

LOS ALAMOS Climate Action Plan Survey Summary

November 2023



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OVERVIEW

SURVEY OVERVIEW

This report summarizes results from a survey administered to Los Alamos County residents to gather feedback to inform the development of the county's first Climate Action Plan (CAP). The survey focused on understanding **community priorities and concerns** related to the County's future, climate change impacts, and climate action, as well as **level of support for possible strategies for the CAP**.

The survey was administered online via SurveyMonkey from **September 19 to October 18, 2023**. Los Alamos County staff advertised the survey through the County's Sustainability website, Los Alamos Daily Post, paper flyers, a press release, a utility bill insert, County Line, Los Alamos County Main Distribution email list, and multiple social media pages. The survey was offered in English and open to the public on the County's website.

Community feedback is an essential part of the Los Alamos CAP development process. The planning team will consult the results of this survey to inform the CAP strategy and action list to ensure community priorities and concerns are reflected across all proposed CAP actions. All proposed draft CAP actions will also undergo a **multicriteria analysis (MCA)** to ensure actions are viable, impactful, cost-effective, center equity, and minimize potential unintended or negative impacts such as on vulnerable or low-income populations.

In total, 552 Los Alamos community members completed the survey.

SURVEY METHODOLOGY

The survey design was informed by survey best practices, climate communication resources, and County staff input. Referenced best practices include:

- Minimizing response bias by asking neutral questions and using "balanced scales" by having an equal number of options on both sides of the response spectrum for each question, and by providing opportunities for additional open-ended comments.
- Using plain language appropriate to the public audience and avoiding jargon (e.g., "supporting climate action" and making the county more "sustainable and resilient" rather than "reducing greenhouse gas emissions and improving resilience to climate impacts").
- Considering audience attention span by keeping the survey short enough so that respondents can successfully complete the survey.
- Keeping questions on sensitive topics, such as about demographics or contact information, optional and at the end of the survey.

The survey design also drew from other available climate-focused surveys such as the Yale Program on Climate Communication's *International Public Opinion on Climate Change* survey.¹ This global survey gauges public opinion on climate change beliefs, attitudes, policy preferences, and behaviors from respondents around the world.

Overall, the survey received 552 responses, 2.9% of the County's population, which represents a 95% level of confidence with a +/-4% margin of error. This summary overviews response rates for

¹ Yale Program on Climate Change Communication: International Public Opinion on Climate Change (2022)

each question and trends and variations in responses across questions. This summary also compares survey response demographics to the County's population to examine survey representativeness. *Section 5: Optional demographic questions* describes this comparison and shows that survey respondents reflect most County demographic categories (within a 5% difference).

Survey responses were exported to Excel and summarized for each question using graphs, tables, and short descriptions (see *Survey Results* section starting on page 4). Key takeaways from openended responses are also provided, when applicable. All open-ended responses to a given question were entered into ChatGPT with the instruction to synthesize the top 5 themes from the responses. The consultant team then manually reviewed survey responses to confirm that the themes produced by ChatGPT were accurate. The full list of responses is in *Appendix B: Open-Ended Responses*.

KEY THEMES

Торіс	Key Themes
Climate knowledge and impacts	Nearly half of respondents know a lot about climate change (48%) and are most concerned about drought, water supply, and ecosystem impacts of climate change.
Community vision and priorities	Respondents who support climate action want to see enhanced energy efficiency, a transition to renewable energy, improved public transit, access to electric vehicle (EV) chargers, more water conservation, and protected green spaces and natural systems in Los Alamos.
	Respondents who do not support climate action would like to see fewer mandates, prioritization of issues other than climate change, and support for community business opportunities.
	In general, the community also cares about promoting a strong and diverse local economy, reducing waste, and facilitating education and collaboration on climate issues.
Climate action concerns	Many respondents are concerned about the economic impact of taking climate action, including the cost to transition to renewable energy, potential job loss, and taxpayer burden.
County's role in climate action	Many respondents share the desire for Los Alamos to be a leader in climate action, stressing the importance of taking proactive action to prepare the county for the future by leveraging scientific knowledge and innovation.
	Respondents also voiced concern and skepticism about the validity of climate change and the effectiveness of taking climate action locally, including hesitancy around introducing mandates and regulations.
Ongoing action	Many community members are already taking action to reduce greenhouse gas (GHG) emissions and promote resilience through reducing waste, using sustainable yard care practices, purchasing environmentally friendly products, and buying second-hand items such as clothing and furniture.

