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Nonmetropolitan Nebraskans' Opinions about Water, Climate, and Energy: 2022 Nebraska Rural Poll Results

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NEBRASKA RURAL POLL

A Research Report

Nonmetropolitan Nebraskans' Opinions about Water, Climate, and Energy

2022 Nebraska Rural Poll Results

Rebecca Vogt Heather Akin Cheryl Burkhart-Kriesel Bradley Lubben L.J. McElravy Timothy Meyer Steve Schulz Amanda Tupper





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All of the research reports detailing Nebraska Rural Poll results are located on its webpage at http://ruralpoll.unl.edu

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Executive Summary

Water is an important resource in Nebraska. Most of the drinking water in the state comes from groundwater sources. Public water sources are required to test their water to ensure it is safe. However, private wells are not subject to any safety or quality standards. Given that, what are the main sources of home tap water for rural Nebraskans? Do they test or treat their water? How concerned are they about water in general? Extreme weather events have also impacted Nebraska in recent years. The ongoing drought as well as flooding in 2019 have affected many Nebraskans. How concerned are rural Nebraskans about extreme weather events? What are their opinions about global climate change? What energy sources do they think Nebraska should invest in? This paper provides a detailed analysis of these questions.

This report details 1,105 responses to the 2022 Nebraska Rural Poll, the 27th annual effort to understand rural Nebraskans' perceptions. Respondents were asked a series of questions about natural resources. Some comparisons are made to previous years when similar questions were asked. Comparisons are also made among different respondent subgroups, that is, comparisons by age, occupation, region, etc. Based on these analyses, some key findings emerged:

- Most rural Nebraskans receive their home tap water from city water or municipal water systems. Just over two-thirds (68%) of rural Nebraskans receive their drinking water from a municipal system. One-quarter (25%) have private well water and seven percent are on a rural water system.
- Many rural Nebraskans have tested their home tap water for nitrates. However, a similar proportion indicated they have not tested their water or are unsure. Just over three in ten have tested their water for nitrates. Just under one-quarter have tested their water for E.coli, lead and hardness.
 - ✓ Persons with higher household incomes are more likely than persons with lower incomes to have tested their home water for each of the items listed. As an example, almost four in ten persons with household incomes of \$100,000 or more have tested their water for nitrates, compared to just over two in ten persons with household incomes under \$40,000. Persons with the lowest household incomes are more likely than persons with higher incomes to be unsure if their water has been tested, with 44 percent unsure if their water has been tested.
- Most rural Nebraskans do not treat their home tap water before drinking it. Just under six in ten rural Nebraskans do not treat their home tap water. Just under two in ten treat their home tap water using either a carbon filter or reverse osmosis.
 - ✓ Persons living in or near the smallest communities are more likely than persons living in or near larger communities to not treat their home tap water. Just over seven in ten persons living in or near communities with populations under 500 (72%) do not treat their home water, compared to 45 percent of persons living in or near communities with populations ranging from 5,000 to 9,999.

- **Rural Nebraskans have mixed opinions about various water problems.** At least three in ten are concerned or very concerned about the following: contaminants in their water supply (34%), water quality affecting their or their family's health (34%), water quality affecting wildlife or environment (33%), water quality affecting the cost of water bills (32%), and water will be too polluted (30%). However, either the same or larger proportions indicate they are not concerned or not very concerned about these same items.
 - Panhandle residents are the regional group most likely to be concerned that we will not have enough water. Just over four in ten Panhandle residents are concerned about not having enough water, compared to approximately one-quarter of the residents of the other regions of the state.
- **Rural Nebraskans' concerns about severe weather events have fluctuated over time.** Concerns over extreme temperatures and more severe droughts declined between 2015 and 2020 but then increased again this year. The level of concern for these weather events this year is the highest over the three periods. Concerns about more severe droughts declined from 48 percent in 2015 to 21 percent in 2020 before increasing to 55 percent this year. However, when asked about more frequent extreme rains or floods, the level of concern was highest in 2020. Just under three in ten were concerned about extreme rains or floods in 2020, compared to just under one-quarter this year and 15 percent in 2015. In 2020, the flooding of 2019 was fresh in respondents' minds. In 2015 parts of the state had been in drought the previous year and in 2022 most of the state is experiencing drought. These likely account for the differing levels of concerns between those years.
- This year, at least one-half of rural Nebraskans are concerned or very concerned about more severe droughts or dry periods (55%) and more extreme summer temperatures (50%). Approximately four in ten are concerned about more frequent severe storms or more extreme winter temperatures. Just under one-quarter are concerned about more frequent extreme rains or floods.
 - ✓ Panhandle residents are more likely than residents of other regions to be concerned about more severe droughts or dry periods and more extreme summer temperatures. Over three-quarters of Panhandle residents (76%) are concerned about more severe droughts, compared to approximately one-half of the residents of the Northeast, Southeast and South Central regions.
- *Rural Nebraskans are less likely to agree that we will learn to live with and adapt to climate change this year as they were in both 2013 and 2008.* Just over six in ten (63%) agree with the statement this year, compared to just over seven in ten respondents in both 2013 and 2008.
- This year, most rural Nebraskans agree that we will learn to live with and adapt to climate change and that we have a responsibility to future generations to reduce the effects of climate change. Just over six in ten (63%) of rural Nebraskans agree or strongly agree that we will learn to live with and adapt to climate change. Just under six in ten (59%) agree that we have a responsibility to future generations to reduce the effects of climate change.
- This year, a slight majority of rural Nebraskans agree that human activity is contributing to climate change. Just over one-half (52%) of rural Nebraskans agree with this statement.

- *Many rural Nebraskans agree that too much attention is paid to global climate change*. Just over four in ten (44%) agree that too much attention is paid to global climate change.
 - ✓ Persons with occupations in agriculture are more likely than persons with different occupations to agree that too much attention is paid to global climate change. Just under seven in ten persons with occupations in agriculture (69%) agree with that statement, compared to just under one-quarter of persons with food service or personal care occupations.
- Many rural Nebraskans favor proposals that use tax credits or taxing corporations based on the carbon emissions they produce. Opinions are mixed on tougher carbon emission standards and tougher fuel-efficiency standards. Many rural Nebraskans oppose tax credits for electric vehicles.
- *Rural Nebraskans are less supportive of additional investment in wind and solar energy than they were in 2015.* This year, less than one-half of rural Nebraskans favor more investment in wind energy, down from 75 percent in 2015. Similarly, 62 percent this year support more investment in solar energy, compared to 74 percent in 2015. The support for increased investment in hydroelectric energy is unchanged from 2015. Two sources of energy have more support for increased investment this year, nuclear and coal. In 2015, 24 percent felt there should be more investment in nuclear energy. That increased to 36 percent this year.

Introduction

Water is an important resource in Nebraska. Most of the drinking water in the state comes from groundwater sources. Public water sources are required to test their water to ensure it is safe. However, private wells are not subject to any safety or quality standards. Given that, what are the main sources of home tap water for rural Nebraskans? Do they test or treat their water? How concerned are they about water in general? Extreme weather events have also impacted Nebraska in recent years. The ongoing drought as well as flooding in 2019 have affected many Nebraskans. How concerned are rural Nebraskans about extreme weather events? What are their opinions about global climate change? What energy sources do they think Nebraska should invest in? This paper provides a detailed analysis of these questions.

This report details 1,105 responses to the 2022 Nebraska Rural Poll, the 27th annual effort to understand rural Nebraskans' perceptions. Respondents were asked a series of questions about natural resources.

Methodology and Respondent Profile

This study is based on 1,105 responses from Nebraskans living in 86 counties in the state.¹ A self-administered questionnaire was mailed in May and June to 6,102 randomly selected households. Metropolitan counties not included in the sample were Cass, Douglas, Lancaster, Sarpy, Saunders, Seward and Washington. The 14-page questionnaire included questions

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pertaining to well-being, community, natural resources, and the economy and employment. This paper reports only results from the natural resources section.

An 18% response rate was achieved using the total design method (Dillman, 1978). The sequence of steps used follow:

- 1. A pre-notification letter was sent requesting participation in the study.
- The questionnaire was mailed with an informal letter signed by the project manager approximately two weeks later.
- A reminder postcard was sent to those who had not yet responded approximately two weeks after the questionnaire had been sent.
- Those who had not yet responded within approximately 30 days of the original mailing were sent a replacement questionnaire.

Appendix Table 1 shows demographic data from this year's study and previous rural polls, as well as similar data based on the entire nonmetropolitan population of Nebraska (using the latest available data from the 2015 - 2019 American Community Survey). As can be seen from the table, there are some marked differences between some of the demographic variables in our sample compared to the Census data. Thus, we suggest the reader use caution in generalizing our data to all rural Nebraska. However, given the random sampling frame used for this survey, the acceptable percentage of responses, and the large number of respondents, we feel the data provide useful insights into opinions of rural Nebraskans on

¹ In the spring of 2013, the Grand Island area (Hall, Hamilton, Howard and Merrick Counties) was designated a metropolitan area. To facilitate comparisons from previous years, these four counties are still included in our sample. In addition, the Sioux City area metropolitan counties of Dixon and Dakota were added in 2014 because of a joint

Metro Poll being conducted by the University of Nebraska at Omaha to ensure all counties in the state were sampled. Although classified as metro, Dixon County is rural in nature. Dakota County is similar in many respects to other "micropolitan" counties the Rural Poll surveys.

the various issues presented in this report. The margin of error for this study is plus or minus three percent.

