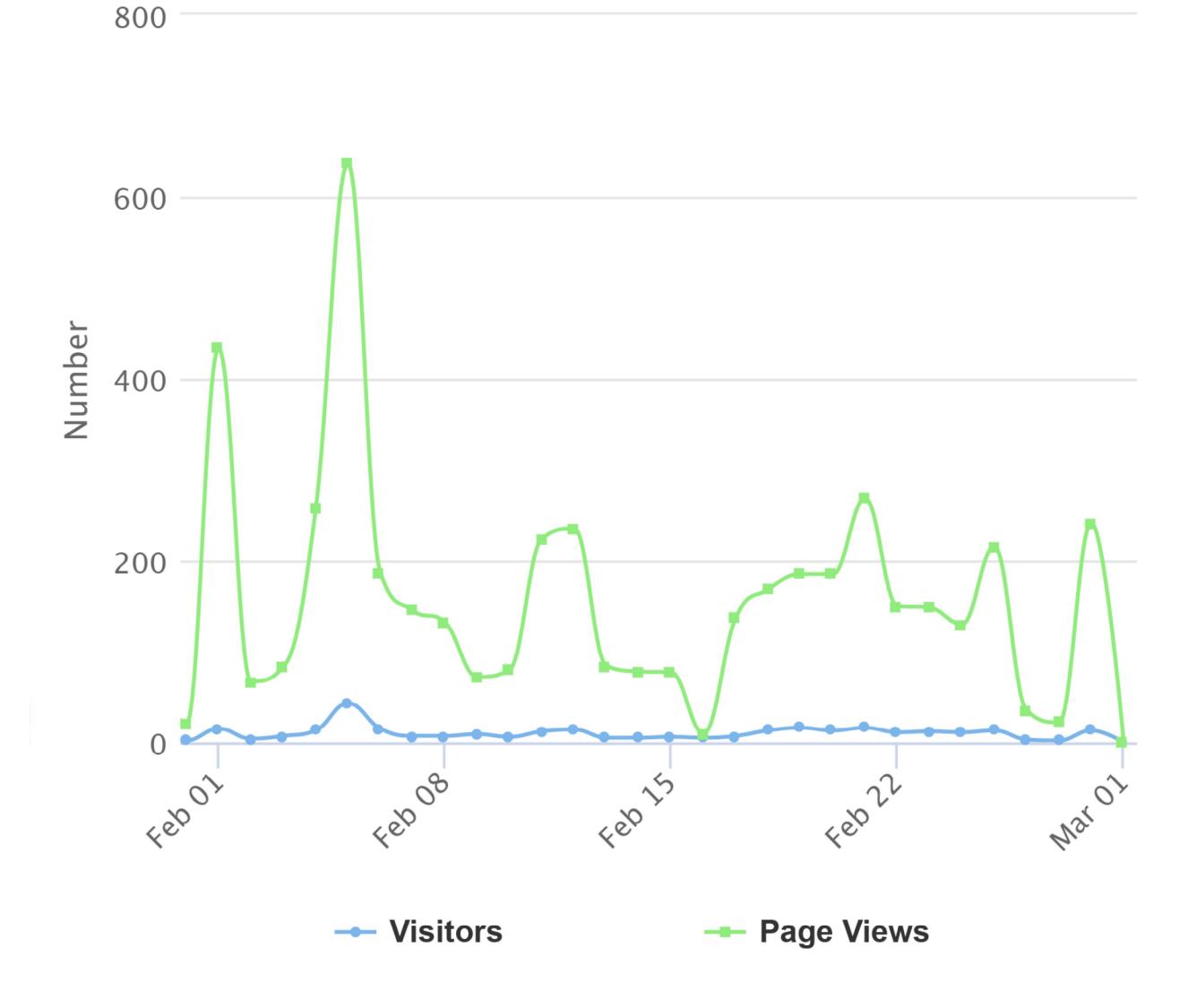
# Participation

• Number of visitors: **269** 

• Number of respondents: 188

• Page views: **5,802** 

• Average time on platform: 20 minutes



#### Participant Recruitment

In order to ensure a representative sample of the Township's population had the opportunity to participate, eDemocracy Solutions, (Ethelo's sister not-for-profit,) with support from municipal staff and community members, executed an outreach campaign which included:

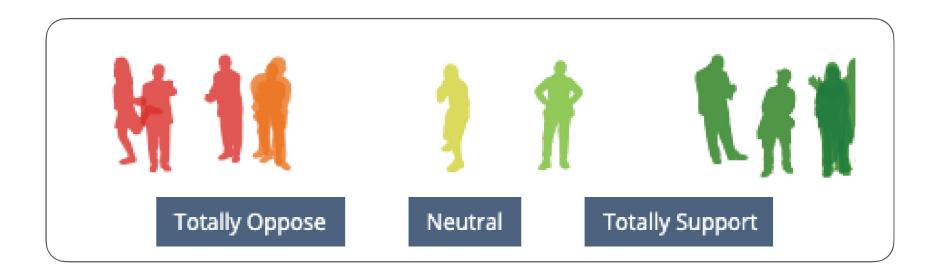
- posters throughout the community
- township-wide mail-out
- phone campaign
- digital advertising campaign
- 310 Outbound Calls
- 50 People Spoken To
- 98 Voicemails Left
- 11 Surveys Completed Over Phone

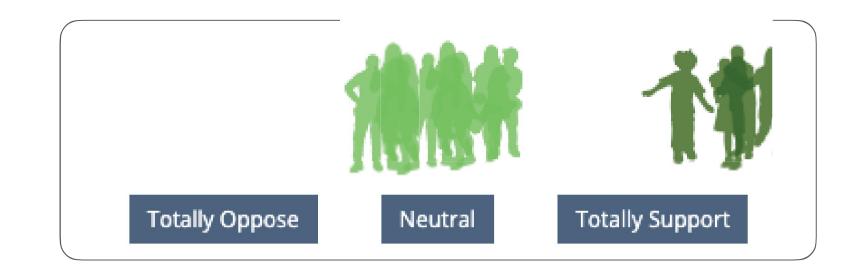




#### Overview

What makes a good plan?





The two pictures above represent levels of **support**\* and **conflict**\*\* for two potential plans. In each picture, colours are used to reflect the overall sentiment of each respondent, with red representing "unhappiness", and dark green representing "happiness". The plan on the right is a better plan than the one on the left. Why? Because the people on the right are roughly equally happy. They will be united in moving forward together, which increases the chance of success. The plan on the left is divisive and polarizing, with winners and losers. This means a higher chance of conflict and resistance to moving forward. Fairness is very important in group decisions and for society in general. The plan on the right distributes happiness in a fair way, which is critical to social cohesion and the democratic legitimacy.

Ethelo has outlined each of the following options after optimizing for the highest levels of community support, and the lowest levels of conflict, thereby minimizing polarization and creating wide-spread community buy-in.

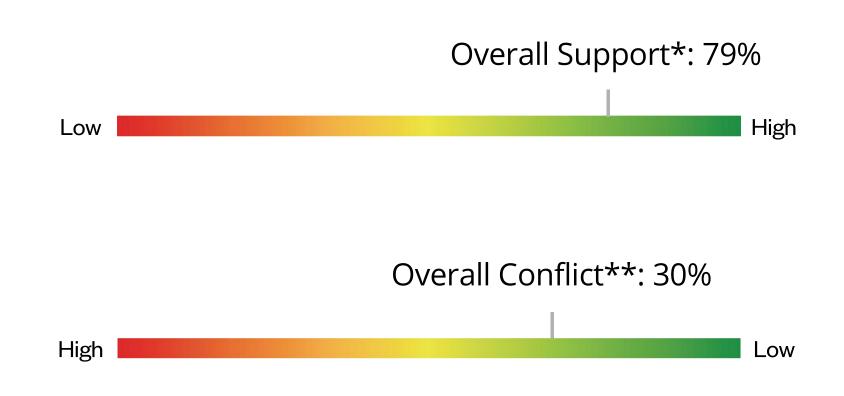
\*Support is the average value of all participant votes where 0 represents a totally opposing vote, and 100 represents a totally supportive vote.

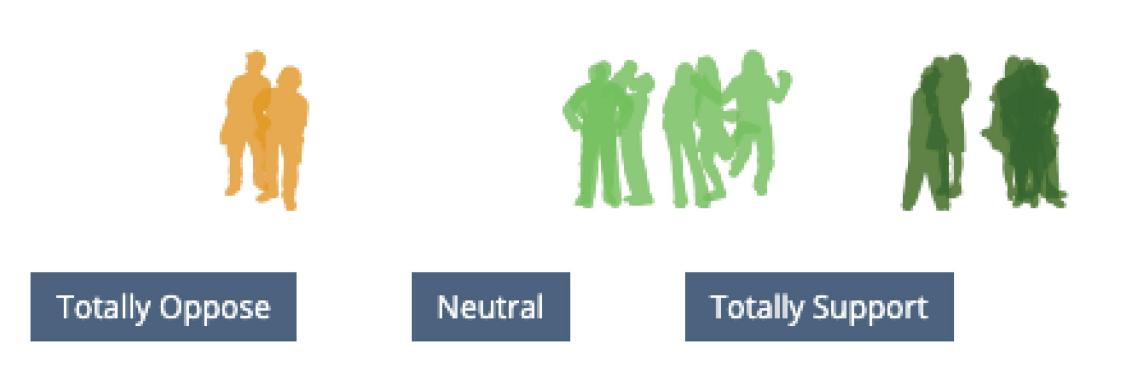
\*\*Conflict is a measure of the level of disagreement in a group. Higher conflict scores represent higher likelihood of internal resistance and failure.

