

2016 Oklahoma Weather, Society and Government Survey: M-SISNet Wave 10 (Spring 2016)

n = 2,528; June 7—July 23, 2016; Median Time = 26 min

My name is Hank C. Jenkins-Smith, and I am a professor at the Center for Risk and Crisis Management at the University of Oklahoma. I am requesting that you volunteer to participate in a research study titled “Oklahoma Weather, Society and Government Survey.”

Purpose of the Research Study

The purpose of this study is to measure perceptions of weather in Oklahoma and views on government policies and societal issues, and to understand how those perceptions and views might shape Oklahomans’ uses of water and energy.

Number of Participants

Up to 7,000 people will take part in this study.

Procedures and Length of Participation

If you agree to participate in this study, you will be asked to respond to an Internet survey that should take an average of about 30 minutes to complete. You will be invited to respond to a similar Internet survey each quarter (four times per year) until May 2018.

Risks of being in the study

There are no risks associated with participation in this study.

Benefits of being in the study

There are no benefits associated with participation in this study.

Compensation

Should you complete the survey, you will receive a \$10 gift card.

Confidentiality

The records of this study will be kept private. In published reports, there will be no information included that will make it possible to identify you as a research participant. Research records will be stored securely. The data will not include any information that would make it possible to identify you. Only approved researchers will have access to the records. There are organizations that may inspect and/or copy your research records for quality assurance and data analysis. These organizations include the OU Institutional Review Board.

Voluntary Nature of the Study

The study will ask questions about your observations on current issues, including your views on extreme

weather and climatological issues such as severe thunderstorms, wind events, floods, droughts, and long-term weather patterns. In the unlikely event that any of these questions make you uncomfortable, in most cases you may skip that question and continue with the survey. In a few cases, we require responses to certain questions so that we know what to ask you in a follow-up question. You may also quit the survey at any time, should you desire to do so.

Contacts and Questions

If you have concerns or complaints about the research, I am the primary investigator conducting this study, and I can be contacted at the Center for Risk and Crisis Management at the University of Oklahoma, at (405) 325-1720 or at crcm@ou.edu. In the event of a research-related injury, contact the researcher(s). You are encouraged to contact the researcher(s) if you have any questions. If you have any questions, concerns, or complaints about the research and wish to talk to someone other than the individuals on the research team, or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at (405) 325-8110 or irb@ou.edu.

consent: Do you agree to participate in this study?
[DROPDOWN LIST]

- 0 - No, I do not want to participate in this study
- 1 - Yes, I agree to participate in this study

[IF consent = 0, MOVE PARTICIPANT TO NEW PAGE WHICH STATES “**You have indicated that you do not want to participate in this study.** If you have reached this page by accident and do wish to participate in this study, please contact our technical support staff at: (405) 325-1720 or crcm@ou.edu.”]

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

This research has been approved by the University of Oklahoma, Norman Campus IRB.

IRB Number: 3938

Approval date: 06/03/2016

-----End Web Index pg-----

This survey involves policy choices about complex

issues. Lengthy interruptions in the survey will make it difficult to respond to some of the questions. As previously noted, the survey should take only about 30 minutes to complete, but we ask that you avoid long interruptions if possible.

Please review the following demographic information that you previously provided to our research team. If the information is the same, there is no need for any action. However, if as of today our records are incomplete or incorrect, please provide us with the correct information by using the boxes provided below. Thank you!

[THE QUESTIONS ON THIS PAGE ARE PRE-POPULATED, WHERE AVAILABLE, WITH THE DATA THAT WAS COLLECTED DURING RECRUITMENT]

age: How old are you? [VERBATIM]

-----End Web pg -----

[SHOW PAGE ONLY IF RESPONSE TO age IS < 18]

agescreen: To participate in this survey, you must be 18 years of age or older. Please verify your age before continuing. [VERBATIM]

[IF AN AGE < 18 IS ENTERED, MOVE PARTICIPANT TO NEW PAGE WHICH STATES “**You must be 18 or older to participate in the study.** To continue with the survey, or if you have reached this page by accident, please contact our technical support staff at: (405) 325-1720 or crecm@ou.edu.” IF AN AGE > 18 IS ENTERED, RETURN TO SURVEY]

-----End Web pg -----

gender: Are you male or female?

- 0 - Female
- 1 - Male

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

- 1 - Less than High School
- 2 - High School / GED
- 3 - Vocational or Technical Training
- 4 - Some College — NO degree
- 5 - 2-year College / Associate’s Degree
- 6 - Bachelor’s Degree
- 7 - Master’s degree
- 8 - PhD / JD (Law) / MD

hispanic: Do you consider yourself to be Hispanic, Latino, or Spanish or to have Hispanic, Latino, or Spanish origins?

- 0 - No
- 1 - Yes

race: Which of the following best describes your race?

- 1 - White
- 2 - Black or African American
- 3 - American Indian or Alaska Native
- 4 - Asian
- 5 - Native Hawaiian or Pacific Islander
- 6 - Two or more races
- 7 - Some other race (please specify)

race_spec: [VERBATIM]

-----End Web pg -----

adults: *Including yourself*, how many ADULTS AGE 18 AND OLDER live in your household?

[LIMIT TO NON-ZERO RESPONSE]
[VERBATIM] adults

children: How many CHILDREN AGE 17 AND YOUNGER live in your household?

[VERBATIM; REQUIRE NUMERIC RESPONSE]
children

-----End Web pg -----

employment: Which one of the following BEST describes your current employment status?