Since younger residents have typically been under-represented by survey respondents and older residents have been over-represented, weights were used to adjust the sample to match the age distribution in the nonmetropolitan counties in Nebraska (using U.S. Census figures from 2010).

The average age of respondents is 50 years. Sixty-six percent are married (Appendix Table 1) and 71 percent live within the city limits of a town or village. On average, respondents have lived in Nebraska 42 years and have lived in their current community 25 years. Fifty-six percent are living in or near towns or villages with populations less than 5,000. Ninety-eight percent have attained at least a high school diploma.

Twenty-one percent of the respondents report their 2021 approximate household income from all sources, before taxes, as below \$40,000. Sixty-three percent report incomes over \$60,000. Seventy-seven percent were employed in 2021 on a full-time, part-time, or seasonal basis.

Nineteen percent are retired. Thirty-eight percent of those employed reported working in a management, professional, or education occupation. Twelve percent indicated they were employed in agriculture.

Water

Water is an important resource in Nebraska. Most of the drinking water in the state comes from groundwater sources. Public water sources are required to test their water to ensure it is safe. However, private wells are not subject to any safety or quality standards.

Given that, respondents were asked the main source of their home tap water. They could select more than one answer. Most rural Nebraskans receive their home tap water from city water or municipal water systems. Just over two-thirds (68%) of rural Nebraskans receive their drinking water from a municipal system (Figure 1). One-quarter (25%) have private well water and seven percent are on a rural water system.

Differences in the sources of home tap water are examined by community size, region, and various individual attributes (Appendix Table 2). Persons living in or near the largest communities are more likely than persons living in or near smaller communities to have a city water system as the main source of their home tap water. Almost eight in ten persons living in or near communities with populations of 5,000 or more have a city water system as the main source of their home tap water, compared to less than one-half of persons living in or near communities with populations under 500. Conversely, persons living in or near the smallest communities are more likely than

Figure 1. Sources of Home Tap Water



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persons living in or near larger communities to have private well water. Just under four in ten persons living in or near the smallest communities (38%) have private well water, compared to less than two in ten persons living in or near the largest communities.

Persons living in both the North Central and Panhandle regions (see Appendix Figure 1 for the counties included in each region) are more likely than persons living in other regions of the state to have private well water. Approximately one-third of persons living in these two regions have a private well as the primary source of their home tap water, compared to less than two in ten persons living in the Southeast region of the state (Figure 2).

Persons living in both the Northeast and Southeast regions are more likely than persons living in other regions to have a rural water system as their primary source of their home tap water.

Persons with lower household incomes are more likely than persons with higher incomes to have a city water system as their primary source of their home water. Conversely, persons with higher incomes are more likely than persons with lower incomes to have private well water.





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In general, older persons are more likely than younger persons to have private well water. Married persons are the marital group most likely to have private well water and the *least* likely to have a city water system. Persons with occupations in agriculture are more likely than persons with different occupations to have private well water. Over six in ten persons with occupations in agriculture (61%) have private well water.

Respondents were next asked if their home tap water has been tested for various substances. Many rural Nebraskans have tested their home tap water for nitrates. Just over three in ten have tested their water for nitrates (Figure 3). However, a similar proportion indicated they have not tested their water or are unsure. Just under one-quarter have tested their water for E.coli, lead and hardness.

Testing done for home tap water was examined by community size, region, and various individual attributes (Appendix Table 3). Persons living in or near smaller communities are more likely than persons living in or near larger communities to have tested their home tap water for nitrates, E.coli and lead. Persons living in or near mid-sized communities are the group most likely to have tested for hardness.

Persons with higher household incomes are

Figure 3. Home Water Tests



more likely than persons with lower incomes to have tested their home water for each of the items listed. As an example, almost four in ten persons with household incomes of \$100,000 or more have tested their water for nitrates, compared to just over two in ten persons with household incomes under \$40,000. Persons with the lowest household incomes are more likely than persons with higher incomes to be unsure if their water has been tested, with 44 percent unsure if their water has been tested.

Older persons are more likely than younger persons to have tested their water for nitrates and hardness. Younger persons are more likely than older persons to say their water has not been tested.

Married persons are the marital group most likely to indicate their water has been tested for all the items listed. Both persons who are divorced/separated and persons who have never married are the groups most likely to say their water has not been tested.

Persons with lower education levels are more likely than persons with more education to be unsure if their water has been tested.

Persons with occupations in agriculture are the occupation group most likely to have tested their water for nitrates, hardness, and E.coli. Persons with healthcare support or public safety occupations are the group most likely to say their water has not been tested. Persons with construction, installation or maintenance occupations are the group most likely to be unsure if their water has been tested.

Next, respondents were asked if they treat their home tap water for safety before drinking it. Most rural Nebraskans do not treat their home tap water before drinking it. Just under six in ten rural Nebraskans do not treat their home

Figure 4. Treatments for Home Tap Water



tap water (Figure 4). Just under two in ten treat their home tap water using either a carbon filter or reverse osmosis.

Use of these various home water treatments are examined by community size, region, and various individual attributes (Appendix Table 4). Some differences are detected.

Persons living in or near the smallest communities are more likely than persons living in or near larger communities to not treat their home tap water. Just over seven in ten persons living in or near communities with populations under 500 (72%) do not treat their home water, compared to 45 percent of persons living in or near communities with populations ranging from 5,000 to 9,999 (Figure 5).

Figure 5. Do Not Treat Home Tap Water by Community Size



Panhandle residents are the regional group most likely to use boiling to treat their home tap water.

Persons with higher household incomes are more likely than persons with lower incomes to use whole house sediment filters, carbon filters and reverse osmosis to treat their home tap water.

Both widowed persons and persons who are divorced or separated are the groups most likely to not treat their home tap water. Married persons are the marital group most likely to use reverse osmosis. Persons with lower education levels are more likely than persons with more education to say they don't treat their home tap water.

Finally, respondents were asked to think about water more generally and indicate how concerned they are about various items being a problem in Nebraska in the coming years. Rural Nebraskans have mixed opinions about various water problems. At least three in ten are concerned or very concerned about the following: contaminants in their water supply (34%), water quality affecting their or their family's health (34%), water quality affecting wildlife or environment (33%), water quality affecting the cost of water bills (32%), and water will be too polluted (30%) (Figure 6). However, either the same or larger proportions indicate they are not concerned or not very concerned about these same items.

The levels of concern about these water issues are examined by community size, region, and various individual attributes (Appendix Table 5). Many differences exist.

Persons living in or near mid-sized communities are more likely than persons living in or near both smaller or larger communities to be concerned about contaminants in their water supply. Four in ten persons living in or near communities with populations ranging from 1,000 to 4,999 are concerned about this,



Figure 6. Concerns about Water Issues Becoming Problems in Nebraska in Coming Years

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compared to just over three in ten persons living in smaller or larger communities. Persons living in or near communities with populations ranging from 5,000 to 9,999 are the community size group most likely to be concerned about water quality affecting the cost of water bills.

Panhandle residents are the regional group most likely to be concerned that we will not have enough water. Just over four in ten Panhandle residents are concerned about not having enough water, compared to approximately one-quarter of the residents of the other regions of the state (Figure 7). They are also the group most likely to be concerned that water systems (infrastructure) will break down and that water quality will affect cost of water bills. Four in ten Panhandle residents are concerned about the prospect of failing water systems, compared to less than two in ten residents of both the North Central and South Central regions.

Both Panhandle residents and residents of the Southeast region are the regional groups most concerned that drinking water will be unsafe





and that water quality will affect water recreation. Approximately one-third of residents of these two regions are concerned about the possibility of unsafe drinking water, compared to just over two in ten residents of both the North Central and South Central regions.

Residents of the Northeast region are the regional group most likely to be concerned about water quality or contamination affecting their or their family's health. Just over four in ten Northeast region residents are concerned about this, compared to just over one-quarter of residents of both the North Central and South Central regions.

Persons with lower household incomes are more likely than persons with higher incomes to be concerned about the following: water will be too polluted, drinking water will be unsafe, contaminants in their water supply, water quality affecting their family's health, water quality affecting the cost of water bills, water quality affecting water recreation, and water quality affecting wildlife or environment. As an example, just over one-third of persons with the lowest household incomes are concerned that drinking water will be unsafe, compared to just over two in ten persons with the highest household incomes.

Older people are more likely than younger people to be concerned about the following: we will not have enough water, water will be too polluted, drinking water will be unsafe, water systems will break down, and water quality affecting the cost of water bills. One-third of persons age 65 and older are concerned that drinking water will be unsafe, compared to approximately two in ten persons under the age of 40.

Younger people are more likely than older

people to be concerned about contaminants in their water supply. Four in ten persons age 19 to 29 are concerned about contaminants in their water supply, compared to just over onequarter of persons age 30 to 39.