### Municipal Buildings

• Recommended Target: 50%

• GHG Reduction: 21 tonnes GHG by 2030





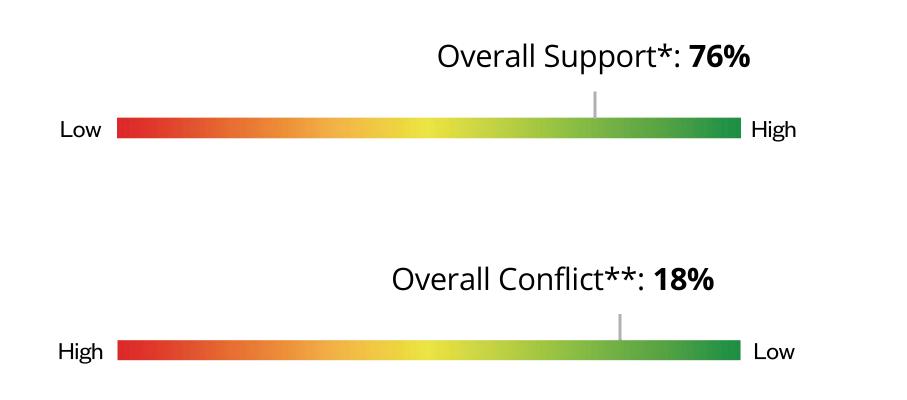
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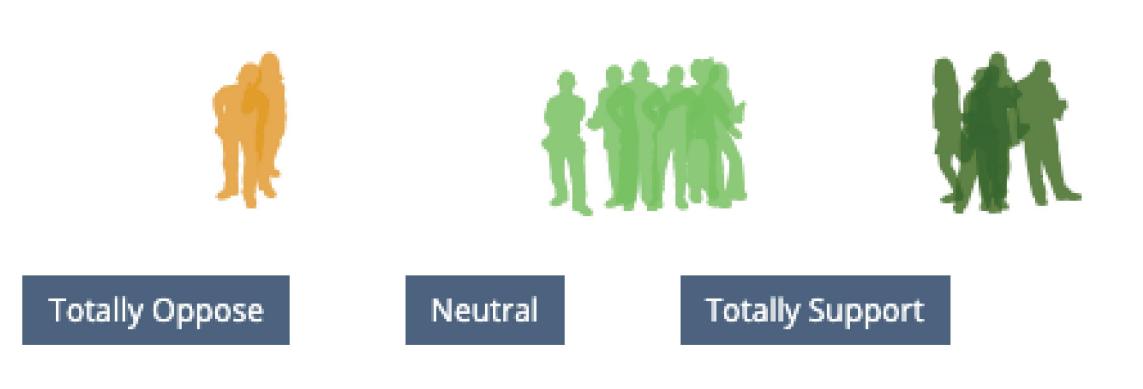
<sup>\*\*</sup>Conflict is a measure of the level of disagreement in a group. Higher conflict scores represent higher likelihood of internal resistance and failure.

#### **Energy Efficiency**

• Recommended Target: 50%

• GHG Reduction: 3,230 tonnes GHG by 2030



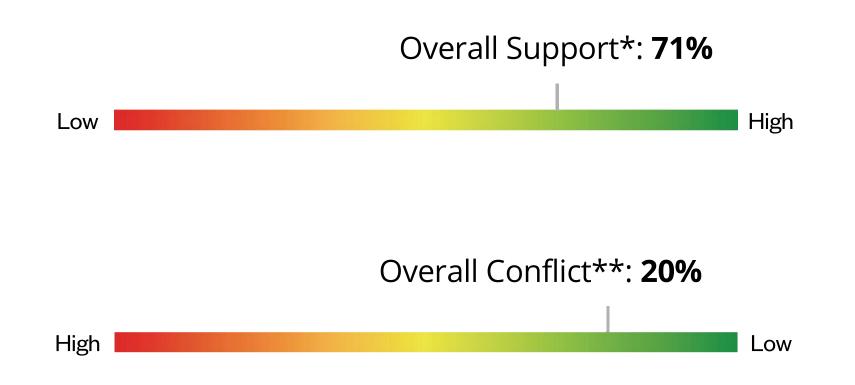


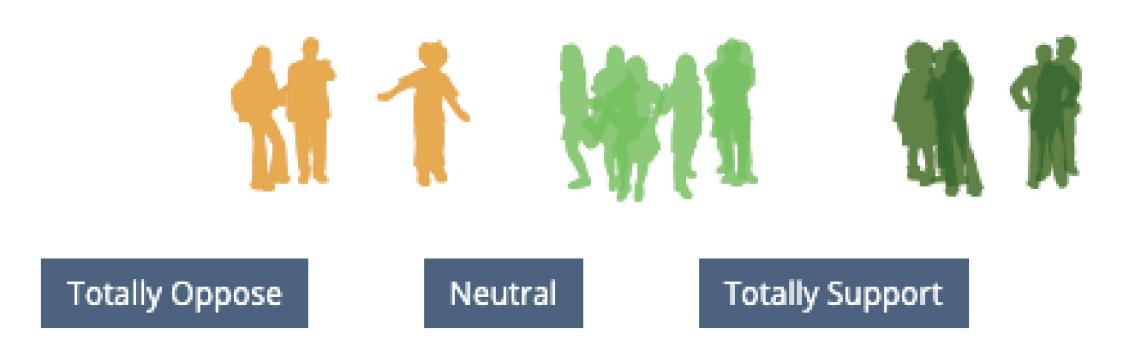
<sup>\*</sup>Support is the average value of all participant votes where 0 represents a totally opposing vote, and 100 represents a totally supportive vote.

<sup>\*\*</sup>Conflict is a measure of the level of disagreement in a group. Higher conflict scores represent higher likelihood of internal resistance and failure.

#### **Personal Vehicles**

- Recommended Target: 50%
- GHG Reduction: 2,274 tonnes GHG by 2030



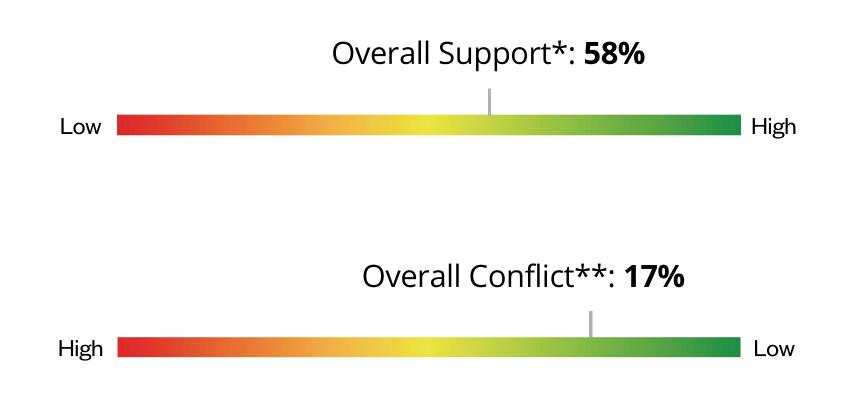


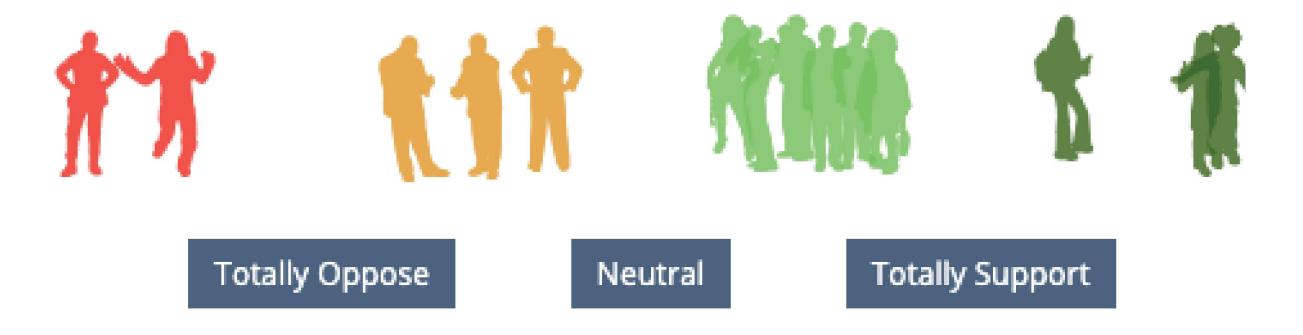
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## Municipal Vehicles

