

PlanSpokane Community Climate Planning Survey Results and Analysis

Climate Planning Early Engagement

February 27, 2025





The City of Spokane is embarking on a transformative journey to support community resiliency to growing climate hazards. Mandated by the Washington State Growth Management Act and due in 2026, the City is undertaking a major update to its Comprehensive Plan. This foundational document guides policy for Spokane for twenty years at a time, with the current update looking towards 2046. The <u>PlanSpokane 2046</u> effort presents a unique opportunity to not only meet climate requirements of <u>House Bill 1181</u>, but also to integrate resiliency considerations into every aspect of Spokane's future.

Before looking at potential climate-related policies, it is important to understand climate hazards and impacts within the local context of Spokane. To that end, a number of elements of the Climate Planning effort have completed deep dives of local, state, and national data points to understand the *science and statitical trends*.

To get at the *lived experience* of Spokane's community members, a Community Climate Planning Survey was launched on December 6, 2024 and ran through January 31, 2025. In the end, the survey heard from **1,573 community members** with a 100% completion rate who shared how they are or are not affected by climate impacts and what they were concerned about for the future.

The value of hearing from the local community is undeniable. It provides:



Local Understanding: Provides insight into how individuals perceive and navigate their world <u>here in Spokane</u>



Contextual Relevance: Uncovers nuances of culture, environment, and social factors influencing behaviors and decisions



Human-Centered Insights: Highlights personal stories, empowering participants by valuing their voices



Actionable Data: Reveals hidden needs, challenges, and opportunities that may not be immediately visible through numbers alone



Community-Based "Pilot Testing": Tests data to see if it aligns with what the community is experiencing

The following report discusses results and trends identified through the Community Climate Planning Survey results that will support future work in developing policies that support the local community.



The WA Department of Commerce climate planning grant is supported with funding from Washington's Climate Commitment Act. The CCA supports Washington's climate action efforts by putting cap-and-invest dollars to work reducing climate pollution, creating jobs, and improving public health. Information about the CCA is available on their website.



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Who Responded?

All demographic related questions were optional and not completed by all survey takers. Despite not having information for all respondents, the collected information provides a general understanding of who completed the survey. Knowing who was reached through the survey allows for more accurate analysis and better-informed conclusions by:

- **Understanding Different Needs:** Identify patterns and trends within specific age, income, or other groups
- **Improving Decision-Making:** Support targeted strategies based on the characteristics of different respondents
- **Ensuring Representation:** Ensure the survey is inclusive and representatives of various segments in the population who is missing?

What best defines your roles in the City of Spokane?

Survey takers were asked to self-identify their roles within Spokane. Are they homeowners? Renters? Do they work in Spokane or own a business?

Resident (Homeowner)	71.57%
Resident (Renter)	16.19%
Business Owner	8.16%
Employee/I Work in Spokane	30.02%
Commercial Landowner	1.47%
Housing Provider/Landlord	4.53%
Elected Official	0.32%
Tribal Member	0.57%
Tribal Elder	0.13%
Student	6.88%
Other	6.12%

Those who responded "other" included answers such as living just outside Spokane City limits, senior, Veteran, nonprofit volunteer, and parent.

A key takeaway from the results is of those who answered this question, a higher percentage of survey takers are homeowners than the City of Spokane population as a whole (approximately 58.4% of housing units in Spokane are owner-occupied according to WA Office of Financial Management estimates). Additionally, while not directly asked, the difference after removing homeowners and renters would point towards 12.24% of respondents living with others/not paying rent or not living within the City of Spokane.



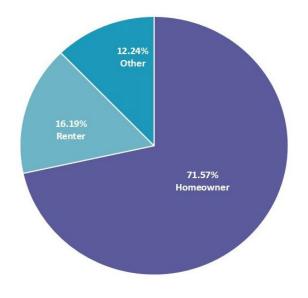


Figure 1. Pie chart showing Homeowner vs. Renter results. Source: 2024-2025 City of Spokane Community Climate Planning Survey.