Females are more likely than males to be concerned about contaminants in their water supply, water quality affecting their family's health, and water quality affecting wildlife or environment. Just under four in ten females are concerned about water quality affecting their family's health, compared to just under three in ten males.

Married persons are more likely than other marital groups to be concerned about contaminants in their water supply. Persons who are divorced or separated are the marital group most likely to be concerned about water quality affecting cost of water bills and water quality affecting water recreation.

Persons with lower education levels are more likely than persons with higher education to be concerned that water will be too polluted, drinking water will be unsafe, contaminants in their water supply, water quality affecting their family's health, water quality affecting cost of water bills, water quality affecting water recreation, and water quality affecting wildlife or environment.

Persons with construction, installation or maintenance occupations are the occupation group most likely to be concerned that drinking water will be unsafe and that water quality will affect their family's health. Persons with production, transportation, or warehousing occupations are the group most likely to be concerned that water systems will break down, about contaminants in their water supply, and water quality affecting the cost of water bills.

Weather and Global Climate Change

Next, respondents were asked their level of concern about various weather events in their area. This question was also asked in both 2015 and 2020. Rural Nebraskans' concerns about severe weather events have fluctuated over time. Concerns over extreme temperatures and more severe droughts declined between 2015 and 2020 but then increased again this year. The level of concern for these weather events this year is the highest over the three periods. Concerns about more severe droughts declined from 48 percent in 2015 to 21 percent in 2020 before increasing to 55 percent this year (Figure 8). However, when asked about more frequent extreme rains or floods, the level of concern was highest in 2020. Just under three in ten were concerned about extreme rains or floods in 2020, compared to just under one-quarter this year and 15 percent in 2015.

Figure 8. Level of Concern about Weather Events in 2015, 2020, and 2022



In 2020, the flooding of 2019 was fresh in respondents' minds. In 2015 parts of the state had been in drought the previous year and in 2022 most of the state is experiencing drought. These likely account for the differing levels of concerns between those years.

This year, at least one-half of rural Nebraskans are concerned or very concerned about more severe droughts or dry periods (55%) and more extreme summer temperatures (50%) (Figure 9). Approximately four in ten are concerned about more frequent severe storms or more extreme winter temperatures. Just under onequarter are concerned about more frequent extreme rains or floods.

The level of concern with these events is examined by community size, region, and various individual attributes (Appendix Table 6). Persons living in or near communities with populations ranging from 5,000 to 9,999 are the community size group most concerned with more severe droughts or dry periods.

Panhandle residents are more likely than residents of other regions to be concerned about more severe droughts or dry periods and more extreme summer temperatures. Over three-quarters of Panhandle residents (76%) are concerned about more severe droughts, compared to approximately one-half of the residents of the Northeast, Southeast and South Central regions (Figure 10).

Residents of both the Panhandle and North Central regions are *less* likely than residents of other regions of the state to be concerned about more frequent extreme rains or floods.

Persons with lower household incomes are more likely than persons with higher incomes to be concerned about more extreme summer temperatures, more extreme winter temperatures, and more frequent severe storms.

Persons age 40 to 49 are the age group most concerned about more severe droughts and more extreme summer temperatures.

Females are more likely than males to be concerned about each of the weather events listed. For example, just over four in ten females are concerned about more extreme winter temperatures, compared to just under



Figure 9. Level of Concern about Weather Events

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Figure 10. Level of Concern with More Severe Droughts by Region

three in ten males.

Married persons are the marital group *least* concerned about more extreme rains or floods. Widowed persons are the group most likely to be concerned about more frequent severe storms.

When comparing levels of concern by education level, persons with less education are more likely than persons with more education to be concerned with both more extreme summer and winter temperatures as well as more frequent severe storms.

Persons with food service or personal care occupations are the occupation group most likely to be concerned about more frequent extreme rains or floods. Persons with sales or office support occupations join this group as most likely to be concerned with more extreme winter temperatures. Respondents were next given a set of statements about global climate change and were asked the extent to which they agree or disagree with each. Some of these statements were also included in both the 2008 and 2013 Nebraska Rural Polls.

Rural Nebraskans have similar opinions about human activity contributing to climate change and having a responsibility to reduce the effects of climate as they did in 2013. This year, just over one-half of rural Nebraskans agree that human activity is contributing to climate change. This is similar to the 54 percent that agreed with a slightly different statement (human activity, including industry and transportation, is a significant cause of climate change) in 2013 but less than the 65 percent agreeing with the latter statement in 2008 (Figure 11). While the statements are similar, the one used in 2008 and 2013 does add the qualifier that human activity is a *significant cause* of climate change. Similarly, just under six in ten rural Nebraskans this year agree with the statement "We have a responsibility to future generations to reduce the effects of climate change." The same proportion agreed with a similar statement (It is my responsibility to help reduce the impacts of global climate change) in 2013, but less than the 70 percent who agreed with the latter statement in 2008.

This year, rural Nebraskans are less likely to agree that we will learn to live with and adapt to climate change as they were in both 2013 and 2008. Just over six in ten (63%) agree with the statement this year, compared to just over seven in ten respondents in both 2013 and 2008.

When asked about being able to reduce global climate change, rural Nebraskans are more likely to agree this year than they were in 2013. Just under one-half of rural Nebraskans agree



Figure 11. Opinions about Climate Change: 2008, 2013 and 2022

that global climate change is something people can reduce. Just over four in ten (41%) of respondents in 2013 agreed that "global climate change is something people can *control*." This was down from the 51 percent agreeing in 2008.

This year, most rural Nebraskans agree that we will learn to live with and adapt to climate change and that we have a responsibility to future generations to reduce the effects of climate change. Just over six in ten (63%) of rural Nebraskans agree or strongly agree that we will learn to live with and adapt to climate change (Figure 12). Just under six in ten (59%) agree that we have a responsibility to future generations to reduce the effects of climate change.

A slight majority of rural Nebraskans agree that human activity is contributing to climate

change. Just over one-half (52%) of rural Nebraskans agree with this statement.

Just under one-half of rural Nebraskans agree that recent extreme weather is related to climate change and global climate change is something people can reduce. Just under onehalf (48%) agree that people can reduce global climate change and recent extreme weather is related to climate change (47%).

Many rural Nebraskans agree that too much attention is paid to global climate change and actions to address climate change will benefit the economy in the long run. Just over four in ten (44%) agree that too much attention is paid to global climate change and that actions to address climate change will benefit the economy in the long run (42%).

Many rural Nebraskans *disagree* that actions to





address climate change will benefit the economy in the short term. Over four in ten (43%) rural Nebraskans *disagree* with this statement while just over two in ten (22%) agree.

Opinions about global climate change are examined by community size, region, and various individual attributes (Appendix Table 7). Many differences exist.

Persons living in or near larger communities are more likely than persons living in or near smaller communities to agree that human activity is contributing to climate change. Over one-half of persons living in or near communities with populations of 1,000 or more agree with the statement, compared to just over four in ten persons living in or near smaller communities. persons to agree that human activity is contributing to climate change. Over seven in ten persons age 19 to 29 agree with the statement, compared to 38 percent of persons age 50 to 64.

Other groups most likely to agree that human activity is contributing to climate change include: females, persons who have never married, persons who are divorced or separated, persons with higher education levels, and persons with management, professional or education occupations.

Residents of the North Central region are the regional group *least* likely to agree that recent extreme weather is related to climate change. Just under four in ten (38%) of residents of the North Central region agree with this statement, compared to approximately one-half of the residents of the Northeast, South Central and Southeast regions.

Younger persons are more likely than older

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Persons with higher education levels are more likely than persons with less education to agree that recent extreme weather is related to climate change. Just over one-half (54%) of persons with at least a four-year college degree agree with the statement, compared to just over four in ten persons with some college education but less than a four-year degree.

Other groups most likely to agree that recent extreme weather is related to climate change include: persons living in or near larger communities, younger persons, females, widowed persons, persons who have never married, and persons with food service or personal care occupations.

Persons with occupations in agriculture are more likely than persons with different occupations to agree that too much attention is paid to global climate change. Just under seven in ten persons with occupations in agriculture (69%) agree with that statement, compared to just under one-quarter of persons with food service or personal care occupations (Figure 13).

Males are more likely than females to agree that too much attention is paid to global climate change. Just over one-half (53%) of males agree with this statement, compared to just over onethird (35%) of females.

Other groups most likely to agree that too much attention is paid to global climate change include: persons age 50 to 64, married persons, and persons with some college education but less than a four-year degree.

Persons with occupations in agriculture are more likely than persons with different occupations to agree that we will learn to live with and adapt to climate change. Just over three-quarters (76%) of persons with

Figure 13. Too Much Attention is Paid to Climate Change by Occupation



occupations in agriculture agree with this statement, compared to just over one-half (54%) of persons with production, transportation, or warehousing occupations.

Other groups most likely to agree that we will learn to live with and adapt to climate change include: persons with higher education levels, married persons, and males.

Persons age 65 and older are the age group most likely to agree that global climate change is something people can reduce. Just over onehalf (54%) of persons age 65 and older agree with that statement.

Other groups most likely to agree that global climate change is something people can reduce

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include: females, widowed persons, and persons with food service or personal care occupations.