- 1 - Not working and not seeking a job outside the home
- 2 - Not working outside the home, but seeking work
- 3 - Working part-time outside the home
- 4 - Working full-time outside the home
- 5 - Working full-time inside the home
- 6 - Working part-time inside the home
- 7 - Student
- 8 - Retired
- 9 - Disabled

-----End Web pg -----

income: Thinking specifically about the past 12 months, what was your annual household income from all sources?

\$ [VERBATIM]

-----End Web pg -----

footage: What is the approximate square footage of your home?

[VERBATIM; REQUIRE NUMERIC RESPONSE]
sq. ft.

-----End Web pg -----

home_lot: Which of the following best describes

your property?

- 1 - Urban lot in a densely populated area
- 2 - Suburban lot in a neighborhood that is near a densely populated area
- 3 - Rural lot in a sparsely populated area

-----End Web pg -----

own_land: Do you own land in any of the following counties? If you own land in more than one of these counties, or if your property crosses county lines, please select the county where you own the most property.

- 1 - Le Flore
- 2 - Pushmataha
- 3 - Latimer
- 4 - Choctaw
- 5 - I do not own land in any of these counties

-----End Web pg -----

[SHOW PAGE ONLY IF **own_land** = 1, 2, 3, or 4]
own_type: How would you describe the character of this land in [AUTOFILL FROM **own_land**] county?

- 1 - Urban
- 2 - Suburban
- 3 - Rural

own_size: Is this land at least 5 acres in size?

- 0 - No
- 1 - Yes

-----End Web pg -----

[SHOW PAGE ONLY IF **own_size** = 1]
own_forest: About how many acres of this land are woods or forest?
[VERBATIM; REQUIRE NON-NEGATIVE NUMERIC RESPONSE] acres

own_pasture: About how many acres of this land are grassland or pasture?

[VERBATIM; REQUIRE NON-NEGATIVE NUMERIC RESPONSE] acres

own_orchrd: About how many acres of this land are planted with crops or orchards?

[VERBATIM; REQUIRE NON-NEGATIVE NUMERIC RESPONSE] acres

-----End Web pg -----

[SHOW PAGE ONLY IF **own_land** = 1, 2, 3, or 4]

[SHOW PAGE ONLY IF **own_size** = 1] **sell_land:** Please select the time frame that best represents when you would be most likely to sell or give away this land to a person or organization

1 - Never; a member of my family or current household will keep this land forever

2 - 0-9 years

3 - 10-19 years

4 - 20-29 years

5 - 30-39 years

6 - 40-49 years

7 - 50 or more years

-----End Web pg -----

acre_split: [SKIP IF **sell_land** = 2] Think about your future plans with this land. In the next 10 years, do you expect to change the number of acres split between woods/forest, grassland/pasture and crops/orchard?

0 - No

1 - Yes

-----End Web pg -----

[SHOW ONLY IF **acre_split** = 1] To the best of your knowledge, how many acres will be devoted to each land cover type in the next 10 years? [TABLE FORMAT, VERBATIM; ALLOW ONLY NON-NEGATIVE NUMERIC RESPONSE]

woods_split: Woods/forest

pasture_split: Grassland/pasture

orchrd_split: Crops/orchard

-----End Web pg -----

[SHOW ONLY IF **own_forest** > 0] You indicated some of your land currently includes woods or forest. In order of importance, where one means *most important* and four means *least important*, please rank the reasons that you own this type of land. Please use each ranking only once. [NUMERIC RESPONSE 1-4; DO NOT ALLOW REPEATS]

comm_timb: Commercial forestry or timber

hunt: Hunting or wildlife

inv_prprty: Investment property

scenic: Scenic beauty

-----End Web pg -----

The next few questions ask you to compare weather patterns *this spring* (March, April and May 2016) to weather patterns in *previous springs*.

ssn_precip: In the area around where you live (by this we mean within about ten miles of your residence), would you say that the amount of precipitation (by this we mean both rain and snow) that fell *this spring* was more, less, or about the same amount as in *previous springs*?

- 3 - More
- 2 - About the same
- 1 - Less

ssn_tmp: In the area around where you live, would you say that *this spring* has been warmer, cooler, or about the same as *previous springs*?

- 3 - Warmer
- 2 - About the same
- 1 - Cooler

-----End Web pg -----

Now we want you to compare weather patterns over the *past three years* to weather patterns in *previous years*.

drhtfreq: In the area around where you live, has drought occurred more frequently, less frequently, or with about the same frequency in the *last three years* as drought in *previous years*?

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

drhtsev: In the area around where you live, has drought been more severe, less severe, or about as severe in the *last three years* as drought in *previous years*?

- 3 - More severe
- 2 - About as severe
- 1 - Less severe

fldfreq: In the area around where you live, has flooding occurred more frequently, less frequently, or with about the same frequency in the *last three years* as flooding in *previous years*?

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

fldsev: In the area around where you live, has flooding been more severe, less severe, or about as severe in the *last three years* as flooding in *previous years*?

- 3 - More severe
- 2 - About as severe
- 1 - Less severe

-----End Web pg -----

avgtmp: Again thinking about the *last three years*, would you say that overall, the average temperatures in the area around where you live have increased, decreased, or stayed about the same as compared to temperatures in *previous years*?

