SPEER23 Survey Report

Investigating Climate, Weather, and Energy Attitudes in the United States through the Lens of Social and Psychological Factors

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Survey Motivation

Changing seasonal weather patterns and increases in climate-related severe weather have resulted in billions of dollars in damages to property as well as injuries and loss of life across the United States. These climate and weather patterns are expected to continue in the coming decades, depending on the magnitude of global warming, ushering in more frequent heat waves and intensifying the water cycle, which will result in more extreme weather events including severe winter storms, flooding, severe wind, hail, drought, and fire weather (i.e., land and weather conditions that are conducive to wildfires) (IPCC, 2021). Humans do not exist independent of Earth systems, and Earth systems no longer operate independently of human influence, as evidenced by the proposal of a new geologic era - the Anthropocene (Crutzen, 2002). This increase in natural catastrophes and large-scale disasters, both observed over the last few decades and expected in the near future, cause repetitive stress and strain on society in rebuilding and mitigation efforts and create disproportionate vulnerabilities for individuals (Thomas et al., 2019). There are a few studies that focus on how attitudes and behaviors are impacted by natural disasters (e.g., Maki et al., 2019; Rudolph & Kuhn, 2018; Sun et al., 2019); however, most of these studies analyzed data that are limited in sample size, and generally looked at on an aggregated level rather than individual-level attitudes and behaviors. This is not always ideal because data on individual attitudes and behaviors can be used to inform climate-related interventions and policies, as well as increase understanding of the willingness of individuals to help others in need, post-disaster. As a first step towards filling data needs, we conducted an online survey – the inaugural wave and pilot study of the Social, Political, Earth & Environmental Survey – in 2023 (SPEER23 Survey).

Key Components of the SPEER23 Survey

Tolerance Scales

The primary aim of this survey is to collect data that allow us to assess the impact of climate-related phenomena on levels of tolerance (the willingness to accept others) held by individuals. A good deal of theoretical work suggests that climate-related disasters have the potential to affect tolerance levels in individuals. Drawing on theories of cultural tightness/looseness (Gelfand, 2018) and terror management (Burke et al., 2013; Landau et al. 2004; Solomon et al., 2015), our overarching hypothesis is that extreme weather exposure reduces individuals' social and political tolerance. To assess general tolerance, we improved upon measures of tolerance found in existing surveys, such as the General Social Survey (GSS) and the American National Election Studies (ANES) by using measures of both political and social tolerance that were assessed in separate steps in the SPEER23 Survey. First, respondents were asked to select their "least-liked" from a list of ten hypothetical individuals belonging to different groups - half left-leaning, half right-leaning. The respondents were reminded of their least-liked choice and then asked a series of questions to assess both political and social tolerance. This "least-liked" approach–which has been advocated by multiple scholars on tolerance (see Djupe, 2015; Eisenstein, 2006; Sullivan et al., 1982) is often the gold standard of tolerance measurement because it measures the concept of "tolerance forbearance," meaning the willingness to grant rights to someone from a group that is least liked by the respondent. The tolerance items on the SPEER23 Survey improve upon the ones available in the GSS because measures in the latter survey only ask about support for stigmatized groups but do not ask whether or not the respondent "likes" members of that group. Exhibiting tolerance towards a group that a respondent likes the least indicates a much "higher bar" of tolerance. Finally, on the SPEER23 Survey we asked each respondent if they personally know anyone from their least-liked group and if they indicated that they do, we then asked about the nature of their relationship. This final step allows us to discern tolerance based on contact with stigmatized groups versus general perceptions. To assess left/right tolerance, the SPEER23 Survey also contains thermometer scales that are common to the ANES. We improved upon these measures by adding groups that are not commonly included for multiple years on the ANES cross-sectional surveys.

Tolerance Vignettes

We also are interested in how the attributes of the individuals who message about climate and climate-mitigation strategies influence reactions to, and endorsement of, climate-related information and interventions. To assess tolerance for left/right climate mitigation messaging, the SPEER23 Survey includes a series of photo vignettes. This type of visual vignette has been used in social science research to investigate attitudes towards ingroups and outgroups (Havekes et al., 2013). Vignettes are increasingly popular in social research, although visual (e.g., photo) vignettes are used much less often than textual ones (Facciani et al., 2022). Respondents were randomly assigned one of two photos for each of four vignettes. (All respondents completed four vignettes.) Photos in the vignettes varied by urbanicity of location (first vignette), occupation (second vignette), race (third vignette),and gender (fourth vignette).

After viewing the photo for a particular vignette, respondents indicated how much they trust the messaging from the person shown in the photo.

Weather, Climate, and Ecological Items

The SPEER23 Survey includes several items that measure attitudes about and experiences with the environment, weather and climate. In particular, the survey includes a module of measures that gauge respondents' recollection of past experiences with, and expectations of a variety of weather events and disasters. Items making up the New Ecological Paradigm also were included.

Other Items

The SPEER23 Survey also includes social, religious, psychological, political, and demographic questions. Social measures include scales for social capital and racial resentment. Religious questions include ones asking about religious service attendance, religious beliefs, biblical literalism, religious affiliation, and Christian nationalism. Psychological questions measure social dominance orientation, moral foundations, fears, conspiracy, and cultural worldviews. Political items measure party affiliation and left/right orientation. Finally, socio-demographic background questions ask about age, race, ethnicity, sex, gender, family structure, marital status, education, income, urbanicity, and region. A summary of the questions, their location in the survey questionnaire, and their basic purpose is shown in Table 1.

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Table 1. Questions in the SPEER23 Survey

Question Number	Purpose/Module
Q1 - Q3	Respondent Informed Consent, Validation & Verification
Q5 - Q12	Demographic Information
Q13	Zip Code
Q14 (6 items)	Scientific Knowledge
Q15 (9 items)	Past Weather Perception
Q16 (9 items)	Future Weather Perception
Q17 – Q19	How Weather Has Impacted R
Q20 – Q21	Water Support/Trust
Q23 – Q29	New Ecological Paradigm
Q30 (9 items)	Energy Attitudes
Q31 – Q33	Climate Concern & Mitigation
Q34 – Q35	Personal Well-being
Q37 – Q40	Social Capital
Q41 (6 items)	Fears
Q42 (4 items)	Conspiracies
Q43	Attention Verification 1
Q45 – Q48	Cultural Worldviews
Q50 – Q53	Social Dominance Orientation
Q54 – Q55	Urbanicity Photo Vignette
Q56 (6 items)	Christian Nationalism
Q57 – Q58	Occupation Photo Vignette
Q59 (15 items)	Thermometer Tolerance Scales
Q60 – Q61	Single Mother Photo Vignette
Q62	Tolerance Target (Least-Liked Group)
Q63 (items 1-4)	Political Tolerance
Q63 (items 5-8)	Social Tolerance
Q64 – Q65	Tolerance Contact
Q66 -Q67	Gender Photo Vignette
Q68 – Q69 (11 items each)	Moral Foundations
Q70 (4 items)	Racial Resentment
Q71	Attention Verification 2
Q72 – Q75	Climate Change/Global Warming Attitudes
Q76 – Q77	Coworker Incentive Vignette
Q79 – Q87	Solution Aversion to Climate Change
Q89 – Q90	Political Background
Q91 – Q94	Religious Background
Q96 – Q100	Additional Demographic Information
Q101 – Q104	Residence Information
Q105 – Q108	Family/Household Information

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References

Burke, B. L., Kosloff, S., & Landau, M. J. (2013). Death goes to the polls: A meta-analysis of mortality salience effects on political attitudes. *Political Psychology*, *34*(2), 183-200.

Crutzen, P. J. (2002). Geology of mankind. *Nature, 415*(6867), 23.

Djupe, P. A. (2015). Peer reviewing in political science: New survey results. *PS: Political Science & Politics, 48*(2), 346-352.

Eisenstein, M. A. (2006). Rethinking the relationship between religion and political tolerance in the US. *Political Behavior, 28*, 327-348.

Facciani, M., Brashears, M. E., & Zhong, J. (2022). Visual vignettes for cross-national research. *International Journal of Social Research Methodology*, *25*(1), 29-43.

Gelfand, M. (2018). *Rule makers, rule breakers: How tight and loose cultures wire our world*. Scribner.

Havekes, E., Coenders, M., & Van der Lippe, T. (2013). Positive or negative ethnic encounters in urban neighbourhoods? A photo experiment on the net impact of ethnicity and neighbourhood context on attitudes towards minority and majority residents. *Social science research*, *42*(4), 1077-1091.

Intergovernmental Panel on Climate Change (IPCC). (2021) *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. doi:10.1017/9781009157896.

Landau, M. J., Solomon, S., Greenberg, J., Cohen, F., Pyszczynski, T., Arndt, J., Miller, C. H., Ogilvie, D. M., & Cook, A. (2004). Deliver us from evil: The effects of mortality salience and reminders of 9/11 on support for President George W. Bush. *Personality and Social Psychology Bulletin*, *30*(9), 1136-1150.

Maki, A., Dwyer, P. C., Blazek, S., Snyder, M., González, R., & Lay, S. (2019). Responding to natural disasters: Examining identity and prosociality in the context of a major earthquake. *British Journal of Social Psychology*, *58*(1), 66-87.

Rudolph, L., & Kuhn, P. M. (2018). Natural disasters and political participation: Evidence from the 2002 and 2013 floods in Germany. *German Politics*, *27*(1), 1-24.

Solomon, S., Greenberg, J., & Pyszczynski, T. (2015). *The worm at the core: On the role of death in life*. Random House.

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Sullivan, J. L., Piereson, J., & Marcus, G. E. (1993). *Political tolerance and American democracy*. University of Chicago Press.

Sun, L., Su, G., Tian, Q., Qi, W., Liu, F., Qi, M., & Li, R. (2019). Religious belief and Tibetans' response to earthquake disaster: a case study of the 2010 Ms 7.1 Yushu earthquake, Qinghai Province, China. *Natural Hazards*, *99*, 141-159.

Thomas, K., Hardy, R. D., Lazrus, H., Mendez, M., Orlove, B., Rivera-Collazo, I., Roberts J. T., Rockman, M., Warner, B. P., & Winthrop, R. (2019). Explaining differential vulnerability to climate change: A social science review. *Wiley Interdisciplinary Reviews: Climate Change*, *10*(2), e565.

Whitehead, A. L., & Perry, S. L. (2020). *Taking America back for God: Christian nationalism in the United States*. Oxford University Press.

Data Collection

The SPEER23 Survey was administered by Qualtrics using funds from the University of Oklahoma. Respondents (adult citizens of the United States who were not incarcerated) were recruited from existing Qualtrics panels using an "opt-in" sampling strategy. Qualtrics used quotas for respondents based on age, race, sex, education, and geographic region to achieve a sample that is approximately representative to that of the United States adult population based on census data. Data collection occurred from May 12, 2023, to June 16, 2023. To ensure data quality, several validation measures were implemented. These included removing responses with straight-line answers, setting a minimum survey completion time, incorporating two attention verification questions, and adding a control question in the moral foundations section regarding the morality of being good at math. A final sample size of 2188 was achieved.

Panelists were recruited form a variety of sources and received compensation in accordance with the terms of their agreement with Qualtrics. Examples of compensation given by Qualtrics include airline miles, "points" at a retail outlet, cash, and gift cards. Panelists were invited to participate via email or though the Qualtrics platform. The estimated time of completion was 22 minutes.

Questionnaire

The survey items below follow the questionnaire as administered by Qualtrics, with a few descriptive maps and charts to demonstrate the distribution of the data.

Q1
Consent to Participate in Research
University of Oklahoma

You are invited to participate in research about social attitudes and beliefs as well as your experiences with weather. You must be at least 18 years of age to participate in this study.

 If you agree to participate, you will complete this approximately 30-minute-long online survey.

 There are no benefits to participating in this research.

You may experience these <u>risks</u>:
You will be asked to complete an online survey as part of this research. The organization hosting the data collection platform has its own privacy and security policies for keeping your information confidential. There is a risk that the external organization, which is not part of the research team, may gain access to or retain your data or your IP address which could be used to re-identify you. No assurance can be made as to their use of the data you provide for purposes other than this research.

 You will be asked to provide demographic information that describes you as well as information about your geographic location. Different combinations of personal and geographic information may make it possible for your identity to be guessed by someone who was given, or gained access, to our research records. To minimize the risk of deductive re-identification, we will not combine identifying variables nor analyze and report results for small groups of people with specific demographic characteristics.

Each survey question requires a response to continue, and the survey must be completed in full to receive the previously agreed upon amount of compensation. Participants will be compensated in accordance with the terms of their agreement with Qualtrics. Note that if you leave the survey prior to completion, you will not be compensated.

This survey contains questions used solely for the purpose of attention verification. Your participation in the survey may be terminated after multiple failed attention verifications.

Your participation is voluntary and your responses will be confidential.

We might share your de-identified data with other researchers or use it in future research

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without obtaining additional consent from you.

Even if you choose to participate now, you may stop participating at any time and for any reason.

If you have questions about this research, please contact: Dr. Ann Beutel at ambeutel@ou.edu.

You can also contact the University of Oklahoma – Norman Campus Institutional Review Board at 405-325-8110 or irb@ou.edu if you have questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than the researchers or if you cannot reach the researchers.

Please print this document for your records. By providing information to the researchers, I am agreeing to participate in this research.

IRB #: 15823   IRB Approval Date: May 9, 2023

Q2 Are you 18 years of age or older?

○ Yes (1)

○ No (2)

Skip To: End of Block If Q2 = No

Q3 Before you proceed to the questionnaire, please complete the captcha below.

End of Block: Consent & captcha

Start of Block: Socio-demographics 1

Q4 First, please answer a few questions about your background.

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Q5 What is the highest level of education you have COMPLETED?

○ Less than high school (1)

○ High school/GED (2)

○ Vocational or technical training (3)

○ Some college -- NO degree (4)

○ 2-year college / associate's degree (5)

○ Bachelor's degree (6)

○ Master's degree (7)

○ PhD/JD (Law) /MD or professional equivalent (e.g., DDS, DVM) (8)

Q5 Distribution by Zip Code

Q5
- High school/GED
- Less than high school
- Vocational or technical training
- PhD/JD (Law) /MD or professional equivalent (e.g., DDS, DVM)
- Bachelors degree
- 2-year college / associates degree
- Masters degree
- Some college -- NO degree

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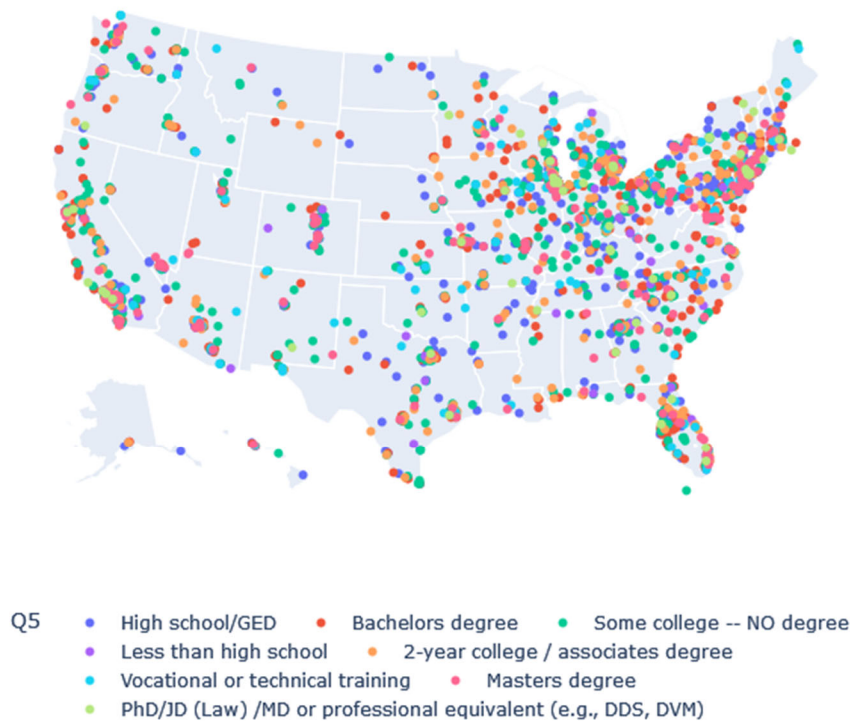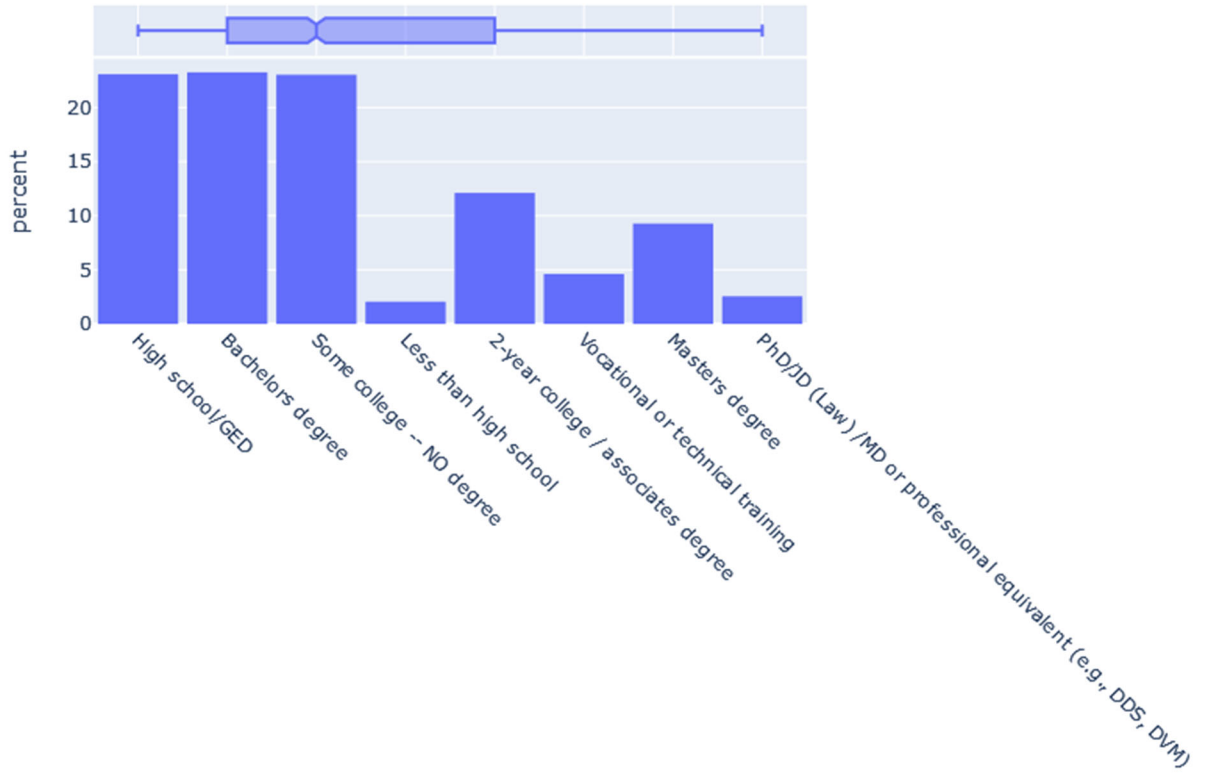
Histogram of Q5

Q6 What is your age?

○ 18-29 (1)

○ 30-39 (2)

○ 40-49 (3)

○ 50-59 (4)

○ 60-69 (5)

○ 70-79 (6)

○ 80 and older (7)

Q6 Distribution by Zip Code

Q6   • 18-29   • 30-39   • 40-49   • 50-59   • 70-79   • 60-69
     • 80 and older

Histogram of Q6

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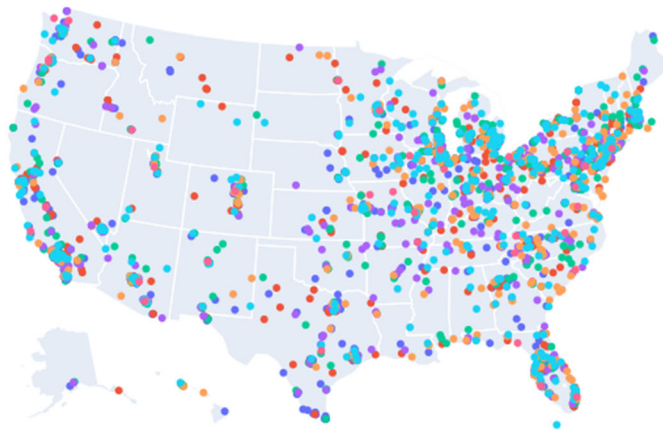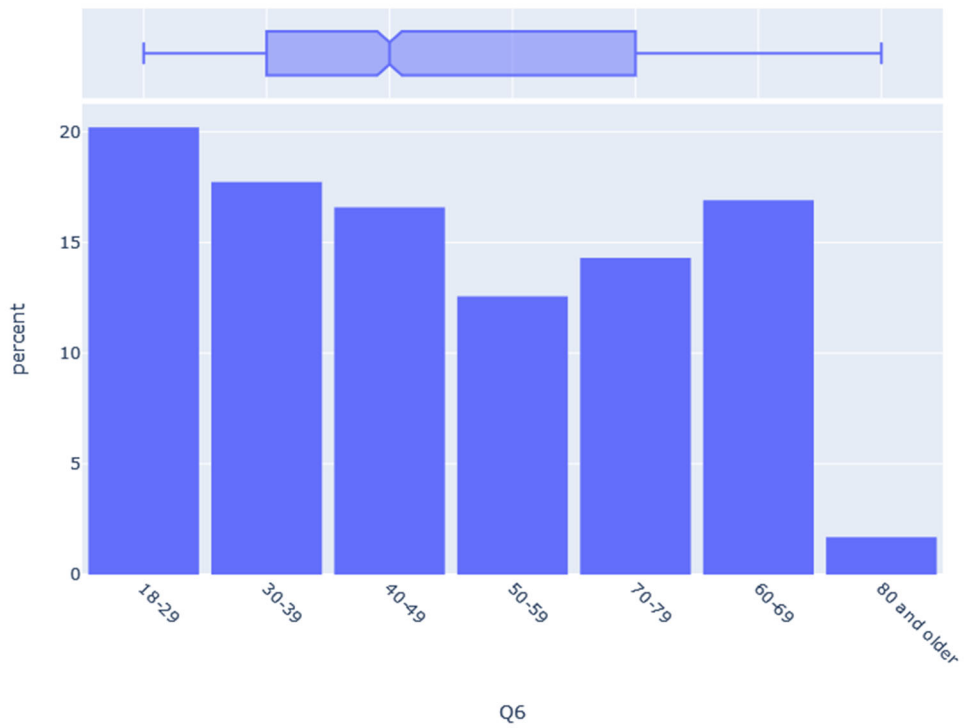
Q7 Are you:

○ 18 years old (1)

○ 19 years old (2)

○ 20 years old (3)

○ 21 years old (4)

○ 22 years old (5)

○ 23 years old (6)

○ 24 years old (7)

○ 25 years old (8)

○ 26 years old (9)

○ 27 years old (10)

○ 28 years old (11)

○ 29 years old (12)

- -

Q8 Are you:

- ○ 30 years old (1)

- ○ 31 years old (2)

- ○ 32 years old (3)

- ○ 33 years old (4)

- ○ 34 years old (5)

- ○ 35 years old (6)

- ○ 36 years old (7)

- ○ 37 years old (8)

- ○ 38 years old (9)

- ○ 39 years old (10)

Display This Question:
    If Q6 = 40-49

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Q9 Are you:

○ 40 years old (1)

○ 41 years old (2)

○ 42 years old (3)

○ 43 years old (4)

○ 44 years old (5)

○ 45 years old (6)

○ 46 years old (7)

○ 47 years old (8)

○ 48 years old (9)

○ 49 years old (10)

Display This Question:

If Q6 = 50-59

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Q10 Are you:

○ 50 years old (1)

○ 51 years old (2)

○ 52 years old (3)

○ 53 years old (4)

○ 54 years old (5)

○ 55 years old (6)

○ 56 years old (7)

○ 57 years old (8)

○ 58 years old (9)

○ 59 years old (10)

Display This Question:

    If Q6 = 60-69

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Q11 Are you:

○ 60 years old (1)

○ 61 years old (2)

○ 62 years old (3)

○ 63 years old (4)

○ 64 years old (5)

○ 65 years old (6)

○ 66 years old (7)

○ 67 years old (8)

○ 68 years old (9)

○ 69 years old (10)

- -

Display This Question:
  If Q6 = 70-79

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Q12 Are you:

○ 70 years old (1)

○ 71 years old (2)

○ 72 years old (3)

○ 73 years old (4)

○ 74 years old (5)

○ 75 years old (6)

○ 76 years old (7)

○ 77 years old (8)

○ 78 years old (9)

○ 79 years old (10)

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*

Q13 What is the **five digit** zip code at your current primary residence?

_____

End of Block: Socio-demographics 1

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Q14 Here are some questions like those you might see on a television quiz show. For each statement, please select if it is true or false.