Persons with higher education levels are more likely than persons with less education to agree that we have a responsibility to future generations to reduce the effects of climate change. Almost two-thirds (65%) of persons with at least a four-year college degree agree with this statement, compared to just over onehalf of persons with less education.

Other groups most likely to agree that we have a responsibility to reduce the effects of climate change include: persons age 19 to 29, females, and persons with management, professional, or education occupations.

The groups most likely to agree that actions to address climate change will benefit the economy in the short term include: persons living in or near larger communities, persons with lower household incomes, older persons, females, and widowed persons.

Persons living in or near the largest communities are more likely than persons living in or near smaller communities to agree that actions to address climate change will benefit the economy in the long term. Just over onehalf of persons living in or near the largest communities agree with this statement, compared to just over one-quarter of persons living in or near the smallest communities.

Other groups most likely to agree that actions to address climate change will benefit the economy in the long term include: persons with lower household incomes, the oldest persons, females, persons with higher education levels, and persons with management, professional, or education occupations.

Next, respondents were asked if they favor or oppose various proposals to reduce the effects of global climate change. Many rural Nebraskans favor proposals that use tax credits or taxing corporations based on the carbon emissions they produce. Opinions are mixed on tougher carbon emission standards and tougher fuel-efficiency standards. Many rural Nebraskans oppose tax credits for electric vehicles. One-half of rural Nebraskans favor or strongly favor tax credits for businesses to use clean energy (Figure 14). Many rural Nebraskans also favor taxing corporations based on the amount of carbon emissions they produce (43%) and tax credits to use technology that captures and stores carbon emissions (42%). Similar proportions both favor and oppose proposals for tougher restrictions on carbon emissions and tougher fuel-efficiency standards for cars and trucks. Almost one-half (49%) oppose tax credits for buying electric vehicles and trucks while just under three in ten (29%) favor this proposal.

Support for those proposals are examined by community size, region, and various individual attributes (Appendix Table 8). Many differences emerge.

Persons with higher education levels are more likely than persons with less education to favor tax credits for businesses to use clean energy. Almost six in ten (58%) of persons with at least a four-year college degree favor that proposal, compared to less than one-half of persons with less education. Persons with management, professional, or education occupations are the occupation group most likely to favor this proposal.



Figure 14. Support for Proposals to Reduce Effects of Global Climate Change

Females are more likely than males to support tax credits for buying electric vehicles. Just over one-third (34%) of females support this proposal, compared to less than one-quarter (23%) of males.

Other groups most likely to favor tax credits for buying electric vehicles include: persons living in or near larger communities, persons with higher household incomes, persons with the highest education levels, and persons with healthcare support or public safety occupations.

Persons living in or near larger communities are more likely than persons living in or near smaller communities to favor taxing corporations based on the amount of carbon emissions they produce. Other groups most likely to favor this proposal include: females, widowed persons, and persons who are divorced or separated. Panhandle residents are the regional group *least* likely to favor this proposal.

The groups most likely to favor tax credits to

use technology that captures and stores carbon emissions include: persons living in or near larger communities, younger persons, females, persons with the highest education levels, and persons with management, professional, or education occupations.

Older persons are more likely than younger persons to favor tougher restrictions on carbon emissions. Just under one-half (49%) of persons age 65 and older favor this proposal, compared to 27 percent of persons age 30 to 39.

Other groups most likely to favor this proposal include: persons living in or near larger communities, persons with lower household incomes, females, widowed persons, and persons with management, professional, or education occupations.

The groups most likely to favor tougher fuelefficiency standards for cars and trucks include: persons living in or near communities with populations ranging from 1,000 to 9,999; older people; females; and widowed persons.

Energy Sources

Finally, respondents were given a list of sources of electrical energy and were asked if they think Nebraska should invest less, more, or about the same in each over the next several years. This same question was asked in the 2015 Rural Poll.

Rural Nebraskans are less supportive of more investment in wind and solar energy than they were in 2015. This year, less than one-half of rural Nebraskans favor more investment in wind energy, down from 75 percent in 2015 (Figure 15). Similarly, 62 percent this year support more investment in solar energy, compared to 74 percent in 2015. The support for increased investment in hydroelectric energy is unchanged from 2015. Two sources of energy have more support for increased investment this year, nuclear and coal. In 2015, 24 percent felt there should be more investment in nuclear energy. That increased to 36 percent this year.

This year, most rural Nebraskans believe Nebraska should invest more in solar energy

Figure 15. Suggested Levels of Investment in Sources of Electrical Energy, 2015 and 2022



over the next several years. Just over six in ten rural Nebraskans (62%) support increased investment in solar energy (Figure 16). One-half of rural Nebraskans believe more should be invested in hydroelectric energy. Less than onehalf of rural Nebraskans favor increased investment in wind energy, natural gas, nuclear energy and coal. Many rural Nebraskans favor the same amount of investment for natural gas, hydroelectric, nuclear, and coal.

Opinions about the future levels of investment for many of these sources differ by community size, region, and individual attributes (Appendix Table 9). Persons with production, transportation, or warehousing occupations are more likely than persons with different occupations to believe more should be invested in coal over the next several years. Just under four in ten persons with these types of occupations believe more should be invested in coal, compared to 18 percent of persons with

Figure 16. Suggested Levels of Investment in Sources of Electrical Energy over the Next Several Years, 2022



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management, professional, and education occupations.

The other groups most likely to support spending more on coal include: Panhandle residents, residents of the North Central region, persons with higher household incomes, males, and persons with lower education levels.

The groups most likely to support increasing the investment in wind energy include: persons living in or near communities with populations ranging from 5,000 to 9,999; persons with lower household incomes; older persons; and females. Residents of the North Central region are the regional group *least* likely to support increased investment in wind energy.

Panhandle residents are more likely than residents of other regions of the state to support increased spending for solar energy over the next several years. Three-quarters (75%) of Panhandle residents say more should be spent on solar energy, compared to 53 percent of the residents of the North Central region.

The other groups most likely to favor increased investment in solar energy include: persons living in or near communities with populations ranging from 5,000 to 9,999; females; persons with higher education levels; and persons with food service or personal care occupations.

Persons living in or near larger communities are more likely than persons living in or near smaller communities to support increased investment in hydroelectric energy. The other groups that are most likely to support increased spending for hydroelectric energy include: residents of the Northeast region, persons with higher household incomes, males, and persons with occupations in production, transportation, and warehousing. Residents of the Northeast region are more likely than persons living in other regions of the state to support increased investment in nuclear energy. Over four in ten persons living in the Northeast region support increased investment in nuclear energy, compared to just over one-quarter of persons living in the North Central region.

The other groups most likely to support increased investment in nuclear energy over the next several years include: persons with higher household incomes, younger persons, males, persons with higher education levels, and persons with occupations in construction, installation, or maintenance.

Older persons are more likely than younger persons to support increased investment in natural gas over the next several years. Just under one-half of persons over the age of 50 support this increased investment, compared to just over one-third of persons age 40 to 49.

The other groups most likely to support increased investment in natural gas include: males, persons with some college education but not a four-year degree, and persons with occupations in production, transportation, and warehousing. Residents of the Southeast region are the regional group *least* likely to support increased investment in natural gas.

Conclusion

Most rural Nebraskans receive their home tap water from city water or municipal water systems. Just over two-thirds of rural Nebraskans receive their drinking water from a municipal system. One-quarter have private well water and seven percent are on a rural water system.

Many rural Nebraskans have tested their home

tap water for nitrates. However, a similar proportion indicated they have not tested their water or are unsure. Persons with higher household incomes are more likely than persons with lower incomes to have tested their home water for each of the items listed. Many persons with the lowest household incomes unsure if their water has been tested.

Most rural Nebraskans do not treat their home tap water before drinking it. Persons living in or near the smallest communities (who were more likely to have private well water) are more likely than persons living in or near larger communities to not treat their home tap water.

Rural Nebraskans have mixed opinions about various water problems. At least three in ten are concerned or very concerned about the following: contaminants in their water supply, water quality affecting their or their family's health, water quality affecting wildlife or environment, water quality affecting the cost of water bills, and water will be too polluted. However, either the same or larger proportions indicate they are not concerned or not very concerned about these same items.

Rural Nebraskans' concerns about severe weather events have fluctuated over time. Concerns over extreme temperatures and more severe droughts declined between 2015 and 2020 but then increased again this year. The level of concern for these weather events this year is the highest over the three periods. Concerns about more severe droughts declined from 48 percent in 2015 to 21 percent in 2020 before increasing to 55 percent this year. However, when asked about more frequent extreme rains or floods, the level of concern was highest in 2020. Just under three in ten were concerned about extreme rains or floods in 2020, compared to just under one-quarter this year and 15 percent in 2015. In 2020, the

flooding of 2019 was fresh in respondents' minds. In 2015 parts of the state had been in drought the previous year and in 2022 most of the state is experiencing drought. These likely account for the differing levels of concerns between those years.

This year, at least one-half of rural Nebraskans are concerned or very concerned about more severe droughts or dry periods (55%) and more extreme summer temperatures (50%). The Panhandle residents are more likely than residents of other regions to be concerned about more severe droughts or dry periods and more extreme summer temperatures.