- 3 - Increased

- 2 - Stayed about the same
- 1 - Decreased

tmpextrm: Would you say that overall, extreme high and/or low temperatures have occurred more often, less often, or with about the same frequency in the *past three years* as compared to *previous years*?

- 3 - More often
- 2 - With about the same frequency
- 1 - Less often

-----End Web pg -----

This spring, have you experienced any of the following kinds of events in the area around where you live? Please indicate all that apply. [RANDOMIZED LIST: 1 INDICATES SELECTED]

- evntexp_wind:** Extreme high winds
- evntexp_drht:** Drought
- evntexp_rain:** Extreme rainstorms
- evntexp_flood:** Floods
- evntexp_torn:** Tornadoes
- evntexp_fire:** Wildfires
- evntexp_ethqk:** Earthquakes
- evntexp_cold:** Extreme cold temperatures
- evntexp_heat:** Extreme hot temperatures
- evntexp_snow:** Extreme snowstorms
- evntexp_ice:** Extreme ice storms
- evntexp_hail:** Hail storms

-----End Web pg -----

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 *this spring* as in *previous springs*? [RANDOMIZED TABLE]

- evntfreq_wind:** Extreme high winds
- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

- evntfreq_rain:** Extreme rainstorms
- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

- evntfreq_torn:** Tornadoes
- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

- evntfreq_fire:** Wildfires
- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfreq_ethqk: Earthquakes

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfreq_cold: Extreme cold temperatures

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfreq_heat: Extreme hot temperatures

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfreq_snow: Extreme snowstorms

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfreq_ice: Extreme ice storms

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfreq_hail: Hail storms

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

-----End Web pg -----

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 few springs* as they have *this spring*?

[There is no right answer; please provide your best guess.][RANDOMIZED TABLE]

evntfutfreq_wind: Extreme high winds

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_drgh: Drought

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_rain: Extreme rainstorms

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_flood: Floods

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_torn: Tornadoes

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_fire: Wildfires

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_ethqk: Earthquakes

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_cold: Extreme cold temperatures

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_heat: Extreme hot temperatures

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_snow: Extreme snowstorms

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_ice: Extreme ice storms

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

evntfutfreq_hail: Hail storms

- 3 - More frequently
- 2 - With about the same frequency
- 1 - Less frequently

-----End Web pg -----

As you may know, some parts of Oklahoma have experienced an increase in earthquakes over the last few years.

ethqk_risk: On a scale from zero to ten, where zero means *no risk* and ten means *extreme risk*, how much risk do you think earthquakes pose to people and property in Oklahoma?

- 0 - No risk
- 1

2
3
4
5
6
7
8
9

10 - Extreme risk

ethqk_cause: In your view, what is the *primary* cause of the increase in earthquakes that some parts of Oklahoma have experienced over the last few years?

[RANDOMIZE ORDER of 1 and 2]

- 1 - Natural shifts of tectonic plates along fault lines
- 2 - Human activities such as natural gas extraction and/or wastewater disposal
- 3 - Don't know

ethqk_risk_mgmt: On a scale from zero to ten, where zero means *not at all involved* and ten means *extremely involved*, how involved do you think the State of Oklahoma should be in [**ethqk_risk_rand:** “managing,” “regulating”] the risks associated with earthquakes? [RANDOM ASSIGNMENT OF WORD]

0 - Not at all involved

1
2
3
4
5
6
7
8
9

10 - Extremely involved

ethqk_risk_fed_mgmt: On a scale from zero to ten, where zero means *not at all involved* and ten means *extremely involved*, how involved do you think the United States government should be in

[**ethqk_risk_rand:** “managing,” “regulating”] the risks associated with earthquakes? [RANDOM ASSIGNMENT OF WORD]

0 - Not at all involved

1
2
3
4
5
6
7
8
9

10 - Extremely involved

-----End Web pg -----

Now, we have a few questions about TORNADO WARNINGS that are issued by the National Weather Service when a tornado is imminent or occurring.

As you may recall, a number of severe thunderstorms and tornadoes occurred in Oklahoma *this spring* (March, April, and May 2016). Some of these storms may have impacted the area around where you live. We would like to know if you **did** or **did not** receive a TORNADO WARNING when these storms occurred.

In this section of the survey, **accuracy is very important**. Government officials might consider your responses when making decisions about how to issue warnings. You may not remember something; if that is the case, please select **I don't remember**.

-----End Web pg -----

[SHOW ONLY IF **storm_system** = 1]

On **FRIDAY, April 29th**, a system of severe thunderstorms moved through Oklahoma. The storm system produced tornadoes in a number of cities and towns, including Ninnekah, Fletcher, Elgin, and Cyril, OK. The system also produced large hail and high winds that impacted a large portion of the state, including parts of Norman and Oklahoma City. Most of the damage caused by this event occurred between 2:00 PM and 6:00 PM. SOME of the counties that were affected by tornadoes, high winds, or hail include Caddo, Seminole, Jefferson, Tillman, Macintosh, Grant, Le Flore, Kiowa, Stephens, Kay, Jackson, McClain, Grady, Comanche, Garfield, Hughes, Cherokee, Wagoner, Garvin, Cleveland, and Pottawatomie *You might remember this storm because it happened a few days AFTER the storm on TUESDAY, April 27th, which (though significant) did not cause the amount of damage that some meteorologists predicted.*

[MAP 1]

-----End Web pg -----

[SHOW ONLY IF **storm_system** = 2]

On **MONDAY, May 9th**, a system of severe thunderstorms moved through Oklahoma. The storm system produced strong tornadoes in a number of cities and towns, including Katie, Wynnewood, Davis, Sulphur, Roff, Bromide, and Boswell, OK. The system also

produced weaker tornadoes, large hail, and high winds that impacted a large portion of the state, including parts of Norman, Oklahoma City, and Stillwater. Most of the damage caused by this event occurred between 4:00 PM and 8:00 PM. SOME of the counties that were affected by tornadoes, high winds, or hail include “Payne, Coal, Murray, Jefferson, Choctaw, Harper, Grant, Oklahoma, Le Flore, Nowata, Atoka, Noble, Alfalfa, Love, Bryan, Kay, Ottawa, Washington, Garfield, Logan, Osage, Cherokee, Garvin, Cleveland, Carter, Johnston, and Pawnee.