	True (1)	False (2)
Antibiotics kill viruses as well as bacteria. (1)	○	○
Astrology is scientific. (2)	○	○
The father's gene decides the sex of the baby. (3)	○	○
Electrons are smaller than atoms. (4)	○	○
The universe is expanding. (5)	○	○
Human beings share a common ancestor with other species. (6)	○	○

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Q14_1 Distribution by Zip Code

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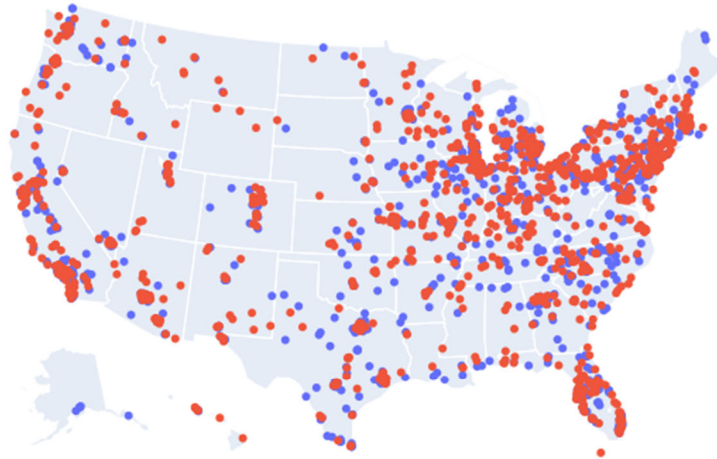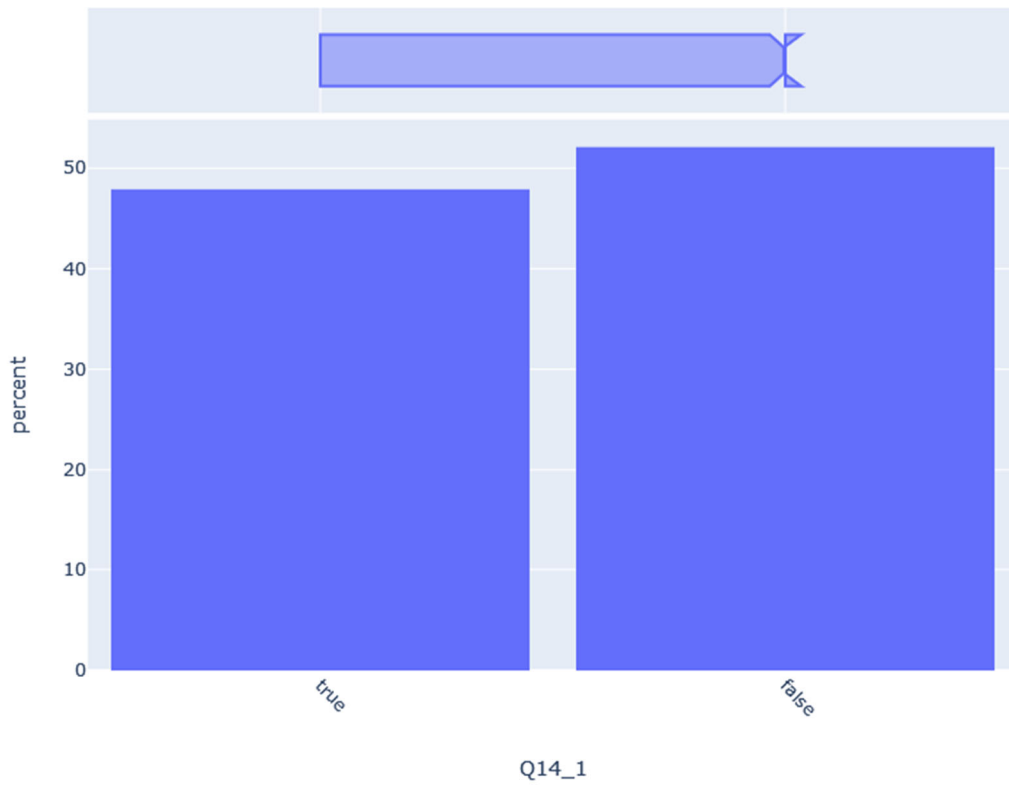
Histogram of Q14_1

Q14_2 Distribution by Zip Code
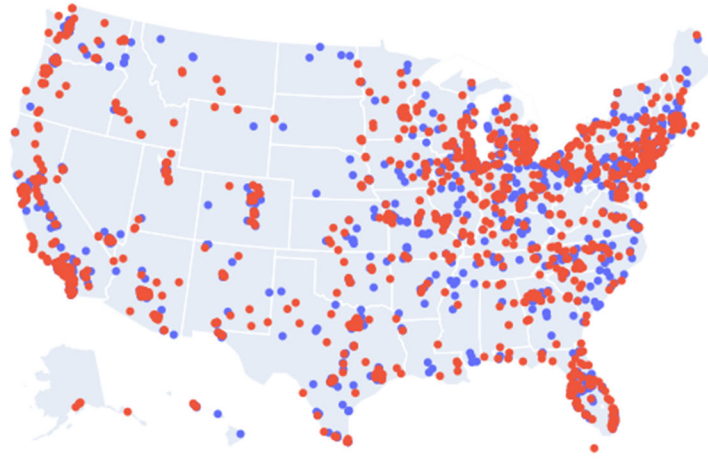
Q14_2   • True   • False

Histogram of Q14_2
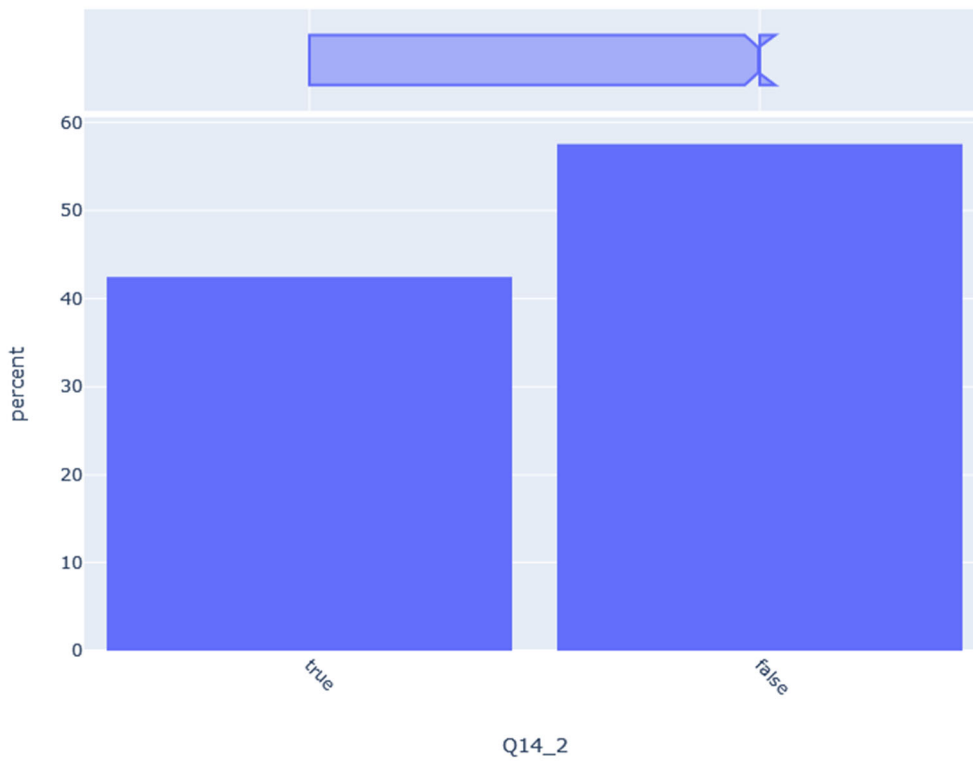
Q14_3 Distribution by Zip Code
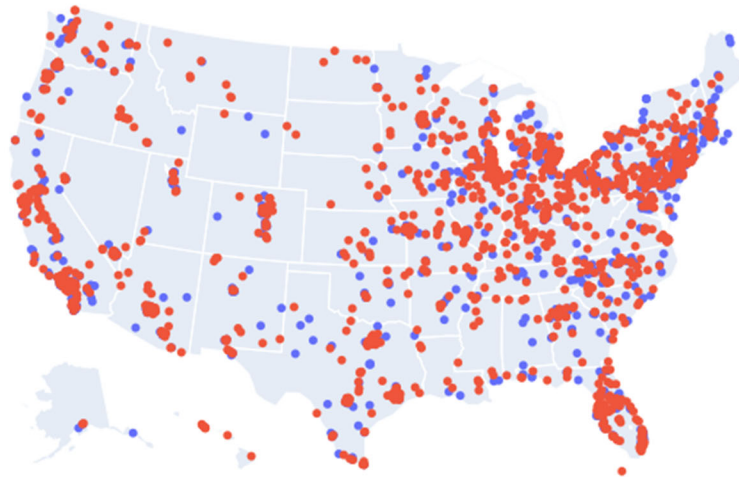
Q14_3   • False   • True

Histogram of Q14_3

SPEER
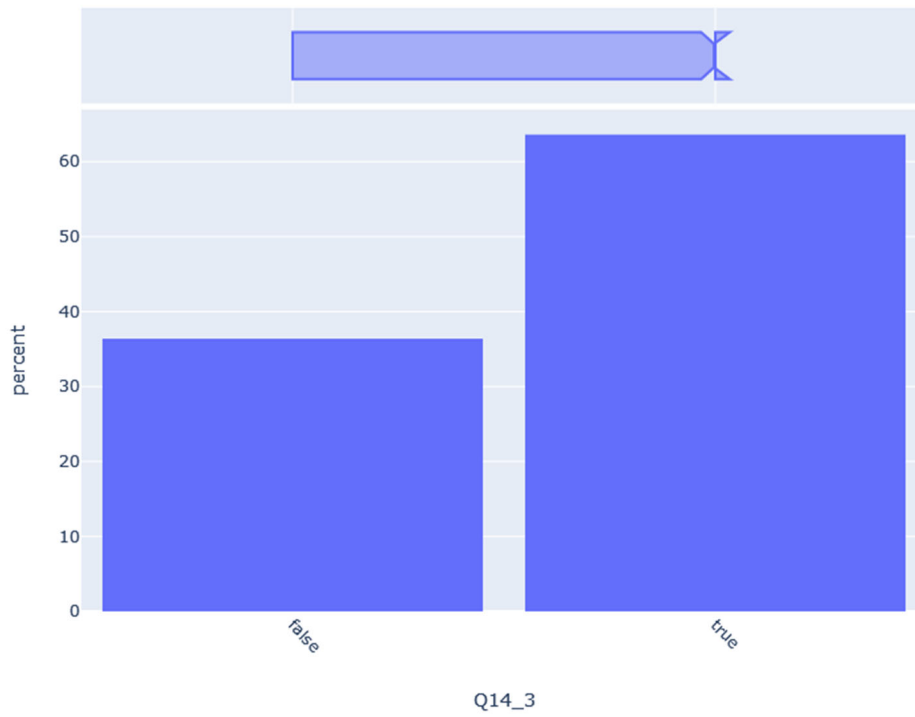
Q14_4 Distribution by Zip Code
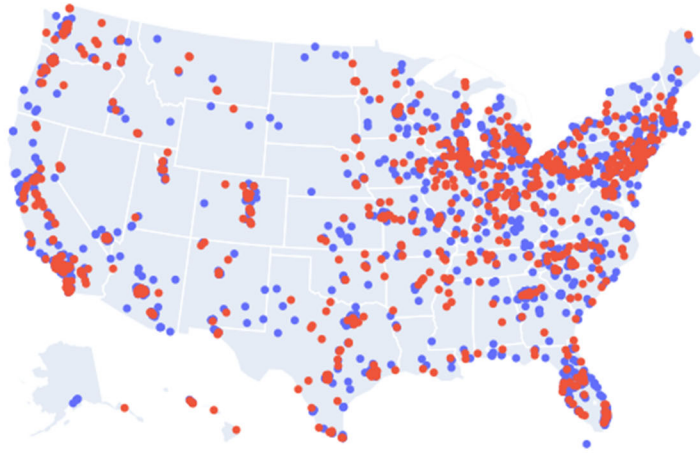
Q14_4   ● True   ● False

Histogram of Q14_4

SPEER
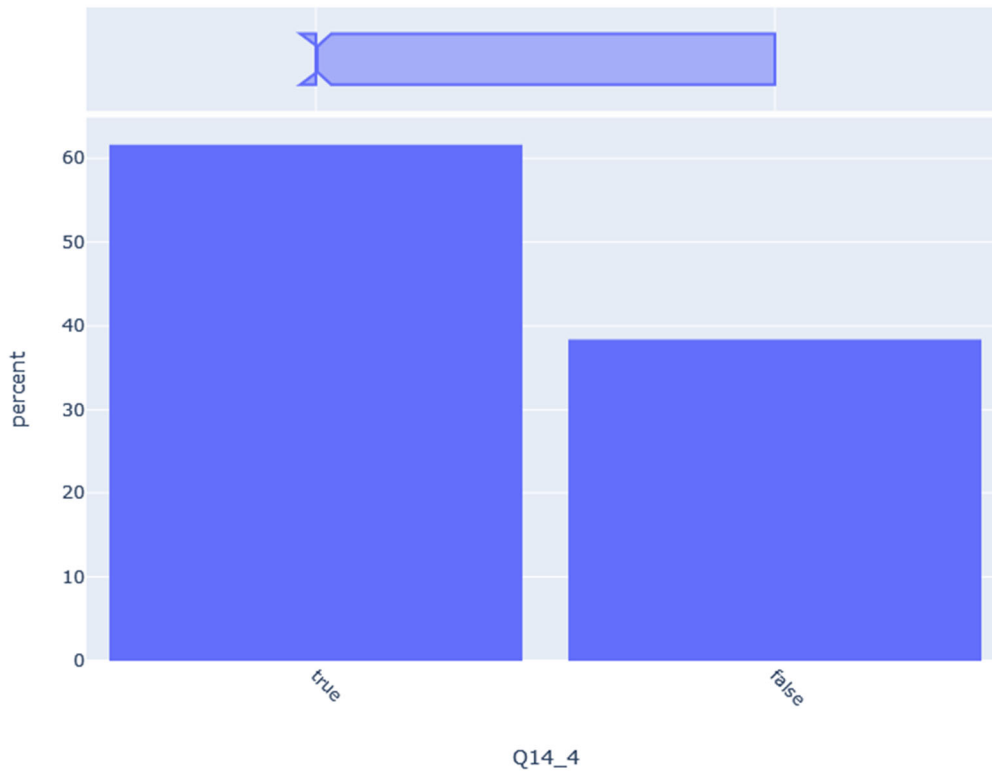
Q14_5 Distribution by Zip Code
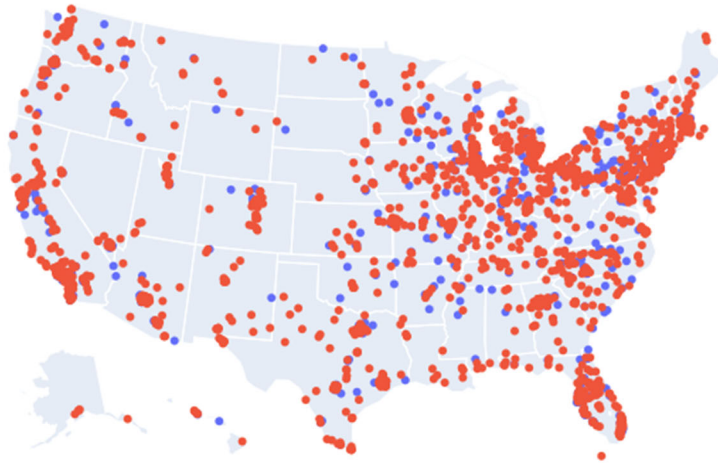
Q14_5   • False   • True

Histogram of Q14_5

SPEER
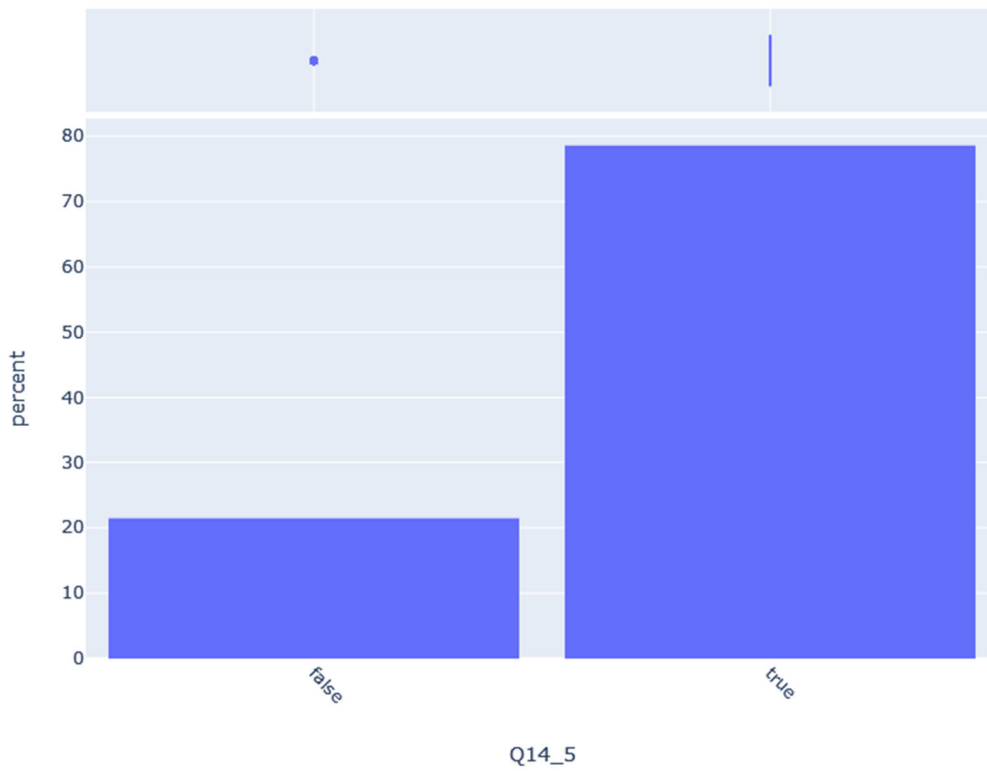
Q14_6 Distribution by Zip Code
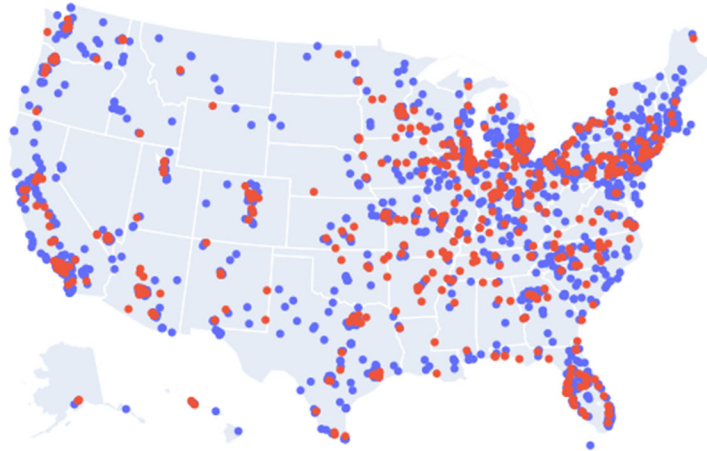
Q14_6   ● True   ● False
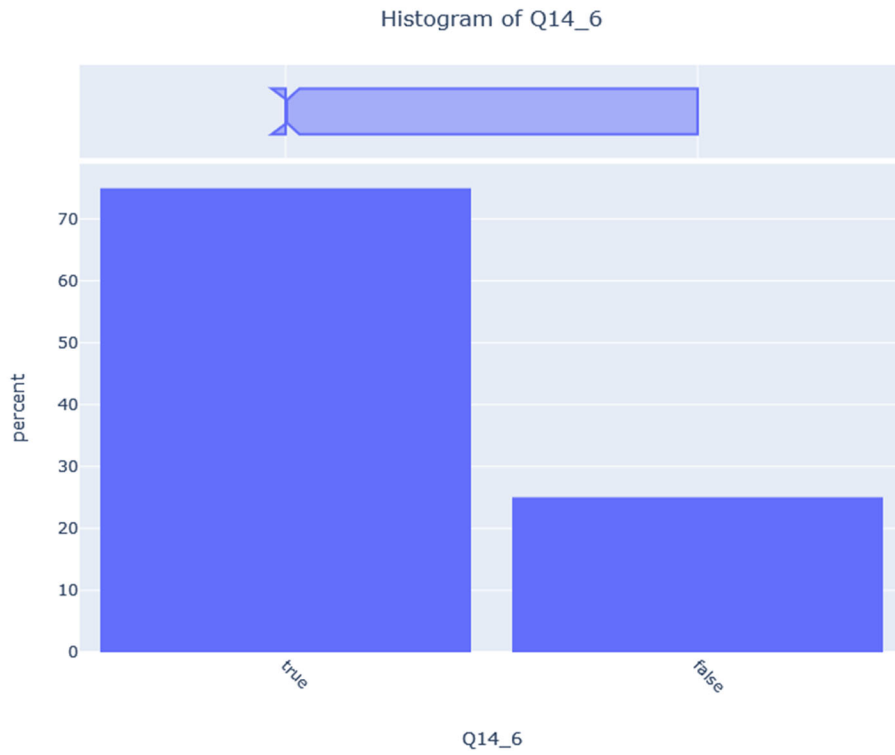
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Histogram of Q14_6

Q15 In the area around where you live, would you say that the following kinds of events have happened more frequently, less frequently, or with about the same frequency in the last twelve months, as compared to the previous five years?

	Definitely less frequently (1)	Probably less frequently (2)	With about the same frequency (3)	Probably more frequently (4)	Definitely more frequently (5)
Extreme rainstorms and floods (1)	○	○	○	○	○
Tornadoes (2)	○	○	○	○	○
Wildfires (3)	○	○	○	○	○
Earthquakes (4)	○	○	○	○	○
Extreme hot temperatures (5)	○	○	○	○	○
Extreme low temperatures (6)	○	○	○	○	○
Extreme winter storms (including ice storms) (7)	○	○	○	○	○
Hailstorms (8)	○	○	○	○	○
Drought (9)	○	○	○	○	○

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Q15_1 Distribution by Zip Code

Q15_1
- With about the same frequency
- Probably more frequently
- Probably less frequently
- Definitely more frequently
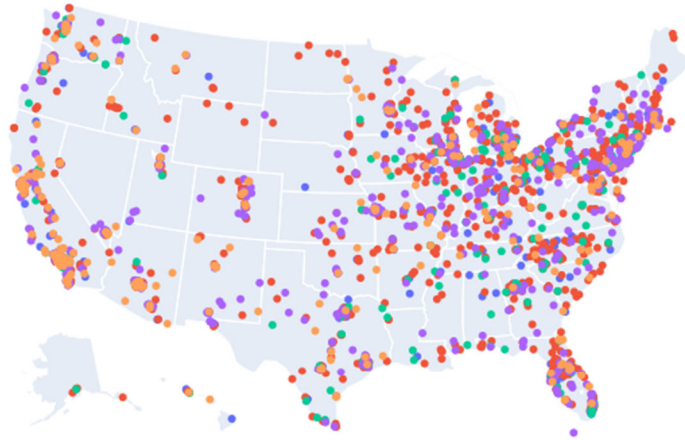- Definitely less frequently

Q15_2 Distribution by Zip Code
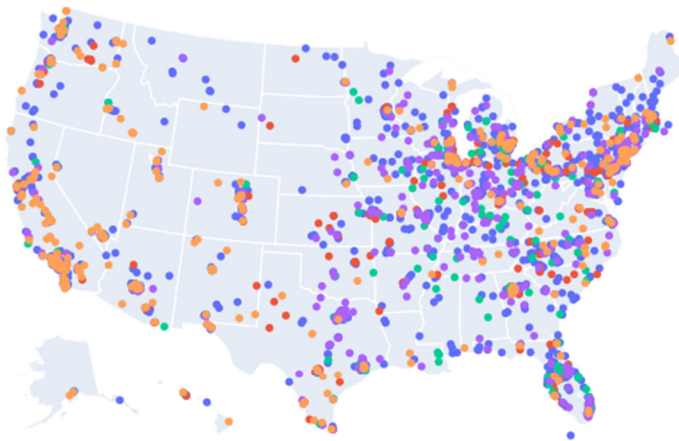
Q15_2
- With about the same frequency
- Definitely more frequently
- Probably less frequently
- Probably more frequently
- Definitely less frequently

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Q15_3 Distribution by Zip Code
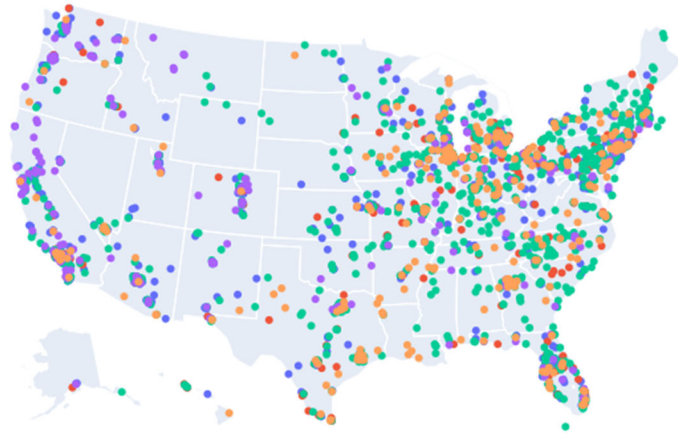
Q15_3
- Probably more frequently
- With about the same frequency
- Definitely less frequently
- Probably less frequently
- Definitely more frequently

Q15_4 Distribution by Zip Code
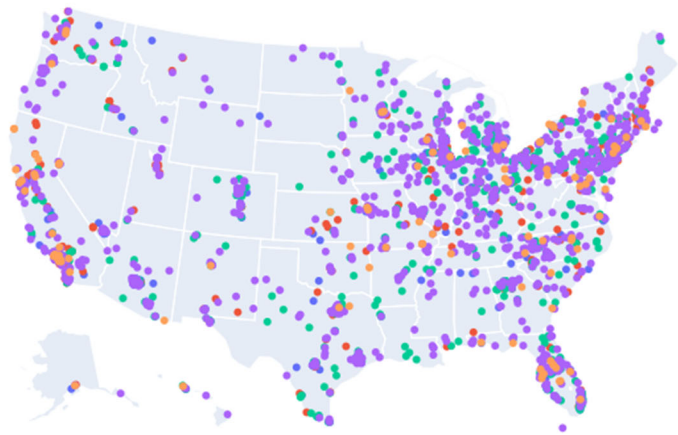
Q15_4
- Probably less frequently
- With about the same frequency
- Probably more frequently
- Definitely more frequently
- Definitely less frequently

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Q15_5 Distribution by Zip Code
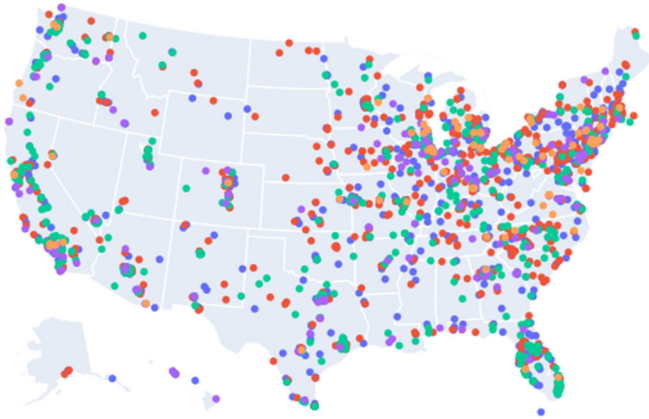
Q15_5
- Probably more frequently
- Definitely more frequently
- With about the same frequency
- Probably less frequently
- Definitely less frequently

Q15_6 Distribution by Zip Code
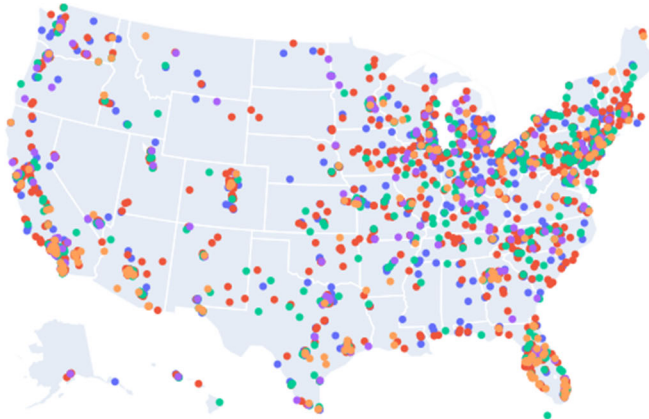
Q15_6
- Probably more frequently
- Probably less frequently
- With about the same frequency
- Definitely more frequently
- Definitely less frequently

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Q15_7 Distribution by Zip Code
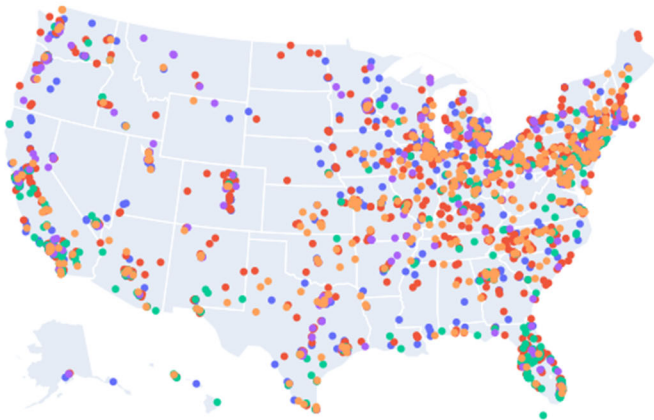
Q15_7
- Probably more frequently
- Definitely less frequently
- With about the same frequency
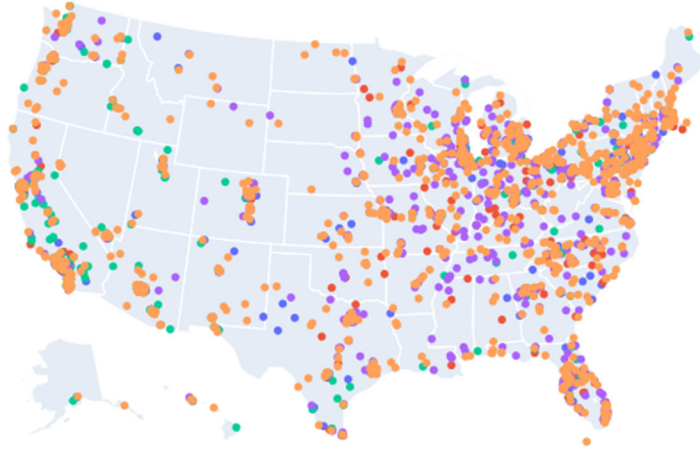- Definitely more frequently
- Probably less frequently

Q15_8 Distribution by Zip Code
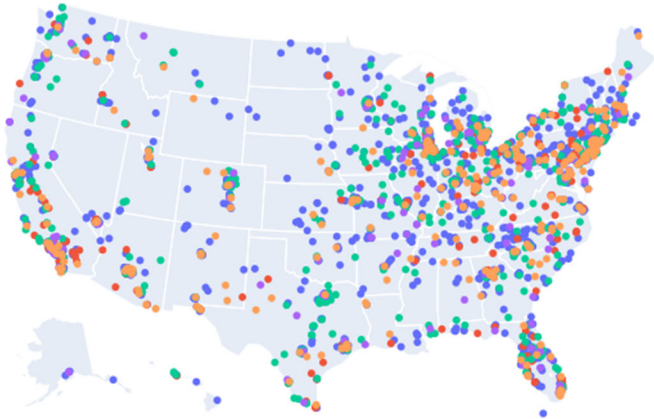
Q15_8
- With about the same frequency
- Probably more frequently
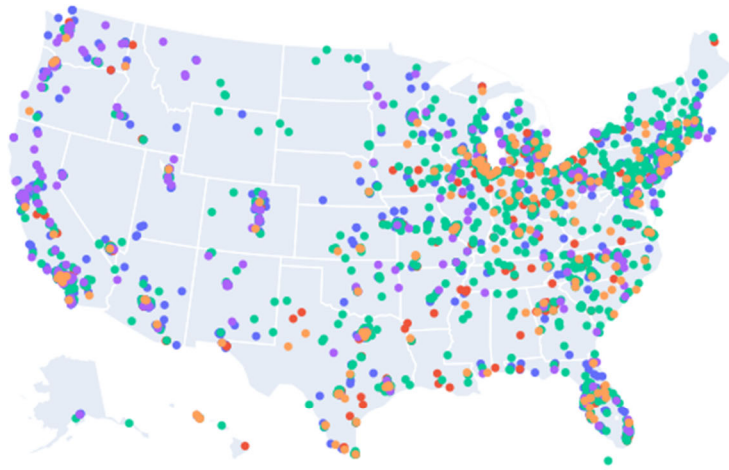- Definitely less frequently
- Definitely more frequently
- Probably less frequently

33

SPEER

Q15_9 Distribution by Zip Code

Q15_9
- Probably less frequently
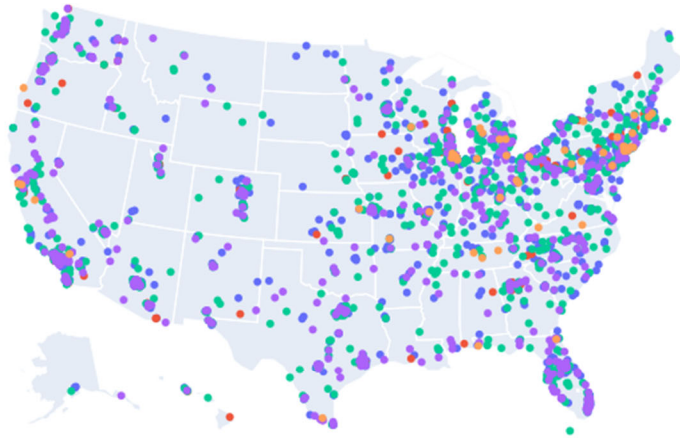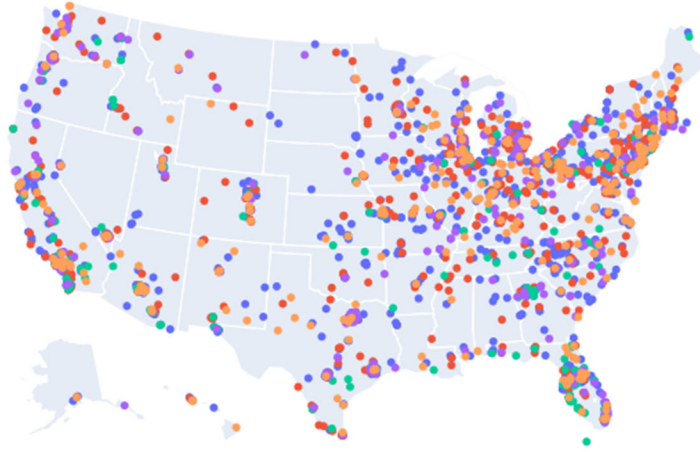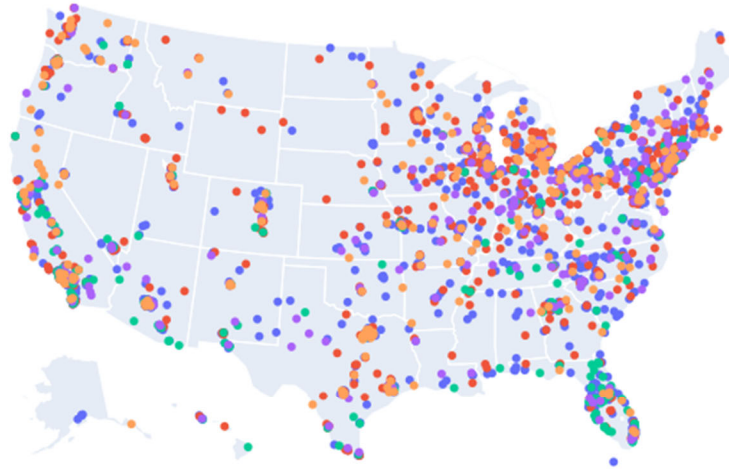- Definitely less frequently
- With about the same frequency
- Probably more frequently
- Definitely more frequently

SPEER

Q16 Looking to the future and again thinking about the area around where you live, do you think that the following kinds of events will happen more frequently, less frequently, or with about the same frequency over the next five years as they have during the last year? (There is no right answer; please provide your best estimate.)