Rural Nebraskans are less likely to agree that we will learn to live with and adapt to climate change this year as they were in both 2013 and 2008. Just over six in ten agree with the statement this year, compared to just over seven in ten respondents in both 2013 and 2008.

This year, most rural Nebraskans agree that we will learn to live with and adapt to climate change and that we have a responsibility to future generations to reduce the effects of climate change. A slight majority of rural Nebraskans agree that human activity is contributing to climate change. However, many rural Nebraskans agree that too much attention is paid to global climate change. This opinion was particularly apparent among persons with occupations in agriculture.

Many rural Nebraskans favor proposals to reduce the effects of climate change that use tax credits or taxing corporations based on the carbon emissions they produce. Opinions are mixed on tougher carbon emission standards and tougher fuel-efficiency standards. Many rural Nebraskans *oppose* tax credits for electric vehicles. Rural Nebraskans are less supportive of additional investment in wind and solar energy than they were in 2015. The support for increased investment in hydroelectric energy is unchanged from 2015. Two sources of energy have more support for increased investment this year, nuclear and coal. Appendix Figure 1. Regions of Nebraska



Source: 2013 Metropolitan and Micropolitan Definitions, Office of Management and Budget, released 2-28-13

Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha - August 11, 2014

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	2022 Poll	2021 Poll	2020 Poll	2019 Poll	2018 Poll	2015 - 2019 ACS
Age: 2						
20 - 39	32%	32%	32%	32%	32%	32%
40 - 64	44%	44%	44%	44%	44%	42%
65 and over	24%	24%	24%	24%	24%	26%
Gender: ³						
Female	49%	55%	55%	55%	55%	51%
Male	51%	45%	46%	45%	46%	49%
Education: ⁴						
Less than 9 th grade	1%	1%	1%	0.3%	1%	4%
9 th to 12 th grade (no diploma)	1%	2%	2%	1%	2%	6%
High school diploma (or equiv.)	16%	16%	16%	15%	18%	32%
Some college, no degree	26%	26%	18%	18%	23%	26%
Associate degree	16%	15%	24%	24%	17%	12%
Bachelors degree	25%	28%	26%	29%	25%	15%
Graduate or professional degree	16%	13%	14%	13%	13%	6%
Household Income: ⁵						
Less than \$20,000	6%	8%	7%	7%	9%	15%
\$20,000 - \$39,999	15%	17%	14%	15%	18%	21%
\$40,000 - \$59,999	17%	16%	19%	18%	22%	18%
\$60,000 - \$74,999	17%	14%	16%	16%	17%	11%
\$75,000 - \$99,999	16%	17%	21%	19%	33%	14%
\$100,000 - \$149,999	17%	19%	15%	16%	***6	13%
\$150,000 - \$199,999	6%	5%	5%	5%	***	4%
\$200,000 or more	6%	4%	4%	3%	***	3%
Marital Status: ⁷						
Married	66%	69%	69%	70%	71%	61%
Never married	17%	13%	12%	12%	10%	19%
Divorced/separated	10%	11%	10%	9%	11%	12%
Widowed/widower	7%	7%	8%	8%	8%	8%

Appendix Table 1. Demographic Profile of Rural Poll Respondents¹ Compared to 2015 – 2019 American Community Survey 5 Year Average for Nebraska*

¹ Data from the Rural Polls have been weighted by age.

² 2015-2019 American Community Survey universe is non-metro population 20 years of age and over.

³ 2015-2019 American Community Survey universe is non-metro population 20 years of age and over.

⁴ 2015-2019 American Community Survey universe is non-metro population 18 years of age and over.

⁵ 2015-2019 American Community Survey universe is all non-metro households.

⁶ Income categories for the Rural Polls were expanded in 2019. \$75,000 or more was the largest category before then.

⁷ 2015-2019 American Community Survey universe is non-metro population 20 years of age and over.

*Comparison numbers are estimates taken from the American Community Survey five-year sample and may reflect significant margins of error for areas with relatively small populations.

Now thinking about your home's water,	what is the main source	of your	home tap water?
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	City water/ municipal	Rural water	Private well	Planned unit/ residential		
	water system	system	water	development water system	Other	Unsure
Total	68	7	Percentages	1	1	1
<u>1 otai</u> Community Sizo	08	/	(n - 1085)	1	1	1
Less than 500	16*	1/1*	(11 - 1003) 38*	0	0*	2*
500 - 999	40 63*	14	28 23*	0	3*	∠ 5*
1 000 - 4 999	68*	7*	25	03	0.3*	03*
5 000 - 9 999	79*	7 7*	20 14*	1	0.5	0.5
10,000 - 9,999	78*	7 2*	10*	1	03*	1*
Region	78	2	(n = 1096)	1	0.5	1
Panhandle	66	2*	31*	0	0	1
North Central	61	5*	35*	0	0	1
South Central	73	3*	21*	1	03	2
Northeast	65	11*	21	1	0.5	1
Southeast	70	11	2 4 10*	1	1	1
Incomo Lovol	70	11	(n - 1022)	1	1	1
<u>Income Lever</u> Under \$40,000	75*	4	(II = 1033) 15*	1	1	6*
\$40,000 \$40,000 \$74,000	73* 60*	4	13* 24*	1	1	0.2*
\$40,000 - \$74,999	09* 70*	9	24.	0.5	1	0.5
\$73,000 - \$99,999 \$100,000 and over	/0* 61*	9	20*	0.2	0 2	0*
	01	0	(n - 1008)	0.5	0.5	0
<u>Age</u> 10 20	74	0	(II - 1098) 16*	0	0	2
19 - 29	/4	0	10 ⁺ 20*	0	0	2
30 - 39	64	9	20* 20*	0	1	2
40-49	64	0 7	30° 20*	1	0	0
50 - 04	04	/	29*	0.4	1	2 1
Condon	/1	3	24° (n = 1094)	1	0.4	1
<u>Genuer</u> Mala	70	7	(n - 1084)	1	1	0.2*
Formala	10	7	24	1	1	0.2 · >*
reliate Marital Status	00	/	$\frac{23}{(n-1071)}$	1	0.2	Ζ.
Maritai Status	(1*	0	(n = 10/1)	0.4	1	0*
Married	04 · 70*	87	30° 11*	0.4	1	0. 1*
Never married	/9 ⁺ 75*	/	11"	0	0	4 · 5*
Divorced/separated	/ 3 · 72*	5	13*	2 1	0	ر 1*
Education	73.	5	24°	1	0	1.
<u>Education</u>	72	7	(n = 1080)	0	0	1
H.S. diploma or less	13	/	20	0	0	1
Some college	00	9	24		1	2 1
Bachelors degree	07	0	$\frac{2}{(n-708)}$	0.2	1	1
<u>Occupation</u>	72*	5*	(n = /98)	1	0	2*
Nigi, prof or education	/3**	⊃* 2*	19**		0	2* 0*
Sales or office support	/3*	3* (*	∠3* 22*	U	0	U* 0*
Constrn, inst or maint	0U* 7(*	0 12*	33* 12*	U	0	U* 0*
Prodn/trans/warensing	/0* 20*	15"	1∠* <1*	U	0	U* 0*
Agriculture	3U* 72*	Y [≁]	01* 12*	U	0	U* (*
Food serv/pers. care	/3* 70*	12*	12*	U	0	0* 0*
Hithcare supp/safety	/8*	4* 0*	19*	U	2	U*
Other	/9*	0*	20*	U	0	0*

* Chi-square values are statistically significant at the .05 level. Those who are not currently working were excluded from this analysis.