[MAP 2]

-----End Web pg -----

storm_mem: In the sections that follow, we ask you a number of questions about the storm system on [IF **storm_system** = 1, “**FRIDAY, April 29th**”; IF **storm_system** = 2, “**MONDAY, May 9th**”], including questions about the hazards that might have occurred in your area (i.e., hail, high winds, tornadoes), the warning messages that you might have received, and where you received this information. Do you remember enough about *this storm system* to answer these questions?

- 0 - No
- 1 - Yes

-----End Web pg -----

[SHOW ONLY IF **storm_mem** = 1]
Did the storm system cause any of the following hazards in the area around where you live (by this we mean within about ten miles of your residence)? Please indicate all that apply. [1 = SELECTED]

- storm_rain:** Heavy Rain
- storm_flood:** Floods
- storm_wind:** High Winds
- storm_hail:** Hail
- storm_torn:** Tornadoes

-----End Web pg -----

[SHOW PAGE ONLY IF **storm_rain, storm_flood, storm_wind, storm_hail, or storm_torn** = 1]
storm_area: When the hazard(s) occurred, were you in the area around where you live?

- 0 - No
- 1 - Yes

storm_loc: Where were you when the hazard(s) occurred?

- 1 - At home
- 2 - At work

- 3 - At school
- 4 - At a business (such as a store or restaurant)
- 5 - In a vehicle (such as a car, truck, or bus)
- 6 - Somewhere else (please specify)
- 7 - I don't remember

storm_loc_specify: [VERBATIM]

-----End Web pg -----

[SHOW ONLY IF **storm_area** = 1]
storm_rec_warn: Did you receive a TORNADO WARNING?

- 0 - No
- 1 - Yes
- 2 - I don't remember

-----End Web pg -----

[SHOW ONLY IF **storm_rec_warn** = 0 OR 1]
storm_rec_warn_cert: On a scale from zero to ten, where zero means *not at all certain* and ten means *completely certain*, how certain are you that you [IF **storm_rec_warn** = 0, “*did not*”; IF **storm_rec_warn** = 1, “*did*”] receive a warning?

- 0 - Not at all certain
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 - Completely certain

-----End Web pg -----

[SHOW ONLY IF **storm_rec_warn** = 1]
How did you receive the TORNADO warning? Please indicate all that apply. [1 = SELECTED]

- storm_rec_brad:** Broadcast radio
- storm_rec_wxrad:** Weather radio (National Weather Service radio)
- storm_rec_tv:** Television
- storm_rec_siren:** Siren
- storm_rec_internet:** Internet sources (such as news or weather websites)
- storm_rec_socmed:** Social media such as Twitter or Facebook
- storm_rec_cell:** Cell phone application or automated text messages
- storm_rec_ntwk:** Word-of-mouth (including telephone or text messages, email, etc.) from family, friends, neighbors, employers, co-workers, etc.

storm_rec_othr: Other sources (please specify)
storm_rec_othr_specify: [VERBATIM]
storm_rec_dk: I don't remember

-----End Web pg -----

storm_first_warn: Of the options you selected, how did you FIRST receive the TORNADO warning? [DROPDOWN BOX THAT INCLUDES ONLY THE OPTIONS SELECTED ON PREVIOUS PAGE; DO NOT SHOW PAGE UNLESS AT LEAST 2 OPTIONS ON PREVIOUS PAGE ARE SELECTED]

-----End Web pg -----

[SHOW ONLY IF **storm_mem** = 1 & **storm_rain**, **storm_flood**, **storm_wind**, **storm_hail**, or **storm_torn** = 1]

Next, we are interested in who you talked to about the storm system on [IF **storm_system** = 1, "FRIDAY, April 29th"; IF **storm_system** = 2, "MONDAY, May 9th"]. We are particularly interested in your communication with people you know personally but who do not live in your house (neighbors, co-workers, extended family members, etc.).

During or immediately before the hazard(s) occurred in your local area, did you use any of the following means to tell someone else about the storm? If so, how many people? [DROP DOWN CHOICES FOR EACH PROMPT: "No", "1 person", "2 to 3 people", "4 to 6 people", "7 to 12 people", "More than 13 people", "I don't remember"]

send_conv_1: In-person conversation
send_phone_1: Phone call
send_email_1: E-mail
send_text_1: Text message

During or immediately before the hazard(s) occurred in your local area, did someone else use any of the following means to tell you about the storm? If so, how many people? [DROP DOWN CHOICES FOR EACH PROMPT: "No", "1 person", "2 to 3 people", "4 to 6 people", "7 to 12 people", "More than 13 people", "I don't remember"]

receive_conv_1: In-person conversation
receive_phone_1: Phone call
receive_email_1: E-mail
receive_text_1: Text message

-----End Web pg -----

[SHOW ONLY IF **storm_mem** = 1 & **storm_rain**, **storm_flood**, **storm_wind**, **storm_hail**, or **storm_torn** = 1]

Did you post information about the storm system on [IF **storm_system** = 1, "FRIDAY, April 29th"; IF **storm_system** = 2, "MONDAY, May 9th"] to any of the following social media sites? Please indicate all that apply. [TABLE FORMAT, CHECK ALL THAT APPLY; 1 INDICATES SELECTED.]