Tell us generally where you live, work, go to school, or otherwise engage in Spokane

Survey takers were asked what zip code they live, work, go to school, or otherwise engage in Spokane to identify general geographical information. The northwest and some southern portions of the City saw the most responses. When reviewing spatial analysis further in the report, maps that reflect the geographic distribution to the right are generally considered to reflect a consensus from survey takers.

Additional zip codes were provided in comment fields, noting responses related to Gonzaga University and areas within Spokane County, just outside of City of Spokane city limits.

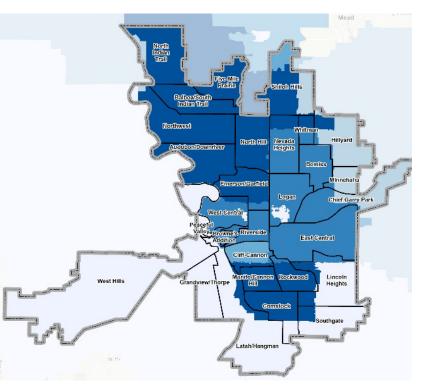
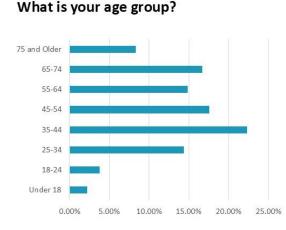


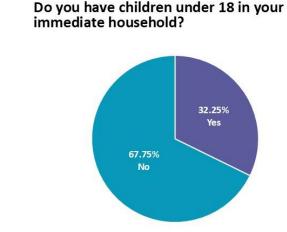
Figure 2. Spatial map of which zip codes had the most survey responses. Source: 2024-2025 City of Spokane Community Climate Planning Survey. The darker the blue the more responses received from that area.

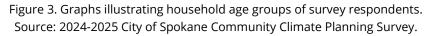


What are your household age groups?

There was a range of age groups who completed the survey, including youth under 18. However, the most responses came from the age groups of 35-44, 45-54, and 65-74. People were also asked if there were children under 18 years of age in their immediate household. 32.25% of survey respondents said "Yes".







Are you or do you know a community member who is more vulnerable to extreme weather and climate impacts?

The survey asked respondents whether they were, or had family members or friends who were, a member of communities identified as generally more vulnerable to extreme weather and climate impacts. Vulnerable communities were identified as those who tend to be impacted first and worst by climate impacts and/or tend to have less resources to respond to climate hazards due to health or socio-economic factors.

The below graph illustrates the responses received. This question also asked about Native American/Tribal community members, older residents, children, Black or African American residents, and Latino or Hispanic residents. However, a lack of responses with these communities identified prevents useable results. Based off other survey results, the responses are assumed to be due to lack of desire to answer this question rather than a lack of hearing from some of the identified groups. Further understanding will be explored in future workshops and focus groups.



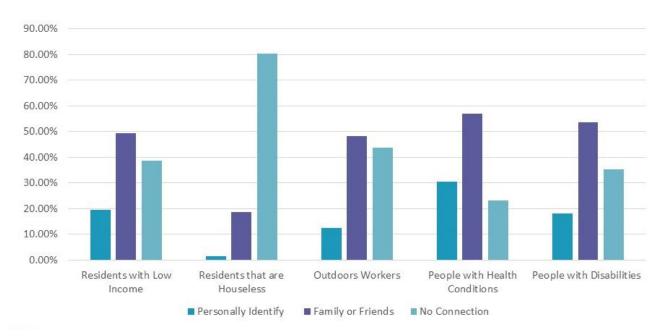


Figure 4. Graph illustrating responses from who identified as or have a connection with someone who is low income, residents that are houseless, outdoors workers, people with health conditions, and people with disabilities. Source: 2024-2025 City of Spokane Community Climate Planning Survey.

What is your race and ethnicity?

Of those who provided their race and ethnicity, a higher percentage of survey takers are members of vulnerable populations identified in the recently published <u>Spokane Climate Impacts and Climate</u> <u>Justice Memo</u> than the City of Spokane population as a whole. For instance, 1.9% of the City of Spokane's population is Black or African American, compared to 3.21% of survey respondents.