	Definitely less frequently (1)	Probably less frequently (2)	With about the same frequency (3)	Probably more frequently (4)	Definitely more frequently (5)
Extreme rainstorms and floods (1)	○	○	○	○	○
Tornadoes (2)	○	○	○	○	○
Wildfires (3)	○	○	○	○	○
Earthquakes (4)	○	○	○	○	○
Extreme hot temperatures (5)	○	○	○	○	○
Extreme low temperatures (6)	○	○	○	○	○
Extreme winter storms (including ice storms) (7)	○	○	○	○	○
Hailstorms (8)	○	○	○	○	○
Drought (9)	○	○	○	○	○

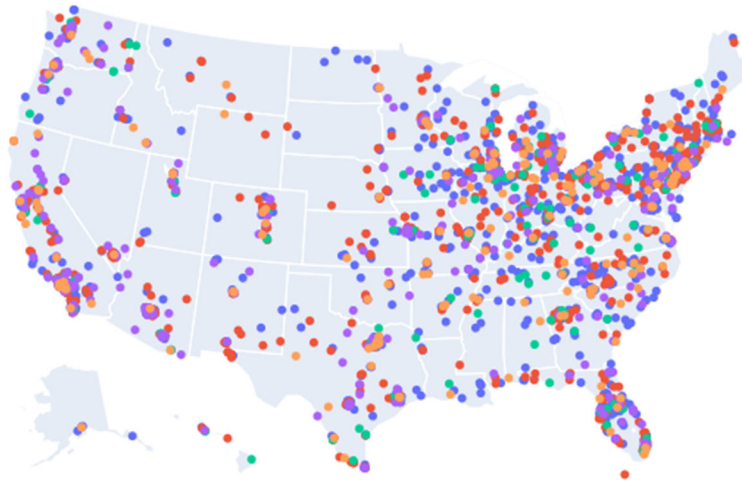SPEER

Q16_1 Distribution by Zip Code

Q16_1   ● With about the same frequency   ● Probably more frequently
         ● Definitely more frequently   ● Probably less frequently   ● Definitely less frequently

SPEER

Q16_2 Distribution by Zip Code

Q16_2
- Probably less frequently
- Probably more frequently
- Definitely more frequently
- With about the same frequency
- Definitely less frequently

SPEER

Q16_3 Distribution by Zip Code

Q16_3
- Probably more frequently
- With about the same frequency
- Probably less frequently
- Definitely less frequently
- Definitely more frequently

Q16_4 Distribution by Zip Code
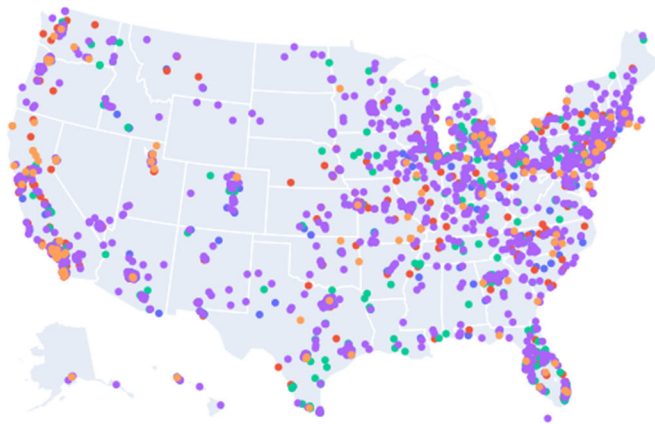
Q16_4
- Probably less frequently
- With about the same frequency
- Probably more frequently
- Definitely more frequently
- Definitely less frequently

SPEER

Q16_5 Distribution by Zip Code


Q16_5   • With about the same frequency   • Probably less frequently
         • Probably more frequently   • Definitely more frequently   • Definitely less frequently

SPEER

Q16_6 Distribution by Zip Code

Q16_6
- With about the same frequency
- Definitely less frequently
- Probably more frequently
- Definitely more frequently
- Probably less frequently

SPEER

Q16_7 Distribution by Zip Code

Q16_7
- With about the same frequency
- Probably more frequently
- Definitely less frequently
- Probably less frequently
- Definitely more frequently

Q16_8 Distribution by Zip Code
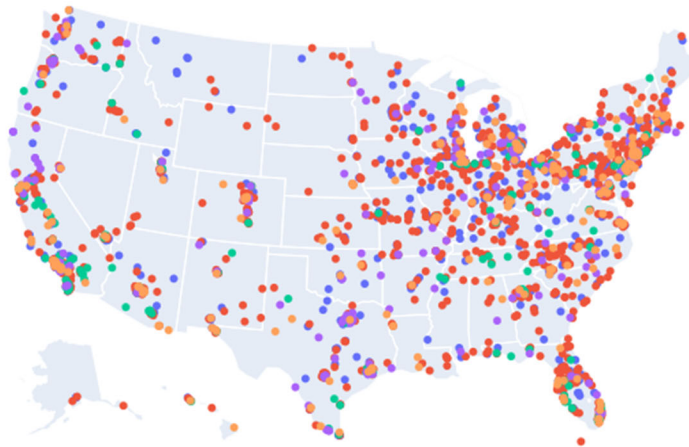
Q16_8
- Probably more frequently
- With about the same frequency
- Definitely less frequently
- Definitely more frequently
- Probably less frequently

SPEER

Q16_9 Distribution by Zip Code

Q16_9
- With about the same frequency
- Definitely less frequently
- Probably more frequently
- Definitely more frequently
- Probably less frequently

Q17 In the last three years, have you or your landlord had to repair your house or property at a cost of over $100 for weather-related damage?

○ Yes (1)

○ No (2)

○ Unsure / don't know (3)

SPEER

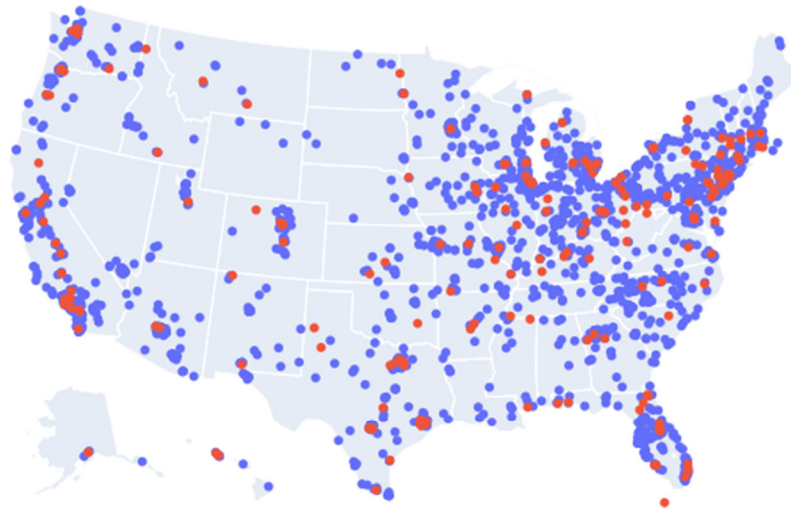Q17 Distribution by Zip Code
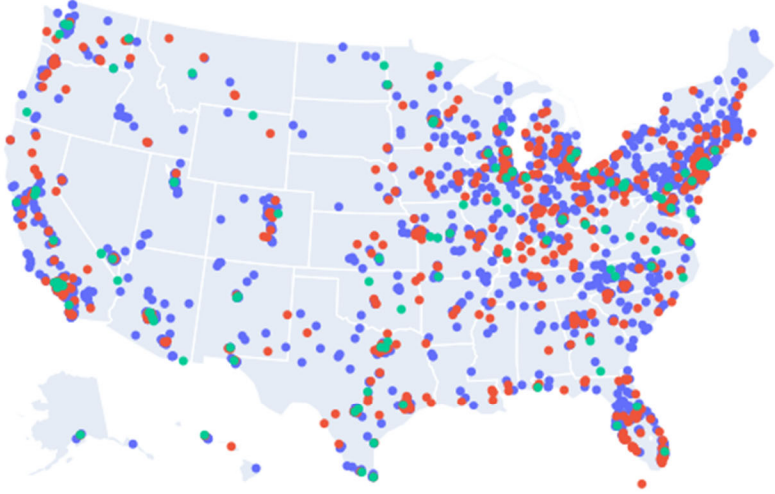
Q17   • No   • Yes   • Unsure / Dont know

SPEER

Q18 In the last three years, have you, someone in your immediate family, or a close friend been physically injured due to a weather-related event or has someone you have known died due to a weather-related event?
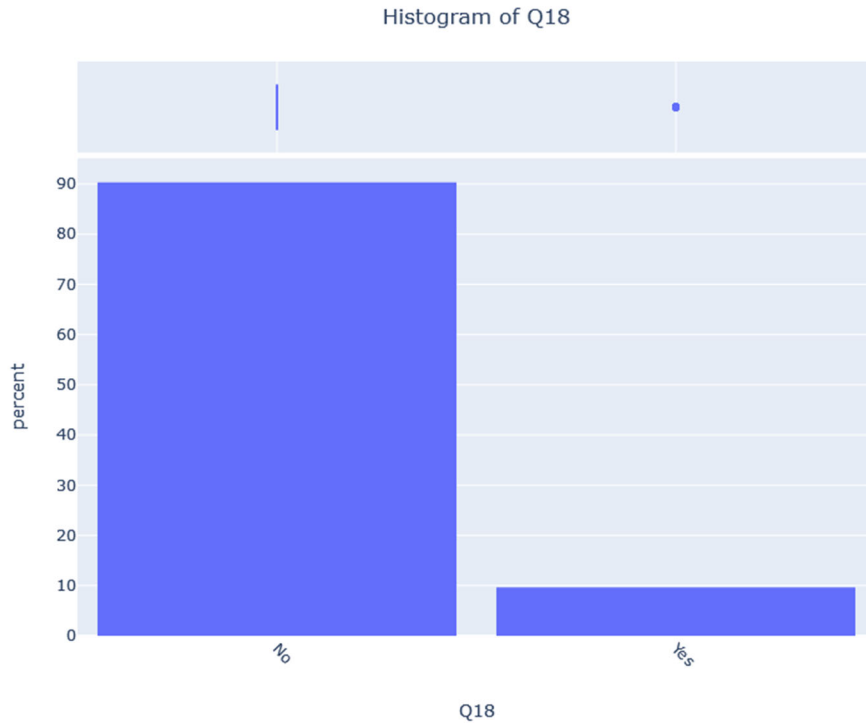
○ Yes (1)

○ No (2)

Q18 Distribution by Zip Code

Q18 ● No ● Yes

SPEER

Histogram of Q18

Q19 In the last three years, have you or your landlord made changes to your house or property for the purpose of weather-proofing? This can be modifications such as adding insulation to the attic or water lines, installing or buying a generator for power outages, or changing landscaping to make it more drought or flood resistant.
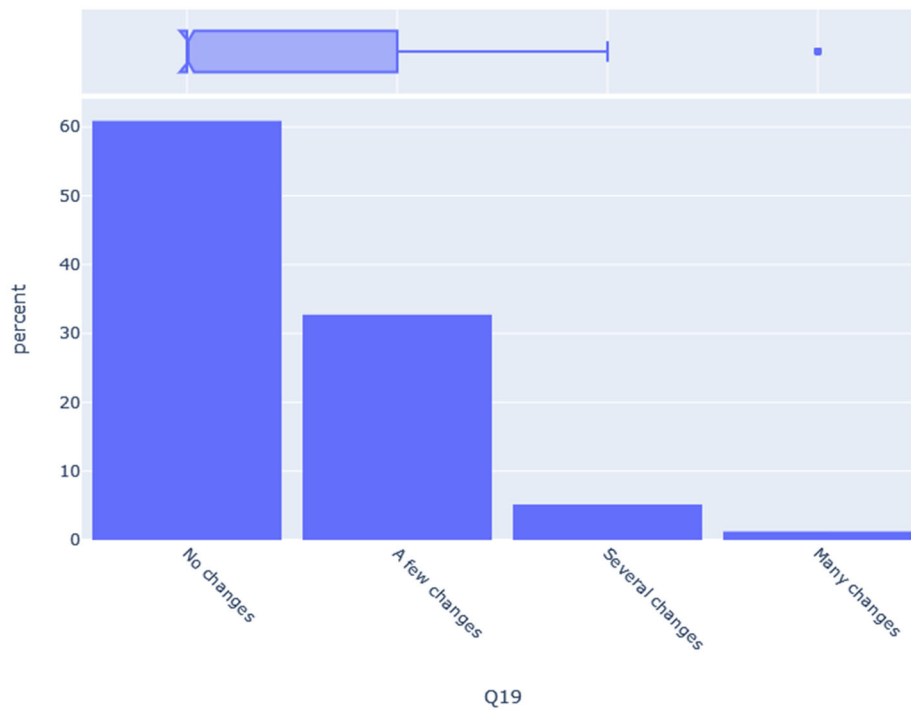
○ No changes (1)

○ A few changes (2)

○ Several changes (3)

○ Many changes (4)

SPEER

Q19 Distribution by Zip Code
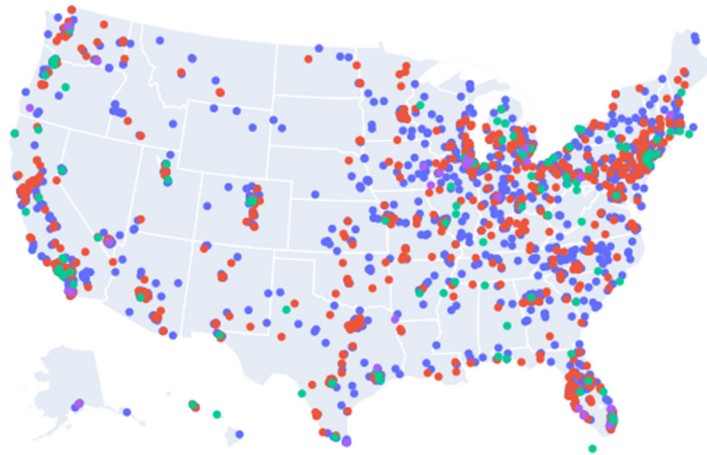
Q19 • No changes • A few changes • Several changes • Many changes
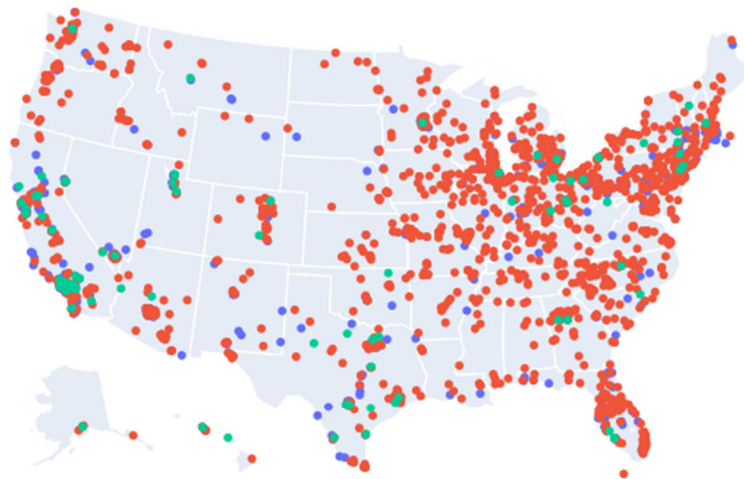
Histogram of Q19

SPEER

Start of Block: Water resources support

Q20 Over the past year, did you experience any water shortages or water use restrictions due to drought?

○ No (1)

○ A limited restriction, such as even-off-day watering schedule. (2)

○ Yes, we had to significantly limit household water consumption. (3)

Q20 Distribution by Zip Code

Q20   • A limited restriction, such as even-off-day watering schedule.   • No
       • Yes, we had to significantly limit household water consumption.

SPEER

Q21 If droughts become more prevalent in portions of the U.S., previously used water may need to be recycled. How much trust do you have in your local water authority to ensure that the water treated through a recycling process is healthy and safe for you to use in your household?

○ A great deal of trust (1)

○ Some trust (2)

○ Very little trust (3)

○ No trust at all (4)

Q21 Distribution by Zip Code
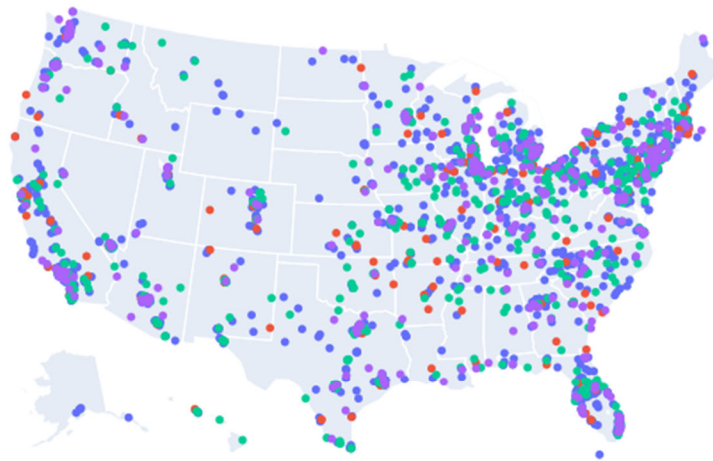
Q21   • Some trust   • No trust at all   • Very little trust   • A great deal of trust

End of Block: Water resources support

Start of Block: New Ecological Paradigm

SPEER

The following statements concern your beliefs about the relationship between humans and the environment. Please indicate how much you disagree or agree with each one.

Q23 Humans were meant to rule over the rest of nature.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

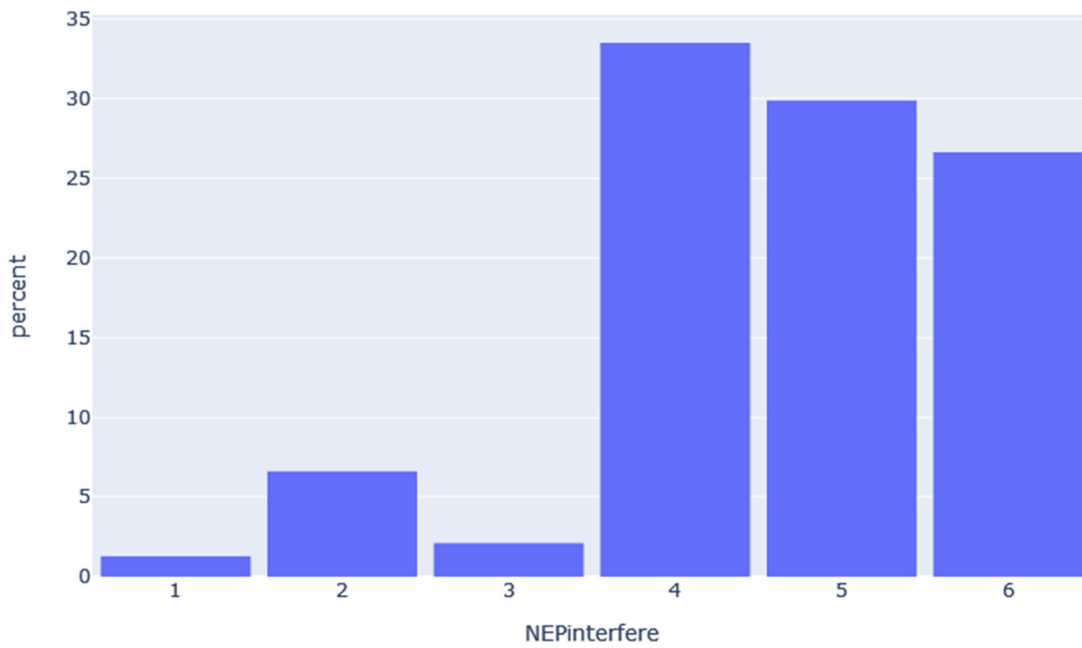○ Somewhat agree (4)

○ Agree (5)

○ Strongly agree (6)

Interactive Histogram

SPEER
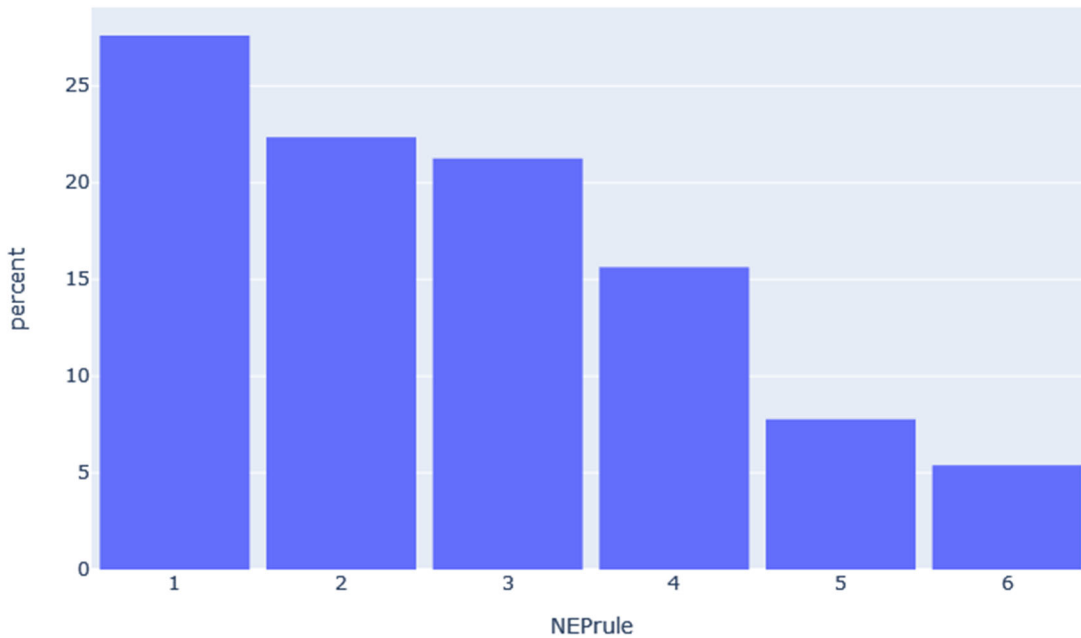
Q24 When humans interfere with nature it often produces disastrous consequences.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

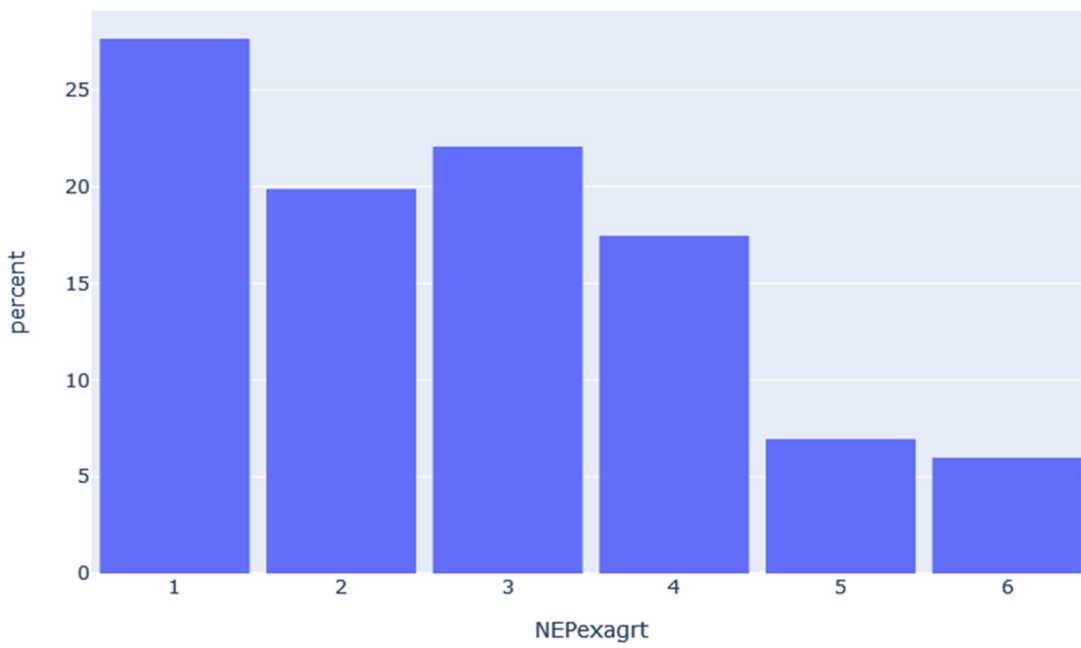○ Agree (5)

○ Strongly agree (6)