- Recommended Target: 50%
- GHG Reduction: 58 tonnes GHG by 2030



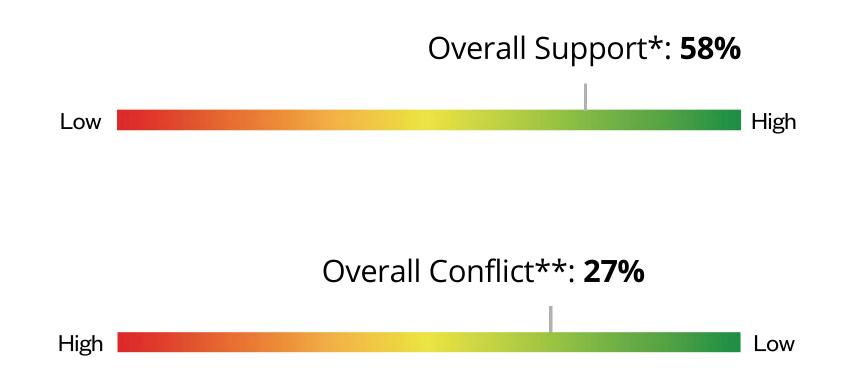


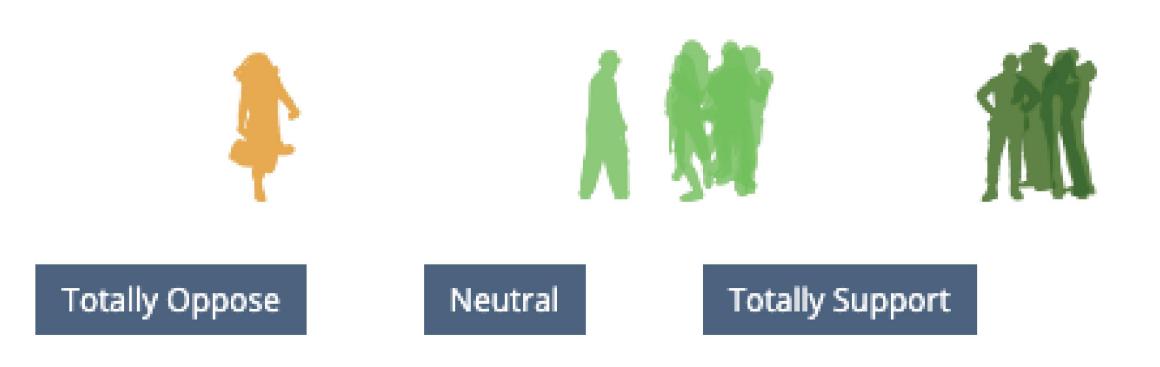
<sup>\*</sup>Support is the average value of all participant votes where 0 represents a totally opposing vote, and 100 represents a totally supportive vote.

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#### Composting

- Recommended Target: 75%
- GHG Reduction: 386 tonnes GHG by 2030



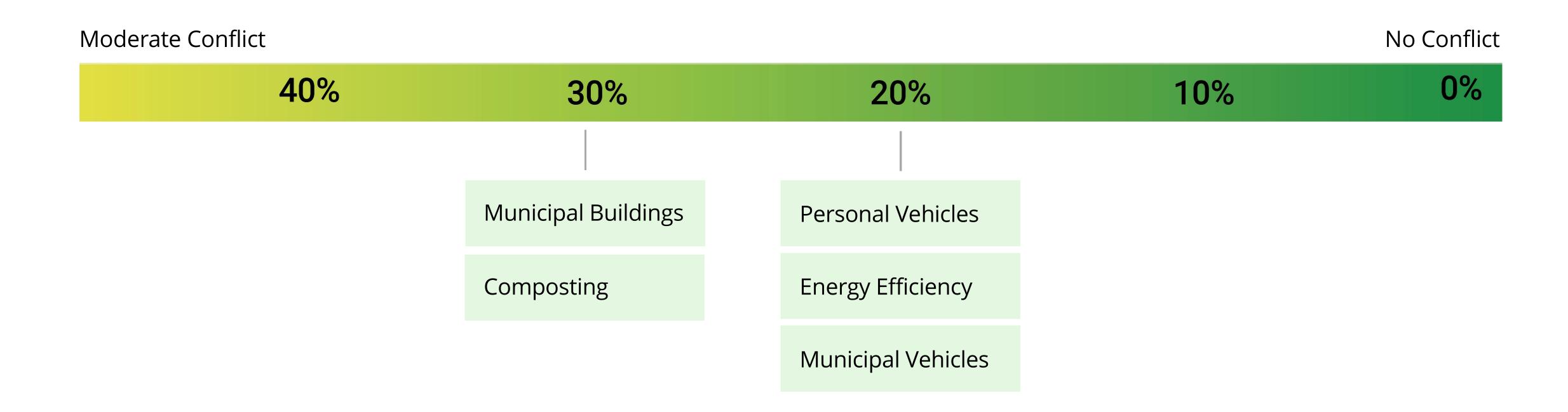


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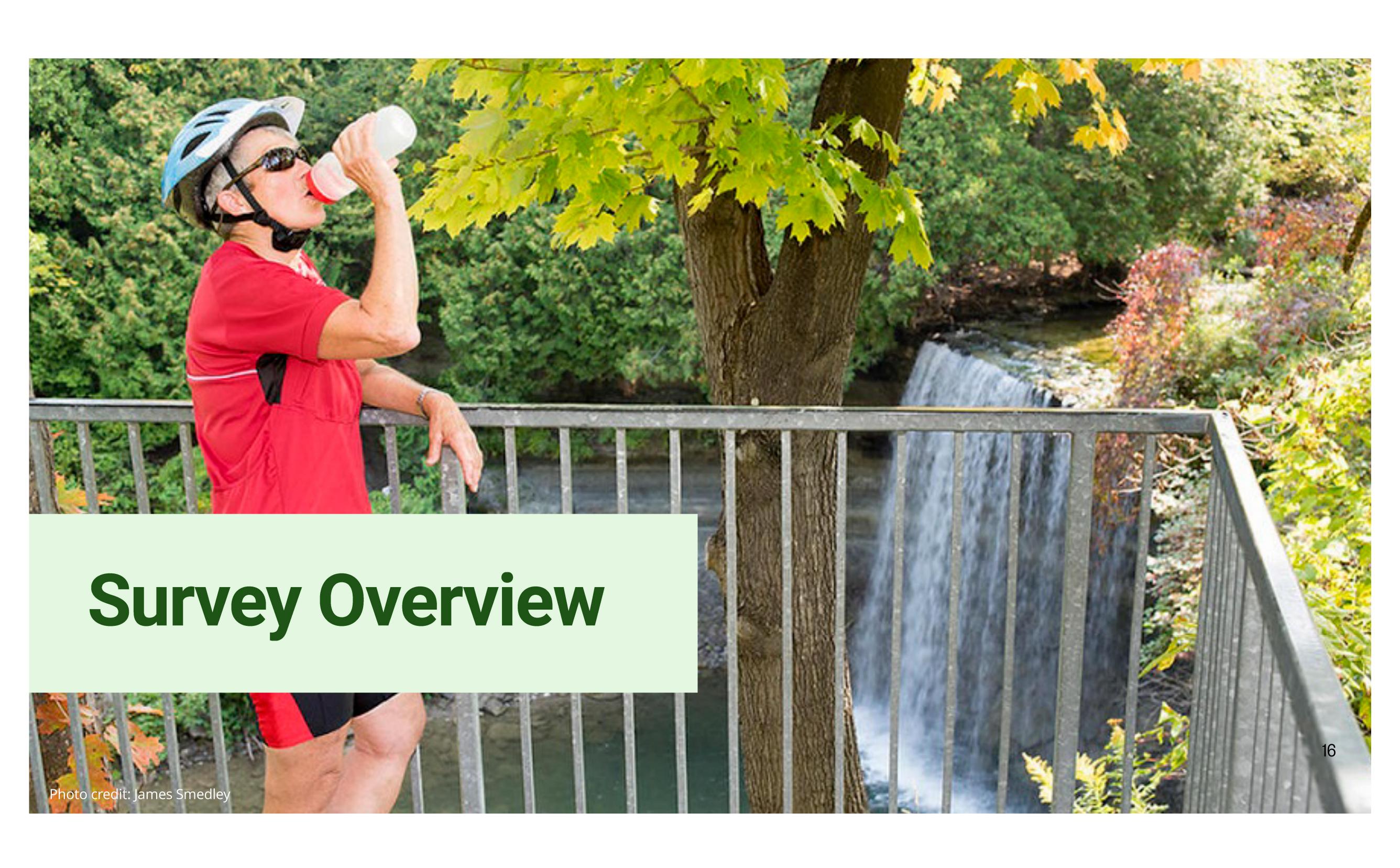
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#### Conflict\*

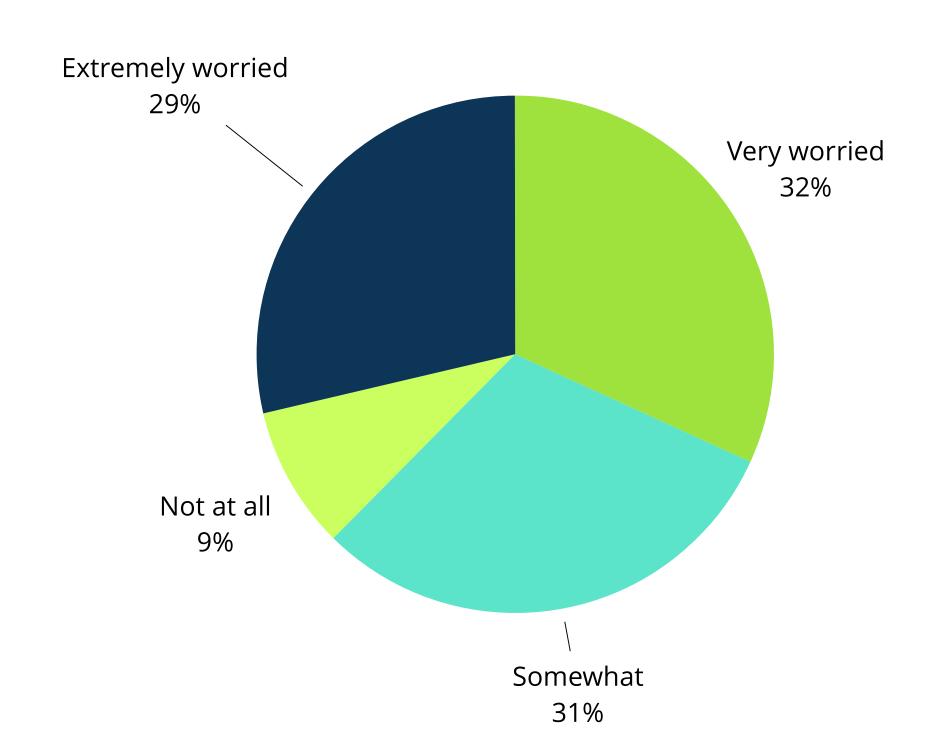


<sup>\*</sup>Conflict is a measure of the level of disagreement in a group. Higher conflict scores represent internal resistance and risk of failure.