Key themes from the online survey results are summarized below.

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SURVEY RESULTS

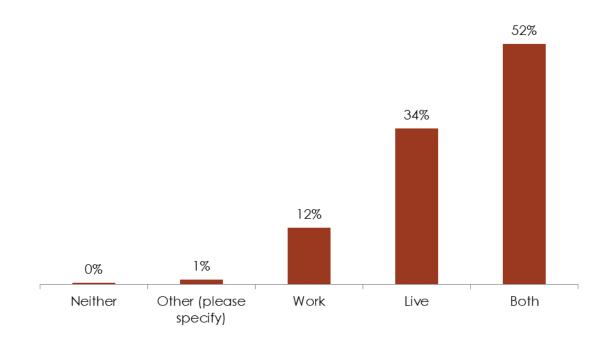
SECTION 1: INTRODUCTION

Question 1: Do you live or work in Los Alamos County?

Answered: 551, Skipped: 1

• As shown in Figure 1, the majority (52%) of respondents **both live and work** in Los Alamos County. About one third of respondents (34%) **just live** in the county and a minority (12%) just **work** in the county.

Figure 1. Respondent relationship to Los Alamos County.

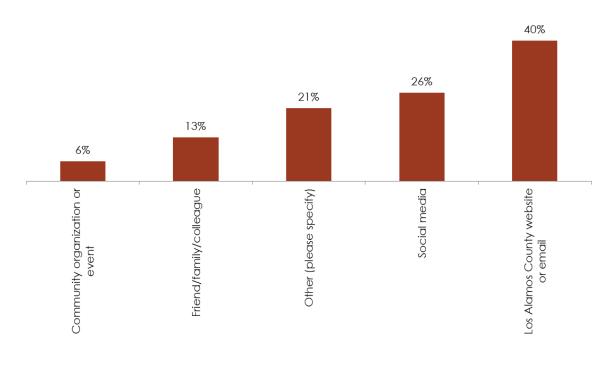


Question 2: How did you hear about this survey? Select all that apply.

Answered: 549, Skipped 3

• Most respondents heard about the survey through the **County's website or emails** (40%) or via social media (26%; see Figure 2).

Figure 2. How respondents heard about the survey.

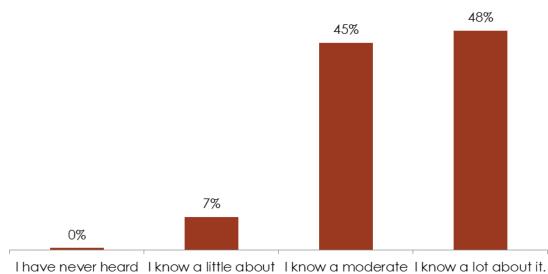


Question 3: How much do you know about climate change?

Answered: 550, Skipped: 2

• Most respondents **know either a lot** (48%) or a **moderate amount** (45%) about climate change (see Figure 3).

Figure 3. Respondent knowledge about climate change.



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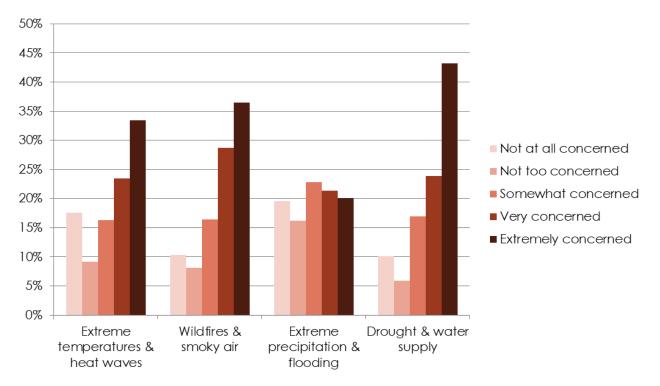
of it.