Interactive Histogram

SPEER

Q25 The so-called "ecological crisis" facing humankind has been greatly exaggerated.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)
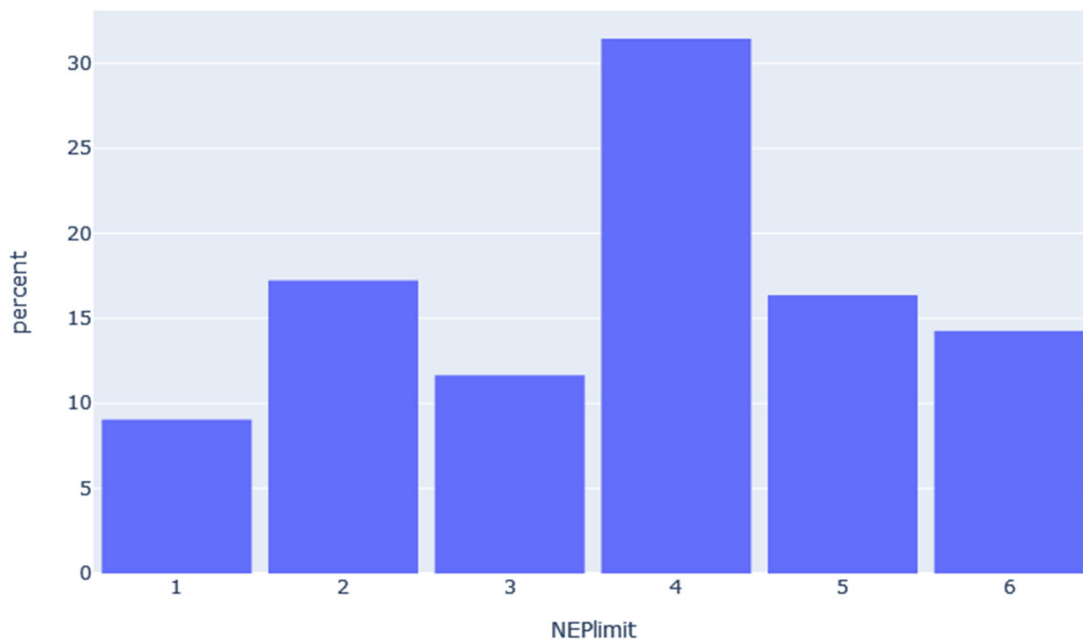
○ Agree (5)

○ Strongly agree (6)

Interactive Histogram

Q26 We are approaching the limit of the number of people the earth can support.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

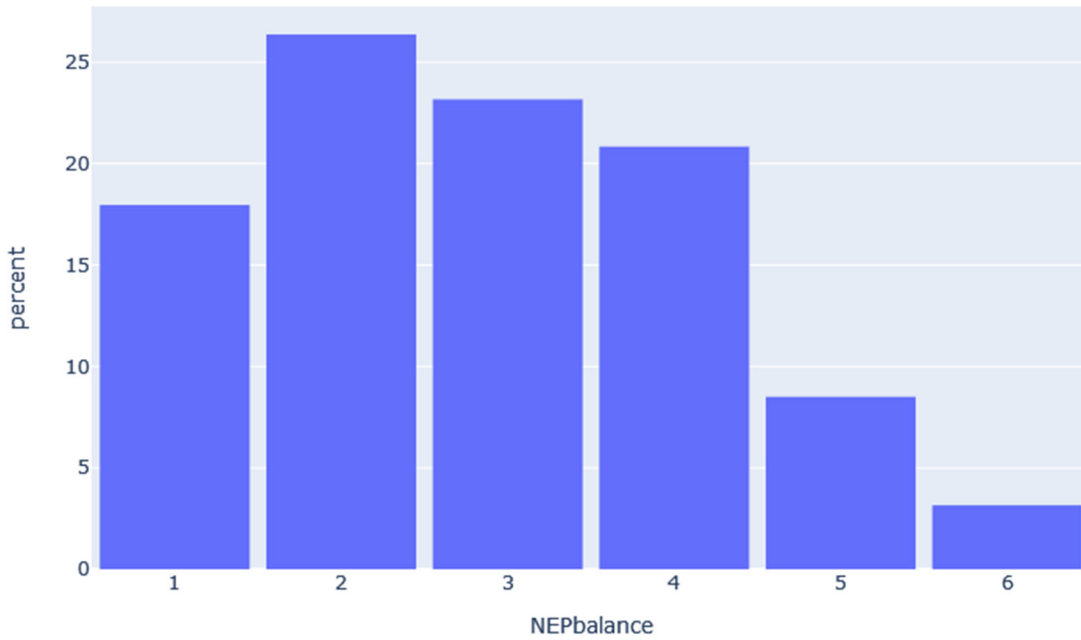○ Agree (5)

○ Strongly agree (6)

Interactive Histogram

SPEER

Q27 The balance of nature is strong enough to cope with the impacts of modern industrial nations.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)
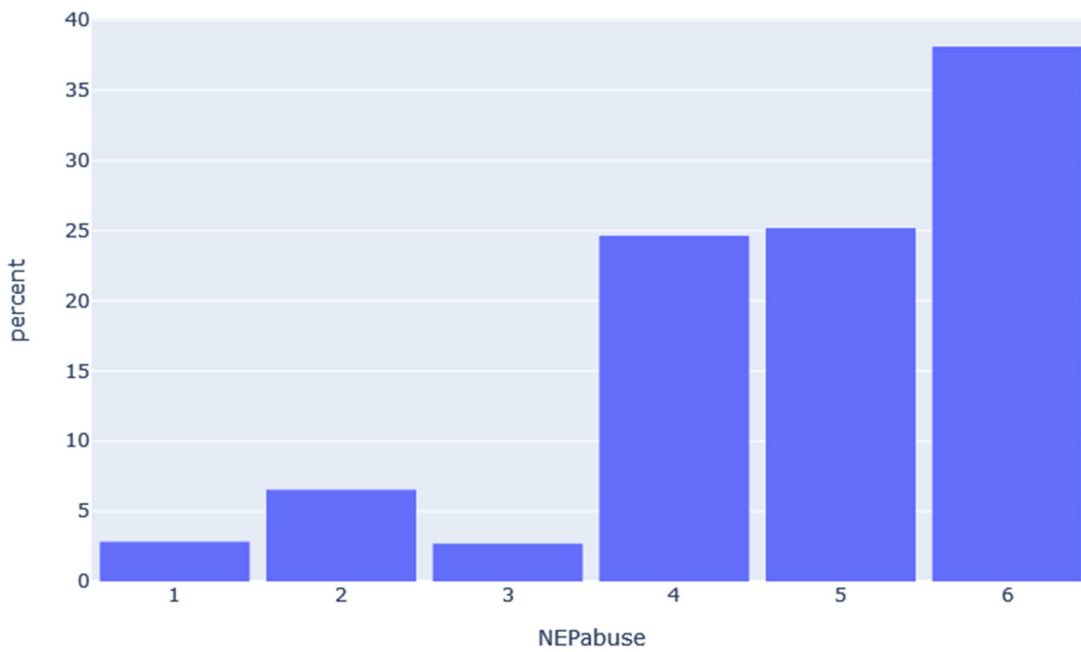
○ Strongly agree (6)

Interactive Histogram

Q28 Humans are severely abusing the environment.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)
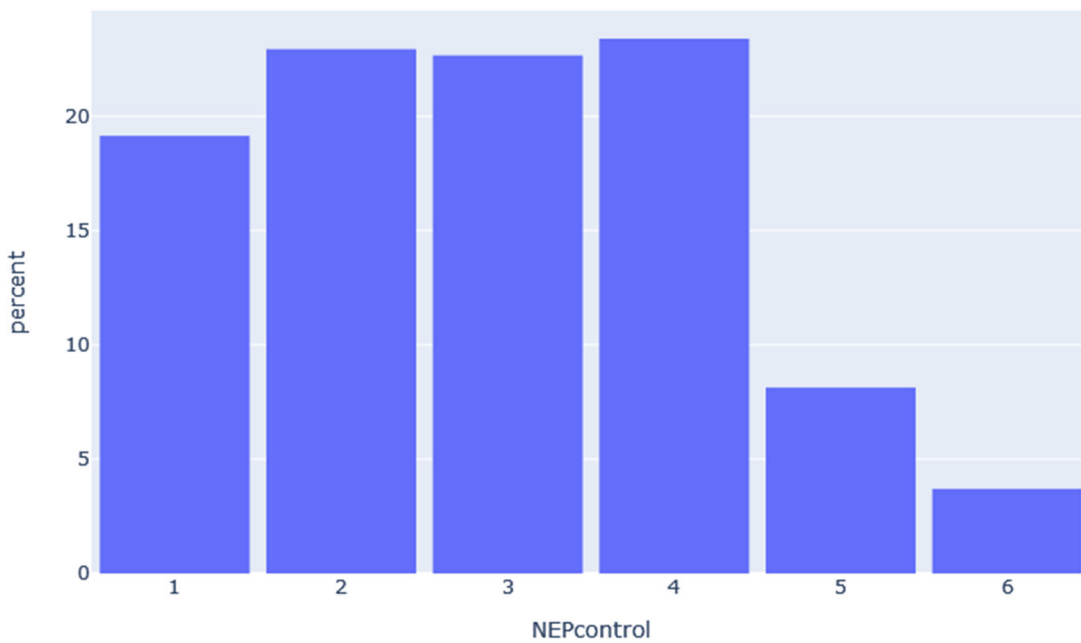
○ Agree (5)

○ Strongly agree (6)

Interactive Histogram

Q29 Humans will eventually learn enough about how nature works to be able to control it.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)

○ Strongly agree (6)

Interactive Histogram


End of Block: New Ecological Paradigm

Start of Block: Social acceptance of energy types & policies for climate mitigation & adaptation

Q30 Please give your opinion on the following energy sources and technologies, and whether you would like to see less or more of each type in the overall energy mix used at the regional and national level.

	Drastically decrease (1)	Decrease (2)	Slightly decrease (3)	Slightly increase (4)	Increase (5)	Drastically increase (6)	Unfamiliar with this technology (7)
Solar power (1)	○	○	○	○	○	○	○
Wind power (2)	○	○	○	○	○	○	○
Geothermal power (3)	○	○	○	○	○	○	○
Hydro power (4)	○	○	○	○	○	○	○
Nuclear power (5)	○	○	○	○	○	○	○
Coal power (6)	○	○	○	○	○	○	○
Natural gas and oil power (7)	○	○	○	○	○	○	○
Carbon capture and sequestration (8)	○	○	○	○	○	○	○
Hydrogen storage (9)	○	○	○	○	○	○	○

For the histograms below, these were recoded to go from Drastically decrease (1) to Drastically increase (7), with unfamiliar with this technology as a (4).

SPEER
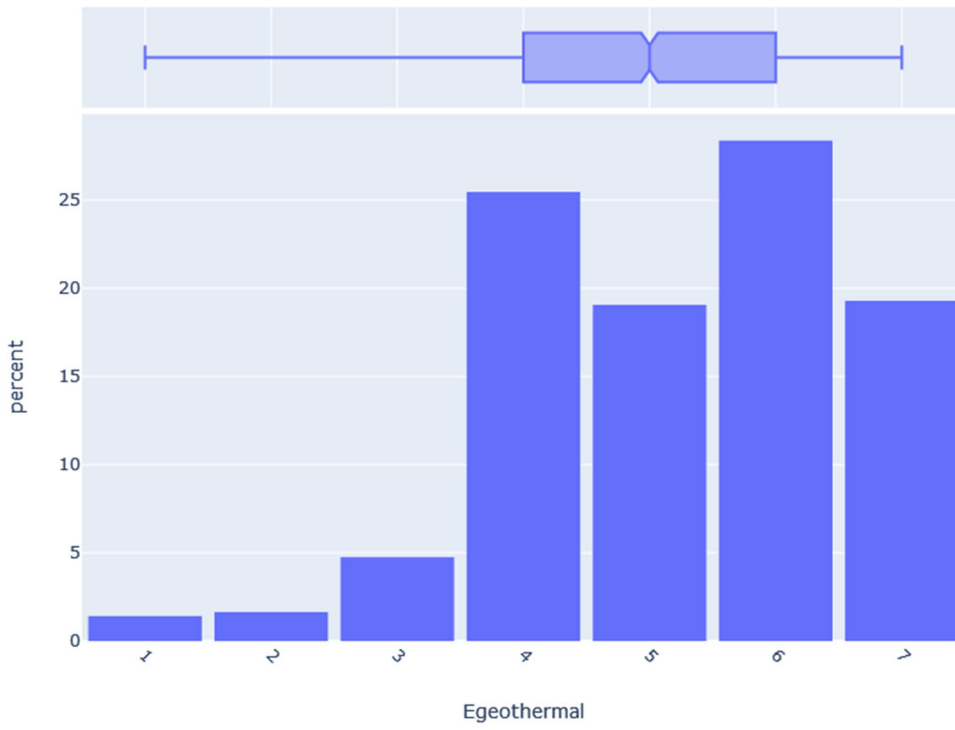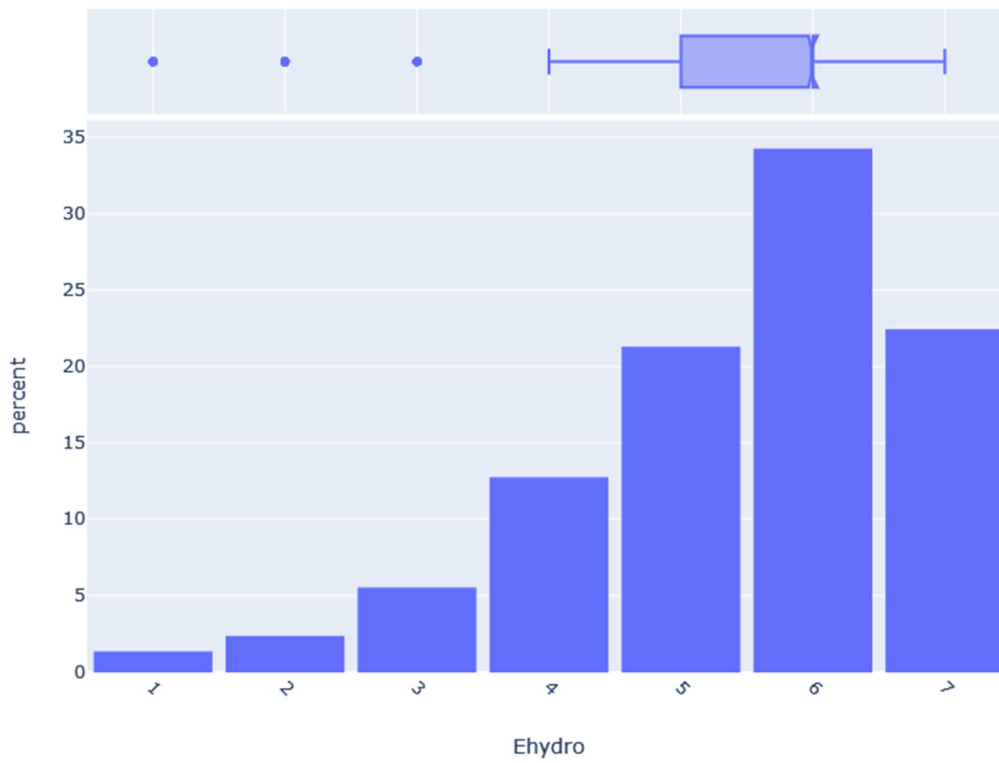
Histogram of Esolar
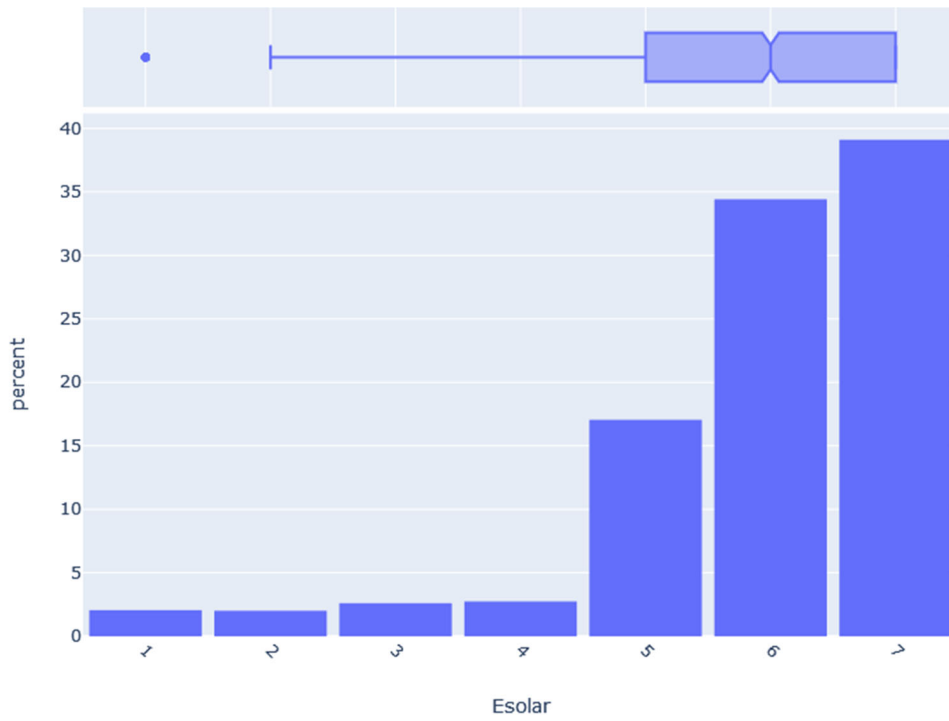
Histogram of Ewind
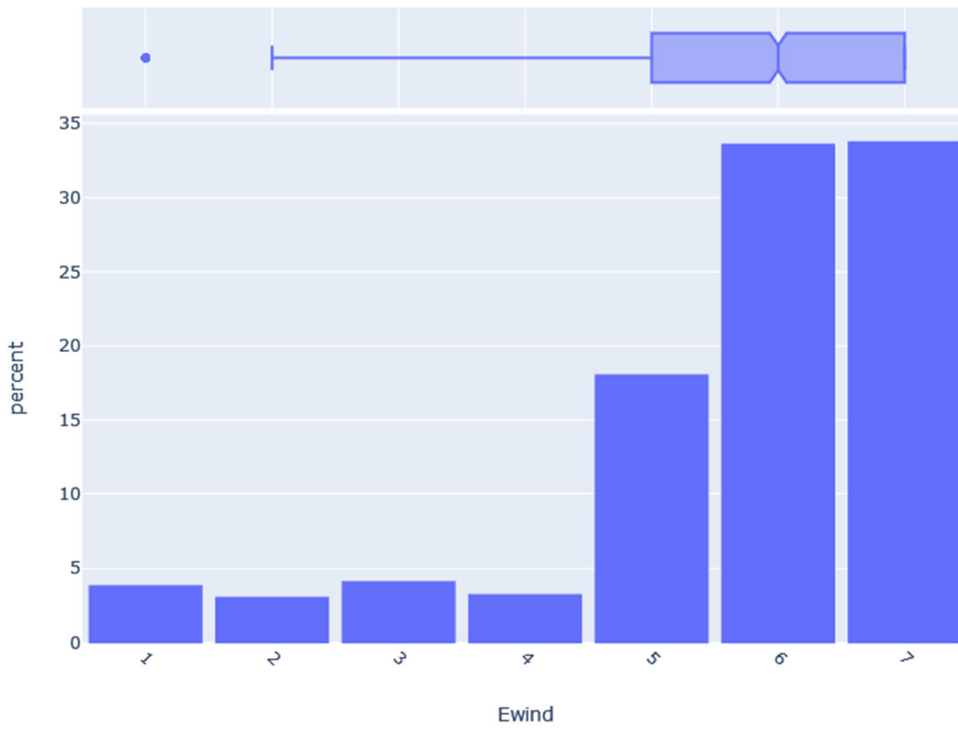
Histogram of Egeothermal

Histogram of Ehydro

Histogram of Enuclear
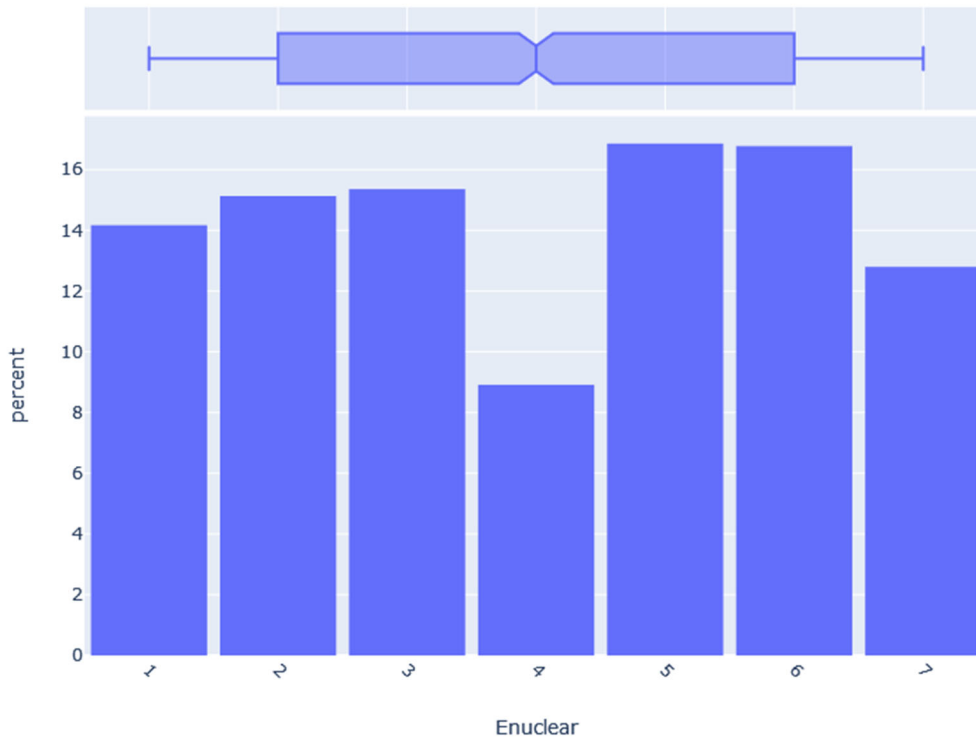
Histogram of Ecoal

SPEER
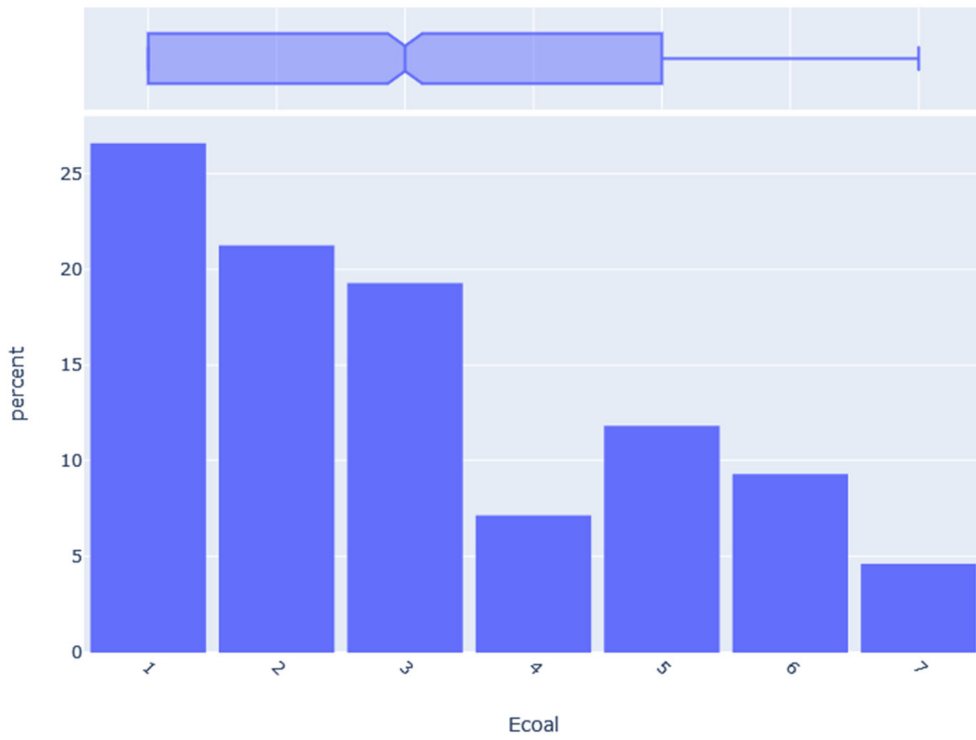
Histogram of Eoilgas
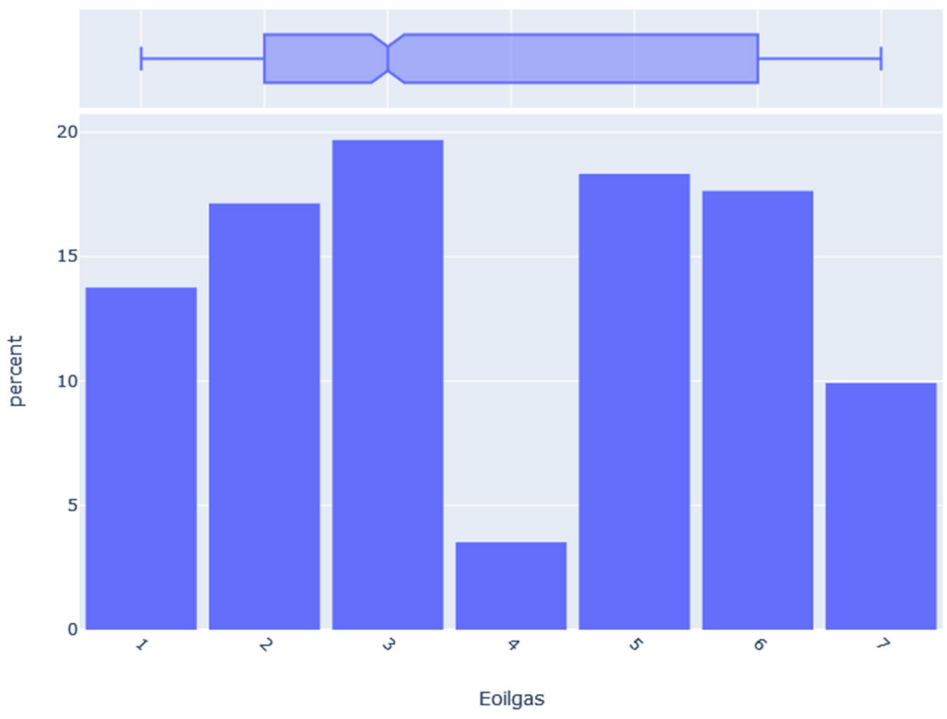
Histogram of Eccus
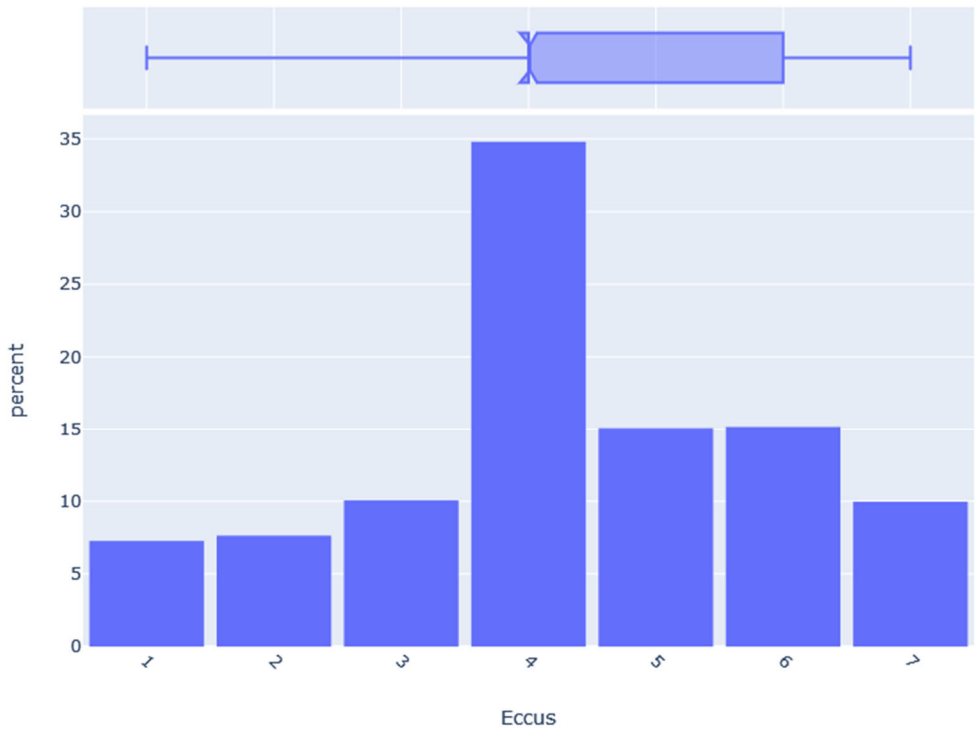
Histogram of Ehydrogen
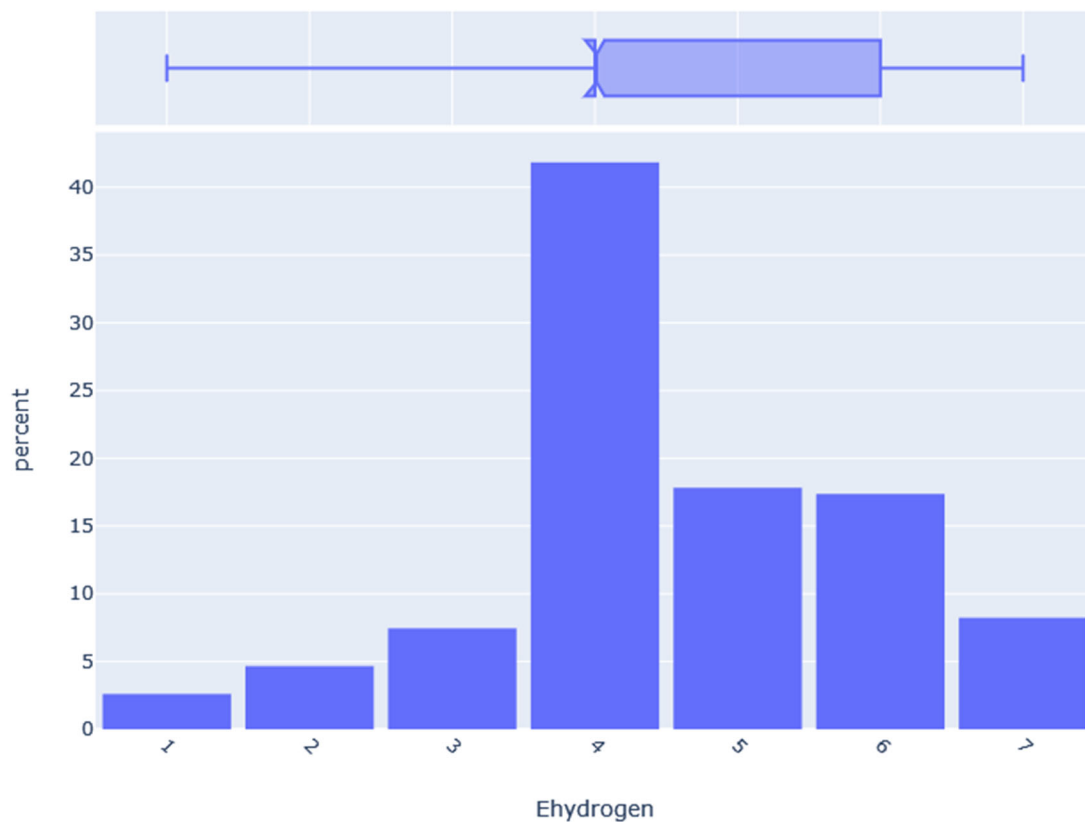
End of Block: Social acceptance of energy types & policies for climate mitigation & adaptation

Start of Block: Climate change belief and risk

SPEER

Q31 How certain are you that greenhouse gases, such as those resulting from the combustion of coal, oil, natural gas, and other materials, are causing average global temperatures to rise?