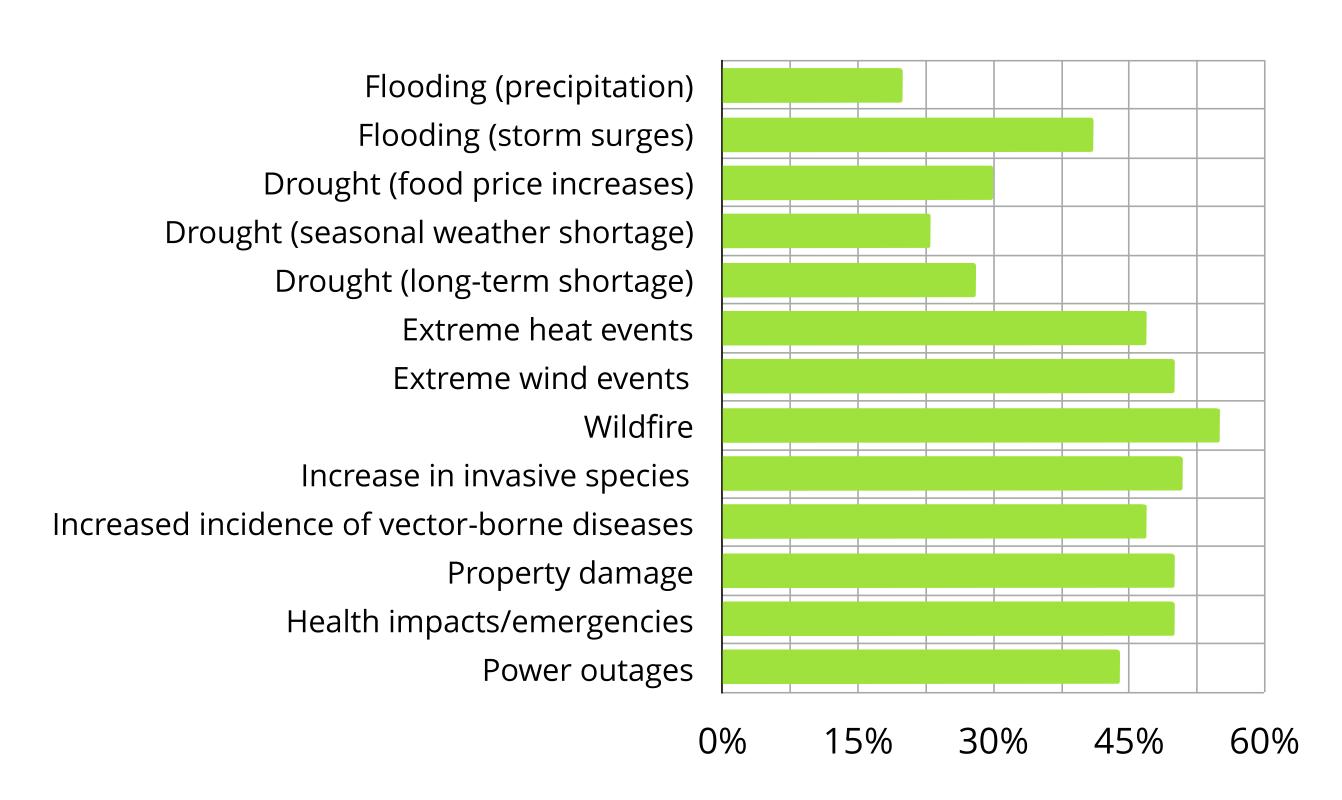


#### Climate Change

How worried are you about climate change?

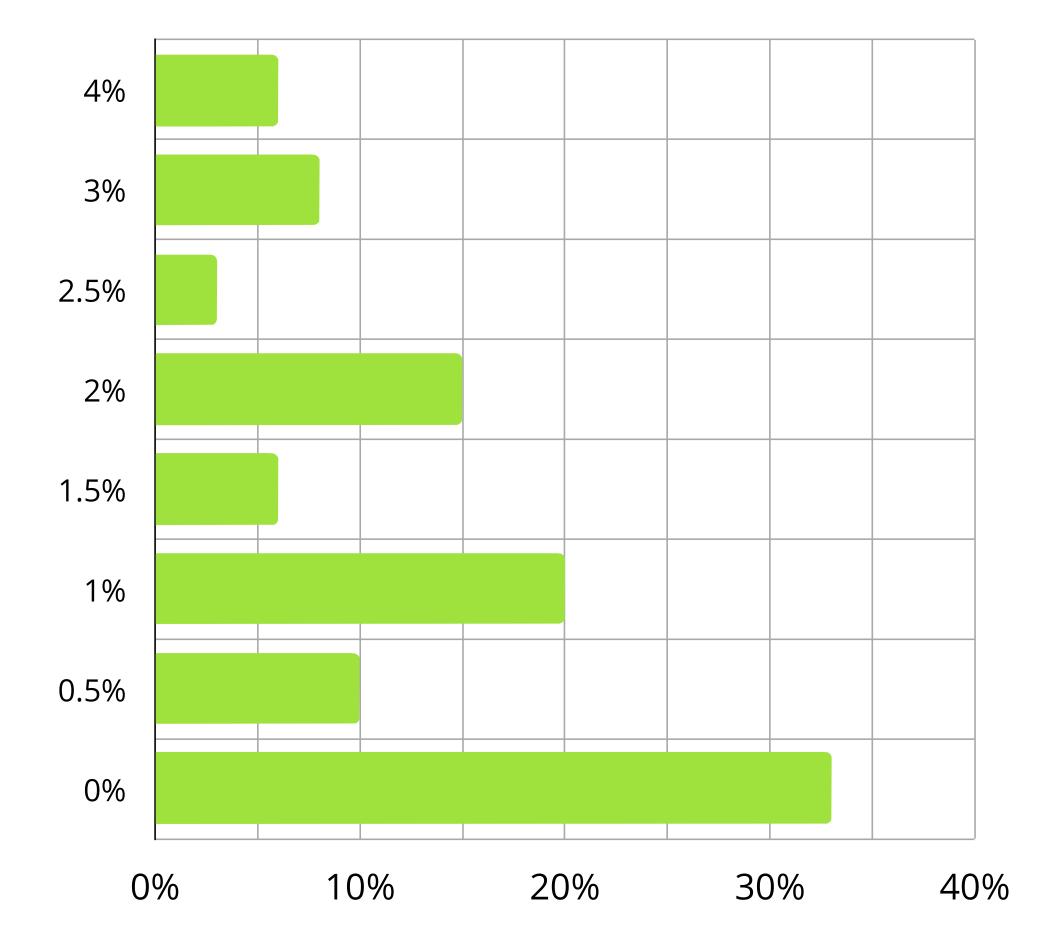


Tell us the top 5 hazards and impacts that concern you most?



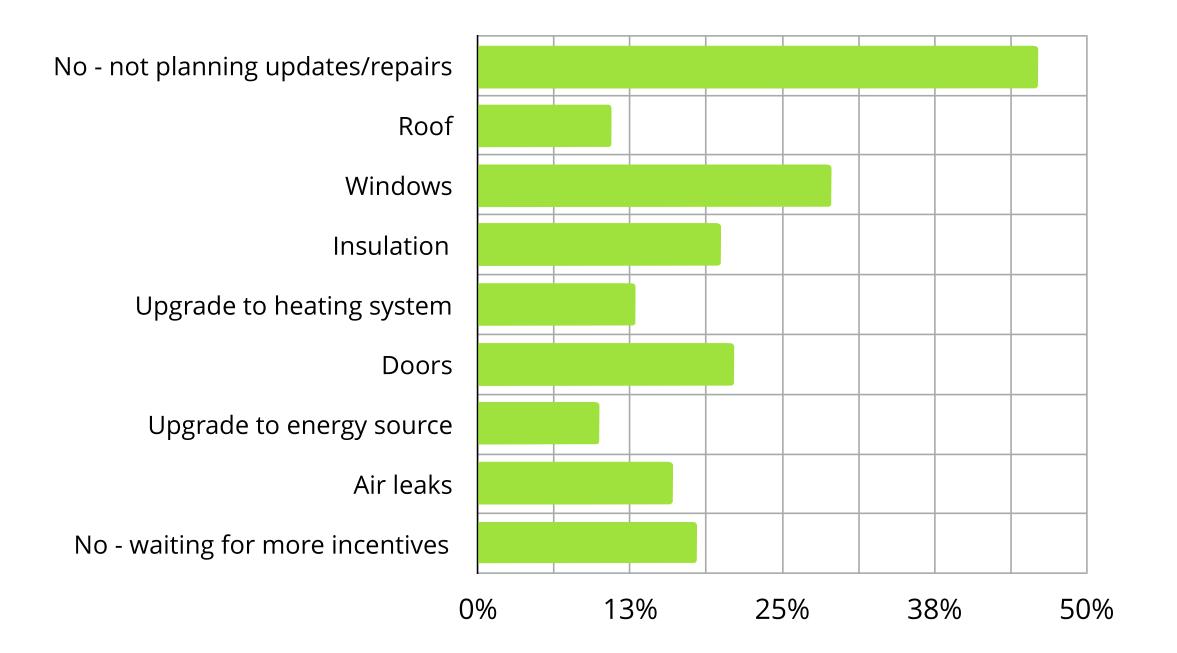
#### Funding Climate Action

Would you support a tax increase if it went directly to climate change mitigation and adaptation projects we have outlined in this survey?