Question 4: How concerned are you about the following climate change impacts? Please indicate your level of concern for each.

Answered: 547, Skipped: 5

- Respondents are **most concerned about drought and water supply** with 43% of respondents being extremely concerned about it (see Figure 4).
- Respondents are **least concerned about extreme precipitation and flooding** with 20% of respondents being not at all concerned about it (see Figure 4).

Figure 4. Respondent concern regarding climate change impacts.



Question 5: Are there any other climate change impacts that you are VERY CONCERNED about? (Open response)

Answered: 239, Skipped: 313

The following top 5 key themes were identified from this open response question in order of most heard to least heard:

- **Skepticism** about the validity of climate change.
- Concern about the **economic impact** of taking climate action including the cost to transition to renewable energy, potential job loss, and taxpayer burden.
- Concern about the **environmental impact** of solar, wind farms, and electric vehicles.
- Desire to **focus on local and regional issues** such as sustainable agriculture, forest management, and water resources.
- Concern about the impact of climate change on wildlife and biodiversity.

Question 6: Please rate your level of agreement with the following statements. For each statement, please select the option that best matches your view. *Taking action on climate change in Los Alamos County*...

Answered: 547, Skipped: 5

- Many respondents **strongly agree** that taking action on climate change in Los Alamos County will **"protect our environment and natural resources"** (43%) and **"is good for the health and livability of my community"** (40%; see Figure 5).
- Respondents are more **split on their level of agreement** on whether climate action "**can help me save money and resources**" (24% of respondents strongly disagree) and "**is good for business in Los Alamos County**" (20% of respondents strongly disagree; see Figure 5).

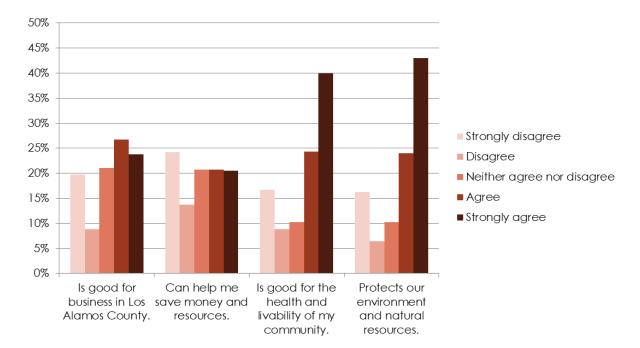


Figure 5. Level of agreement on benefits of climate action.

Question 7: What other benefits can be realized from taking action on climate change in Los Alamos? (Open response)

Answered: 193, Skipped: 359

The following top 3 key themes were identified from this open response question in order of most heard to least heard:

- Skepticism about the effectiveness of taking climate action locally.
- Recognition that taking climate action can help to **improve the environment**, **save money**, **and lead to a more sustainable community**.
- Desire for Los Alamos to be a **leader in climate action**, stressing the importance of taking proactive action to prepare the county for the future.

SECTION 2: VISION & TARGETS

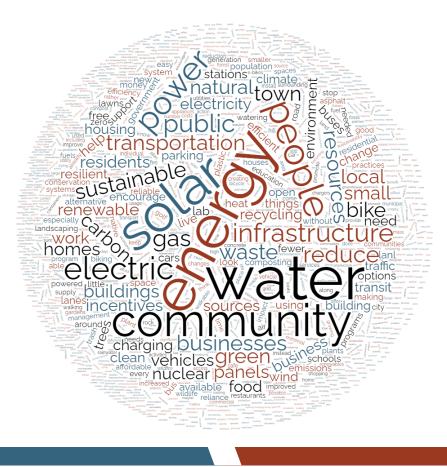
Question 8: What would a sustainable and resilient Los Alamos look like? (Open response)

Answered: 305, Skipped: 247

The following top 7 key themes were identified from this open response question in order of most heard to least heard (see Figure 6):

- There would be enhanced **energy efficiency** and a transition to **renewable energy** sources while ensuring reliable power distribution.
- It would prioritize **conserving water**.
- There would be improved **public transit**, access to **EV chargers**, and safe and connected **pedestrian and bikeways**.
- There would be **reduced waste** and/or **increased waste diversion**.
- It would have a **strong and diverse local economy** that supports small businesses and is less reliant on LANL.
- It would have a community that is well **educated** about sustainable practices and knows how to be a **collaborative part of the solution**.
- It would be **resilient to wildfire** through wildfire mitigation efforts, such as forest thinning.