	Nitrates	Hardness	E.coli	Lead	Pesticides	Other	Not Been Tested	Unsure
				Perce	ntages			
<u>Total</u>	31	23	24	24	21	14	29	29
Community Size				(n =	1084)			
Less than 500	36*	20*	25*	26*	22	12*	27	27
500 - 999	36*	22*	30*	27*	23	9*	26	32
1,000 - 4,999	39*	32*	28*	29*	25	11*	30	23
5,000 - 9,999	23*	19*	21*	23*	21	19*	29	34
10,000 and up	22*	20*	19*	17*	18	17*	32	31
Region				(n =	1096)			
Panhandle	31	30	31	30	29	20	29*	20*
North Central	29	17	20	21	20	16	29*	27*
South Central	27	23	21	20	19	12	34*	27*
Northeast	33	24	24	24	21	13	29*	31*
Southeast	35	23	26	28	24	12	19*	39*
Income Level	55	25	20	$(n = 1)^{20}$	1032)	12	19	57
Under \$40,000	21*	16*	17*	14*	14*	5*	32	44*
\$40,000 - \$74,999	30*	22*	25*	25*	23*	14*	28	31*
\$75,000 - \$99,999	30*	22	23	23	23	20*	20	2/*
\$100,000 - \$77,777 \$100,000 and over	30*	30*	22	20*	21	20 15*	27	2 1 20*
	57	50	2)	$\int (n =$	1008)	15	2)	20
<u>19 – 29</u>	21*	16*	21	18	21	18*	40*	24
10 - 20 30 - 30	21	10 24*	21	25	21	1/1*	-10 26*	24
30 - 39	52 28*	2 4 20*	18	20	17	17*	20	29
40 - 49	20	20	27	20	22	11*	55 27*	32
50 - 04	36*	20*	27	20	22	10*	27 23*	32
Conder	50	29	20	$\frac{2}{n}$	1084)	10	23	52
<u>Genuer</u> Mala	26*	7%	26*	20*	25*	12	20	25*
Fomala	30 25*	20	20 10*	10*	23 19*	12	29	23
I'Clilate Marital Status	23	19	19	(n -	1072)	15	30	33
<u>Married</u>	36*	28*	28*	20*	1072) 26*	15	26*	26*
Never merried	20*	20*	20° 10*	16*	20*	13	20*	20*
Diversed/separated	20 ⁺ 11*	1/' 0*	10 ⁻ 7*	0*	14 · 6*	13	30 ¹ 41*	30° 40*
Divorced/separated	20*	0' 10*	10*	9 ⁺ 10*	0" 1.4*	12	41*	40*
Education	29	19.	10	19 [.]	14.	0	25	40.
<u>Education</u> US diplome or loss	20	25	26	(II – 25	21	6*	26	40*
H.S. dipiona of less	30	23	20	25	21	15*	20	40° 20*
Some college	30	24	25	25	23	15*	27	32* 22*
Decumetian	32	22	22	22 (m —	20	10.	32	22*
<u>Occupation</u>	24*	10*	17*	(n – 21*	198)	20*	20*	27*
Mgt, prof or education	24* 22*	19*	1/" 20*	21 ⁺ 11*	1 / 1 0	20 ⁺	29*	2/*
Sales of office support	23*	13*	20*	22*	18	10*	34* 1.4*	28*
Constrn, inst or maint	3/* 27*	∠/* 27*	∠ð‴ 22*	3∠* 20*	28 19	18" 0*	14"	30" 27*
Prodn/trans/warensing	۲/۳ 50*	∠/* 40*	25" 40*	20* 22*	18	ð" 0*	37" 25*	∠/″ 12*
Agriculture	⊃ð″ 20*	40* 20*	40 [~]	35 ⁻ 14*	32 14	9" 10*	∠ɔ* 20*	15"
Food serv/pers. care	20* 24*	20* 17*	14" 24*	14" 20*	14	12* 20*	37" 10*	۷۵۳ ۱0*
Hitncare supp/safety	24* 20*	۱/۳ ۱/۴	∠4* 20*	20* 20*	21	20* ~*	4∠* 52*	19"
Uther	20*	10*	20°	20°	20	57	2.57	23*

Appendix Table 3. Tests Conducted for Home Tap Water by Community Size, Region and Individual Attributes

Has your home tap water been tested for the following?

* Chi-square values are statistically significant at the .05 level. Those who are not currently working were excluded from this analysis.

	If you treat your home tap water at all for safety before drinking it, please select which method you use or select 'Do not treat.'							
	Do not treat	Boil	Whole house sediment filter	Vhole house ediment filter Carbon filter		Other		
			Percentages					
<u>Total</u>	59	1	7	18	17	8		
Community Size			(n = 1067)					
Less than 500	72*	0	8*	13*	13	2*		
500 - 999	65*	1	4*	15*	20	3*		
1,000 - 4,999	58*	1	11*	15*	17	12*		
5,000 - 9,999	45*	0	7*	26*	20	9*		
10,000 and up	56*	2	4*	21*	17	9*		
Region			(n = 1079)					
Panhandle	56	6*	6	18	16	9		
North Central	67	1*	8	19	11	4		
South Central	56	0*	6	21	17	9		
Northeast	62	1*	6	14	18	8		
Southeast	54	1*	10	17	21	8		
Income Level			(n = 1020)					
Under \$40,000	62	4*	2*	12*	12*	14*		
\$40,000 - \$74,999	61	1*	8*	19*	13*	9*		
\$75,000 - \$99,999	58	0*	7*	26*	15*	2*		
\$100,000 and over	55	1*	10*	16*	27*	4*		
Age			(n = 1081)					
19 - 29	55	3	5	24	13	16*		
2230 - 39	53	2	6	17	17	8*		
40 - 49	57	0	9	18	22	4*		
50 - 64	62	1	8	17	17	7*		
65 and older	66	1	6	14	15	7*		
<u>Gender</u>			(n = 1067)					
Male	61	1	7	18	19	5*		
Female	58	2	6	18	16	10*		
Marital Status			(n = 1055)					
Married	55*	1	8*	19*	21*	7		
Never married	63*	3	2*	22*	7*	12		
Divorced/separated	72*	0	8*	13*	9*	5		
Widowed	74*	0	3*	7*	12*	9		
Education			(n = 1062)					
H.S. diploma or less	64*	0	7	15	14	7		
Some college	62*	2	6	16	15	9		
Bachelors degree	55*	1	8	21	20	6		
Occupation			(n = 790)					
Mgt, prof or education	51	1*	11*	24*	16	10*		
Sales or office support	64	0*	4*	15*	23	3*		
Constrn, inst or maint	61	0*	9*	18*	20	8*		
Prodn/trans/warehsing	64	0*	12*	14*	15	5*		
Agriculture	66	0*	7*	6*	23	4*		
Food serv/pers. care	67	0*	0*	22*	10	6*		
Hlthcare supp/safety	53	1*	5*	27*	20	3*		
Other	65	10*	0*	0*	21	26*		

Appendix Table 4. Treatments of Home Tap Water by Community Size, Region and Individual Attributes

* Chi-square values are statistically significant at the .05 level. Those who are not currently working were excluded from this analysis.

Appendix Table 5. Level of Concern about Water by Community Size, Region and Individual Attributes

How concerned are you about the following being a problem in Nebraska in the coming years? We will not have enough water Water will be too polluted

	Not/not very concerned	Somewhat concerned	Concerned/very concerned	Chi-square (sig)	Not/not very concerned	Somewhat concerned	Concerned/ very concerned	Chi-square (sig)
				Percenta	ges			
<u>Total</u>	40	33	28		40	31	30	
Community Size		(n = 1086))			(n = 108	37)	
Less than 500	39	32	29		43	30	27	
500 - 999	46	31	23		48	23	28	
1,000 - 4,999	43	27	30		39	29	32	$\chi^2 =$
5,000 - 9,999	28	44	29	$\chi^2 = 13.81$	29	35	36	11.56
10,000 and up	40	33	27	(.087)	41	32	27	(.172)
Region		(n = 1097))			(n = 109)	98)	
Panhandle	20	39	41		34	28	38	
North Central	36	38	27		43	34	23	
South Central	44	31	25		41	32	28	$\chi^2 =$
Northeast	45	29	27	$\chi^2 = 30.63^*$	42	29	29	8.34
Southeast	40	34	25	(.000)	39	29	32	(.401)
Individual Attributes:								
Income Level		(n = 1036))			(n = 103)	37)	
Under \$40,000	33	35	31		28	36	36	
\$40,000 - \$74,999	37	37	27		36	35	29	$\chi^2 =$
\$75,000 - \$99,999	46	35	20	$\chi^2 = 23.11^*$	48	24	28	36.12*
\$100,000 and over	45	24	31	(.000)	52	24	25	(.000)
Age		(n = 1098))			(n = 109	98)	
19 - 29	50	34	16		45	32	24	
30 - 39	50	26	24		56	22	23	
40 - 49	40	28	32		43	26	32	$\chi^2 =$
50 - 64	39	33	28	$\chi^2 = 43.43^*$	36	35	29	44.04*
65 and older	27	39	34	(.000)	28	36	37	(.000)
Gender		(n = 1086))			(n = 108	35)	$\chi^2 =$
Male	45	29	27	$\chi^2 = 11.18^*$	45	26	29	12.24*
Female	35	36	29	(.004)	36	35	30	(.002)
Marital Status		(n = 1074))			(n = 107)	75)	
Married	40	32	28		41	30	29	
Never married	47	30	23		42	30	28	$\chi^2 =$
Divorced/separated	40	30	30	$\chi^2 = 10.47$	37	29	34	6.87
Widowed	26	40	33	(.106)	27	40	33	(.333)
Education		(n = 1080))			(n = 108)	31)	
H.S. diploma or less	34	38	27	_	31	36	33	$\chi^2 =$
Some college	43	30	26	$\chi^2 = 6.21$	39	30	31	12.34*
Bachelors/grad degree	39	33	29	(.184)	46	28	26	(.015)
Occupation		(n = 801)				(n = 79	8)	
Mgt, prof or education	42	32	26		43	32	26	
Sales or office support	50	34	16		52	32	17	
Constrn, inst or maint	46	28	26		39	23	38	
Prodn/trans/warehsing	45	30	25		33	28	39	
Agriculture	51	26	23		58	26	16	2
Food serv/pers. care	43	31	26	2 0 67	50	22	28	$\chi^2 =$
Hithcare supp/safety	51	39	25	$\chi^2 = 9.6^7$	50	29	21	51.58*
Other	42	26	52	(./86)	21	51	42	(.005)

How concerned are you about the following being a problem in Nebraska in the coming years? Drinking water will be unsafe Water systems will break down