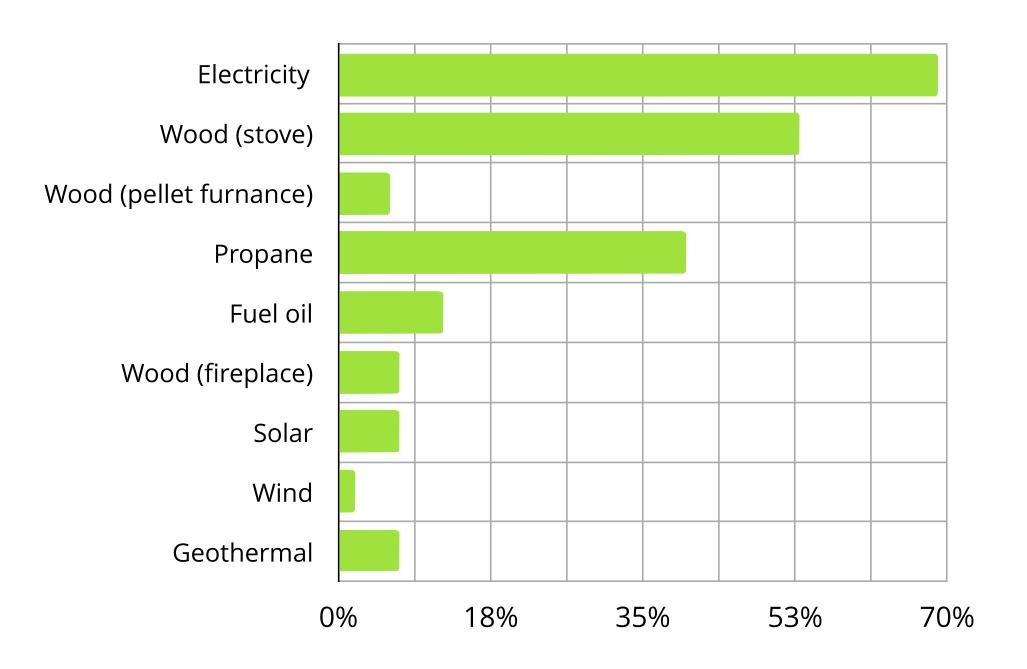


#### Homes, Buildings and You

In the next 5 years do you have any plans on making repairs or upgrades that will improve the energy efficiency of your home?

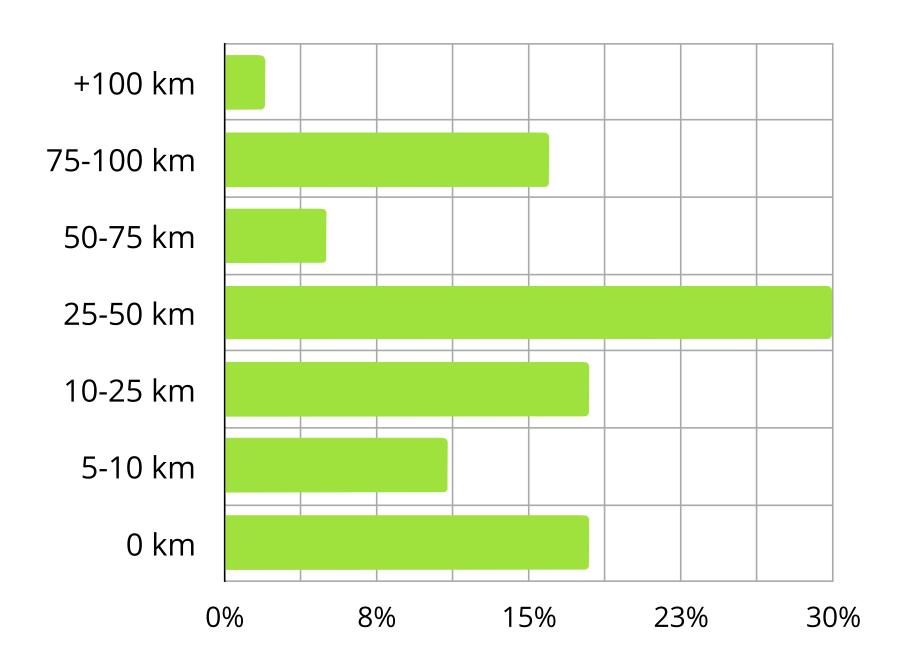


What type of energy source do you use to heat, cool, and power your home?

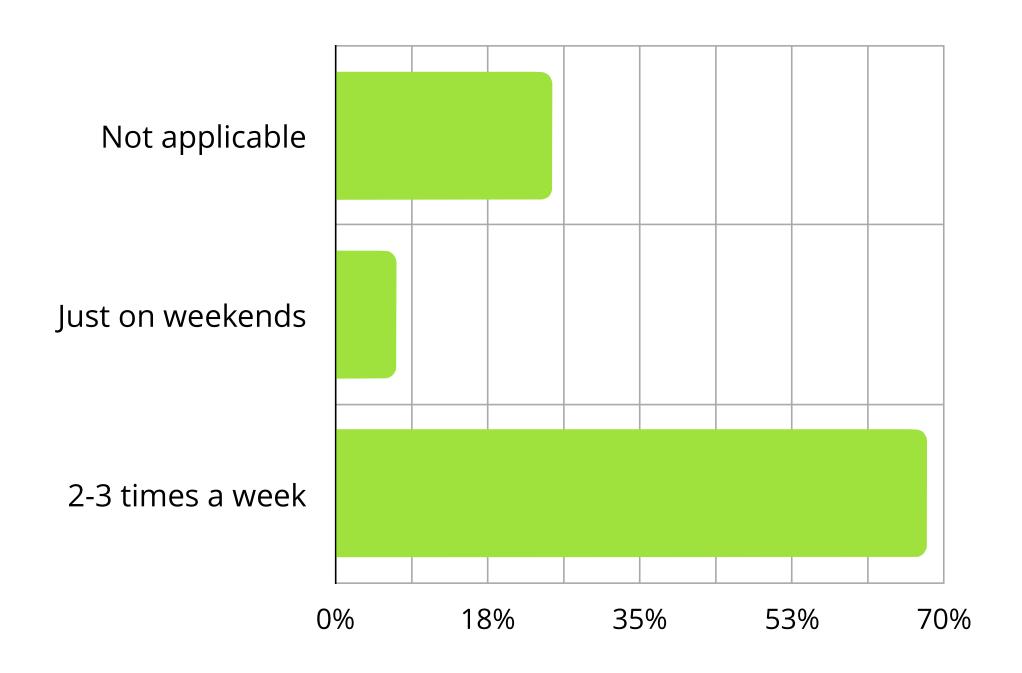


#### Transportation and You

If you are a regular commuter, how many kilometres is your round trip commute?

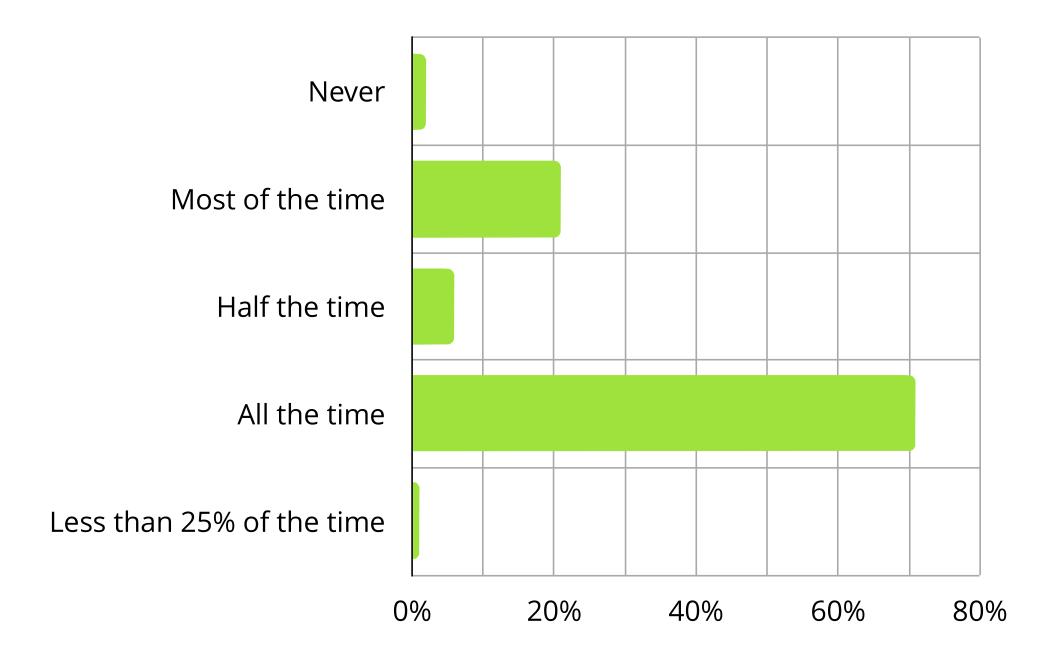


If you are an irregular commuter, how often do you drive?