	Survey Responses	Spokane Population *
Black or African American	3.21%	1.9%
American Indian, Native American, or Alaska Native	4.07%	1.1%
Asian or Asian American	3.41%	2.2%
Native Hawaiian or other Pacific Islander	1.14%	0.6%
White or Caucasian	75.02%	84.8%
Other	3.74%	9.4% **
Prefer Not to Say	13.63%	

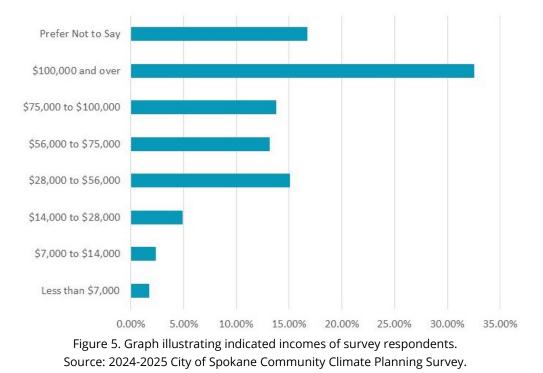
* Demographic data is from American Community Survey (ACS), 2023 update

**Data point is a combination of Other and Two or More Races to better reflect the survey question structure



What is your household income?

To understand the potential ability to respond to or be resilient from climate hazards, survey respondents were asked for their approximate household income. Approximately 37% of survey respondents are at or below Spokane's Median Household Income, which is \$65,745. Additionally, while not broken down by household size, approximately 8% of survey respondents make at or below the poverty line, assuming an average household size of three people.



How Have You Been Impacted?

Survey respondents were asked how they have been impacted (or not impacted) by climate hazards in Spokane. When compared to national, state, and local data points on climate hazards, the analysis provides insight into how impacts are perceived and individually felt by community members.

Have you been impacted by any of the following extreme weather and climate hazards in Spokane?

When asked what climate hazards impact their lives, survey respondents indicated that smoke from **wildfires**, **extreme heat**, and **intense storms** are the top three hazards. Of note, 14.91% of survey respondents indicated that they were not personally impacted by any of the climate hazards and some open-ended responses questioned the cause of extreme weather or other climate hazards. "Other" responses included bad air quality (not just related to wildfire smoke), reduced ability to grow vegetables due to changing frost dates/extreme heat/drought conditions, high winds and hailstorms, increased pests due to variable temperatures, and power outages caused by extreme weather events.

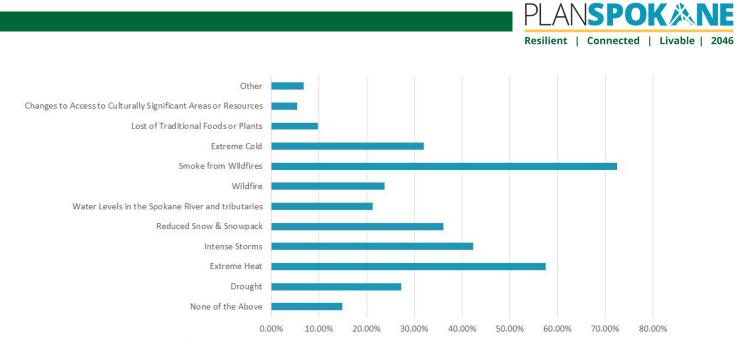
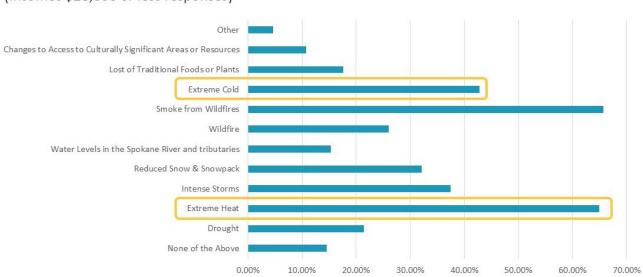


Figure 6. Graph illustrating overall responses to impacts of climate hazards. Source: 2024-2025 City of Spokane Community Climate Planning Survey.