○ Very certain it is happening (1)

○ Certain it is happening (2)

○ Somewhat certain it is happening (3)

○ Uncertain whether it is happening (4)

○ Somewhat certain it is not happening (5)

○ Certain it is not happening (6)

○ Very certain it is not happening (7)
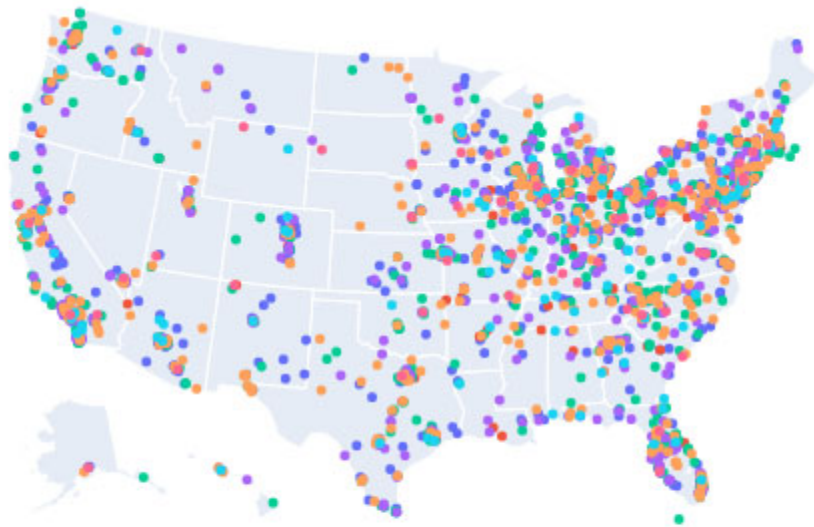
Q31
- Uncertain whether it is happening
- Very certain it is happening
- Somewhat certain it is happening
- Certain it is not happening
- Very certain it is not happening
- Certain it is happening
- Somewhat certain it is not happening

SPEER

Q32 On a scale from zero to ten, where zero means no risk and ten means extreme risk, how much risk do you think global warming poses for people and the environment?

○ 0 – No risk (0)

○ 1 (1)

○ 2 (2)

○ 3 (3)

○ 4 (4)

○ 5 (5)

○ 6 (6)

○ 7 (7)

○ 8 (8)

○ 9 (9)

○ 10 – Extreme risk (10)

Interactive Histogram

SPEER
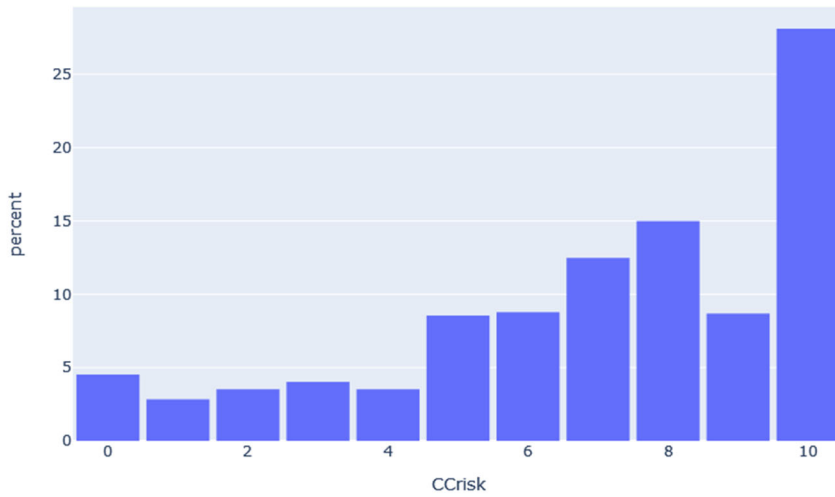
Q33 How much do you oppose or favor injecting and storing carbon dioxide in the ground to reduce greenhouse gases, even if it triggers small earthquakes that occasionally cause slight damage such as knocking items off bookshelves or picture frames off walls?

○ Strongly oppose (1)

○ Oppose (2)

○ Somewhat oppose (3)

○ Somewhat favor (4)

○ Favor (5)

○ Strongly favor (6)
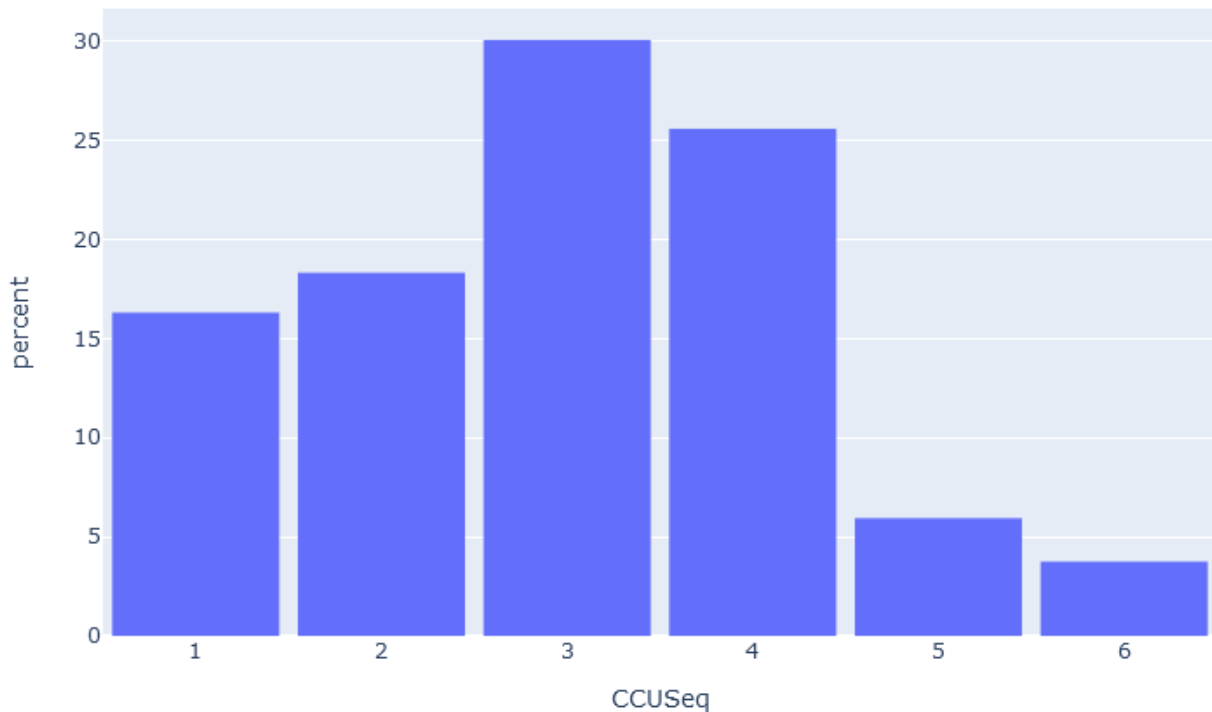
End of Block: Climate change belief and risk

Start of Block: Mental well-being & health

SPEER

Q34 Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?

○ Very happy (1)

○ Pretty happy (2)

○ Not too happy (3)

Histogram of Q34
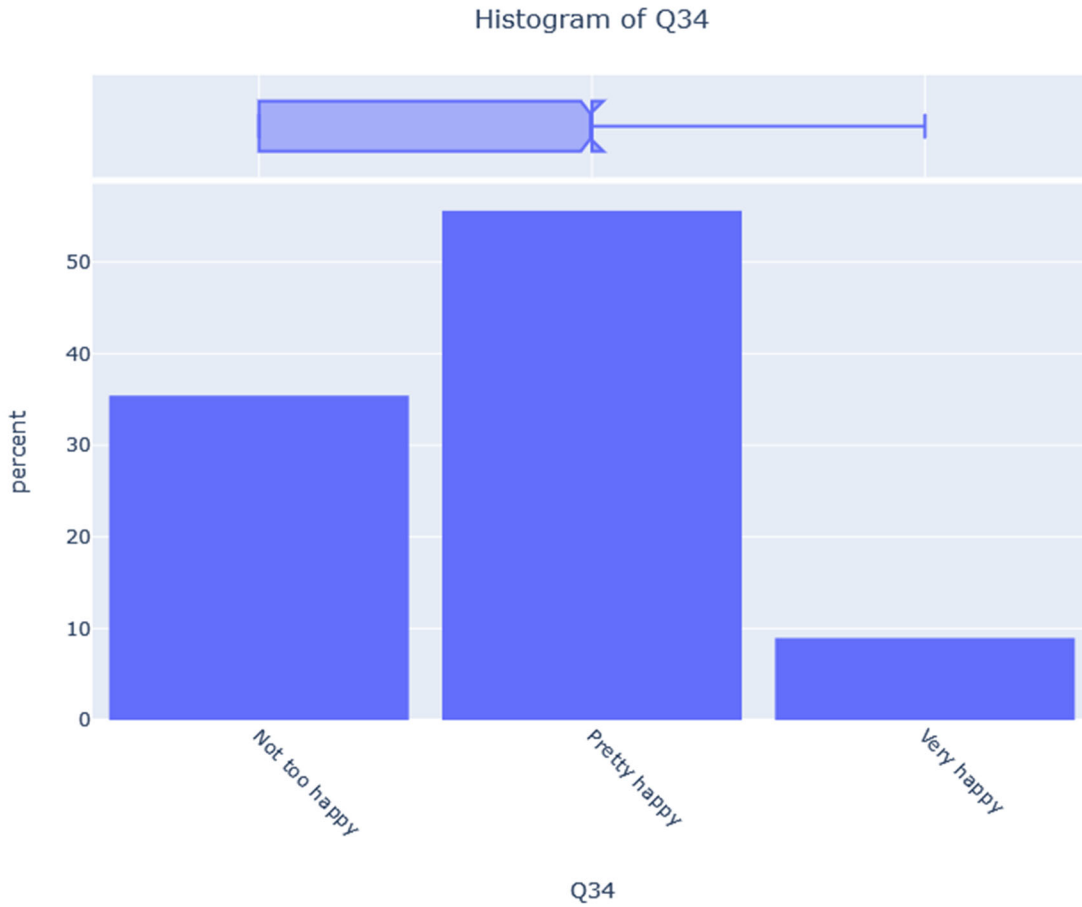
Q35 Would you say your own health, in general, is excellent, good, fair, or poor?

○ Excellent (1)

○ Good (2)

○ Fair (3)

○ Poor (4)
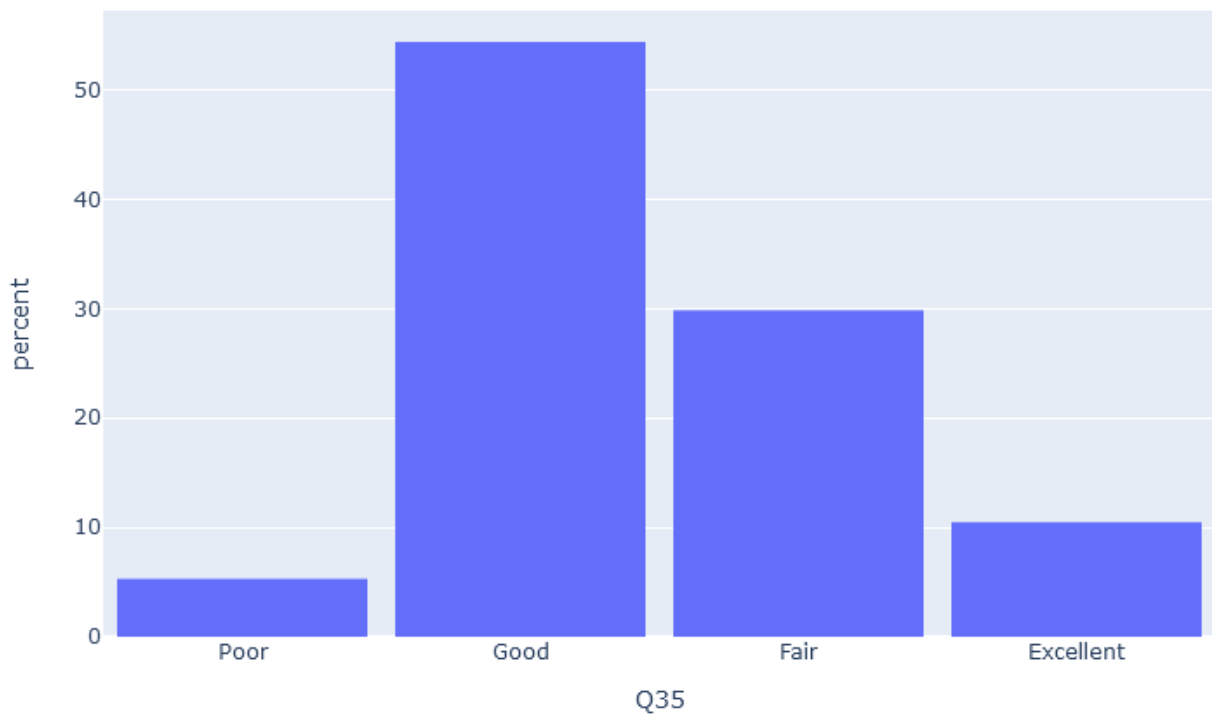
End of Block: Mental well-being & health

Start of Block: Neighborhood social capital

Q36 Please indicate how much you disagree or agree with the following statements about your neighborhood or immediate surrounding area.

Q37 If there is a problem around here, the neighbors get together to deal with it.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)
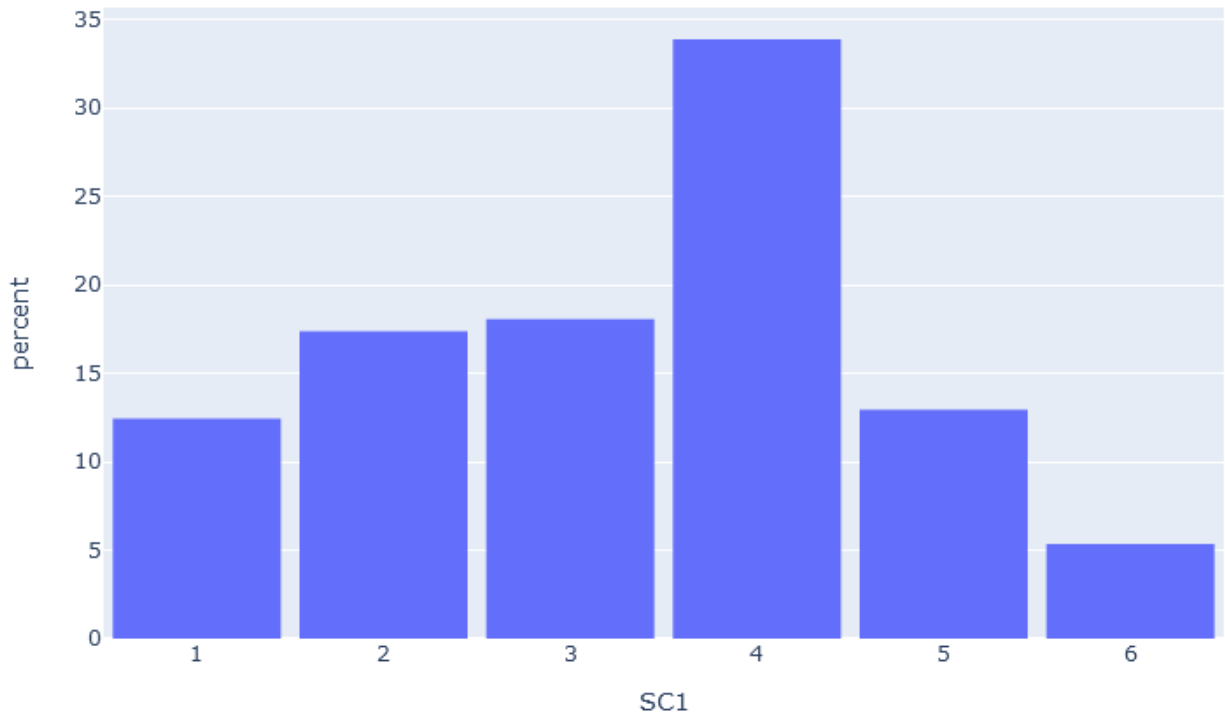
○ Strongly agree (6)

Q38 This is a close-knit neighborhood/area.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)

○ Strongly agree (6)

SPEER
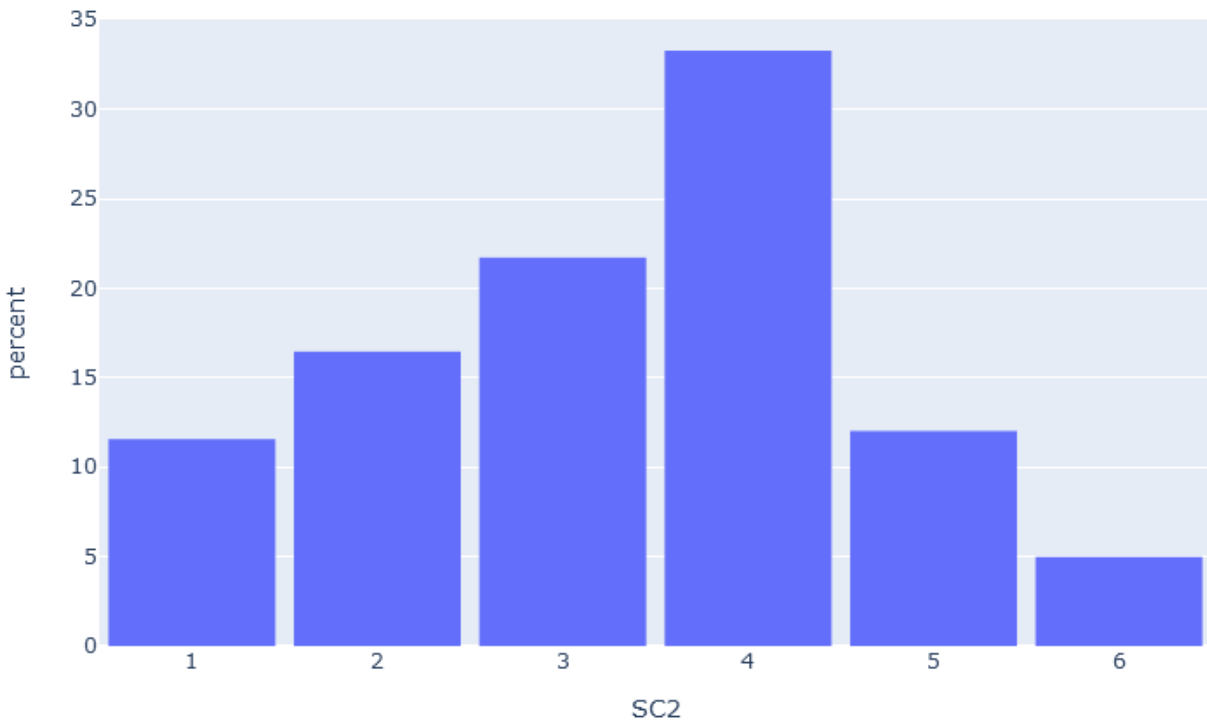
Q39 When you get right down to it, no one in this neighborhood/area cares much about what happens to me.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)
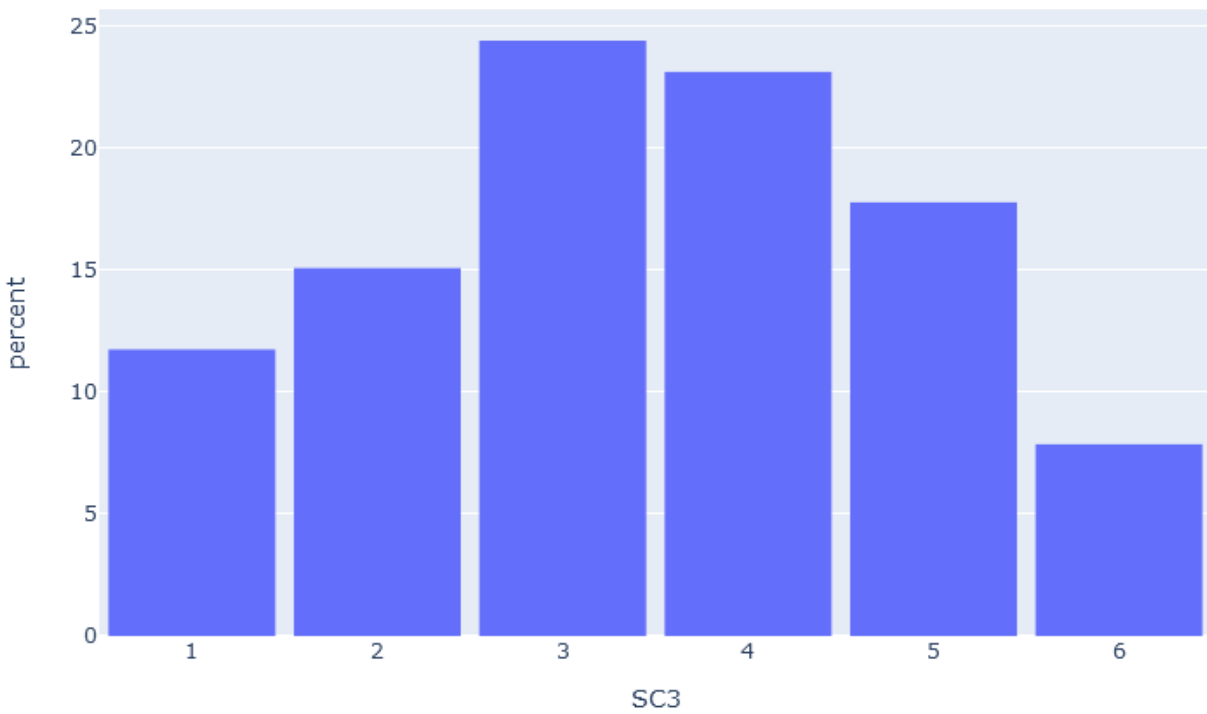
○ Strongly agree (6)

Q40 If I needed emergency repairs at my residence, I could count on my neighbors to pitch in and help.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)

○ Strongly agree (6)

Q41 Please indicate how afraid you are of each of the following:

	Not afraid at all (0)	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	8 (8)	9 (9)	Extremely afraid (10)
Strangers (1)											
Being a victim of a personal crime, including such things as theft, assault, mass violence, or financial fraud (2)											
Environmental problems, such as air and water pollution, oil spills, and the extinction of plant and animal species (3)											
Human-made events, such as nuclear attacks or nuclear meltdown, economic collapse, pandemics, civil unrest, war, and terrorist attacks (4)											
Natural disasters, such as earthquakes, hurricanes, floods, extreme weather, and volcanoes (5)											
A personal tragedy happening in your life, from you or a loved one becoming ill or dying, to becoming unemployed, or not being able to pay bills (6)											