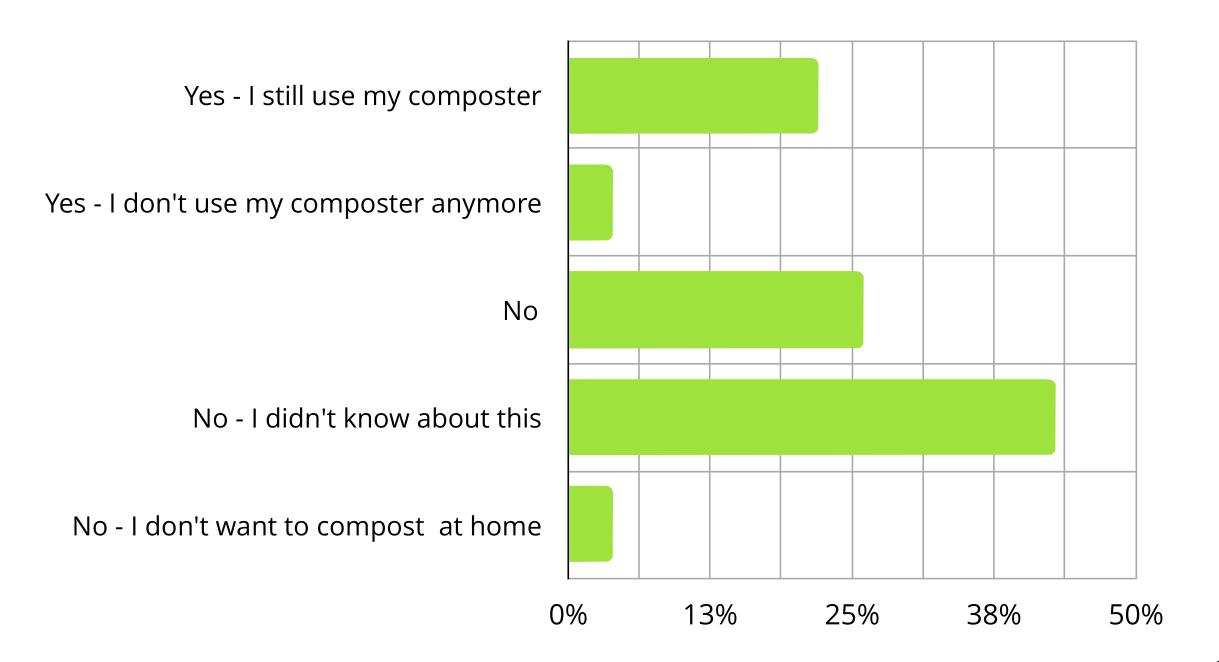


#### Waste Reduction and You

How often do you recycle?

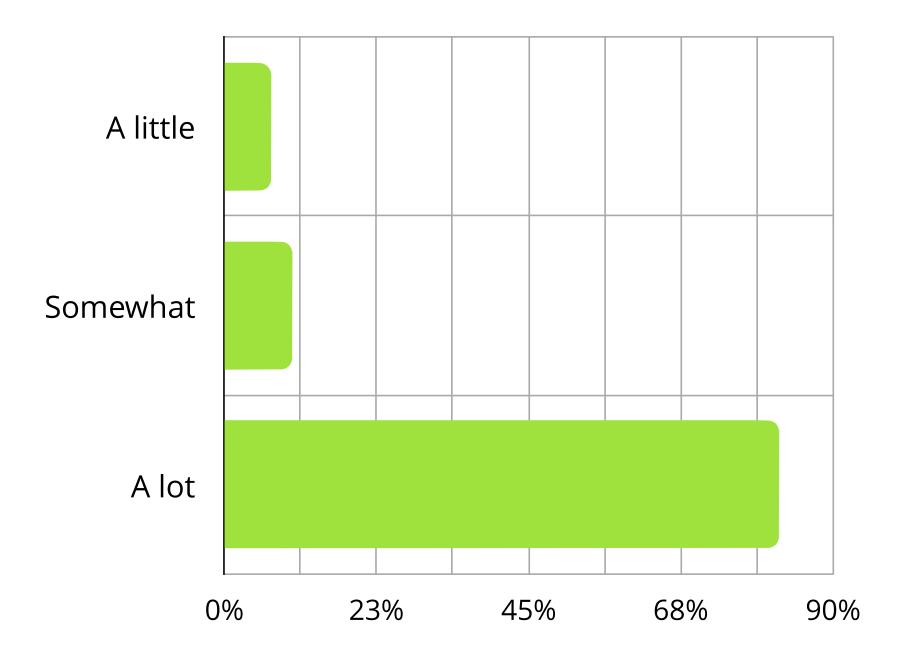


The Township of Billings had composters for sale at a subsidized price for residents. Did you participate in this program and do you still using your composter?

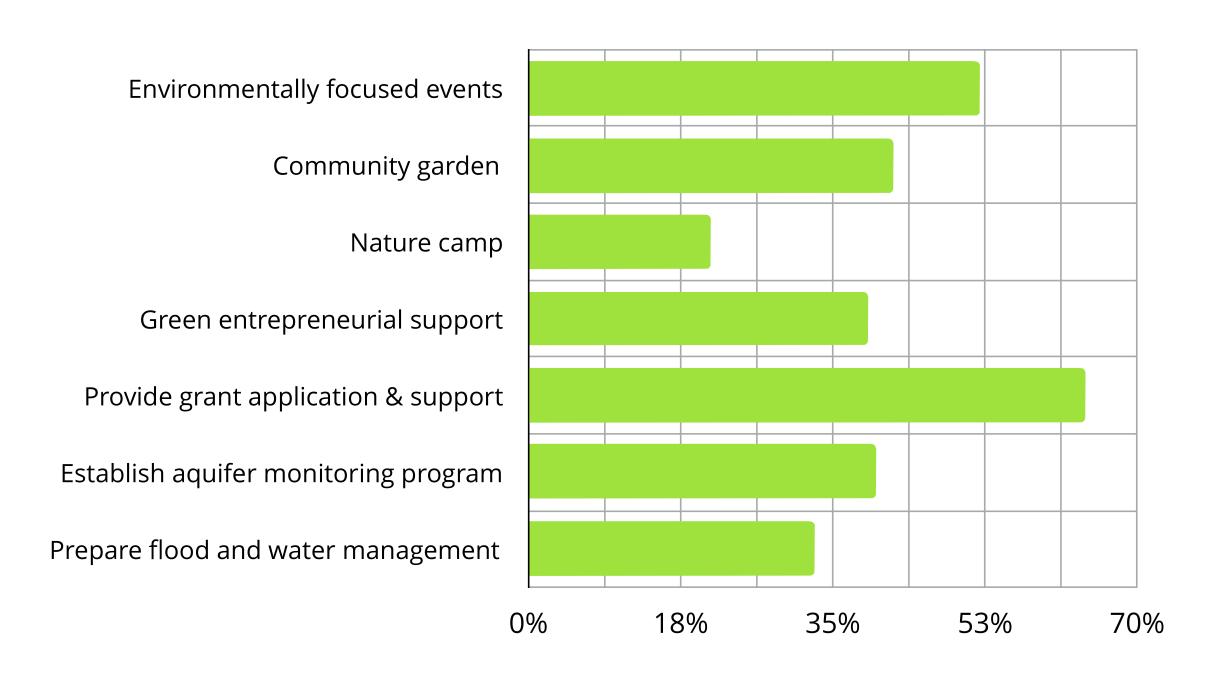


### **Shared Spaces**

How much do you value our natural shared spaces?\*



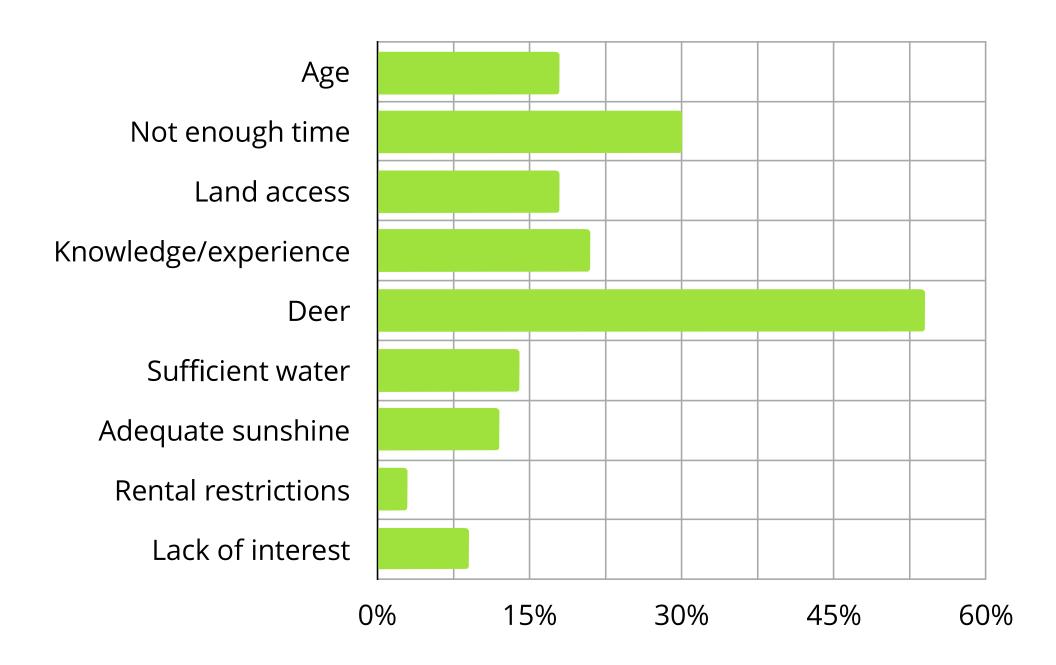
What are your top three priorities for our shared natural spaces?