When the same question is broken down to see how individuals who indicated a household income generally at or below the poverty line, depending on household size, an increased percentage of respondents indicated some of the extreme weather and climate hazards as more impactful. Of note, **extreme heat** and **extreme cold** substantially increased, which may indicate how lower incomes may be less able to financially respond to climate hazards (difficulty to manage higher heating and cooling bills, inability to install air conditioning or improved insulation, etc.).



(Incomes \$28,000 or less responses)

Figure 7. Graph highlighting response differences when broken down to income at or below \$28,000. Source: 2024-2025 City of Spokane Community Climate Planning Survey. In order to understand potential location variability, the responses for extreme heat, wildfire smoke, intense storms, and extreme cold were compared with survey respondents who provided their zip code.

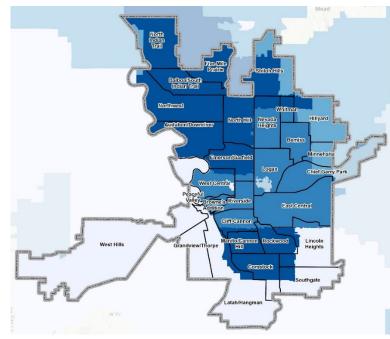


Figure 8. Map showing areas impacted by extreme heat, wildfire smoke, and intense storms. Source: 2024-2025 City of Spokane Community Climate Planning Survey. The darker the blue the more responses received from that area.

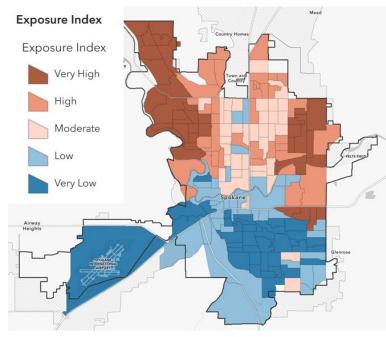


Figure 9. Exposure Index map. Source: Spokane Climate Risk and Vulnerability Index.

Extreme heat, wildfire smoke, and intense storms had the same spatial distribution. In general, the response distribution mirrors the distribution of who took individuals the survey, indicating an overall consensus of survey takers regardless of city location. Of note, portions of Shiloh Hills, the majority of Hillyard, portions of Minnehaha, portions of Chief Garry Park, and portions of Cliff-Cannon, as well as the westernmost portion of North Indian Trail and Northwest, all had a higher response rate, indicating more individuals in these areas reported having been impacted by extreme heat, wildfire smoke, and intense storms than other areas of the city.

When comparing the results from the survey to the Climate Risk and Vulnerability Index mapping tool, the Northwest of Spokane seems to align. Northeast Spokane, on the other hand, appears to indicate less perceived concern for climate hazards than the identified exposures would assume. However, a lower number of survey results coming from Northeast Spokane could potentially be masking the exposure risks identified for that region. The South Hill area also diverges from the Index, indicating a higher perception of impacts. Prior community engagement with Neighborhood Councils in the area indicated concerns of extreme storms



and impacts on trees, which is not easily captured by the Index and may explain some of the deviation.

When looking at those who said they were impacted by extreme cold, the distribution does not

mirror the distribution of overall survey responses. Unlike the results above, this indicates that there is a lack of consensus within the city when it comes to perceiving the impact of extreme cold. Most of North Hill, portions of Emerson/Garfield, portions of Northwest, and portions of West Central had a higher response rate than other parts of the city. The results generally align with the Climate Risk and Vulnerability Index of "Poor Housing Conditions", which shows areas with a high number of homes built before 1960, potentially pointing towards an explanation that is beyond actual temperatures (e.g. reduced insulation, lower use of heat, general less resiliency to cold temperatures, etc.).

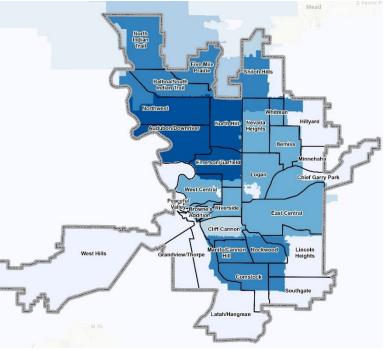


Figure 10. Map showing areas impacted by extreme cold. Source: 2024-2025 City of Spokane Community Climate Planning Survey. The darker the blue the more responses received from that area.