Figure 6. Word cloud of responses, with word size representing number of mentions.

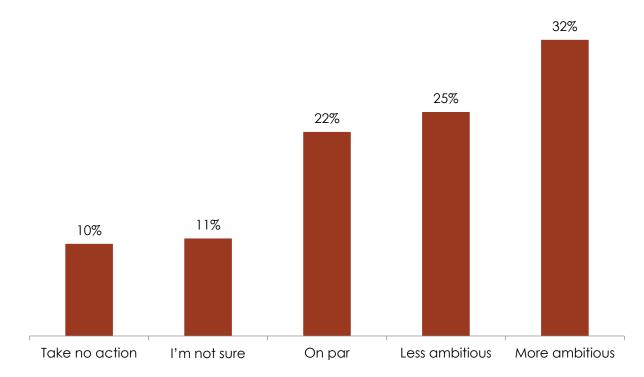


Question 9: The state of New Mexico has a goal to reduce greenhouse gas emissions 45% by 2030 (compared to 2005 baseline levels). This ambitious goal will require implementing new regulations and programs across major emissions sectors, including transportation, buildings (electricity and natural gas), and solid waste. Compared to the state target, Los Alamos County's target should be....

Answered: 506, Skipped: 46

• As shown in Figure 7, 32% of respondents think Los Alamos County's targets should be **more ambitious** than the state of New Mexico's targets with the remaining respondents indicating: less ambitious (25%), on par (22%), unsure (11%), or no action should be taken (10%).

Figure 7. Respondent feedback on Los Alamos County emission reduction targets.



Question 10: Please elaborate on why you believe this should be Los Alamos County's target. (Open response)

Answered: 304, Skipped: 248

If respondents thought Los Alamos County should be **more ambitious** than the state:

- Respondents believe that the county should be a leader in climate action due to level of communitywide education, wealth, and scientific expertise.
- Respondents think that the County should leverage the scientific knowledge and innovation in the community.

• Respondents believe that taking climate action is urgent and therefore the County should set ambitious goals.

If respondents thought Los Alamos County should be **less ambitious** than the state:

- Respondents are skeptical about the validity of climate change.
- Respondents are concerned about the economic impact of taking action.
- Respondents are resistant to mandates and would prefer voluntary actions.

If respondents thought Los Alamos County should be **on par** with the state:

- Respondents are concerned about the economic impact of being more ambitious on working-class families.
- Respondents support being aligned with the state goals.
- Respondents would prefer voluntary behavioral changes over mandates.

If respondents were **not sure** where Los Alamos County's targets should be in relation to the state:

- Respondents would like more information before deciding.
- Respondents express concern about the feasibility of achieving targets.
- Respondents express a desire for the County to take leadership in climate action, recognizing the county's unique position as a highly educated community known for being scientific innovators.

If respondents thought Los Alamos County should **take no action**, therefore setting no targets:

- Respondents are skeptical of climate science, expressing thoughts that it is a hoax or that climate scientists exaggerate the urgency of taking action.
- Respondents believe it is not the government's place to impose regulations for climate action.
- Respondents express concerns about the socioeconomic impact setting targets would have on low-income populations.

SECTION 3: CLIMATE STRATEGIES

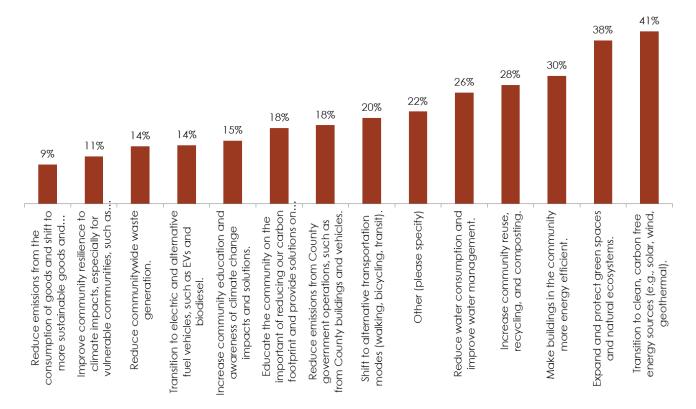
Question 11: What TOP THREE STRATEGIES do you think the Los Alamos Climate Action Plan should focus on? (Choose up to three)