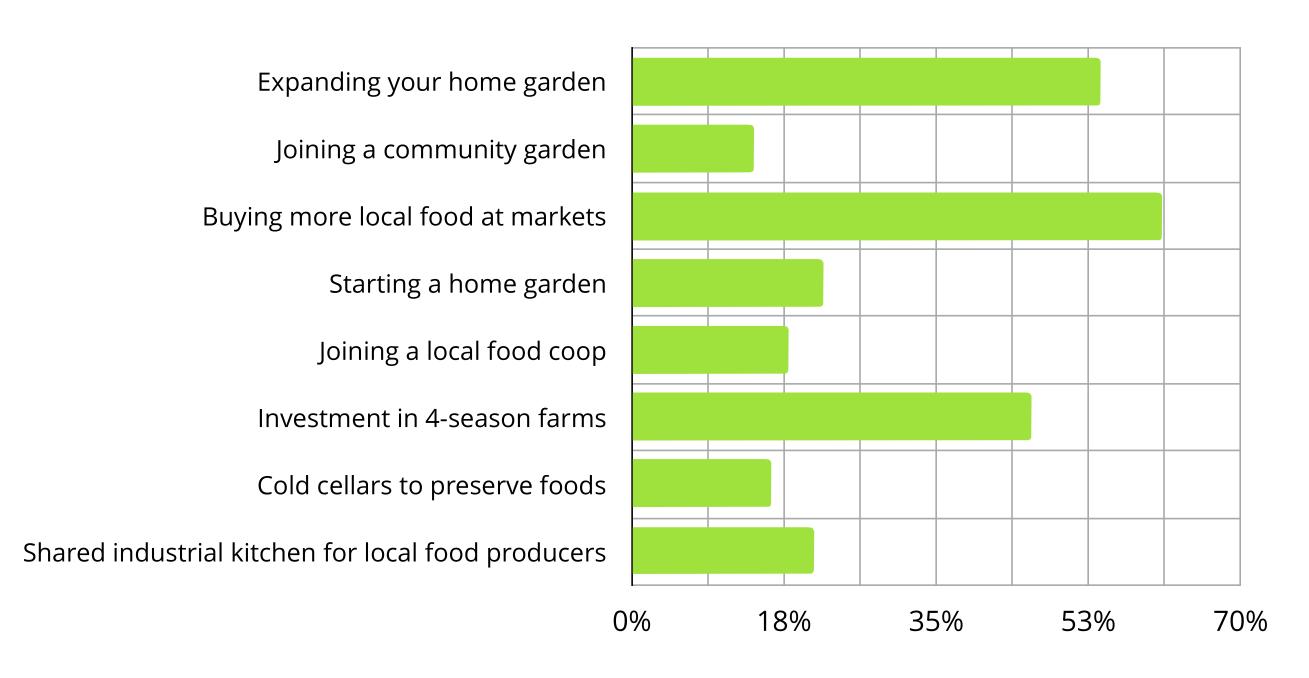
<sup>\*</sup>Not Included: Not at all 0%

#### Food and Agriculture

What are the barriers for you to grow more of your own food and increase local food production?