How have extreme weather and climate hazards affected you personally in the past five years?

The next question, how have the respondents been personally affected by extreme weather and climate hazards, relied on individual experiences and perceptions to identify how local lives are impacted. **Rising costs of living and basic needs** and **changes to recreational activities** were the top areas survey respondents stated they have been affected. 16.94% of respondents stated that they had not been impacted by any of the options. In the open-ended answers to "Other", increased or cancelled property insurance was brought up, as well as property damage and the increased use of government funds on projects related to climate and resiliency.



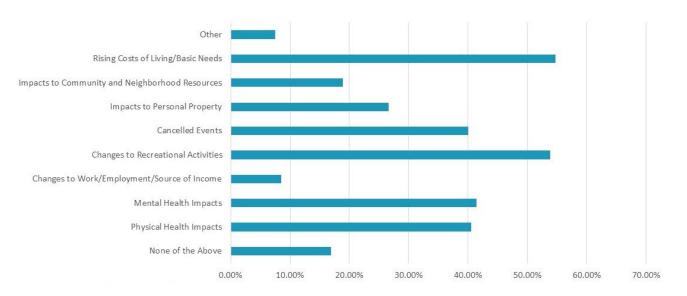
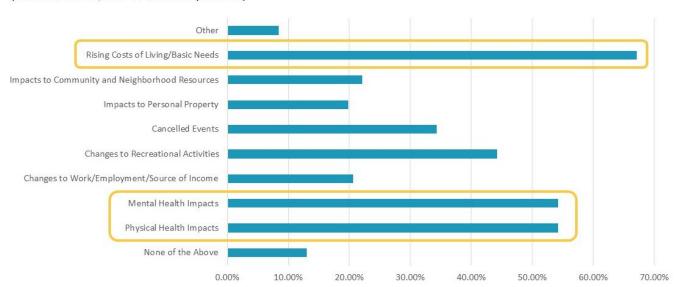


Figure 11. Graph illustrating how survey respondents have been personally impacted by extreme weather and climate hazards. Source: 2024-2025 City of Spokane Community Climate Planning Survey.

When evaluating the responses from those who indicated a household income generally at or below the poverty line, depending on household size, an increased percentage of respondents indicated being impacted by **rising costs of living/basic needs**, **mental health impacts**, and **physical health impacts**. While income is not directly tied to homeowner or renter status, another key insight is that 64.82% of renters indicated being affected by rising costs of living/basic needs, compared to 56.06% of homeowners, and 61.26% of renters indicated their mental health being affected, compared to 38.36% of homeowners.

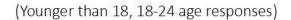


(Incomes \$28,000 or less responses)

Figure 12. Graph illustrating how survey respondents below the poverty line have been personally impacted by extreme weather and climate hazards. Source: 2024-2025 City of Spokane Community Climate Planning Survey.



This question was also broken down by age group, to better understand the impacts on Spokane's youth. Results indicate a significantly higher percentage of respondents indicating that extreme weather and climate hazards have **impacted youth mental health** the most. Approximatley 58.5% of youth 24 years of age or younger reported having their mental health impacted (59.38% under 18).



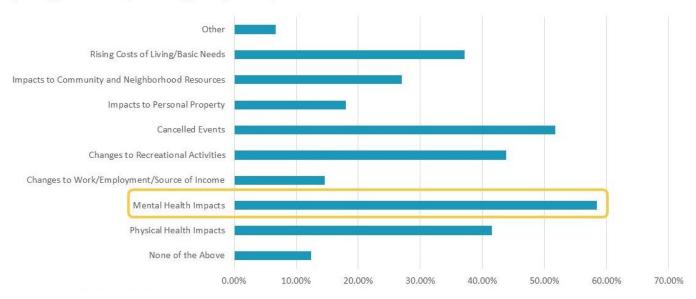
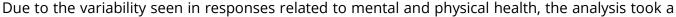


Figure 13. Graph illustrating how survey respondents 24 years of age and younger have been personally impacted by extreme weather and climate hazards. Source: 2024-2025 City of Spokane Community Climate Planning Survey.