Facebook

post_fb_no_1: No
post_fb_yesbf_1: Yes, before the storm
post_fb_yesdur_1: Yes, during the storm
post_fb_yesaft_1: Yes, after the storm
post_fb_idr_1: I don't remember

Twitter

post_tw_no_1: No
post_tw_yesbf_1: Yes, before the storm
post_tw_yesdur_1: Yes, during the storm
post_tw_yesaft_1: Yes, after the storm
post_tw_idr_1: I don't remember

Instagram

post_in_no_1: No
post_in_yesbf_1: Yes, before the storm
post_in_yesdur_1: Yes, during the storm
post_in_yesaft_1: Yes, after the storm
post_in_idr_1: I don't remember

post_othr_spec_1: [VERBATIM]
post_othr_no_1: No
post_othr_yesbf_1: Yes, before the storm
post_othr_yesdur_1: Yes, during the storm
post_othr_yesaft_1: Yes, after the storm
post_othr_idr_1: I don't remember

Did you see information about the storm system on [IF **storm_system** = 1, "FRIDAY, April 29th"; IF **storm_system** = 2, "MONDAY, May 9th"] on any of the following social media sites? Please indicate all that apply. [TABLE FORMAT, CHECK ALL THAT APPLY; 1 INDICATES SELECTED.]

Facebook

see_fb_no_1: No
see_fb_yesbf_1: Yes, before the storm
see_fb_yesdur_1: Yes, during the storm
see_fb_yesaft_1: Yes, after the storm
see_fb_idr_1: I don't remember

Twitter

see_tw_no_1: No
see_tw_yesbf_1: Yes, before the storm
see_tw_yesdur_1: Yes, during the storm
see_tw_yesaft_1: Yes, after the storm
see_tw_idr_1: I don't remember

Instagram

see_in_no_1: No

see_in_yesbf_1: Yes, before the storm
see_in_yesdur_1: Yes, during the storm
see_in_yesaft_1: Yes, after the storm
see_in_idr_1: I don't remember

see_othr_spec_1: [VERBATIM]
see_othr_no_1: No
see_othr_yesbf_1: Yes, before the storm
see_othr_yesdur_1: Yes, during the storm
see_othr_yesaft_1: Yes, after the storm
see_othr_idr_1: I don't remember

-----End Web pg -----

[SHOW ONLY IF **storm_mem** = 0 OR **storm_rain**,
storm_flood, **storm_wind**, **storm_hail**, or
storm_torn = 0]

Now, we are interested in who you talk to about severe weather anytime it occurs. We are particularly interested in your communication with people you know personally but who do not live in your house (neighbors, co-workers, extended family members, etc.).

This spring (March, April, May 2016), did **you** use any of the following means to tell **someone else** about a severe weather hazard during or immediately before it occurred in your local area? If so, how many people? [DROP DOWN CHOICES FOR EACH PROMPT: "No", "1 person", "2 to 3 people", "4 to 6 people", "7 to 12 people", "More than 13 people", "I don't remember"]

send_conv_2: In-person conversation
send_phone_2: Phone call
send_email_2: E-mail
send_text_2: Text message

This spring, did **someone else** use any of the following means to tell **you** about a severe weather hazard during or immediately before it occurred in your local area? If so, how many people? [DROP DOWN CHOICES FOR EACH PROMPT: "No", "1 person", "2 to 3 people", "4 to 6 people", "7 to 12 people", "More than 13 people", "I don't remember"]

receive_conv_2: In-person conversation
receive_phone_2: Phone call
receive_email_2: E-mail
receive_text_2: Text message

-----End Web pg -----

[SHOW ONLY IF **storm_mem** = 0 OR **storm_rain**,
storm_flood, **storm_wind**, **storm_hail**, or
storm_torn = 0]

This spring, did you **post** information about a severe weather hazard to any of the following social media

sites? Please indicate all that apply. [TABLE FORMAT, CHECK ALL THAT APPLY; 1 INDICATES SELECTED.]

Facebook

post_fb_no_2: No
post_fb_yesbf_2: Yes, before the storm
post_fb_yesdur_2: Yes, during the storm
post_fb_yesaft_2: Yes, after the storm
post_fb_idr_2: I don't remember

Twitter

post_tw_no_2: No
post_tw_yesbf_2: Yes, before the storm
post_tw_yesdur_2: Yes, during the storm
post_tw_yesaft_2: Yes, after the storm
post_tw_idr_2: I don't remember

Instagram

post_in_no_2: No
post_in_yesbf_2: Yes, before the storm
post_in_yesdur_2: Yes, during the storm
post_in_yesaft_2: Yes, after the storm
post_in_idr_2: I don't remember

post_othr_spec_2: [VERBATIM]
post_othr_no_2: No
post_othr_yesbf_2: Yes, before the storm
post_othr_yesdur_2: Yes, during the storm
post_othr_yesaft_2: Yes, after the storm
post_othr_idr_2: I don't remember

This spring, did you **see** information about a severe weather hazard on any of the following social media sites? Please indicate all that apply. [TABLE FORMAT, CHECK ALL THAT APPLY; 1 INDICATES SELECTED.]