	Not/not very concerned	Somewhat concerned	Concerned/very concerned	Chi-square (sig)	Not/not very concerned	Somewhat concerned	Concerned/ very concerned	Chi-square (sig)
				Percen	ntages			
<u>Total</u>	42	31	27		43	33	24	
Community Size		(n = 1072	2)			(n = 108)	(3)	
Less than 500	43	31	26		46	36	18	
500 - 999	48	23	30		44	24	31	
1,000 - 4,999	40	33	26		43	33	25	$\chi^2 =$
5,000 - 9,999	33	30	37	$\chi^2 = 11.87$	31	38	32	17.27*
10,000 and up	44	32	24	(.157)	46	33	22	(.027)
Region		(n = 1082)	2)			(n = 109	3)	
Panhandle	43	26	32		27	33	40	
North Central	43	35	22		46	37	17	
South Central	40	37	23		47	35	18	$\chi^2 =$
Northeast	48	24	28	$\chi^2 = 21.41^*$	46	28	26	34.76*
Southeast	36	31	33	(.006)	40	34	26	(.000)
Individual Attributes:				~ /				
Income Level		(n = 1021))			(n = 103)	3)	
Under \$40,000	31	35	35		35	37	27	
\$40,000 - \$74,999	37	36	27		44	36	20	$\gamma^2 =$
\$75,000 - \$99,999	49	26	25	$\gamma^2 = 37.63^*$	43	30	27	22.06*
\$100,000 and over	54	25	21	(.000)	53	24	23	(.001)
Age		(n = 1085)	5)			(n = 109)	2)	
19 - 29	43	38	19		53	32	16	
30 - 39	57	23	20		52	30	18	
40 - 49	46	23	31		38	36	26	$\gamma^2 =$
50 - 64	36	36	28	$\gamma^2 = 42.76^*$	41	30	29	22.61*
65 and older	33	34	33	(.000)	39	35	26	(.004)
Gender		(n = 1071))	(1000)	0,5	(n = 108)	1)	$\gamma^2 =$
Male	49	24	27	$\gamma^2 = 24.48^*$	50	28	22	19.05*
Female	36	37	26	(.000)	38	38	25	(.000)
Marital Status		(n = 1060)))	()		(n = 107)	(0)	()
Married	45	29	27		44	31	25	
Never married	39	37	25		50	33	17	$\gamma^2 =$
Divorced/separated	37	32	32	$\gamma^2 = 7.46$	36	35	30	۸ 9.69
Widowed	37	32	31	(.280)	39	37	24	(.139)
Education	0,	(n = 1066)	5))	(1200)		(n = 107)	7)	()
H.S. diploma or less	32	37	32		36	35	29	$\gamma^2 =$
Some college	39	31	30	$\gamma^2 = 23.80^*$	43	34	23	8.11
Bachelors/grad degree	51	28	21	(.000)	48	31	21	(.088)
Occupation	01	(n = 790))	()	10	(n = 796)	ก ว	(.000)
Mot prof or education	47	30	, 23		39	42	19	
Sales or office support	49	35	16		53	25	22	
Constrn inst or maint	41	21	39		50	30	22	
Prodn/trans/warehsing	35	29	36		35	29	36	
Aoriculture	60	27	13		59 59	29	15	
Food serv/pers. care	45	29	26		55	24	22	$\gamma^2 =$
Hlthcare supp/safety	45	32	23	$\chi^2 = 30.67*$	55	26	19	37.54*
Other	25	45	30	(.006)	32	32	37	(.000)

How concerned are you about the following being a problem in Nebraska in the coming years? Contaminants in <u>my</u> water supply Water quality affecting family's health

	Not/not very concerned	Somewhat (concerned	Concerned/very concerned	Chi-square (sig)	Not/not very concerned	Somewhat concerned	Concerned/ very concerned	Chi-square (sig)
				Percen	ntages			
<u>Total</u>	34	32	34		34	32	34	
Community Size		(n = 1080))			(n = 107)	79)	
Less than 500	40	26	34		36	31	33	
500 - 999	38	30	32		41	27	32	
1,000 - 4,999	31	29	40		31	31	38	$\chi^2 =$
5,000 - 9,999	23	43	34	$\chi^2 = 20.01*$	35	34	31	5.81
10,000 and up	35	35	31	(.010)	33	33	34	(.668)
Region		(n = 1092))	~ /		(n = 109)	91)	. ,
Panhandle	30	32	39		39	26	35	
North Central	37	37	27		36	36	28	
South Central	38	34	29		37	36	27	$\chi^2 =$
Northeast	32	30	38	$\gamma^2 = 14.57$	31	27	42	20.74*
Southeast	32	28	40	(.068)	30	32	38	(.008)
Individual Attributes:	02	20		(1000)	20	02		()
Income Level		(n = 1029))			(n = 103)	32)	
Under \$40.000	23	39	, 38		25	38	38	
\$40,000 - \$74,999	29	37	35		28	34	38	$\gamma^2 =$
\$75,000 - \$99,999	36	24	40	$\gamma^2 = 47.57*$	38	26	35	۸ 43 87*
\$100.000 and over	48	25	27	(000)	48	26	25	(.000)
<i>Ασρ</i>	10	(n = 1096))	()	10	(n = 109)) ()	()
19 - 29	24	37	, 40		29	37	34	
30 - 39	50	23	27		45	24	31	
40 - 49	35	31	35		33	32	35	$v^2 =$
50 - 64	32	34	34	$v^2 = 31.55*$	32	33	35	14.07
65 and older	32	34	34	(000)	32	32	36	(080)
Gender	52	(n = 1081))	(.000)	55	(n = 108)	20)	(.000) $v^2 =$
Male	42	27	, 31	$\gamma^2 = 25.61*$	44	27	29	$^{\lambda}$ 40 40*
Female	27	36	37	(000)	25	36	39	(000)
Marital Status	21	(n = 1070))	(.000)	25	(n = 107)	70)	(.000)
Married	37	28	36		36	29	35	
Never married	28	20 40	32		33	30	28	$\gamma^2 =$
Divorced/separated	30	38	32	$v^2 = 14.81*$	32	34	35	λ 8.18
Widowed	35	36	29	(022)	31	34	35	(225)
Education	55	(n = 1075)	2)	(.022)	51	(n = 107)	76)	(.223)
HS diploma or less	25	35	, 40		22	35	43	$v^2 =$
Some college	32	34	40 34	$\gamma^2 - 16.01*$	33	31		λ 25.00*
Bachelors/grad degree	52 41	29	31	$\chi = 10.91$	41	32	27	(000)
Occupation	71	(n = 796)	51	(.002)	71	(n = 79)	5)	(.000)
Mat prof or education	36	(1 - 750)	34		36	$(\Pi = 7)$	31	
Salas or office support	30	30 48	20		24	J 4 46	30	
Constrn inst or maint	33	40	20		24 40	40	30 42	
Drodn/trans/warshsing	20 20	∠/ 28	33 12		40 25	10 26	4∠ 20	
A griculture	29 55	20 21	43 24		55 51	20	59 17	
Food serv/pers_core	35	$\frac{21}{42}$	27		31	55 46	17 22	$v^2 =$
Hithcare sunn/safety	33	30	37	$\gamma^2 = 35.12*$	52 41	23	36	41.20*
Other	25	35	40	(.001)	21	37	42	(.000)

How concerned are you about the following being a problem in Nebraska in the coming years? Water quality affecting water bills Water quality affecting water recreation

	Not/not very concerned	Somewhat concerned	Concerned/very concerned	Chi-square (sig)	Not/not very concerned	Somewhat concerned	Concerned/ very concerned	Chi-square (sig)
				Percen	ntages			
<u>Total</u>	37	31	32		49	27	24	
<u>Community Size</u>		(n = 1082))			(n = 108)	(0)	
Less than 500	47	28	25		48	30	22	
500 - 999	43	24	34		52	23	25	
1,000 - 4,999	34	34	32		55	23	22	$\chi^2 =$
5,000 - 9,999	23	32	44	$\chi^2 = 25.18^*$	43	32	25	10.09
10,000 and up	35	33	32	(.001)	46	28	26	(.259)
Region		(n = 1092))	. ,		(n = 109)	1)	
Panhandle	25	33	42		41	30	30	
North Central	36	32	32		50	30	20	
South Central	37	37	26		50	30	20	$\gamma^2 =$
Northeast	41	25	34	$\gamma^2 = 20.95^*$	55	22	23	18.78*
Southeast	37	29	34	(.007)	45	24	32	(.016)
Individual Attributes:	57	_>	51	()	10	21	32	(.010)
Income Level		(n = 1034))			(n = 103)	(1)	
Under \$40 000	25	29	46		41	27	32	
\$40,000 - \$74,999	33	35	32		45	32	32 24	$\gamma^2 =$
\$75,000 - \$99,999	33	33	32	$\gamma^2 = 62.25^*$	-+ <i>5</i> 55	22	24	λ 26.03*
\$100 000 and over	53	26	21	$\chi = 02.23$	59	22	18	(000)
4 <i>a</i> ₂	55	(n = 1003))	(.000)	57	(n = 100)	10	(.000)
10 20	12	(II = 1075 45	13		18	(II – 10) 20	24	
19 - 29 30 - 30	42	4J 28	13 20		40 54	29 27	24 10	
40 40	30	28	29		J 4 45	27	22	$\alpha^2 -$
40 - 49	39	21	34	$w^2 - 40.65*$	43	24	32	$\chi = 14.91$
50 - 04	30	28	39 40	$\chi = 49.03$	40	29	23	(062)
65 and older	52	20	40	(.000)	55	20	19	(.005)
Gender	41	(n = 1081))	$x^2 - 7.04*$	52	(n = 108)	24	χ- = 5.50
Male	41	29	31 22	$\chi^{-} = 7.94^{\circ}$	33	24	24	5.50
Female	33	34	33	(.019)	46	29	25	(.064)
Marital Status	20	(n = 1069))		52	(n = 106)	(8)	
Married	39	30	31		53	25	22	2
Never married	34	38	28	2 15 20*	46	26	28	$\chi^2 =$
Divorced/separated	26	29	45	$\chi^2 = 17.38^*$	35	32	33	15.11*
Widowed	33	27	40	(.008)	52	26	22	(.019)
Education	•	$(n = 10^{7}/8)$)		10	(n = 10)	(5)	2
H.S. diploma or less	28	29	43	2	40	31	29	$\chi^2 =$
Some college	34	32	34	$\chi^2 = 22.46^*$	45	30	26	26.68*
Bachelors/grad degree	43	32	25	(.000)	59	23	19	(.000)
Occupation		(n = 796))			$(n = 79^{\circ})$	7)	
Mgt, prof or education	40	37	24		55	25	21	
Sales or office support	40	30	30		41	37	23	
Constrn, inst or maint	51	20	29		55	18	28	
Prodn/trans/warehsing	29	30	41		38	35	27	
Agriculture	56	27	18		56	20	24	<u> </u>
Food serv/pers. care	28	46	26		30	54	16	$\chi^2 =$
Hlthcare supp/safety	33	30	37	$\chi^2 = 36.16*$	54	22	24	41.12*
Other	32	32	37	(.000)	32	26	42	(.000)