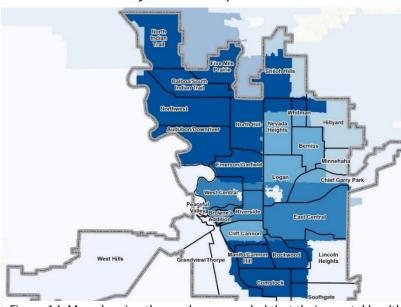


Figure 14. Map showing those who responded that their mental health and their physical health have been impacted by climate hazards.Source: 2024-2025 City of Spokane Community Climate Planning Survey. The darker the blue the more responses received from that area.

closer look into those areas. In order to understand whether mental and physical health impacts vary depending on location within the City of Spokane, the responses were compared with survey respondents who provided their zip code. The maps for both mental and physical health impacts had the same spatial distribution. In general, the response distribution mirrors the rate distribution of individuals who took the survey, indicating an overall consensus of survey takers regardless of city location. However, the northernmost portion of Shiloh Hills, portions of Nevada Heights,



Bemiss, portions of Logan, and portions of Whitman all indicated a slightly lower response rate, indicating fewer individuals in these areas reported having their mental and/or physical health impacted by climate hazards.

Personal stories about your experiences and concerns

When asked to share personal stories about their experiences and concerns (or lack of) around extreme weather and climate impacts, respondents largely discussed their concerns over **smoke and wildfires**, as well as **extreme heat**. Impacted activities included sports, camping, and gardening, with many expressing concerns over not being able to continue growing their own food. The increased cost of utilities due to greater demand for heat and air conditioning usage was also a common story.

Some survey respondents believe the weather events are not unusual, but many still acknowledge the personal or financial impact of extreme weather. This result indicates a **collective desire for community resiliency**, regardless of personal thoughts around changing climate patterns or hazards.

"I would like to stay in Spokane, but I'm concerned about wildfire risk especially - where to buy and how to make the property more fire resistant..."
"Loss of power from windstorms disabling powerlines effected my finding it more and more difficult with the extreme heat that can wipe the garden out in a matter of a week."

Figure 15. Personal stories submitted that reflected consistent patterns from survey respondents. Source: 2024-2025 City of Spokane Community Climate Planning Survey.

As You Look to the Future...

Survey respondents were also asked to think into the future about climate impacts. The City of Spokane Comprehensive Plan looks at a twenty-year vision for the city, identifying policies to guide future growth. The intent of these questions was to identify potential areas for future policy consideration.



Within the next 20 years, how concerned are you with weather and climate impacts in the City of Spokane?

When asked how concerned they are about certain weather and climate impacts within the next twenty years, respondents indicated a general extreme concern over **extreme heat**, **wildfire**, and **smoke from wildfires**. Drought, intense storms, reduced snow and snowpack, extreme cold, and water levels were generally of moderate concern. Most respondents indicated little to no concern over flooding, landslides, loss of traditional foods or plants, and changes in access to culturally significant areas or resources. The below graph breaks down the results by extremely concerned and not at all concerned responses. It is important to note that moderately and slightly concerned were also potential responses, which is how the impacts of moderate concern above were identified but were not graphed below to make it easier to identify the highest and lowest concerns.

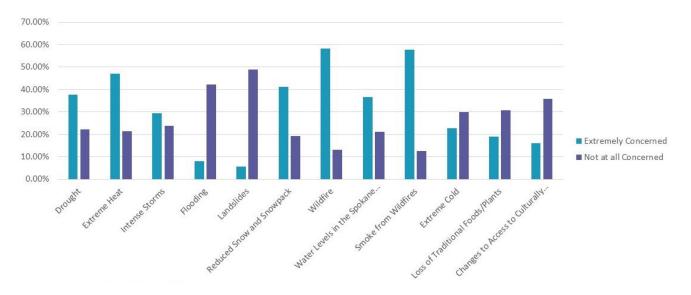


Figure 16. Graph illustrating the number of respondents who indicated extremely concerned or not at all concerned to future climate impacts. Source: 2024-2025 City of Spokane Community Climate Planning Survey.