Facebook

see_fb_no_2: No
see_fb_yesbf_2: Yes, before the storm
see_fb_yesdur_2: Yes, during the storm
see_fb_yesaft_2: Yes, after the storm
see_fb_idr_2: I don't remember

Twitter

see_tw_no_2: No
see_tw_yesbf_2: Yes, before the storm
see_tw_yesdur_2: Yes, during the storm
see_tw_yesaft_2: Yes, after the storm
see_tw_idr_2: I don't remember

Instagram

see_in_no_2: No
see_in_yesbf_2: Yes, before the storm
see_in_yesdur_2: Yes, during the storm
see_in_yesaft_2: Yes, after the storm
see_in_idr_2: I don't remember

see_othr_spec_2: [VERBATIM]
see_othr_no_2: No
see_othr_yesbf_2: Yes, before the storm
see_othr_yesdur_2: Yes, during the storm
see_othr_yesaft_2: Yes, after the storm
see_othr_idr_2: I don't remember

-----End Web pg -----

We would like you to think about the different types of warnings that government agencies issue for dangerous natural hazards such as severe thunderstorms, tornadoes, floods, heatwaves, blizzards, hurricanes, or fires. Please tell us how strongly you agree with the following statements: [RANDOMIZED TABLE FORMAT WITH THE FOLLOWING CATEGORIES: "Strongly disagree", "Disagree", "Somewhat disagree", "Neither agree nor disagree", "Somewhat agree", "Agree", "Strongly agree"]

rec_all: I receive all important weather and hazard alerts issued in my area.
rec_nev: I never miss important weather or hazard warnings issued for my area.
rec_know: I usually know about weather and hazard alerts as soon as they are issued.
rec_subscribe: I subscribe to a service that contacts me when there is a weather or hazard warning in my area.
rec_miss: I sometimes miss important weather and hazard warnings.

-----End Web pg -----

The next few questions concern water and energy use at your residence.

[SHOW QUESTION ONLY IF wtr_billfreq IS OTHER THAN 4; REQUIRED NUMERIC, DECIMALS OK]

What was the approximate total cost (charges for water plus taxes and other fees) of your last water bill?

wtr_bill_totcost: \$ [VERBATIM]
wtr_bill_dk: Don't know [CHECKBOX: 1 INDICATES SELECTED]

wtr_use: As best you can recall, did you use more, less, or about the same amount of water at your residence *this spring* as you did *last spring*?
3 - More
2 - About the same amount
1 - Less

wtr_short: Over the *past few months* (March, April and May 2016), did you experience any water shortages or water use restrictions for your residence?
0 - No
1 - Yes

-----End Web pg -----

Do you (or others in your household) maintain any of the following at your residence? Please indicate all that apply.

mntain_lawn – Residential lawn
mntain_flwr – Flower garden
mntain_veg – Fruit and/or vegetable garden

-----End Web pg -----

[SHOW PAGE ONLY IF AT LEAST ONE BOX IS CHECKED FOR mntain_lawn, mntain_flwr, or mntain_veg]

wtr_freq: During *this spring*, about how frequently did you (or someone else in your household) water your residential lawn or family garden?
1 – Never
2 - Less than once a month
3 - Once a month
4 - Once a week
5 - A few times a week
6 - Daily

-----End Web pg -----

Were any of the following steps taken to decrease the amount of water used at your residence *this spring*? Please indicate all that apply. [RANDOMIZED LIST (EXCEPT "other"): 1 INDICATES SELECTED]

wtr_steps_flush: Installed a low-volume or low-flush toilet
wtr_steps_flow: Installed a low-volume or low-flow showerhead
wtr_steps_bath: Took shorter or less frequent baths or showers
wtr_steps_lawn: Watered lawn or garden less frequently
wtr_steps_car: Washed car less frequently
wtr_steps_leaks: Repaired leaks
wtr_steps_ldry: Did laundry less frequently
wtr_steps_othr: Other (please specify)
wtr_steps_spec: [VERBATIM]

-----End Web pg -----

wtr_qual: Using a scale of excellent, good, fair or poor, how would you rate the overall quality of the drinking water at your residence?

- 4 - Excellent
- 3 - Good
- 2 - Fair
- 1 - Poor

wtr_safe: On a scale from zero to ten, where zero means *not at all safe* and ten means *completely safe*, how would you rate the safety of the drinking water at your residence for your health?

- 0 - Not at all safe
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 - Completely safe

-----End Web pg -----

wtr_comm: In your view, are the supplies of water in your region of Oklahoma adequate to meet the needs of your community over the *next 25 years*?

- 5 - Definitely yes
- 4 - Probably yes
- 3 - Unsure
- 2 - Probably no
- 1 - Definitely no

wtr_farm: In your view, are the supplies of water in your region of Oklahoma adequate to meet the needs of farmers and ranchers over the *next 25 years*?

- 5 - Definitely yes
- 4 - Probably yes
- 3 - Unsure
- 2 - Probably no
- 1 - Definitely no

-----End Web pg -----

The next set of questions concern energy use at your residence.

Which of these energy sources did you use at your residence *this spring* (March, April and May 2016)? Please indicate all that apply.