Answered: 465, Skipped: 87

The top chosen strategies among respondents were (Figure 8):

- 1. Transition to **clean**, **carbon free energy** sources (41% of respondents selected strategy among the top three for the CAP's focus).
- 2. Expand and protect **green spaces and natural ecosystems** (38% of respondents selected strategy among the top three for the CAP's focus).
- 3. Make buildings in the community more **energy efficient** (30% of respondents selected strategy among the top three for the CAP's focus).

Figure 8. Percentage of respondents who selected strategy among the top three for the CAP's focus.



Question 12: What do you see as significant BARRIERS or CHALLENGES to implementing these strategies? (Open response)

Answered: 313, Skipped: 239

The following top 4 key themes were identified from this open response question in order of most heard to least heard:

• Concern about the **cost** of climate action.

- **Skepticism** about the validity of climate change.
- Resistance to the change these strategies would bring.
- Concern about the **politics** surrounding climate change.

Question 13: Do you have any additional feedback on these strategies? Are there any key strategies that you think are missing or actions you would like to see included in this plan?

Answered: 172, Skipped: 380

The following top 5 key themes were identified from this open response question in order of most heard to least heard:

- Importance of **education and outreach**, emphasizing the importance of transparency.
- Desire to promote sustainable infrastructure, energy resources, and renewable energy.
- Desire for sustainable transportation options and access to EV chargers.
- Desire for the County to **support local businesses** and focus on **local job creation**.
- Importance of water conservation and sustainable waste management in climate action.

Question 14: What are some things you or your household/business HAVE DONE or would be WILLING TO DO to support climate action? (Select all that apply)

Answered: 456, Skipped: 96

As shown in Figure 9, most frequently chosen actions respondents or their business have done or are willing to do to support climate action were:

- 1. Reduce your use of single-use items (plastics and napkins) (67% of respondents).
- 2. Waste less food (63% or respondents).
- 3. Use sustainable yard care practices such as by planting native or drought-tolerant plants or adding water catchment systems (59% of respondents).
- 4. Purchase environmentally friendly products (e.g., items with recycled content or less toxic chemicals; 57% of respondents).

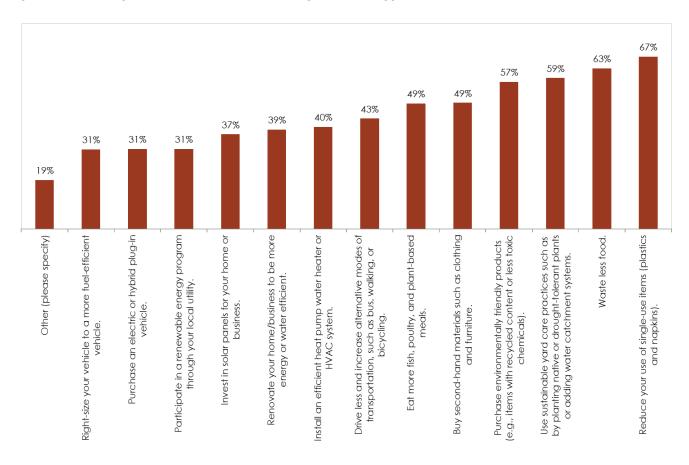


Figure 9. Actions respondents have taken or are willing to take to support climate action.

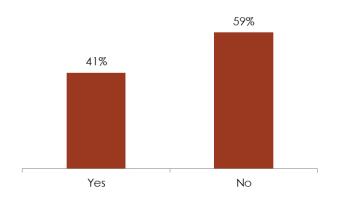
SECTION 4: STAYING INVOLVED

Question 15: Can we email you about additional engagement opportunities for the Climate Action Plan? (You will receive approximately one email per month).