Which sectors do you think are most at risk from extreme weather and climate impacts in Spokane?

Survey respondents were asked to rank how at risk they believe certain sectors or categories of assets will be in the future, ranked from 1 to 11. **Agriculture and food systems** were largely ranked most at risk, while neighborhoods and communities were largely ranked least at risk.



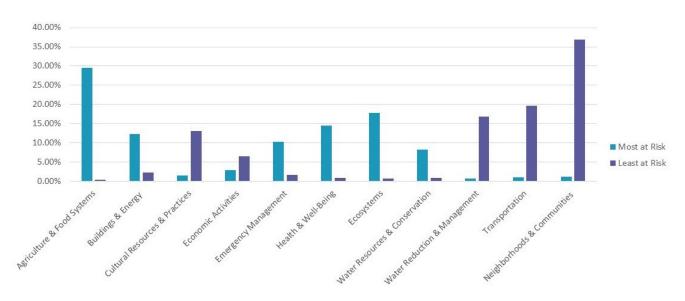


Figure 17. Graph illustrating the number of respondents who indicated most at risk or least at risk for provided sectors. Source: 2024-2025 City of Spokane Community Climate Planning Survey.

Survey respondents were also asked to provide comments on why or why not they are concerned about the sectors reviewed, or if there were any specific resources and infrastructure they thought were at risk. Common themes include concerns over local food production and small farms, the resiliency of the natural ecosystem and wildfires, water quality and the aquifer, how unhoused residents are more affected, the impact of trash and littering, and the support of multi-modal transportation options. Other comments included concerns over community safety and crime, as well as rising costs.



Figure 18. Comments about sectors submitted that reflected consistent patterns from survey respondents. Source: 2024-2025 City of Spokane Community Climate Planning Survey.



Looking Towards Solutions

When looking toward the future, its import to also look at potential future actions and solutions in the face of extreme weather and climate hazards. Feedback received from these questions will help **inform potential policies** that will be incorporated into the City of Spokane Comprehensive Plan.

What obstacles do you face when trying to reduce your household's environmental impact?

When asked what **obstacles** they may face when trying to reduce their household's environmental impact, a majority of survey respondents indicated the **costs** and **time** needed to make changes – such as improving insulation, updating windows, or replacing lawn – kept them from making changes they wanted to do. Other common themes included a lack of control over rented properties, lack of information on how to reduce their impact, not being sure individual actions make a difference, neighborhood covenants that restrict actions, businesses being viewed as having more of an impact, limited option of goods available to purchase, and limited recycling of once every other week.

"I would love to plant trees in the grassy space between the sidewalk and the street. I don't because they would require water, increasing my cost and upkeep...I am concerned about tree roots seeking water lines and causing very expensive repairs,"

"Trust and access to affordable ways to dispose of the right waste in the right area."

'Biggest obstacle is feeling solated in these attempts at conservation. Like my efforts don't matter." "Conserving outdoor water use also can put us at risk of fire danger."

"The hardest part to me is that there tends to be a high up front cost to conservation. We live in an old house, which means we would have to make high cost updates to increase the energy efficiency at home."

Figure 19. Comments about obstacles that reflected consistent patterns from survey respondents. Source: 2024-2025 City of Spokane Community Climate Planning Survey.

What kinds of climate solutions would you most like to see in Spokane?

Rather than just identifying concerns, risks, and obstacles, survey respondents were also asked to think specifically about **potential solutions** to increase Spokane's resiliency. Common themes included **water and waste reduction**, **incentives for more sustainable upgrades** (particularly for low-income residents), **tree management**, and **more trees and greenspace** throughout the city. Education and formal information sharing was also highlighted throughout the received comments.



"Add more trees in parking strips throughout the city and in our parks...Sponsor neighborhood community food gardens and have people who know about growing food guide the neighbors and teach them how to do it and share the produce."

"Walkability in the city and creating the city around that."

"The City should help incentivize transition to heat pumps for low in come residents. Create plan to transition all city owned buildings away from methane to electric heat pumps or other renewable technologies." "Planning for urban wildfires by training individuals to preemptively protect their home."