- enrgy_sourc_elec:** Electricity
- enrgy_sourc_natgas:** Natural Gas
- enrgy_sourc_prop:** Propane or Liquefied Petroleum Gas
- enrgy_sourc_wood:** Wood
- enrgy_sourc_geo:** Geothermal
- enrgy_sourc_othr:** Other (please specify)

enrgy_sourc_othr_spec: [VERBATIM]

-----End Web pg -----

[THIS PAGE ONLY DISPLAYED IF **enrgy_sourc_elec** IS SELECTED]

What was the approximate total cost (including taxes and other fees) of your last electricity bill? [REQUIRED NUMERIC, DECIMALS OK]

elec_bill_totcost: \$ [VERBATIM]
elec_bill_dk: Don't know/Not Applicable [CHECK-BOX: 1 INDICATES SELECTED]

elec_use: As best you can recall, did you use more, less, or about the same amount of electricity at your residence *this spring* as *last spring*?

- 3 - More
- 2 - About the same amount
- 1 - Less

elec_out: During *this spring*, did you experience any electricity outages at your residence?

- 0 - No
- 1 - Yes

-----End Web pg -----

[THIS PAGE ONLY DISPLAYED IF **enrgy_sourc_natgas** IS SELECTED]

What was the approximate total cost (including taxes and other fees) of your last natural gas bill? [REQUIRED NUMERIC, DECIMALS OK]

gas_bill_totcost: \$ [VERBATIM]
gas_bill_dk: Don't know/Not Applicable [CHECK-BOX: 1 INDICATES SELECTED]

gas_use: As best you can recall, did you use more, less, or about the same amount of natural gas at your residence *this spring* as *last spring*?

- 3 - More
- 2 - About the same
- 1 - Less

-----End Web pg -----

Were any of the following steps taken to decrease the amount of energy used at your residence *this spring*? Please indicate all that apply. [RANDOMIZED LIST (EXCEPT "other"): 1 INDICATES SELECTED]

- enrgy_steps_lghts:** Turned lights off
- enrgy_steps_heat:** Turned heat down/off
- enrgy_steps_ac:** Turned air conditioning down/off
- enrgy_steps_savappl:** Installed energy saving appliances

enrgy_steps_unplug: Unplugged appliances 4
enrgy_steps_insul: Added insulation 5
enrgy_steps_savdoor: Installed energy saving 6
doors/windows 7
enrgy_steps_bulbs: Installed energy saving light 8
bulbs 9
enrgy_steps_othr: Other (please specify) 10 - Extremely Concerned
enrgy_steps_othr_spec: [VERBATIM]

-----End Web pg -----

The next several questions are about important issues facing policy makers and the people of Oklahoma today.

For each of the following issues, please rate your level of concern using a scale from zero to ten, where zero means you are *not at all concerned* and ten means you are *extremely concerned*. How concerned are you about each of the following? [RANDOMIZED TABLE] 1
2
3
4
5
6
7
8
9
10 - Extremely Concerned

cnern_secure: Threats to the security of people in Oklahoma, including crime and terrorism 0 - Not at all Concerned
1
2
3
4
5
6
7
8
9
10 - Extremely Concerned

cnern_health: The delivery and cost of healthcare in Oklahoma 0 - Not at all Concerned
1
2
3
4
5
6
7
8
9
10 - Extremely Concerned

cnern_energ: The availability and cost of energy in Oklahoma 0 - Not at all Concerned
1
2
3

cnern_trns: The cost of transportation fuel in Oklahoma, such as gasoline and diesel 0 - Not at all Concerned

1
2
3
4
5
6
7
8
9
10 - Extremely Concerned

cnern_tax: The cost of state and local taxes in Oklahoma 0 - Not at all Concerned
1
2
3
4
5
6
7
8
9
10 - Extremely Concerned

cnern_edu: The cost and quality of education in Oklahoma 0 - Not at all Concerned
1
2
3
4
5
6
7
8
9
10 - Extremely Concerned

cnern_econ: The state of the Oklahoma economy, including jobs and inflation 0 - Not at all Concerned
1
2
3

4
5
6
7
8
9
10 - Extremely Concerned

cnern_natres: The preservation of natural resources in Oklahoma

0 - Not at all Concerned

1
2
3
4
5
6
7
8
9
10 - Extremely Concerned

-----End Web pg -----

As you may know, the issue of global climate change has been the subject of public discussion over the last few years.

glbcc: In your view, are greenhouse gases, such as those resulting from the combustion of coal, oil, natural gas, and other materials, causing average global temperatures to rise?

0 – No
1 – Yes

-----End Web pg -----

glbcc_cert: On a scale from zero to ten, where zero means *not at all certain* and ten means *completely certain*, how certain are you that greenhouse gases are/are not [AUTOFILL “are” IF glbcc = 1; AUTOFILL “are not” IF glbcc = 0] causing average global temperatures to rise?

0 - Not at all certain
1
2
3
4
5
6
7
8
9
10 - Completely certain

glbcc_risk: 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
1
2
3
4
5
6
7
8
9
10 - Extreme risk

glbwrn_ok: In your view, is global warming causing the weather patterns in Oklahoma to change?

0 - No
1- Yes
2 - Don’t know

-----End Web pg -----

glbwrn_risk_mgmt: On a scale from zero to ten, where zero means *not at all involved* and ten means *extremely involved*, how involved do you think the State of Oklahoma should be in [glbwrn_risk_rand: RANDOMIZE ASSIGNMENT OF WORD managing OR regulating] the risks associated with global warming?