Answered: 469, Skipped: 83

• A majority of respondents do not wish to be contacted about additional engagement opportunities for the Climate Action Plan (59%; see Figure 10).

Figure 10. Respondents who wish to be contacted about additional engagement opportunities.



Question 16: Email? (Open response)

Answered: 189, Skipped: 363

If respondents answered yes to question 15, they were prompted to share their email address for contact.

Question 17: Name? (Open response)

Answered: 186, Skipped: 366

If respondents answered yes to question 15, they were prompted to share their name for contact.

SECTION 5: OPTIONAL DEMOGRAPHIC QUESTIONS

Question 18: What is your zip code? (Open response)

Answered: 438, Skipped: 114

• Most respondents live in area code 87544 (65%) and 87547 (25%; see Table 1) which encompass the most populous areas of the county.

Table 1. Respondents' zip codes.

Zip code	
87544	64.8%
87547	24.9%
87025	0.2%
89547	0.2%
87532	2.1%
87566	0.7%
87506	1.8%
87655	0.2%
87507	0.5%
87548	0.2%
87505	0.7%
88547	0.5%
87508	0.9%
87537	0.5%
87581	0.2%
87571	0.2%
85744	0.2%
87567	0.2%
87544-2110	0.2%
87545	0.5%
87533	0.2%

Question 19: What is your gender?

Answered: 432, Skipped: 120

• Half of respondents (50%) identify as a woman, 47% identify as a man, and 2% identify in another way (see Table 2). Survey data on gender is not comparable to data from the U.S Census, which reports sex rather than gender.

Table 2. Gender of survey respondents.

Gender	
Woman	50%
Man	47%
I identify another way	2%

Question 20: If you identify in another way, how would you describe your gender?

Answered: 11, Skipped: 541

• Of the 11 respondents who identify their gender in a way other than man or woman, 18% identify as non-binary, 9% identify as transgender man, and 73% identify in another way (see Table 3). The U.S. Census does not currently share comparable data on gender.

Table 3. Gender of survey respondents who identify in another way.

Gender	
Non-binary	18%
Transgender man	9%
I identify another way	73%

Question 21: Are you Spanish, Hispanic, or Latino?

Answered: 408, Skipped: 144

• Most respondents do not consider themselves to be Spanish, Hispanic or Latino (82%; See Table 4). This is representative of the County's demographics in the U.S. Census which includes 18% of the population identifying as Hispanic or Latino (see Table 5).

Table 4. Spanish, Hispanic, or Latino ethnicity of survey respondents.

Spanish, Hispanic, or Latino Population	
No, I do not consider myself to be Spanish, Hispanic, or Latino.	82%
Yes, I consider myself to be Spanish, Hispanic, or Latino.	18%

Table 5. U.S. Census race/ethnicity.

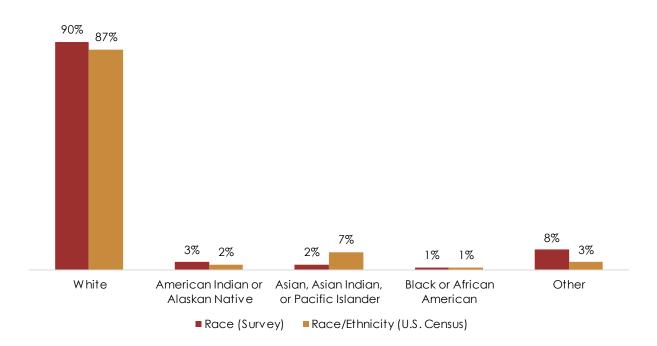
Race/Ethnicity ²		
Hispanic or Latino	18%	

Question 22: What is your race? (Mark one or more races to indicate what race you consider yourself to be)

Answered: 395, Skipped: 157

• As shown in Figure 11, most respondents identify as White (90%), followed by Other (8%), American Indian or Alaskan Native (3%), Asian, Asian Indian, or Pacific Islander (2%), and Black or African American (1%). This is representative of the County's demographics for all races in the U.S. Census within 5%.²

Figure 11. Indicated race of survey respondents compared to race of residents from U.S. Census.²



² U.S. Census Bureau QuickFacts: Los Alamos County, New Mexico (2022)

Question 23: In which category is your age?