SPEER

Histogram of FrStrangers
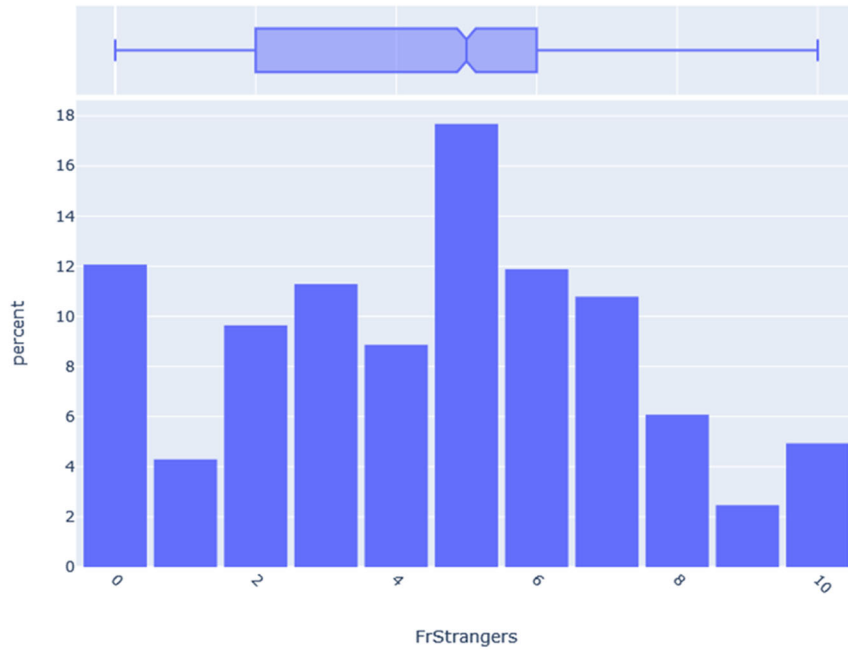
Histogram of FrCrime
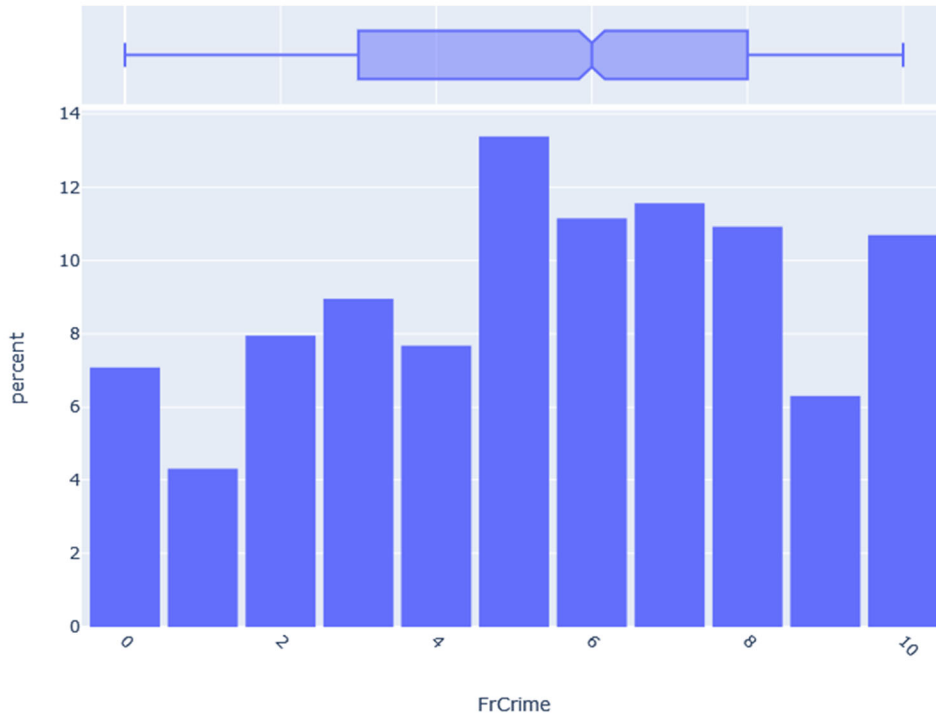
Histogram of FrEnvironment
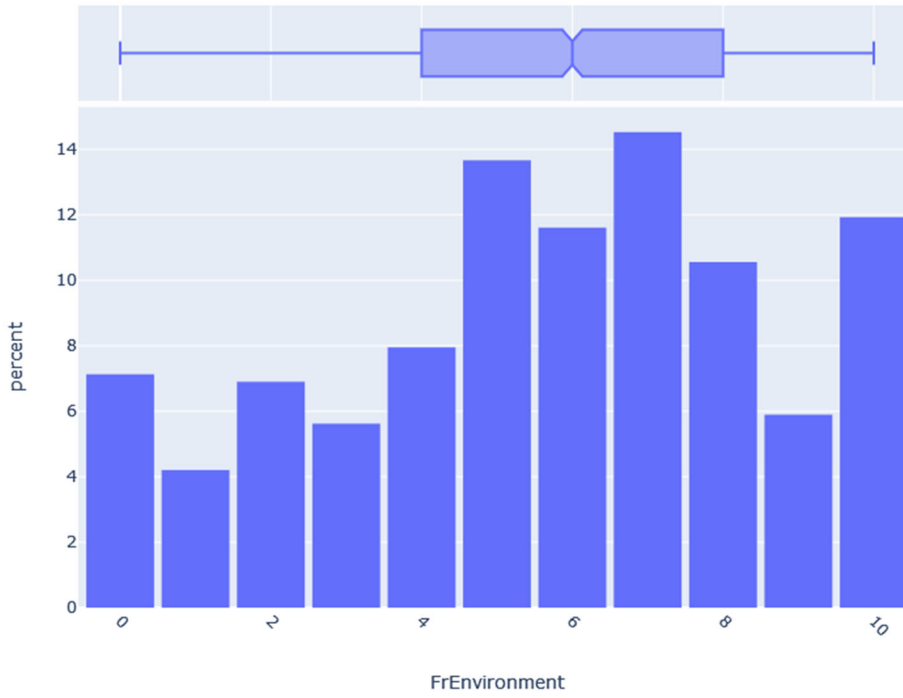
Histogram of FrHuman
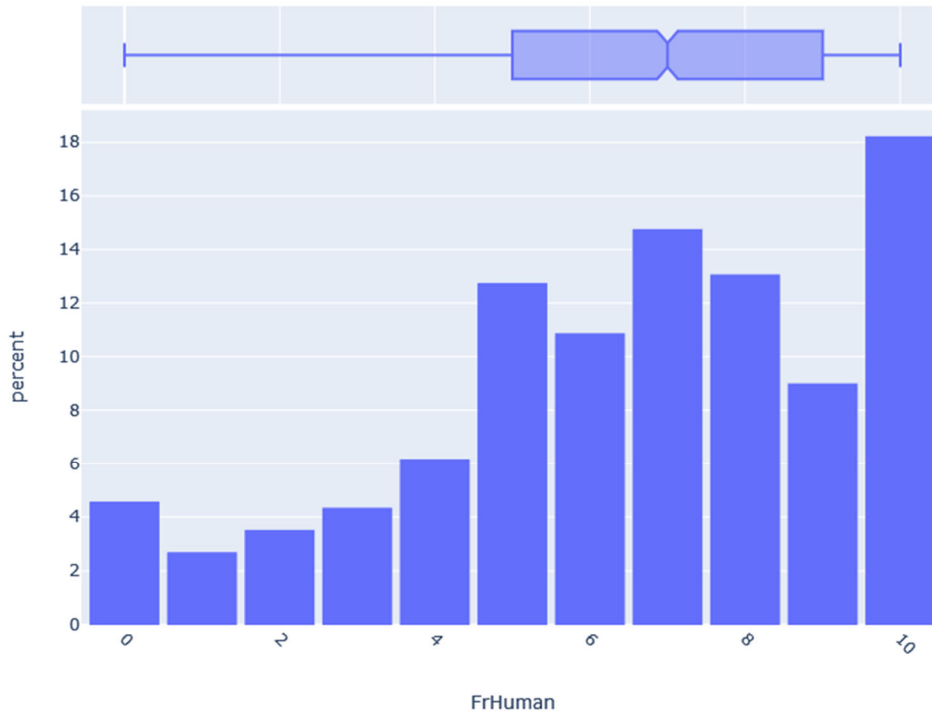
Histogram of FrDisaster

Histogram of FrTragedy

SPEER
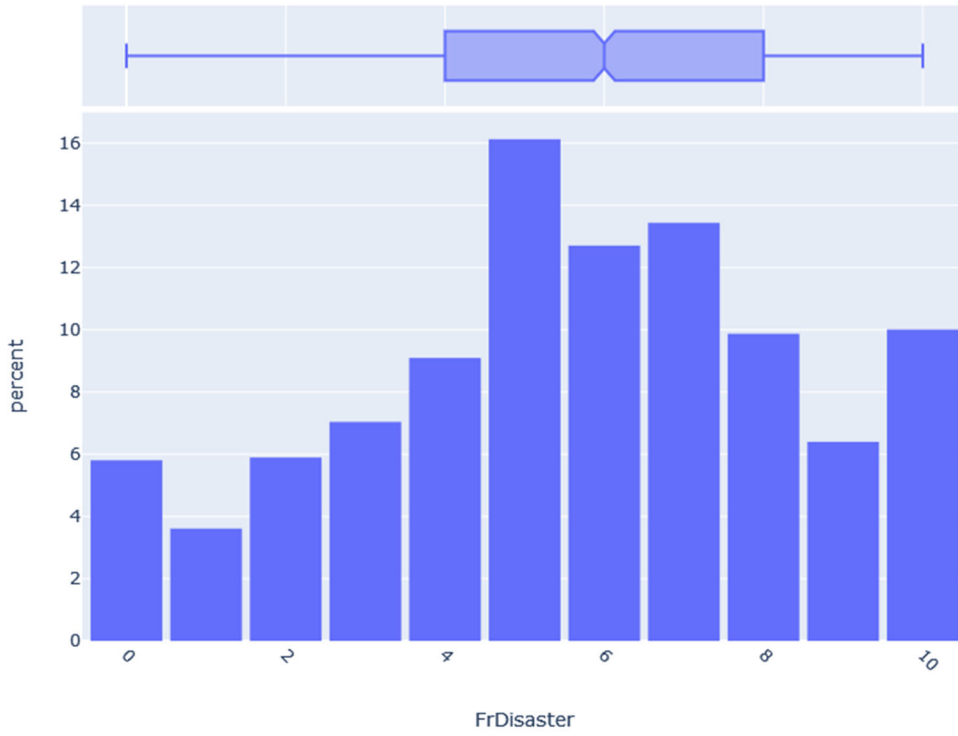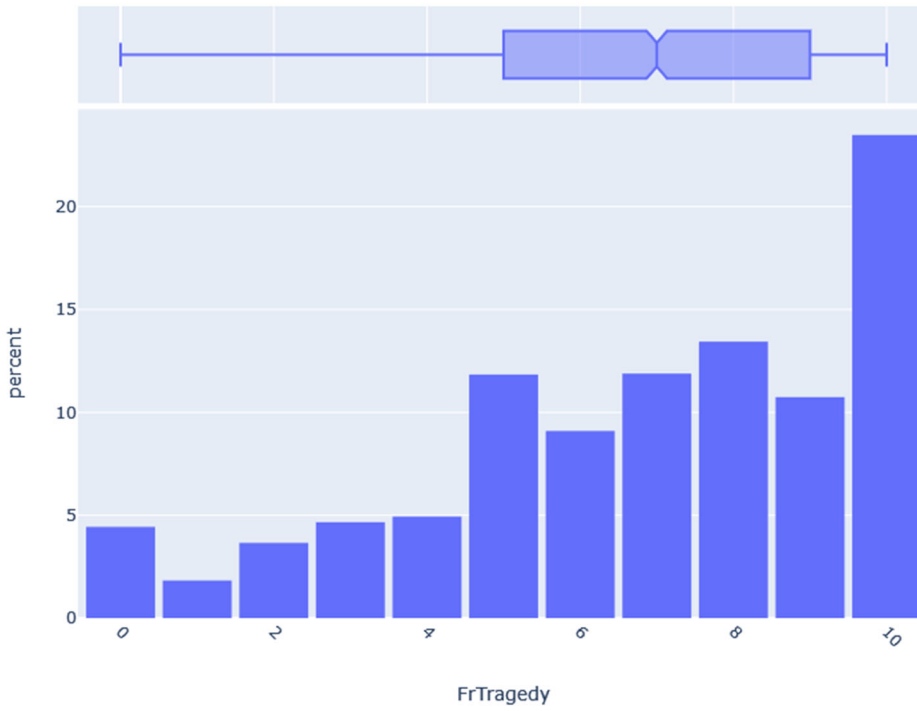
Q42 To what extent do you think the government is concealing information about:

	To no extent at all (1)	To a very small extent (2)	To a small extent (3)	To a moderate extent (4)	To a large extent (5)	To a very large extent (6)
The 9/11 attacks (1)	○	○	○	○	○	○
Global warming (2)	○	○	○	○	○	○
The moon landing (3)	○	○	○	○	○	○
The JFK assassination (4)	○	○	○	○	○	○

Histogram of CT911
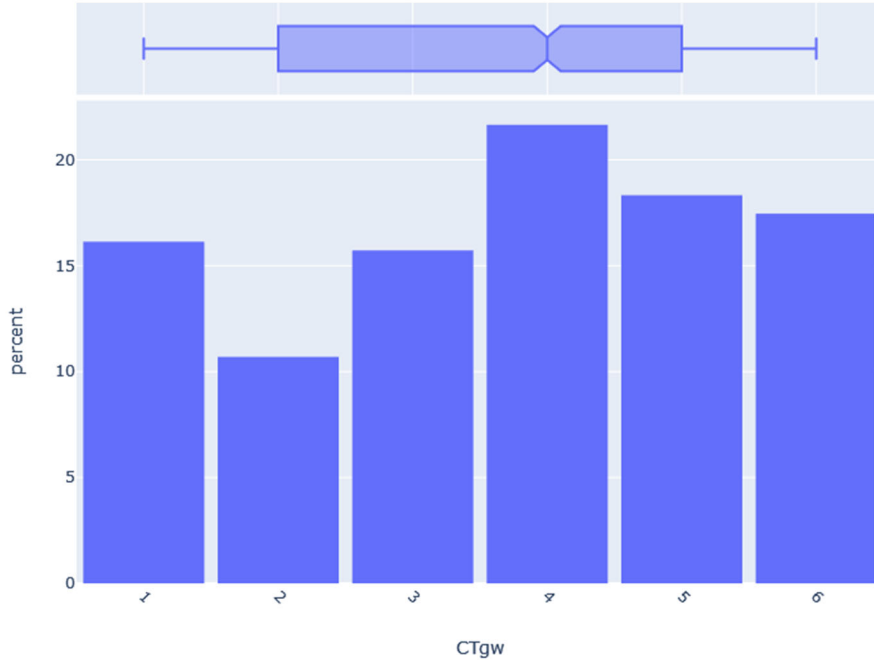
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SPEER

Histogram of CTgw

Histogram of CTmoon

SPEER

Histogram of CTjfk
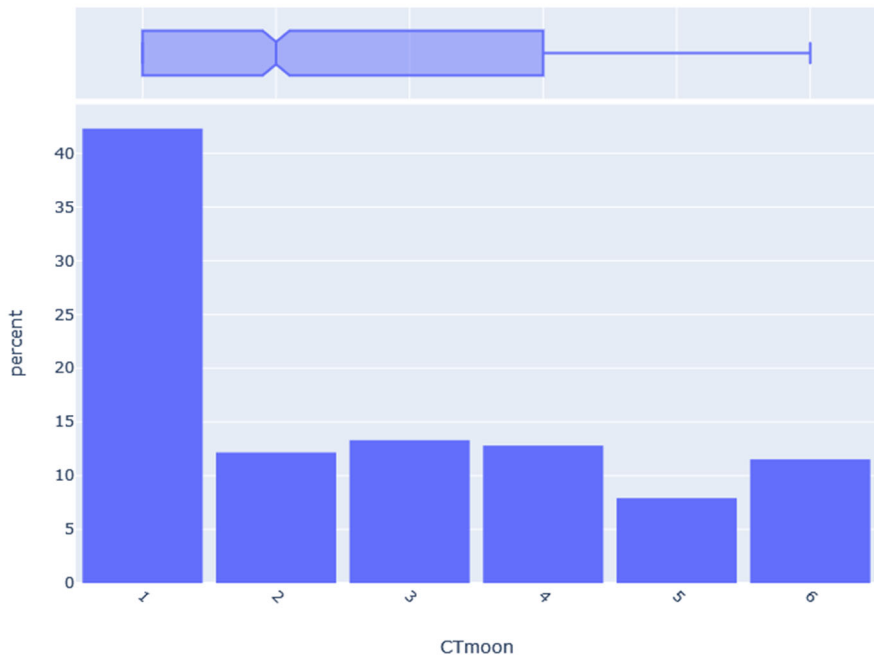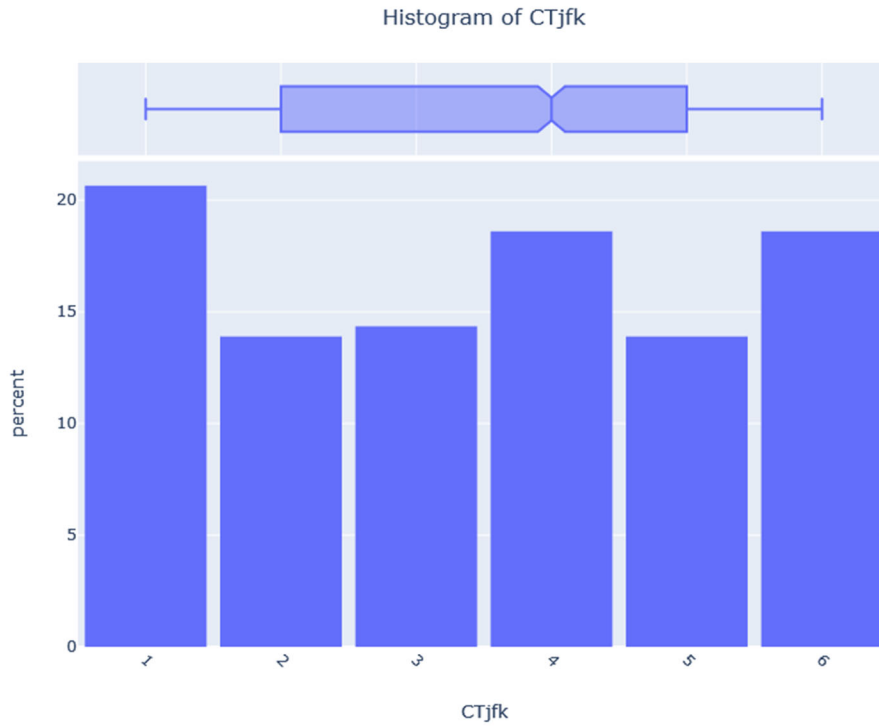
Q43 Please select 'Agree' to show you are paying attention to this question.

○ Strongly agree (1)

○ Agree (2)

○ Disagree (3)

○ Strongly disagree (4)

Q44 Please rate the degree to which you disagree or agree with each of the following statements describing your outlook on life.

SPEER

Q45 I am more comfortable when I know who is, and who is not, a part of my group, and loyalty to the group is important to me. I prefer to know who is in charge and to have clear rules and procedures; those who are in charge should punish those who break the rules. I like to have my responsibilities clearly defined, and I believe people should be rewarded based on the position they hold and their competence. Most of the time, I trust those with authority and expertise to do what is right for society.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)

○ Strongly agree (6)

Q46 Groups are not all that important to me. I prefer to make my own way in life without having to follow other peoples' rules. Rewards in life should be based on initiative, skill, and hard work, even if that results in inequality. I respect people based on what they do, not the positions or titles they hold. I like relationships that are based on negotiated "give and take," rather than on status. Everyone benefits when individuals are allowed to compete.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)

○ Strongly agree (6)

Q47 My most important contributions are made as a member of a group that promotes justice and equality. Within my group, everyone should play an equal role without differences in rank or authority. It is easy to lose track of what is important, so I have to keep a close eye on the actions of my group. It is not enough to provide equal opportunities; we also have to try to make outcomes more equal.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)

○ Strongly agree (6)

- -

Q48 Life is unpredictable and I have very little control. I tend not to join groups, and I try not to get involved because I can't make much difference anyway. Most of the time other people determine my options in life. Getting along is largely a matter of doing the best I can with what comes my way, so I just try to take care of myself and the people closest to me. It's best to just go with the flow, because whatever will be will be.

○ Strongly disagree (1)

○ Disagree (2)

○ Somewhat disagree (3)

○ Somewhat agree (4)

○ Agree (5)

○ Strongly agree (6)

End of Block: Cultural worldviews

SPEER

Q49 Rate how much you favor or oppose each of the following ideas.

Q50 An ideal society requires some groups to be on top and others to be on the bottom.

○ Strongly oppose (1)

○ Somewhat oppose (2)

○ Slightly oppose (3)

○ Slightly favor (4)

○ Somewhat favor (5)

○ Strongly favor (6)

Q51 Some groups of people are simply inferior to other groups.

○ Strongly oppose (1)

○ Somewhat oppose (2)

○ Slightly oppose (3)

○ Slightly favor (4)

○ Somewhat favor (5)

○ Strongly favor (6)

SPEER

Q52 We should do what we can to equalize conditions for different groups.

○ Strongly oppose (1)

○ Somewhat oppose (2)

○ Slightly oppose (3)

○ Slightly favor (4)

○ Somewhat favor (5)

○ Strongly favor (6)

Q53 We should work to give all groups an equal chance to succeed.

○ Strongly oppose (1)

○ Somewhat oppose (2)

○ Slightly oppose (3)

○ Slightly favor (4)

○ Somewhat favor (5)

○ Strongly favor (6)

Social dominance (SDO) questions (Q50-Q53) were combined into a scale. That scale is plotted below, ranging from low (minimum value of 6) to high SDO (maximum value of 24).

Histogram of SDO_Scale

Q54 Take a look at the photo below. Imagine you are watching television and a public service announcement (PSA) comes on featuring this person. His name is John. In the PSA, John discusses the impact of drought on his community and way of life. How likely or unlikely are you to think that John is a trustworthy person to talk about this issue?

SPEER

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

Q55 Take a look at the photo below. Imagine you are watching television and a public service announcement (PSA) comes on featuring this person. His name is John. In the PSA, John discusses the impact of drought on his community and way of life. How likely or unlikely are you to think that John is a trustworthy person to talk about this issue?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

End of Block: PSA with John vignette

Start of Block: Christian Nationalism scale

SPEER

Q56 For the questions below, read each statement and select your level of agreement or disagreement from the following options:

	Strongly agree (1)	Somewhat agree (2)	Slightly agree (3)	Slightly disagree (4)	Somewhat disagree (5)	Strongly disagree (6)
The federal government should declare the United States a Christian nation. (1)	○	○	○	○	○	○
The federal government should advocate Christian values. (2)	○	○	○	○	○	○
The federal government should enforce strict separation of church and state. (3)	○	○	○	○	○	○
The federal government should allow the display of religious symbols in public spaces. (4)	○	○	○	○	○	○
The success of the United States is part of God's plan. (5)	○	○	○	○	○	○
The federal government should allow prayer in public schools. (6)	○	○	○	○	○	○

The Christian nationalism questions were combined into a scale (with scores ranging from 6 to 36) for the histogram below.

SPEER

Histogram of cn_scale

Q57 Take a look at the photo below. Imagine you are attending a local town/city council meeting and this man asks to speak. His name is James, and he is an accountant who lives in the community. James would like to voice his opinion about a possible resolution that would require local businesses to restrict water use during summer months due to drought. How likely or unlikely are you to think that James is a trustworthy person to talk about this issue?

SPEER

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

Q58 Take a look at the photo below. Imagine you are attending a local town/city council meeting and this man asks to speak. His name is James, and he is a professor who lives in the community. James would like to voice his opinion about a possible resolution that would require local businesses to restrict water use during summer months due to drought. How likely or unlikely are you to think that James is a trustworthy person to talk about this issue?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

End of Block: James vignette
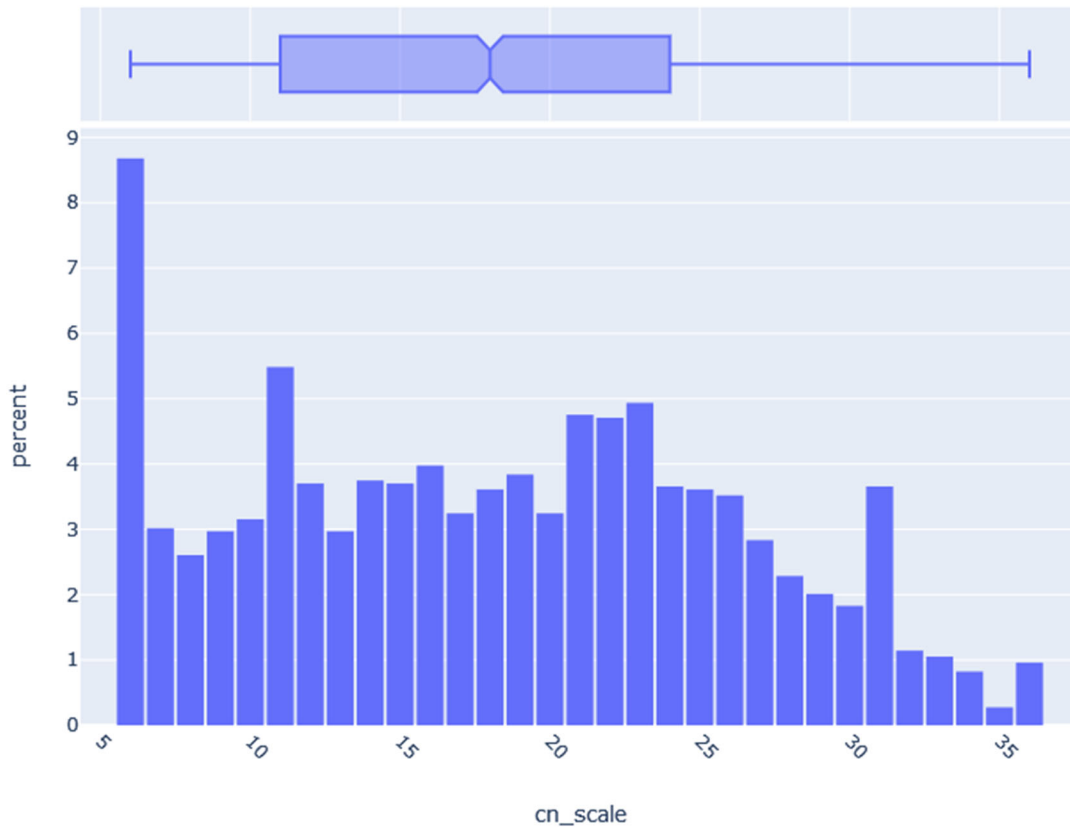
Start of Block: Tolerance thermometer scales (ANES)

SPEER

Q59 We'd like to get your feelings toward some groups of people. We'd like you to rate each group named below using something we call the feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the group. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the group and that you don't care too much for that group of people. You would rate the group at the 50-degree mark if you don't feel particularly warm or cold toward the group. For each group, touch or click the circle and drag it to the degree mark that best represents your feelings about that group. If you come to a group whose name you don't recognize, you don't need to rate that group. Just move on to the next one.

SPEER

	Cold and unfavorable feelings	50 degrees: no feeling at all	Warm and favorable feelings
	0 10 20 30 40 50 60 70 80 90 100		
Atheists ()			
Christian Nationalists ()			
Climate Scientists ()			
Conservatives ()			
Feminists ()			
Illegal Immigrants ()			
Journalists ()			
Liberals ()			
Militia Members ()			
Muslims ()			
The NRA ()			
Oil and Energy Industry ()			
Police ()			
Transgender People ()			
White Supremacists ()			

End of Block: Tolerance thermometer scales (ANES)

Start of Block: Single mother vignette

Q60 Below is a photo of Jade. She is a single mother of two young children. Imagine that her home was severely damaged in a recent flood. If you lived in a town near hers that was not affected by the flood, how likely or unlikely is it that you would help Jade clean up and repair her house?

SPEER

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

Q61 Below is a photo of Jade. She is a single mother of two young children. Imagine that her home was severely damaged in a recent flood. If you lived in a town near hers that was not affected by the flood, how likely or unlikely is it that you would help Jade clean up and repair her house?

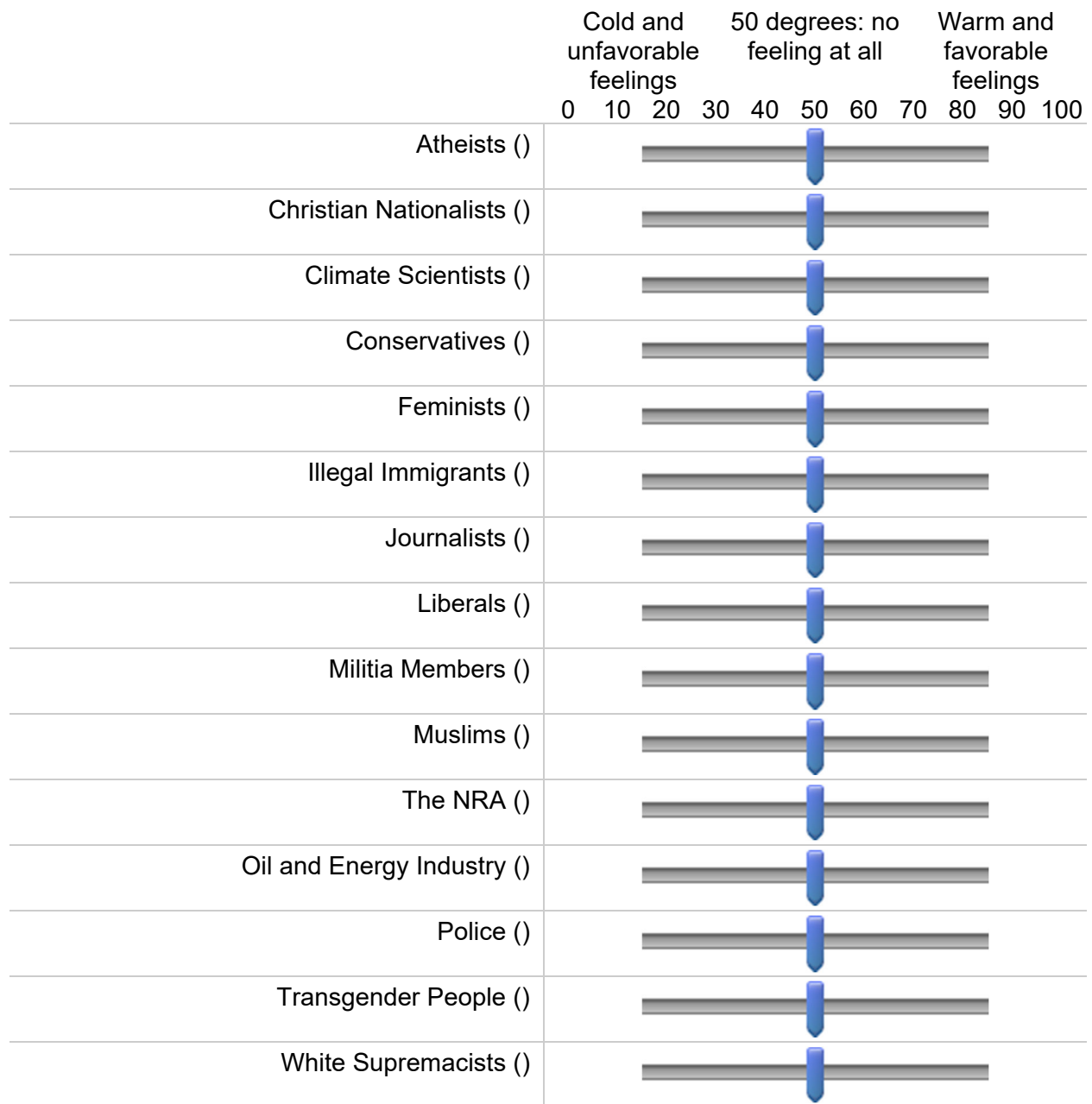○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

End of Block: Single mother vignette

Start of Block: Political tolerance questions

SPEER

Q62 It is common to like some groups of people or organizations more than others. Take a look at the following list of persons from different groups or organizations and indicate which you like the least. (You may choose only one.)