0 – Not at all involved
1
2
3
4
5
6
7
8
9
10 – Extremely involved

-----End Web pg -----

glbwrn_risk_fed_mgmt: On a scale from zero to ten, where zero means *not at all involved* and ten means *extremely involved*, how involved do you think the United States government should be in [glbwrn_risk_rand: RANDOMIZE ASSIGNMENT OF WORD managing OR regulating] the risks associated with global warming?

0 – Not at all involved
1
2
3

- 4
- 5
- 6
- 7
- 8
- 9
- 10 – Extremely involved

-----End Web pg -----

Now we would like you to think about last year (2015).

hot2015: As you may know, scientists recently reported that 2015 was the Earth’s warmest year on record. Had you heard about these reports before now, or not?

- 0 - No, have not heard
- 1 - Yes, have heard
- 2 - No opinion

hot2015acc: Just your best guess, do you generally believe these reports are accurate or not accurate?

- 0 - Not accurate
- 1 - Accurate
- 2 - No opinion

hot2015_why: Assuming these reports are accurate, do you think the record temperatures in 2015 were mainly due to [**hot2015_rand:** RANDOMIZE ORDER: “human-caused climate change” or “natural changes in the Earth’s temperatures”]? [MATCH PRESENTATION ORDER OF RESPONSE 1 AND 2 TO THE ORDER OF THE QUESTION WORDING]

- 1 – Human-caused climate change
- 2 - Natural changes
- 3 - No opinion

[LEAVE A LITTLE EXTRA SPACE BEFORE PRESENTING OPTION 4]

- 4 - Reports are not accurate

-----End Web pg -----

The next few questions are about your life, your health, and your neighborhood.

time_outside: How much time would you say you spent outdoors on a typical spring day?

- 0 - No time
- 1 - Less than 1 hour per day
- 2 - 1–2 hours per day
- 3 - 2–4 hours per day
- 4 - More than 4 hours per day

-----End Web pg -----

[SHOW PAGE ONLY IF **time_outside** = 1, 2, 3, OR 4]

spent_outside: Is this time spent outdoors for work, for recreation, or both?

- 1 - Work
- 2 - Recreation
- 3 - Both

cmpr_time_outside: Overall, would you say that you spent more, less, or about the same amount of time outdoors *this spring* (March, April and May 2016) as compared to *previous springs*?

- 3 - More time
- 2 - About the same amount of time
- 1 - Less time

-----End Web pg -----

lifesat: Using a scale where 0 means you are *completely dissatisfied* and 10 means you are *completely satisfied*, all things considered, how satisfied are you with your life as a whole these days?

- 0 – Completely dissatisfied
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 – Completely satisfied

hlth_status: In general, would you say your health is:

- 5 - Excellent
- 4 - Very Good
- 3 - Good
- 2 - Fair
- 1 - Poor

-----End Web pg -----

How frequently do you get information about the WEATHER from each of the following sources?

[DROP DOWN CHOICES FOR EACH PROMPT: “Several times a day”, “About once a day”, “Several times per week”, “About once per week”, “Less than once per week”, “Never”]

wthr_info_paper: Newspapers

wthr_info_web: Non-government Internet websites (such as weather.com)

wthr_info_govweb: Government sponsored Internet websites (such as noaa.gov, Oklahoma Mesonet)

wthr_info_loctv: Local TV (television) news
wthr_info_cabtv: Cable TV (television) news (such as The Weather Channel)
wthr_info_radio: Radio
wthr_info_fam: Family, friends or colleagues
wthr_info_soc: Social Media, such as Facebook and Twitter
wthr_info_phone: Cell phone applications or automated text messages
wthr_info_othr: Other (please specify)
wthr_info_othr_spec: [VERBATIM]

-----End Web pg -----

Scholars have learned that information often influences the way in which people answer survey questions. With this in mind, we are interested in whether you are taking the time to read the text that precedes each question. So, in order to demonstrate that you have read this text, please ignore the question below and click on the blue dot.

dot_answer: Which of the following devices do you typically use to answer surveys on the Internet?
1 - A computer
2 - A tablet (like an iPad or a Kindle)
3 - A smart phone (like an Android phone or iPhone)

-----End Web pg -----

Thank you very much for your participation in the Oklahoma Weather, Society and Government Survey! We greatly appreciate your time and attention. As a token of our appreciation, you will be receiving a \$10 gift card in the mail within the next few weeks.

confirm_zip: Zip: [AUTOFILL ZIP; REQUIRED 5-DIGIT NUMERIC]

-----End Web pg -----

NOTES: This dataset includes the following that do *not* correspond with questions on the instrument:

userid: randomly generated respondent identifier; consistent across waves

wave_id: wave id

click_bluetdot: 1 if participant clicked blue dot instead of responding to dot_answer

begin_datetime: date/time respondent started the survey (Unix time)

end_datetime: date/time respondent completed the survey (Unix time)

time_taken: time between survey commencement and completion (minutes)

is_statewide: 1 if participant is in the statewide sample

is_kiamichi: 1 if participant lives within the Kiamichi watershed study region

is_payne: 1 if participant lives within the Payne Co./Cimarron watershed study region

is_washita: 1 if participant lives within the Washita watershed study region

is_canadian: 1 if participant lives within the North Canadian watershed study region

is_okcity: 1 if participant lives within the Oklahoma City watershed study region