Answered: 421, Skipped: 131

• Most survey respondents are 55-64 years of age (21%), 65-74 years of age (21%), or 45-54 years of age (20%; See Figure 12). The median age of survey respondents is over 10 years older than the median age of Los Alamos residents, according to the U.S. Census (see Figure 13 and Figure 14).

Figure 13. Age of survey respondents.

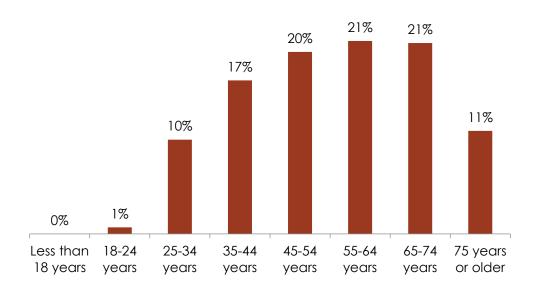
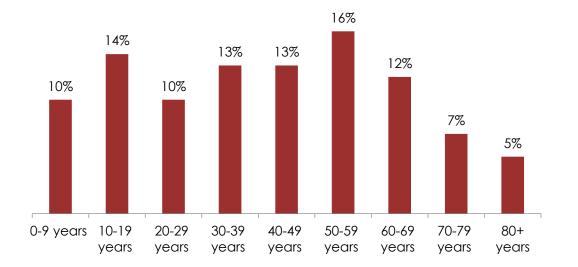


Figure 14. Age of Los Alamos residents (U.S. Census).³



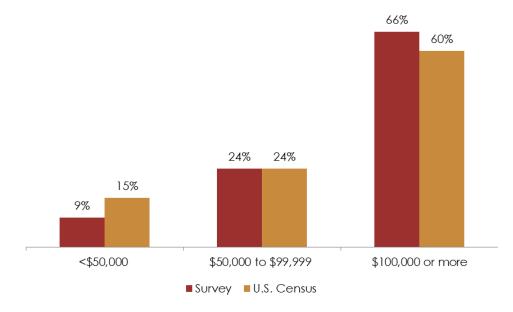
³ U.S. Census Bureau: American Community Survey 5-year estimates. Los Alamos County, NM (2021)

Question 24: How much do you anticipate your household's total income before taxes will be for the current year? (Please include in your total income money from all sources for all persons living in your household).

Answered: 364, Skipped: 188

• Most survey respondents have an annual household income before taxes of over \$100,000 (66%; Figure 15). Compared to the US Census data for the County, survey respondents had a higher median household income.

Figure 15. Household total income of survey respondents compared to U.S. Census.³



Question 25: Which best describes the building you live in?

Answered: 429, Skipped: 123

• Most survey respondents live in a one family house detached from any other houses (83%; See Table 6). The next most common building type for respondents is a building with two or more homes (13%) followed by mobile home (4%). The US Census does not provide data on this question.

Table 6. Building type of survey respondents.

Building type	
One family house detached from any other houses	83%
Building with two or more homes (duplex, townhome, apartment, or condominium)	13%
Mobile home	4%
Other (please specify)	1%

Question 26: Do you rent or own the place where you live?

Answered: 430, Skipped: 122

• Table 7 shows that the vast majority of survey respondents own the place where they live (91%). This rate is significantly higher than the percent of owner-occupied units in Los Alamos County according to the US census (74%; see Table 8).

Table 7. Percent of survey respondents who rent versus own the place where they live.

Rent or own	
Own	91%
Rent	7%
Neither	2%

Table 8. U.S. Census ownership of occupied units.³

Occupied units ²	
Owner occupied	74%
Renter occupied	26%

Question 27: Do you work or volunteer for an organization in any of the following sectors? (Select all that apply)

Answered: 378, Skipped: 174

• Many survey respondents work or volunteer in the education, health care, and social assistance sector (23%). Other popular work sectors of respondents include faith/religious based groups (18%), environmental advocacy (14%), energy (14%), and tech (13%; see Figure 16). Comparable data from the US Census was not available.

Figure 16. Sector of work/volunteer of survey respondents.