○ An atheist (1)

○ A Black Lives Matter activist (2)

○ A Christian Nationalist (3)

○ An outspoken leader of a local militia (4)

○ An NRA chapter president (5)

○ A strong believer in Q Anon (6)

○ An outspoken socialist (7)

○ A transgender person (8)

- -

Q63 Think of the person you said you liked the least in the previous question. For the following statements, please respond with your level of agreement or disagreement using the following scale:

	Strongly agree (1)	Somewhat agree (2)	Slightly agree (3)	Slightly disagree (4)	Somewhat disagree (5)	Strongly disagree (6)
This person should be allowed to give a divisive speech in public in my community. (1)	○	○	○	○	○	○
This person should be allowed to work as an elementary school teacher in my school district. (2)	○	○	○	○	○	○
This person should be allowed to serve on a local governing body like city council. (3)	○	○	○	○	○	○
This person should be allowed to volunteer as a poll worker at my local voting location. (4)	○	○	○	○	○	○
I would feel comfortable living next door to this person. (5)	○	○	○	○	○	○
I would feel comfortable having this person as a coworker. (6)	○	○	○	○	○	○
I would feel comfortable having this person over to my house at a dinner party or other social gathering. (7)	○	○	○	○	○	○
I would feel comfortable having this person marry into my immediate family. (8)	○	○	○	○	○	○

SPEER

Q64 Again, thinking of the person that you said you liked the least, do you personally know someone from that group or organization?

○ Yes (1)

○ No (2)

- -

Q65 Again, thinking of the person that you said you liked the least, how do you personally know someone from the group or organization? You may choose more than one option.

☐ Someone from that group is an immediate family member (1)

☐ Someone from that group is in my extended family (2)

☐ Someone from that group is a close friend (3)

☐ Someone from that group is a coworker (4)

☐ Someone from that group is a neighbor (5)

☐ Someone from that group is an acquaintance (6)

End of Block: Political tolerance questions

Start of Block: City council member vignette

Q66 Below is a photo of Alex, a local city council member. Alex has proposed a water conservation ordinance for the city that would require citizens to collect rainwater in barrels, known as rainwater harvesting, to use for hand watering their lawns and gardens and washing their vehicles. If you lived in Alex's city, how strongly are you to agree or disagree that Alex's

SPEER

proposed ordinance should be passed?

○ Agree strongly (1)

○ Agree (2)

○ Agree slightly (3)

○ Disagree slightly (4)

○ Disagree (5)

○ Disagree strongly (6)

Q67 Below is a photo of Alex, a local city council member. Alex has proposed a water conservation ordinance for the city that would require citizens to collect rainwater in barrels, known as rainwater harvesting, to use for hand watering their lawns and gardens and washing their vehicles. If you lived in Alex's city, how strongly are you to agree or disagree that Alex's proposed ordinance should be passed?

○ Agree strongly (1)

○ Agree (2)

○ Agree slightly (3)

○ Disagree slightly (4)

○ Disagree (5)

○ Disagree strongly (6)

End of Block: City council member vignette

Start of Block: Moral Foundations Theory (22 question version)

SPEER

Q68 When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale:

 0 = not at all relevant (This consideration has nothing to do with my judgement of right and wrong)

 1 = not very relevant

 2 = slightly relevant

 3 = somewhat relevant

 4 = very relevant

 5 = extremely relevant (This is one of the most important factors when I judge right and wrong)

	0=not at all relevant	1=not very relevant	2=slightly relevant	3=somewhat relevant	4=very relevant	5=extremely relevant
Whether or not someone suffered emotionally (1)	○	○	○	○	○	○
Whether or not some people were treated differently than others (2)	○	○	○	○	○	○
Whether or not someone's action showed love for their country (3)	○	○	○	○	○	○
Whether or not someone showed a lack of respect for authority (4)	○	○	○	○	○	○
Whether or not someone violated standards of purity and decency (5)	○	○	○	○	○	○

SPEER

Whether or not someone was good at math (6)	○	○	○	○	○	○
Whether or not someone cared for someone weak or vulnerable (7)	○	○	○	○	○	○
Whether or not someone acted unfairly (8)	○	○	○	○	○	○
Whether or not someone did something to betray their group (9)	○	○	○	○	○	○
Whether or not someone conformed to the traditions of society (10)	○	○	○	○	○	○
Whether or not someone did something disgusting (11)	○	○	○	○	○	○

Q69 Please read the following sentences and indicate your disagreement or agreement with each one using this scale:

0 = strongly disagree
1 = moderately disagree
2 = slightly disagree
3 = slightly agree
4 = moderately agree
5 = strongly agree

	0=strongly disagree	1=moderately disagree	2=slightly disagree	3=slightly agree	4=moderately agree	5=strongly agree
Compassion for those who are suffering is the most crucial virtue. (1)	○	○	○	○	○	○
When the government makes laws, the number one principle should be ensuring that everyone is treated fairly. (2)	○	○	○	○	○	○
I am proud of my country's history. (3)	○	○	○	○	○	○
Respect for authority is something all children need to learn. (4)	○	○	○	○	○	○
People should not do things that are disgusting, even if no one is harmed. (5)	○	○	○	○	○	○
It is better to do good than to do bad. (6)	○	○	○	○	○	○
One of the worst things a person could do is hurt a defenseless animal. (7)	○	○	○	○	○	○
Justice is the most important requirement for a society. (8)	○	○	○	○	○	○

SPEER

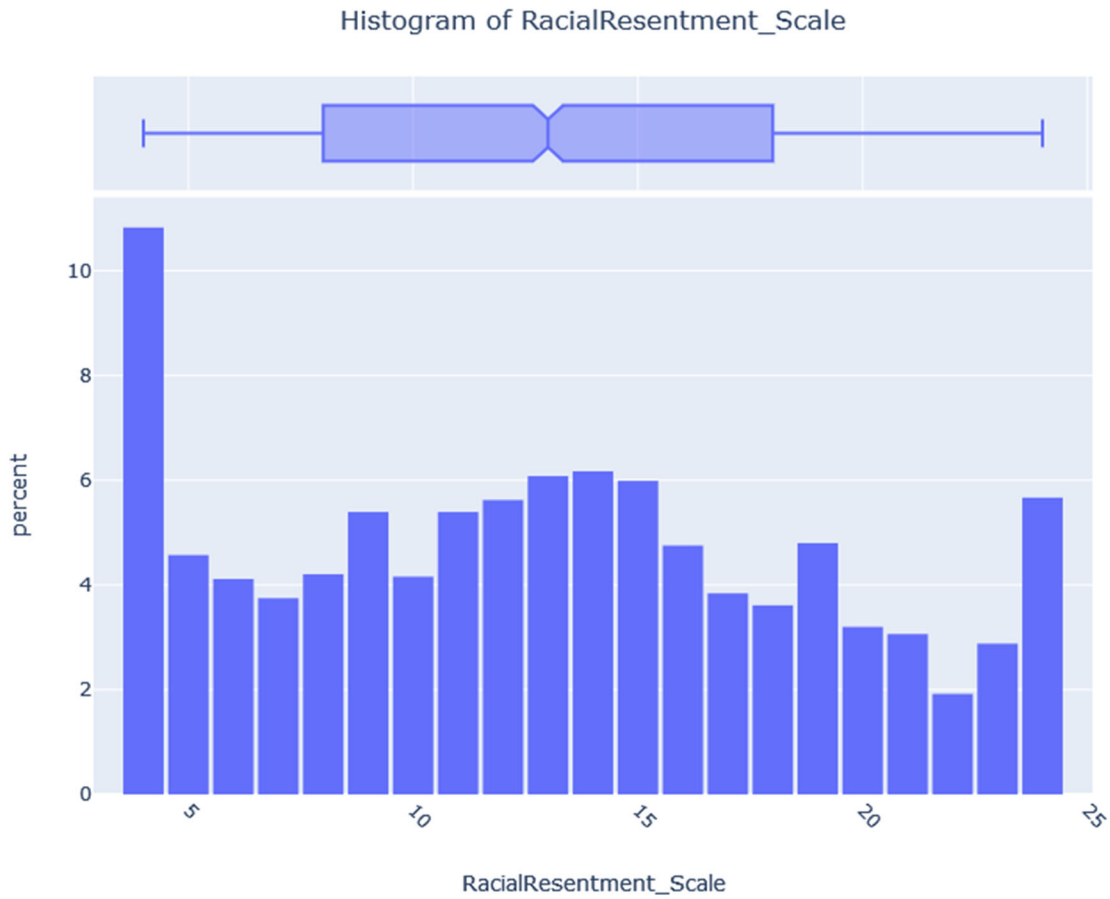|					
People should be loyal to their family members, even when they have done something wrong. (9)	○	○	○	○	○	○
Men and women each have different roles to play in society. (10)	○	○	○	○	○	○
I would call some acts wrong on the grounds that they are unnatural. (11)	○	○	○	○	○	○

End of Block: Moral Foundations Theory (22 question version)

Start of Block: Racial resentment

SPEER

Q70 Please indicate how strongly you agree or disagree with each of the following statements.

	Agree strongly (1)	Agree somewhat (2)	Agree slightly (3)	Disagree slightly (4)	Disagree somewhat (5)	Disagree strongly (6)
Generations of slavery and discrimination have created conditions that make it difficult for Black Americans to work their way out of the lower class. (1)	○	○	○	○	○	○
Over the past few years, Black Americans have gotten less than they deserve. (2)	○	○	○	○	○	○
It's really a matter of some people just not trying hard enough: if Black Americans would only try harder they could be just as well off as White Americans. (3)	○	○	○	○	○	○
Government officials usually pay less attention to a request or complaint from a Black American than from a White American. (4)	○	○	○	○	○	○

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Racial Resentment questions were combined into a scale (with scores ranging from 0-24) and are shown below:

Histogram of RacialResentment_Scale

Q71 Please select 'Strongly disagree' to show you are paying attention to this question.

○ Strongly agree (1)

○ Agree (2)

○ Disagree (3)

○ Strongly disagree (4)

SPEER

Q72 How unimportant or important is the issue of global warming to your personally?

○ Very unimportant (1)

○ Unimportant (2)

○ Slightly unimportant (3)

○ Slightly important (4)

○ Important (5)

○ Very important (6)

SPEER
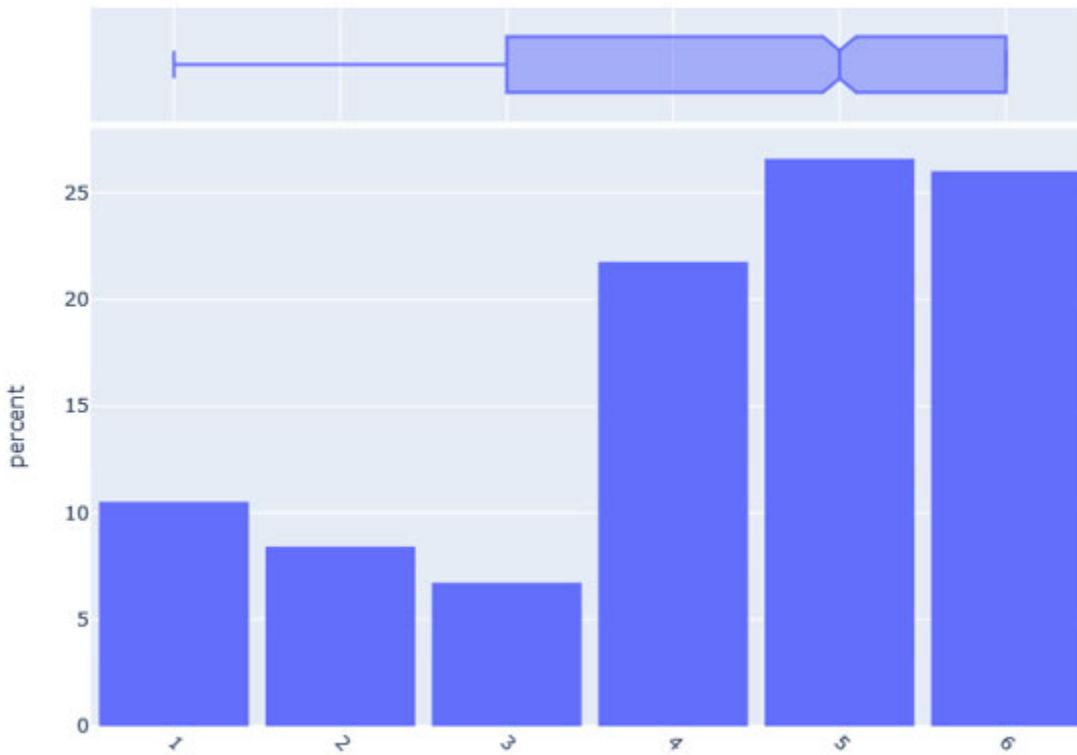
Q73 How worried are you about global warming?

○ Extremely worried (1)

○ Very worried (2)

○ Worried (3)

○ Somewhat worried (4)

○ Slightly worried (5)

○ Not at all worried (6)

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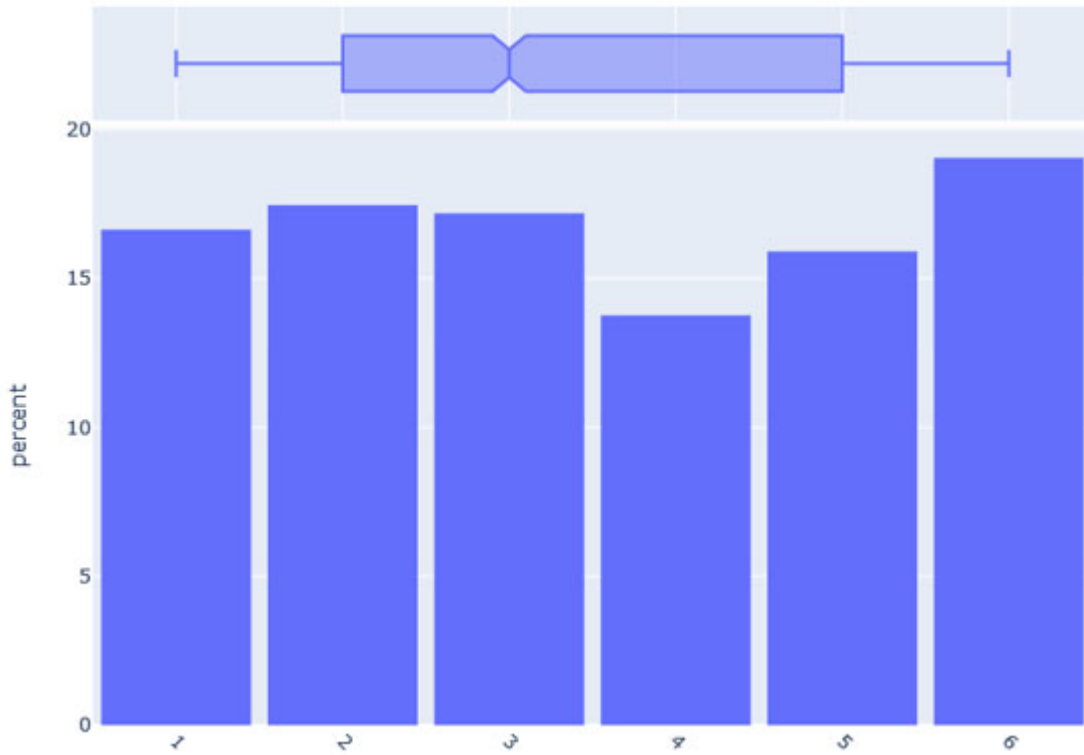
Q74 How much do you think global warming will harm you personally?

○ A very great deal (1)

○ A great deal (2)

○ A moderate amount (3)

○ A little (4)

○ Not at all (5)
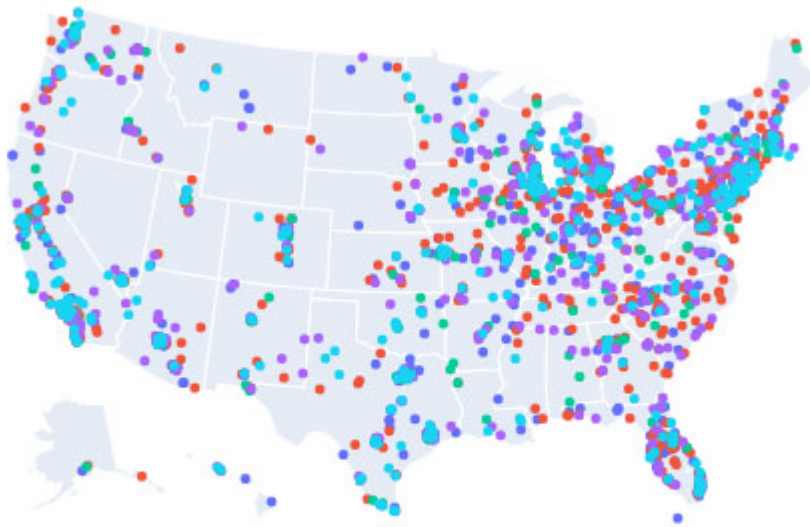
○ I don't know (6)

Q74   ● A moderate amount   ● A little   ● A very great deal   ● Not at all   ● A great deal

SPEER

Q75 How much do you think global warming will harm future generations of people?

○ A very great deal (1)

○ A great deal (2)

○ A moderate amount (3)

○ A little (4)

○ Not at all (5)

○ I don't know (6)
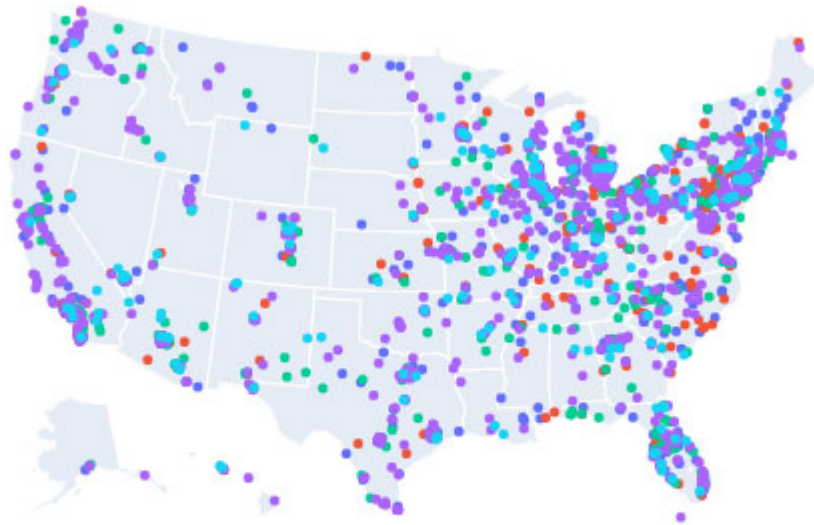
Q75   • A great deal   • A little   • A moderate amount   • A very great deal   • Not at all

End of Block: New climate questions

Start of Block: Carbon footprint

Q76 You and a co-worker are traveling to a conference together, and they suggest that instead of taking a 2-hour plane flight, the two of you take a train instead, which would lengthen the travel time to 4 hours. When you tell your co-worker that this change fits your schedule but

SPEER

would require you to wake up an hour earlier, they tell you that we all need to be responsible for reducing our carbon footprint. How likely or unlikely would you be to agree to take the train?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

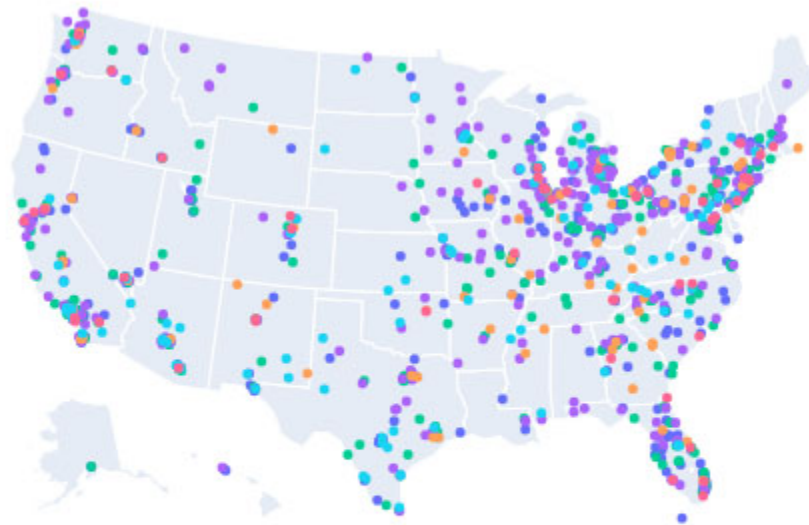○ Somewhat unlikely (5)

○ Very unlikely (6)

Q76 • Somewhat likely • Slightly likely • Very likely • Very unlikely
      • Slightly unlikely • Somewhat unlikely

Q77 You and a co-worker are traveling to a conference together, and they suggest that instead of taking a 2-hour plane flight, the two of you take a train instead, which would lengthen the travel time to 4 hours. This change fits into your schedule, although you would have to wake up an hour earlier. Your company has been offering employees $50 gift-card incentives to reduce

SPEER

their carbon footprint when traveling for work. How likely or unlikely would you be to agree to take the train?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

Q77   ● Somewhat likely   ● Somewhat unlikely   ● Very likely   ● Slightly likely
      ● Slightly unlikely   ● Very unlikely

Q78 Please read the statement below and then answer the questions follow.

Climate change is a threat to the environment of the United States.

SPEER

Q79 How likely or unlikely are you to take steps in your own life that would reduce greenhouse gas emissions as a way to fight climate change?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)
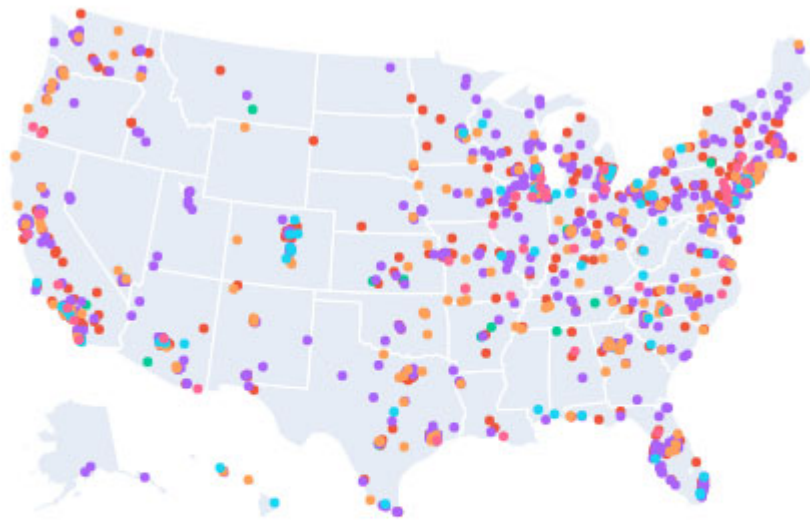
Q80 How likely or unlikely are you to vote for political candidates who favor greater regulation of carbon emissions by business and industry?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

SPEER

Q81 How likely or unlikely are you to support political candidates who favor using the free market to combat climate change?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

- -

Q82 How likely or unlikely are you to support companies that use more environmentally-friendly practices?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

End of Block: Solution aversion A

Start of Block: Solution aversion B

Q83 Please read the statement below and then answer the questions follow.

Climate change is a threat to the environment of the United States, and it is recommended that we as individuals take actions such as reducing airline travel, driving less, and adjusting our thermostats. Additionally, it is recommended that we as a nation adopt new laws that: limit the

SPEER

amount of carbon pollution in the air, stop deforestation, and require business and industry to switch from coal to renewable energy sources.

Q84 How likely or unlikely are you to take steps in your own life that would reduce greenhouse gas emissions as a way to fight climate change?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

Q85 How likely or unlikely are you to vote for political candidates who favor greater regulation of carbon emissions by business and industry?

○ Very likely (1)

○ Somewhat likely (2)

○ Slightly likely (3)

○ Slightly unlikely (4)

○ Somewhat unlikely (5)

○ Very unlikely (6)

SPEER

Q86 How likely or unlikely are you to support political candidates who favor using the free market to combat climate change?

- ○ Very likely (1)

- ○ Somewhat likely (2)

- ○ Slightly likely (3)

- ○ Slightly unlikely (4)

- ○ Somewhat unlikely (5)

- ○ Very unlikely (6)

Q87 How likely or unlikely are you to support companies that use more environmentally-friendly practices?

- ○ Very likely (1)

- ○ Somewhat likely (2)

- ○ Slightly likely (3)

- ○ Slightly unlikely (4)

- ○ Somewhat unlikely (5)

- ○ Very unlikely (6)
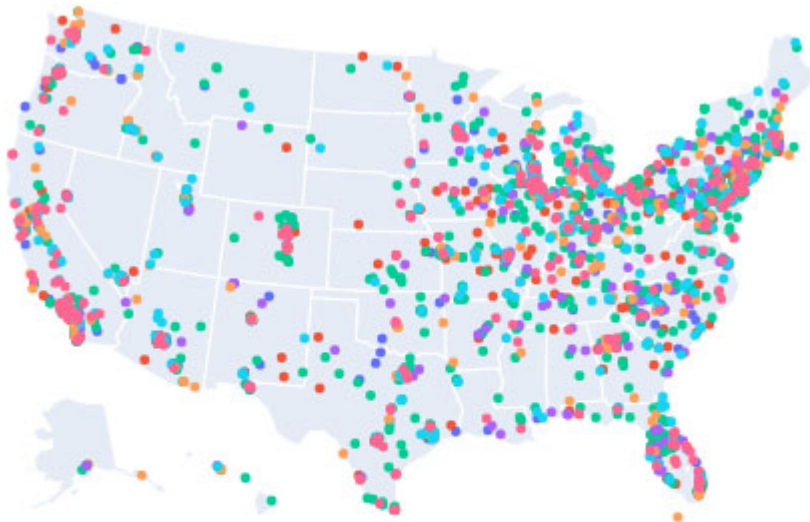
End of Block: Solution aversion B

Start of Block: Political and religious variables

Q88 Please answer the following questions about your beliefs.

SPEER

Q89 What is your political orientation?

○ Very liberal (1)

○ Liberal (2)

○ Moderately liberal (3)

○ Moderate (4)

○ Moderately conservative (5)

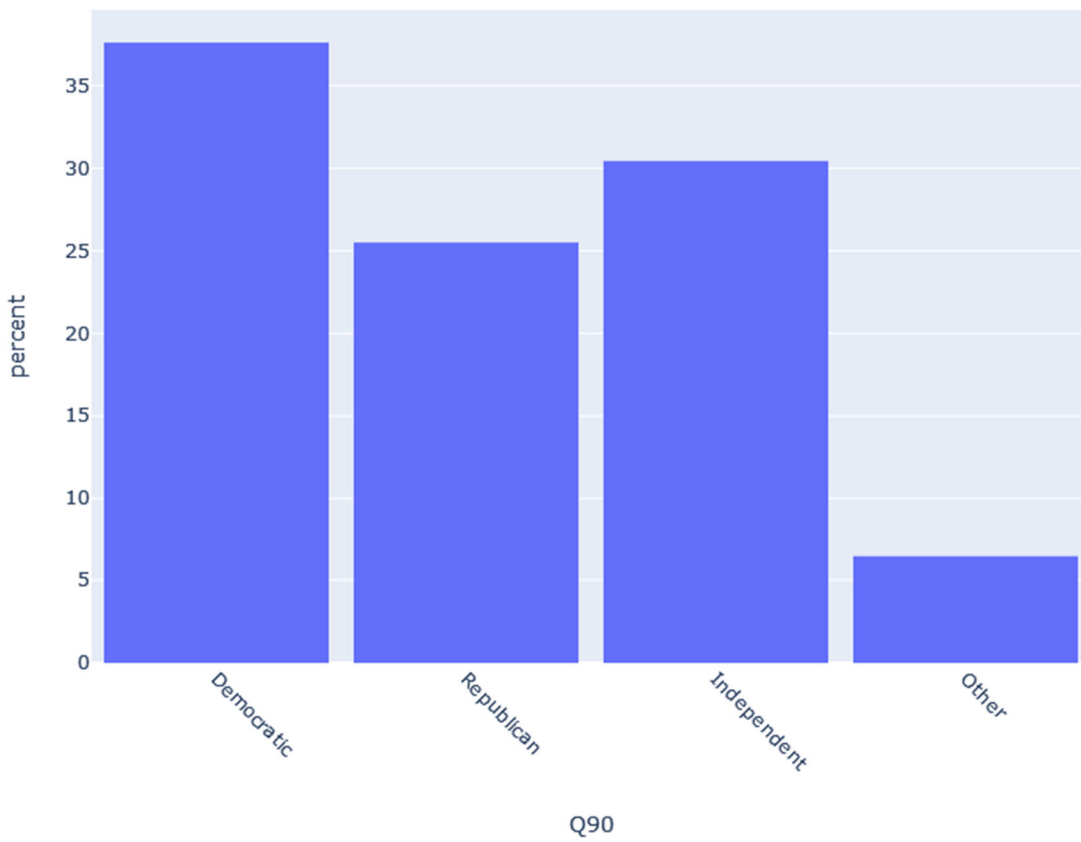○ Conservative (6)

○ Very conservative (7)

Q89   • Liberal   • Moderately conservative   • Moderate   • Very conservative
      • Very liberal   • Conservative   • Moderately liberal

SPEER

Q90 What political party do you identify with?