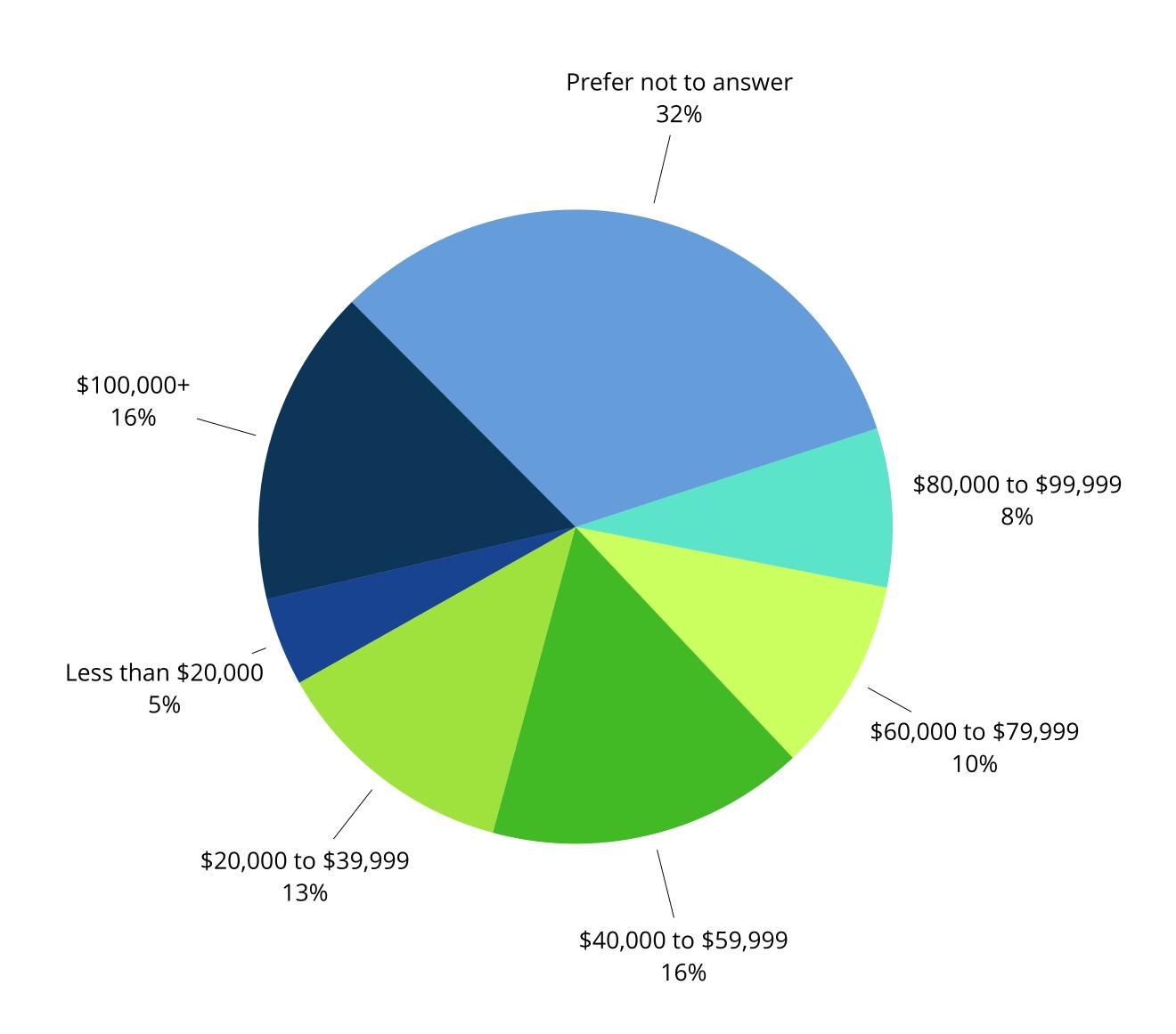


#### What method of local food production/consumption are you more interested in supporting

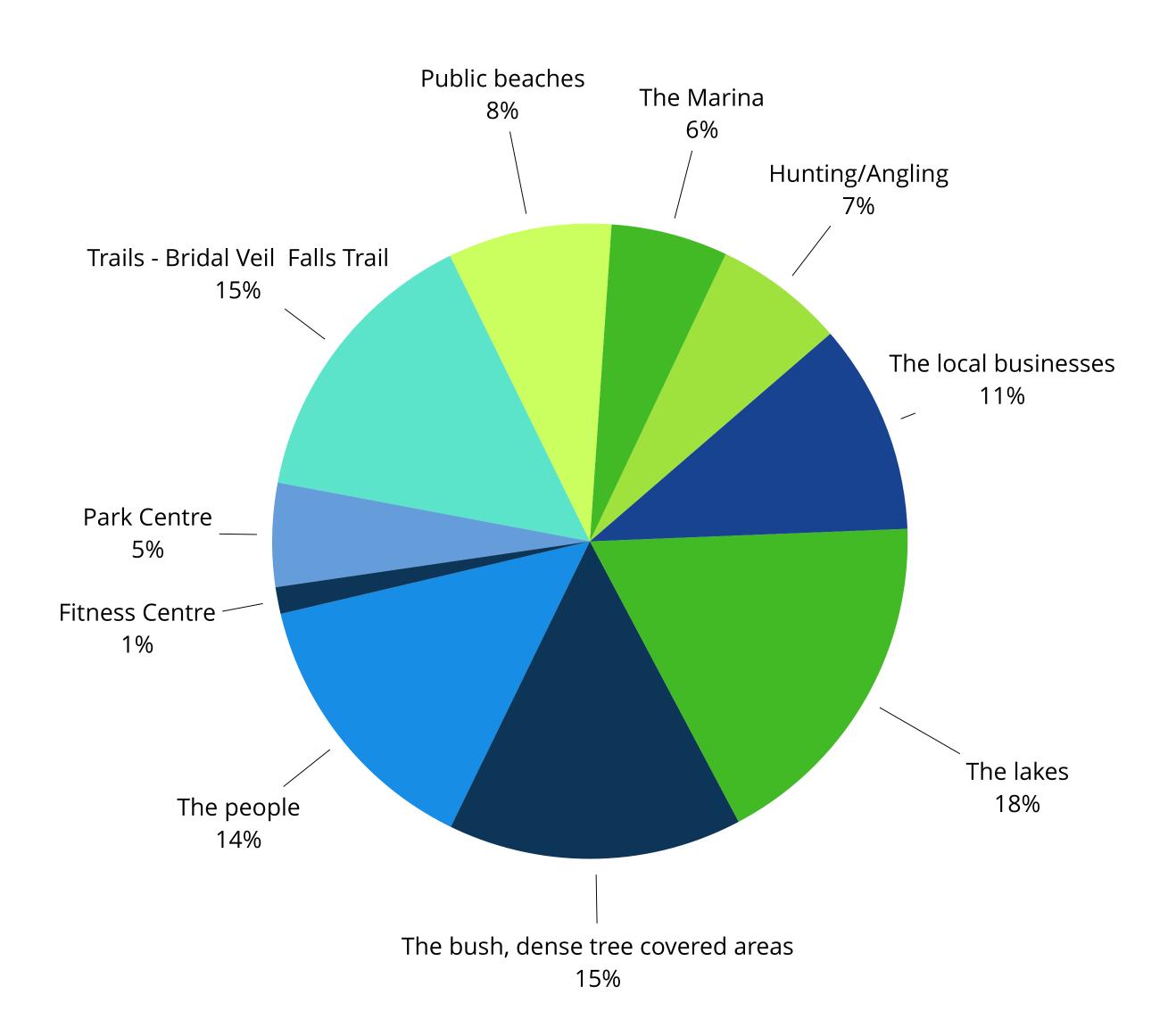




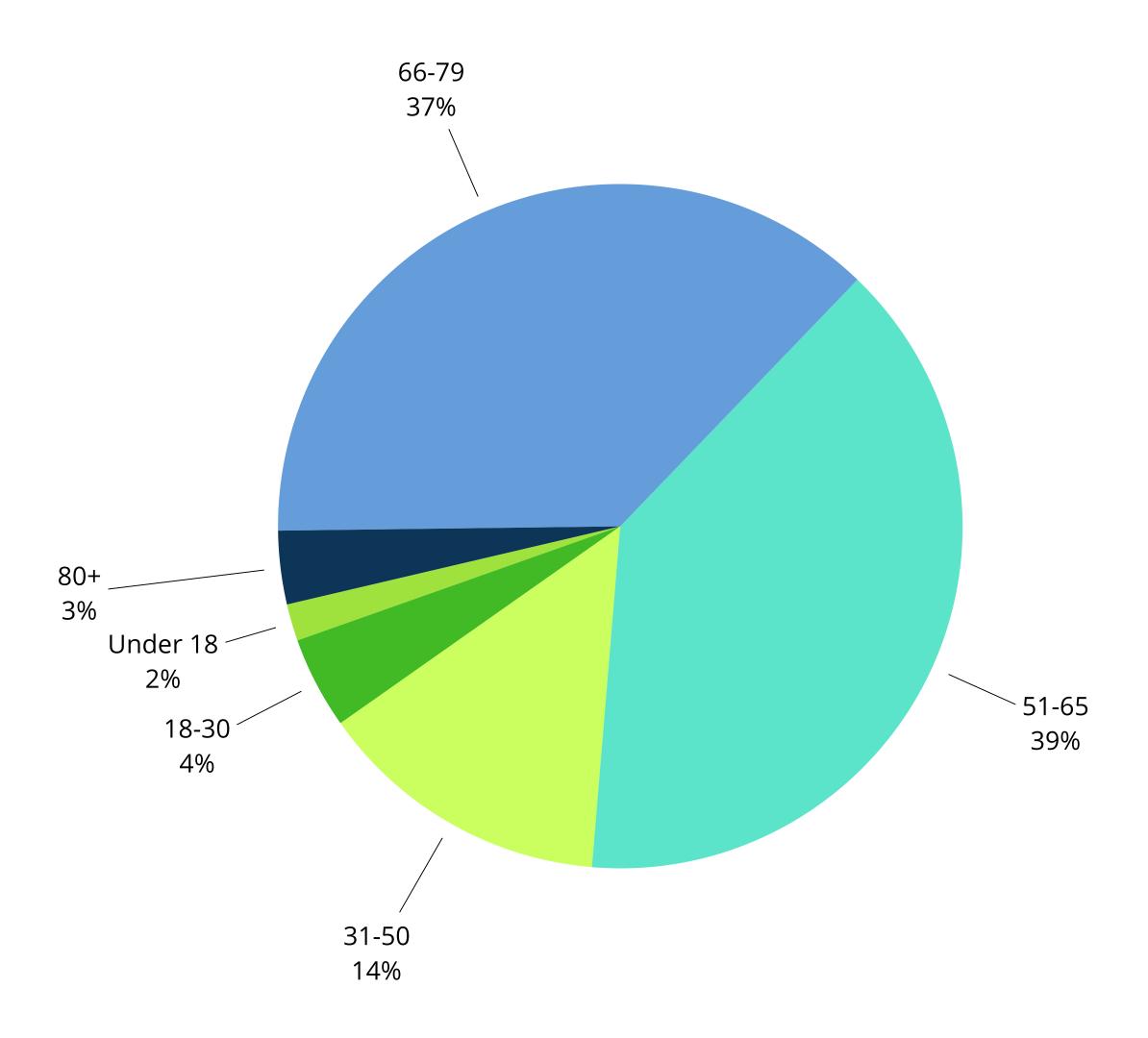
#### Household Income



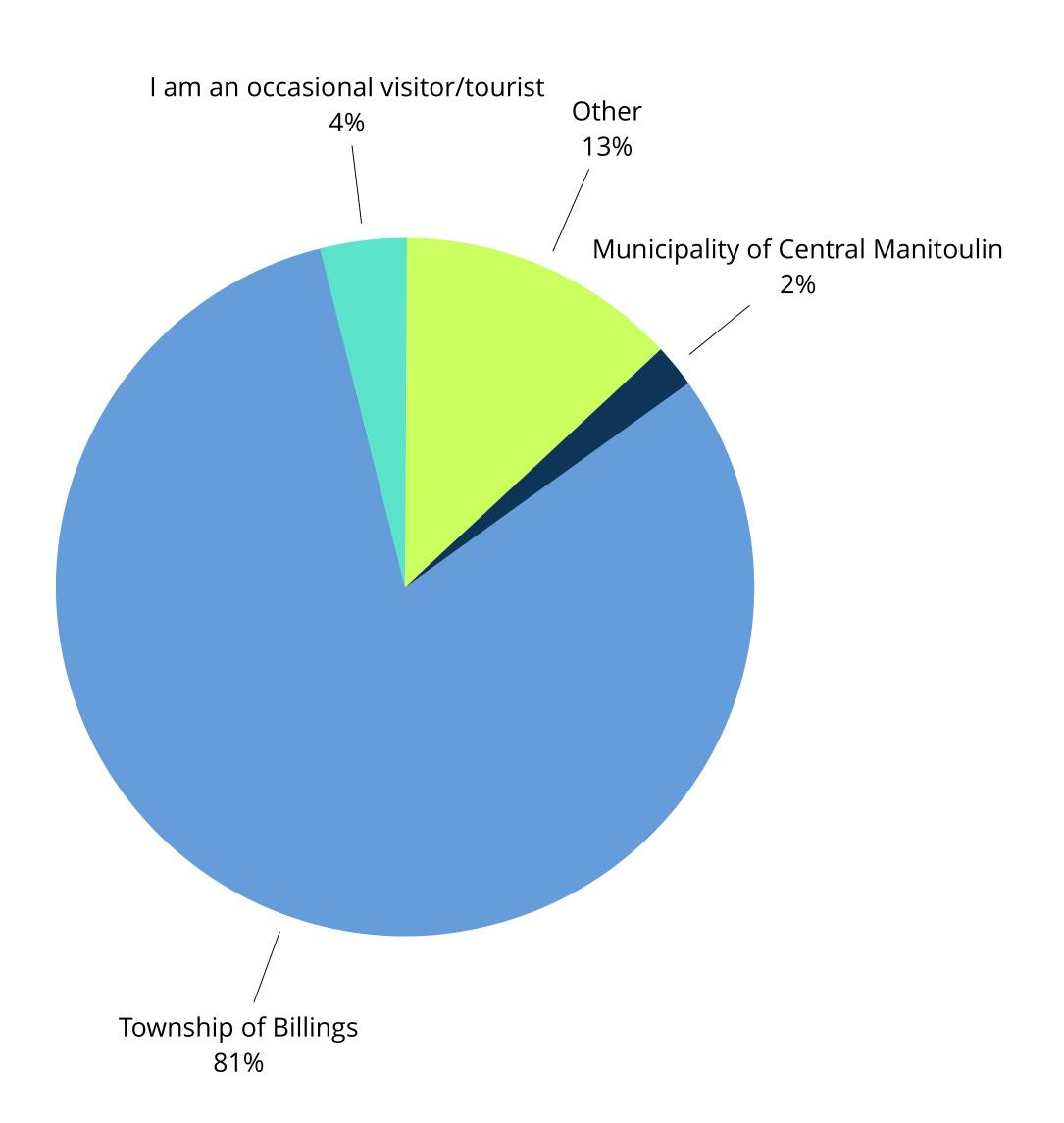
# What do you like most about living in Billings?



# Age



# Municipality/Township



# Residency