"I would like to be able to attend an ongoing series of interactive community education seminars (in person or on the web) where information is shared about [resiliency topics]."

Figure 20. Comments about potential solutions that reflected consistent patterns from survey respondents. Source: 2024-2025 City of Spokane Community Climate Planning Survey.

Next Steps

The Community Climate Planning Survey was one tool used to seek feedback about climate impacts experienced by Spokane's community. The engagement will continue throughout 2025 and 2026 and will be jointly considered along with data and scientific analysis throughout the phases of the Climate Planning efforts, ultimately resulting in proposed climate and resiliency focused policies to be incorporated into the City of Spokane Comprehensive Plan. The public is encouraged to stay engaged and keep an eye out for future opportunities to have their voice heard.



- **Stay Informed:** Follow the City of Spokane on social media and <u>sign up for email updates</u> to stay up-to-date on the latest developments in our climate planning efforts. You can also find more information on the project webpage at <u>my.spokanecity.org/climateplanning</u>.
- **Attend Events:** Look out for upcoming community workshops and events to chat, share information, and have your thoughts on climate planning heard.
- **Participate in Engage Spokane:** Community members can weigh in on Spokane's climate and resiliency planning efforts through <u>Engage Spokane</u>, an online community space to offer input and help shape the future of our thriving city.
- **Share Your Voice:** Your input is crucial in shaping our city's response to growing climate hazards. Join us for community workshops, town hall meetings, and online surveys to share your ideas, concerns, and priorities. You can also directly email the Climate Planning project team at <u>climateplanning@spokanecity.org</u>.



Appendix A – Survey Analytics

Analytics of survey responses and outreach efforts are documented to provide insight into how the survey was taken and shared.

SurveyMonkey Analytics

The Community Climate Planning Survey used SurveyMonkey to create and distribute the survey to the community. With a total of **1,573 responses**, the **survey completion rate was 100%**. This means everyone who started the survey submitted their responses. The first full week of January saw the most survey responses in one week, corresponding with PeachJar distribution (details below).

The survey was provided in **six languages**: English, Spanish, Arabic, Russian, Marshallese, and Vietnamese. One response was submitted through the Spanish survey, and one was submitted through the Russian survey. While not a high rate of responses, translation of the survey provided an opportunity for more community members to learn about the survey and Climate Planning efforts.

Digital Media Analytics

The City of Spokane leveraged its digital media to promote the Community Climate Planning Survey. A blog post and a news release advertising the survey were published. In January 2025, a total of **thirteen City newsletters** from various Departments and including the citywide Community Update newsletter reached over **80,000 unique emails** and resulted in **over 800 individual "clicks"** to learn more about the survey. Collectively, through the various City social media channels, the survey was **promoted to accounts over a half-million times**, **seen 190,000 times**, and **engaged with 1,300 times**.

PeachJar Analytics

PeachJar is an online bulletin board for the Spokane School District. The survey was shared through their system from January 6, 2025 through January 31, 2025. Distribution went to **56 schools**, with a total of **15,767 impressions** and **299 views**. 44 individuals visited the City of Spokane webpage or otherwise took action from the dashboard.

Community Distribution

A focused effort to distribute the Community Climate Planning Survey outside of City platforms was also conducted. Partnerships that helped amplify the survey with their audience include Spokane Public Schools (including non-English speaking families), Spokane Transit Authority, Spokane River Forum, the Northeast Community Center, Spokane Zero Waste, Inland Northwest Land Conservancy, The Lands Council, a number of faith-based organizations, and many more. Information about the survey, as well as digital flyers, were emailed to approximately 85 organizations and all Spokane Neighborhood Councils.



Non-digital efforts included physically posting flyers at Spokane libraries, community centers, throughout City Hall, and general community boards throughout the city. Survey flyers were available at the City Council Legislative Session sign up table and City staff promoted the survey during a tabling event outside City Council Chambers before the January 27, 2025 legislative session. The survey was also advertised during numerous Plan Commission, Climate Resiliency & Sustainability Board, and City Council committee meetings.