○ Democratic (1)

○ Independent (2)

○ Republican (3)

○ Other (4)

Histogram of Q90

SPEER

Q91 What best describes your belief about the Bible?

○ Literal truth and word of God (1)

○ Divinely inspired word of God (2)

○ Book of stories with a good message (3)

○ Book of stories with little value (4)

○ Just a book of stories – neutral about its value (5)

○ Other / don't know (6)

Q91   • Literal truth and word of God   • Book of stories with a good message
       • Divinely inspired word of God   • Just a book of stories – neutral about its value
       • Book of stories with little value   • Other / Dont know

SPEER
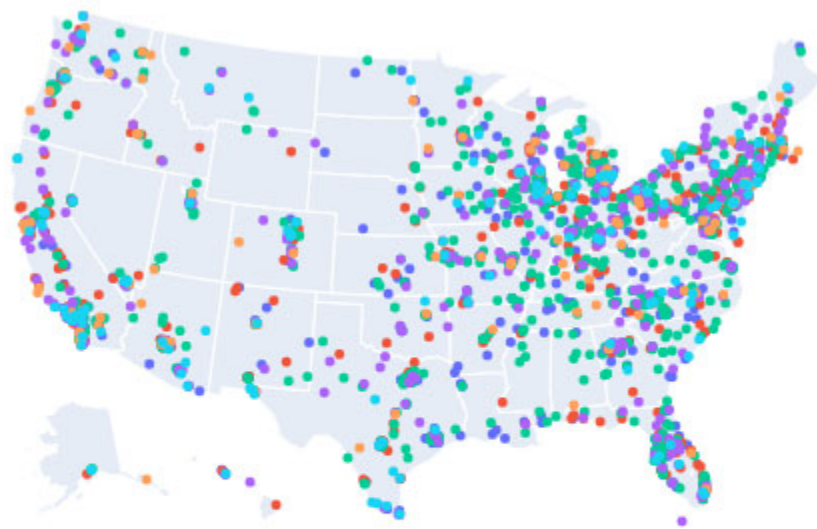
Q92 How often do you attend religious services, if ever?

○ Never (1)

○ Less than once per year (2)

○ Once or twice per year (3)

○ Several times per year (4)

○ Once per month (5)

○ Two or three times per month (6)

○ Every week (7)

○ More than once per week (8)

Q92
- Two or three times per month
- Several times per year
- Once or twice per year
- Never
- More than once per week
- Once per month
- Less than once per year
- Every week

SPEER
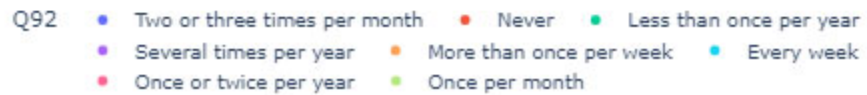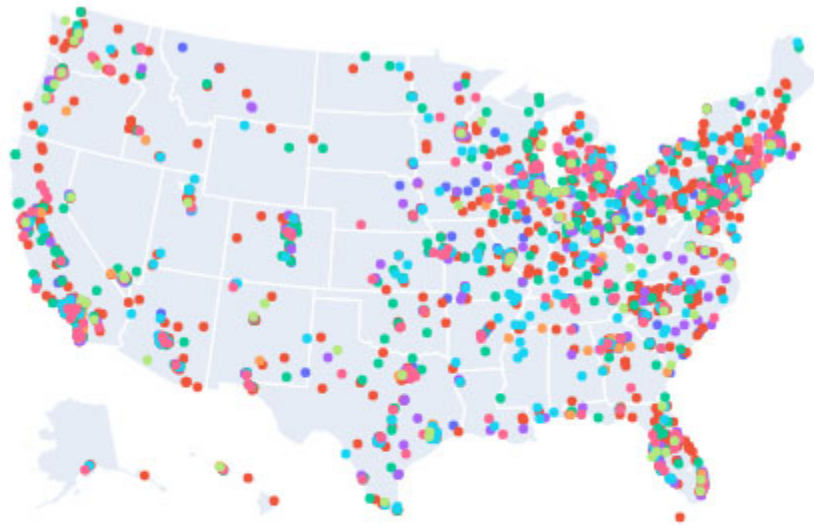
Q93 Do you consider yourself an evangelical or born-again Christian?

○ No (1)

○ Not sure (2)

○ Yes (3)

Histogram of Q93

SPEER
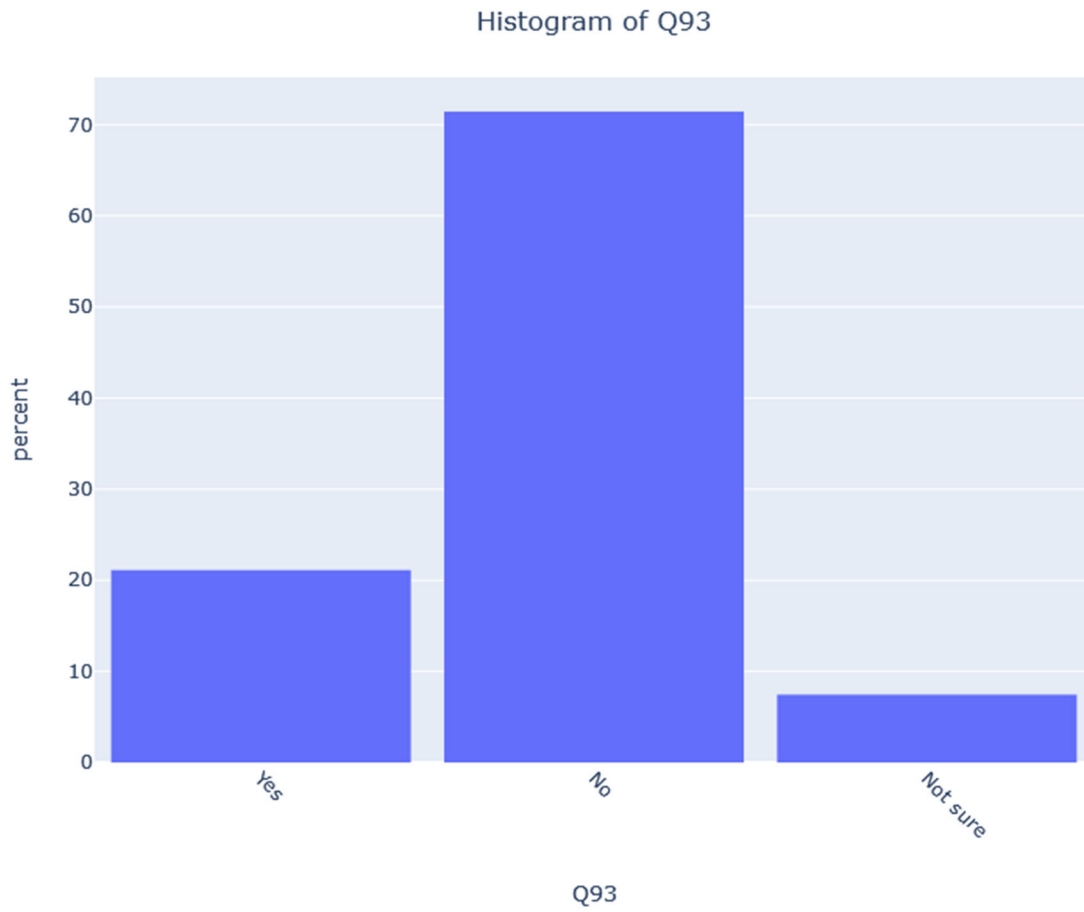
Q94 Which of the following best describes your religious preference?

○ Protestant (1)

○ Catholic (2)

○ Latter Day Saints (Mormon) (3)

○ Orthodox Christian (4)

○ Non-denominational Christian (5)

○ Jewish (6)

○ Buddhist (7)

○ Hindu (8)

○ Other Eastern Religion (9)

○ Muslim (10)

○ Spiritual but not religious (11)

○ Not religious – atheist or agnostic (12)

○ Something else. Please specify: (13)

_____

SPEER
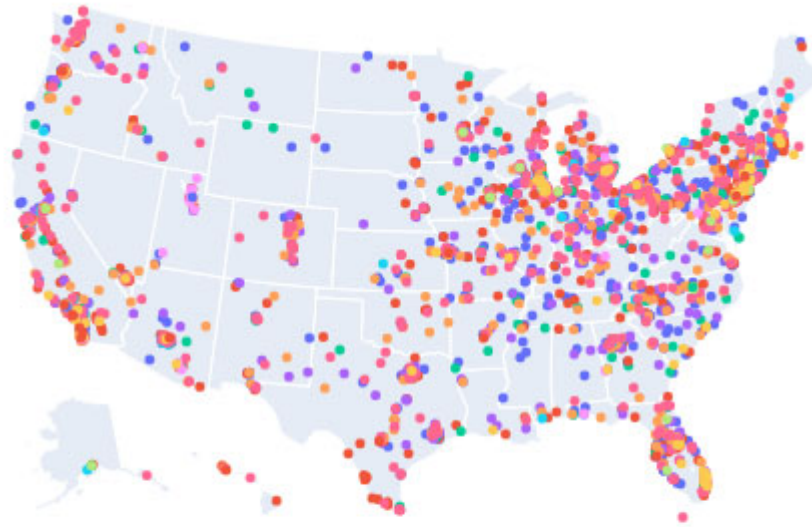
Q94
- Protestant
- Catholic
- Something else. Please specify:
- Non-denominational Christian
- Spiritual but not religious
- Orthodox Christian
- Not religious – atheist or agnostic
- Muslim
- Latter Day Saints (Mormon)
- Jewish
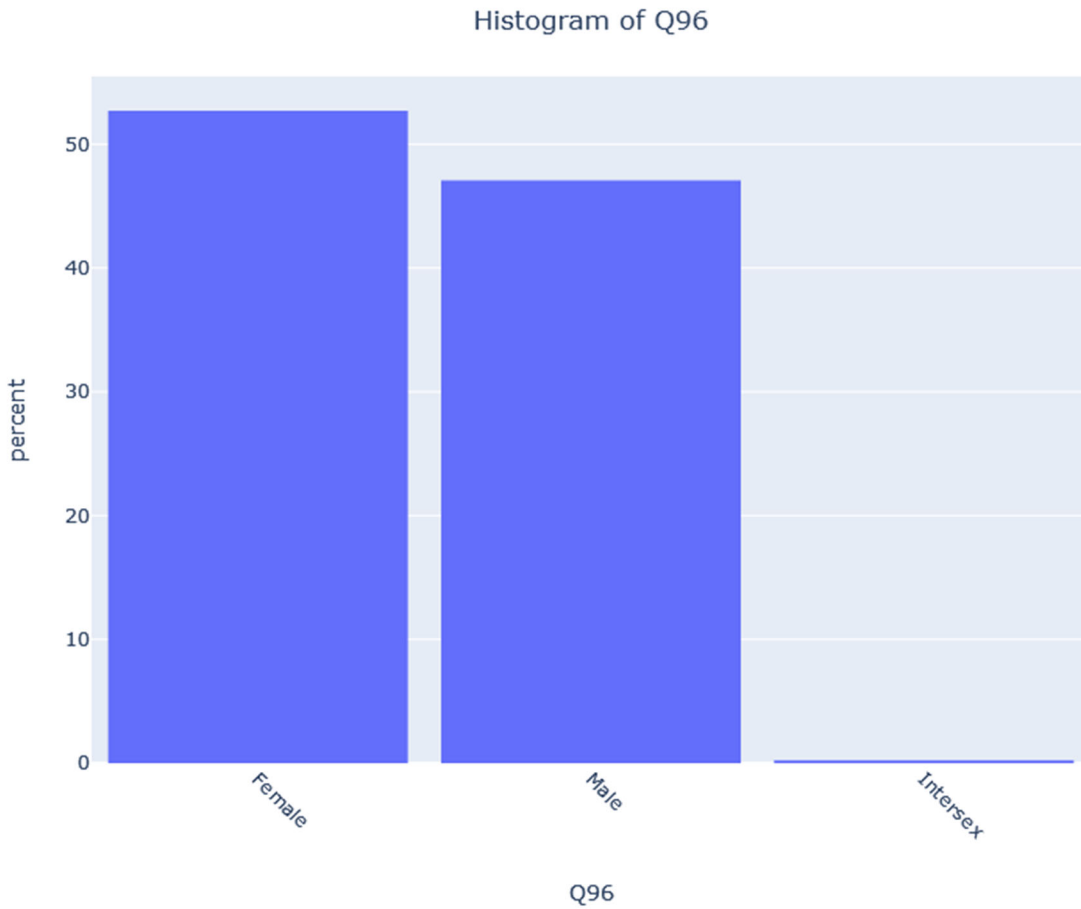- Hindu
- Buddhist
- Other Eastern Religion

End of Block: Political and religious variables

Start of Block: Socio-demographics 2

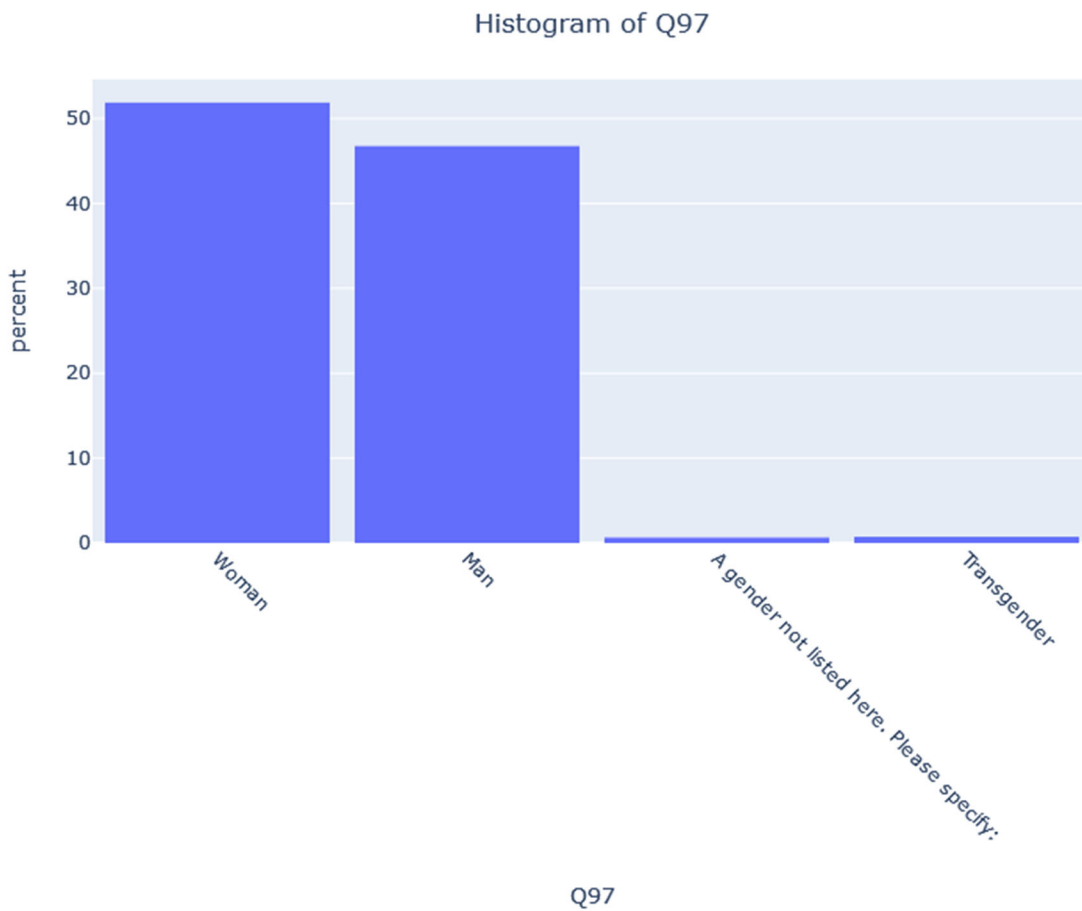Q95 Finally, please answer the following questions about your background.

SPEER

Q96 What sex were you assigned at birth? (For example, on your birth certificate.)

○ Male (1)

○ Female (2)

○ Intersex (3)

Histogram of Q96

SPEER

Q97 What is your current gender? Choose one of the following.

○ Woman (1)

○ Man (2)

○ Transgender (3)

○ A gender not listed here. Please specify: (4)

Histogram of Q97

SPEER

Q98 In general, how do you see yourself? Please answer on both scales below.

	Not very (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (6)	Very (7)
Feminine (1)	○	○	○	○	○	○	○
Masculine (2)	○	○	○	○	○	○	○

SPEER

Q99 Which of the following best describes your race-ethnicity? Please choose all that apply.

☐ White (1)

☐ Black or African American (2)

☐ Hispanic, Latino/Latina/Latinx, or Spanish (3)

☐ American Indian, Native American, or Alaska Native (4)

☐ Asian (5)

☐ Native Hawaiian or Pacific Islander (6)

☐ Two or more races (7)

☐ Some other race. Please specify: (8)

_____

- -

Q100 Do you consider yourself to be (choose one answer):

○ Heterosexual or straight (1)

○ Gay or lesbian (2)

○ Bisexual (3)

○ Other identity not listed above. Please specify: (4)

_____

○ I prefer not to answer. (5)

- -

SPEER

Q101 How long have you lived at your current primary residence?

○ Under one year (1)

○ One to under five years (2)

○ Five to under ten years (3)

○ Ten years or longer (4)

Q102 How long have you lived in your current primary city or town of residence?

○ Under one year (1)

○ One to under five years (2)

○ Five to under ten years (3)

○ Ten years or longer (4)

Q103 Which of the following best describes the area where your current primary residence is located?

○ Urban -- in a densely populated area (1)

○ Suburban -- in a neighborhood that is near a densely populated area (2)

○ Rural -- in a sparsely populated area (3)

Q103 Distribution by Zip Code
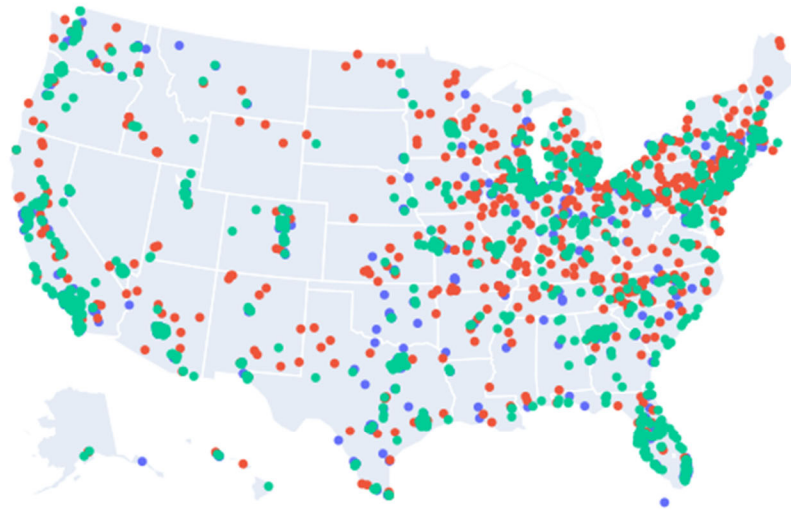
Q103   ● Urban -- in a densely populated area   ● Rural -- in a sparsely populated area
        ● Suburban -- in a neighborhood that is near a densely populated area

SPEER

Q104 Which of the following is true about your current primary residence? Note that a residence is considered owned even if there is a mortgage or loan on it.

○ It is owned by me and/or someone in my household (1)

○ It is rented or leased by me and/or someone in my household (2)

○ Other. Please specify: (3)

_____

SPEER

Q105 What is your current relationship status? Choose one answer.

○ Single, not dating (1)

○ Dating, not cohabiting (2)

○ Cohabiting (3)

○ Married (4)

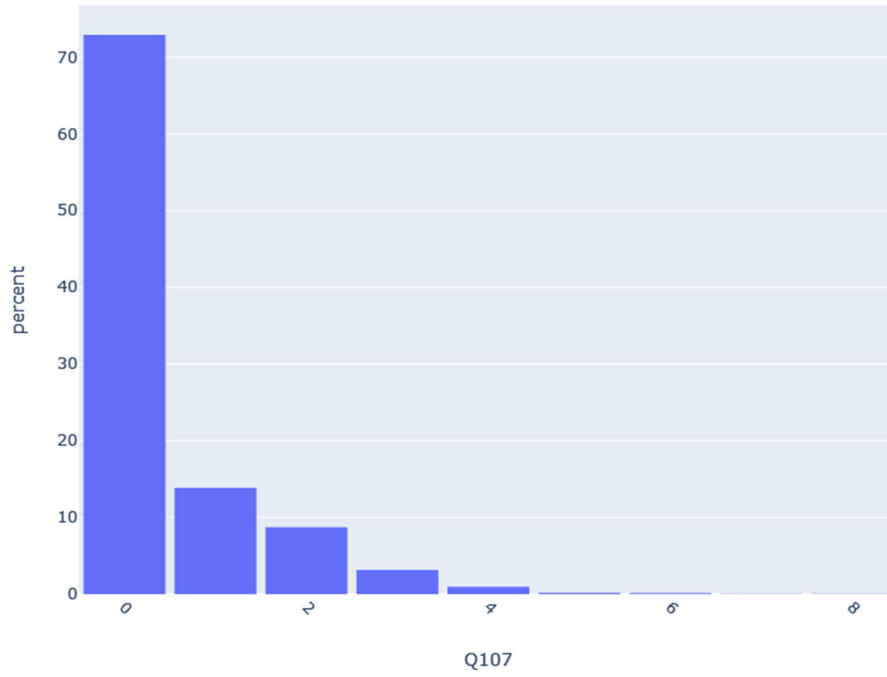○ Married but separated (5)
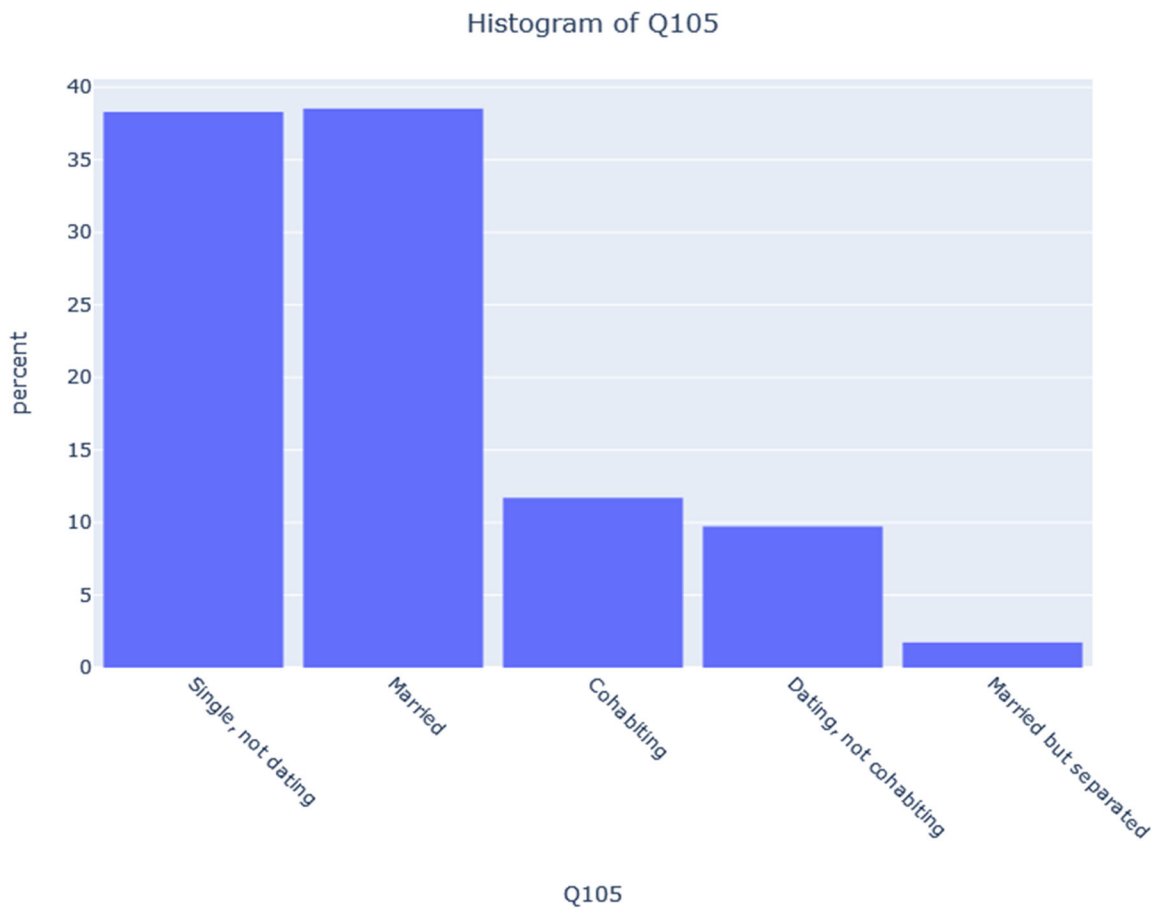
Histogram of Q105

SPEER

Q106 What is your current marital status? Choose one answer.

○ Never married (1)

○ Engaged to be married (2)

○ Separated (3)

○ Divorced (4)

○ Widowed (5)

SPEER

Q107 How many children age 17 and younger live in your household more than half the time?

○ 0 (0)

○ 1 (1)

○ 2 (2)

○ 3 (3)

○ 4 (4)

○ 5 (5)

○ 6 (6)

○ 7 (7)

○ 8 (8)
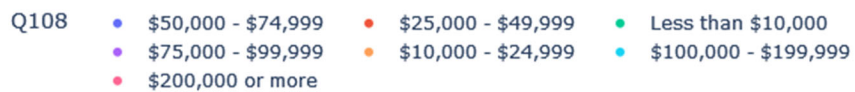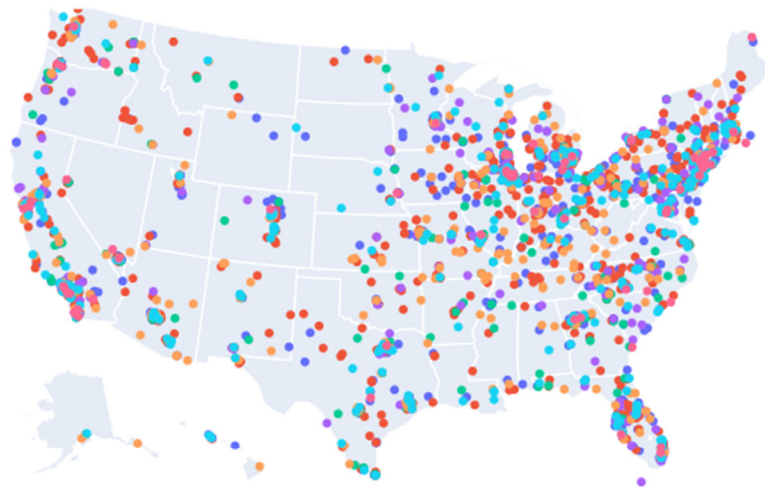
○ 9 (9)

○ 10 or more (10)

SPEER

Histogram of Q107

Q108 Thinking specifically about the past 12 months, what was your approximate annual HOUSEHOLD income from all sources?

○ Less than $10,000 (1)

○ $10,000 - $24,999 (2)

○ $25,000 - $49,999 (3)

○ $50,000 - $74,999 (4)

○ $75,000 - $99,999 (5)

○ $100,000 - $199,999 (6)

○ $200,000 or more (7)

Q108 Distribution by Zip Code

Q108	• $50,000 - $74,999	• $25,000 - $49,999	• Less than $10,000
	• $75,000 - $99,999	• $10,000 - $24,999	• $100,000 - $199,999
	• $200,000 or more		

End of Block: Socio-demographics 2

SPEER