	Not/not very concerned	Somewhat concerned	Concerned/very concerned	Chi-square (sig)	
		E	arcontagos	(18)	
Total	37	30	erceniuges 33		
<u>rotar</u> Community Size	51	(n = 1072)	7)		
Less than 500	38	29	33		
500 - 999	44	25	30		
1 000 - 4 999	41	29	31		
5 000 - 9 999	26	38	37	$v^2 = 11.72$	
10,000 and up	35	31	34	(164)	
Region	55	(n = 1087)	7)	(.101)	
Panhandle	29	31	41		
North Central	38	32	30		
South Central	39	30	31		
Northeast	41	28	31	$\gamma^2 = 11.35$	
Southeast	30	34	36	(183)	
Individual Attributes	50	51	50	(.105)	
Income Level		(n = 1026)	5)		
Under \$40.000	27	38	34		
\$40,000 - \$74,999	29	33	39		
\$75.000 - \$99.999	44	25	31	$\gamma^2 = 47.76^*$	
\$100.000 and over	50	23	26	(.000)	
Age	50	(n = 1088)	3)	(1000)	
19 - 29	37	37	26		
30 - 39	43	27	29		
40 - 49	35	28	37		
50 - 64	35	29	36	$\gamma^2 = 10.92$	
65 and older	37	31	33	(.206)	
Gender	0,	(n = 1075)	5)	()	
Male	41	29	30	$\gamma^2 = 8.88^*$	
Female	33	31	36	(.012)	
Marital Status		(n = 1063)	3)	()	
Married	40	29	31		
Never married	33	34	33		
Divorced/separated	29	31	40	$\gamma^2 = 9.39$	
Widowed	33	28	39	(.153)	
Education		(n = 1069)))		
H.S. diploma or less	27	34	39		
Some college	34	34	32	$\chi^2 = 21.55^*$	
Bachelors/grad degree	45	26	30	(.000)	
Occupation		(n = 792))		
Mgt, prof or education	43	29	29		
Sales or office support	26	45	29		
Constrn, inst or maint	41	33	27		
Prodn/trans/warehsing	30	35	35		
Agriculture	49	26	26		
Food serv/pers. care	24	44	32		
Hlthcare supp/safety	44	21	36	$\chi^2 = 34.93*$	
Other	26	16	58	(.002)	

How concerned are you about the following being a problem in Nebraska in the coming years? Water quality affecting wildlife or environment

Appendix Table 6. Level of Concern about Extreme Weather Events by Community Size, Region and Individual Attributes

How concerned are you about each of the following potential problems for your area? More frequent extreme rains or floods More severe droughts/dry periods

	Not/not very Somewhat concerned concerned		ewhat Concerned/very Chi-square Not/ cerned concerned (sig) cor		Not/not very concerned	Somewhat concerned	Concerned/ very concerned	Chi-square (sig)
				Percenta	ges			
<u>Total</u>	48	28	24		17	28	55	
Community Size		(n = 1082))			(n = 10)	84)	
Less than 500	55	23	22		16	26	57	
500 - 999	57	19	24		23	27	50	
1,000 - 4,999	46	29	25		12	31	57	$\chi^2 =$
5,000 - 9,999	45	28	26	$\chi^2 = 15.19$	11	20	69	19.48*
10,000 and up	44	33	23	(.056)	19	30	51	(.012)
Region		(n = 1093)			(n = 10)	96)	
Panhandle	66	17	17		11	13	76	
North Central	56	27	17		8	28	64	
South Central	44	30	26		19	29	52	$\chi^2 =$
Northeast	44	31	25	$\chi^2 = 27.08^*$	19	33	48	40.57*
Southeast	45	28	27	(.000)	20	30	50	(.000)
Individual Attributes:								
Income Level		(n = 1032)			(n = 10)	32)	
Under \$40,000	42	34	24		12	30	58	
\$40,000 - \$74,999	49	25	26		12	30	58	$\chi^2 =$
\$75,000 - \$99,999	45	34	22	$\chi^2 = 12.01$	19	31	51	18.44*
\$100,000 and over	53	25	23	(.062)	22	24	54	(.005)
Age		(n = 1093))			(n = 10)	99)	
19 - 29	40	34	26		13	32	55	
30 - 39	59	24	17		17	35	48	
40 - 49	46	27	28		19	13	68	$\chi^2 =$
50 - 64	53	27	21	$\chi^2 = 19.99*$	21	32	47	44.12*
65 and older	44	30	26	(.010)	12	31	57	(.000)
Gender		(n = 1080))			(n = 10)	84)	$\chi^2 =$
Male	56	26	18	$\chi^2 = 28.20^*$	24	27	50	38.71*
Female	41	31	29	(.000)	10	30	61	(.000)
Marital Status		(n = 1069))			$(n = 10^{\circ})$	73)	
Married	53	27	21		17	29	55	
Never married	38	33	30		19	28	53	$\chi^2 =$
Divorced/separated	43	29	29	$\chi^2 = 18.04*$	14	30	56	2.68
Widowed	41	30	30	(.006)	12	27	60	(.848)
Education		(n = 1076))			(n = 10)	81)	
H.S. diploma or less	45	30	25		15	31	54	$\chi^2 =$
Some college	46	29	25	$\chi^2 = 3.70$	16	27	57	2.75
Bachelors/grad degree	52	27	22	(.448)	19	29	53	(.600)
Occupation		(n = 797)	1			(n = 79	96)	
Mgt, prof or education	47	30	23		19	30	51	
Sales or office support	42	35	23		20	18	62	
Constrn, inst or maint	52	29	19		22	29	49	
Prodn/trans/warehsing	60	16	24		20	29	52	
Agriculture	59	29	12		25	19	56	2
Food serv/pers. care	35	26	39	2 20 16*	10	39	51	$\chi^2 =$
Hithcare supp/safety	58 55	22	20	$\chi^2 = 28.16^*$		33	56	19.79
Other	22	13	30	(.014)	10	20	58	(.13/)

How concerned are you about each of the following potential problems for your area?More extreme summer temperaturesMore extreme winter temperatures

	Not/not very concerned	Somewhat concerned	Concerned/very concerned	Chi-square (sig)	Not/not very concerned	Somewhat concerned	Concerned/ very concerned	Chi-square (sig)
				Percenta	ges			
<u>Total</u>	24	26	50		33	32	36	
Community Size		(n = 1080))			(n = 108)	80)	
Less than 500	20	29	51		34	32	34	
500 - 999	30	26	44		37	28	35	
1,000 - 4,999	21	26	53		31	27	42	$\chi^2 =$
5,000 - 9,999	21	20	59	$\chi^2 = 11.61$	35	27	38	15.20
10,000 and up	27	27	46	(.170)	31	38	31	(.055)
Region		(n = 1090))			(n = 109)	91)	
Panhandle	23	15	63		31	26	43	
North Central	17	33	50		24	39	37	
South Central	23	28	49		34	32	33	$\chi^2 =$
Northeast	30	26	45	$\chi^2 = 22.39^*$	35	32	33	13.12
Southeast	23	25	52	(.004)	35	28	38	(.108)
Individual Attributes:								
Income Level		(n = 1030))			(n = 103)	30)	
Under \$40,000	12	30	58		25	34	41	
\$40,000 - \$74,999	22	26	52		30	33	37	$\chi^2 =$
\$75,000 - \$99,999	28	25	47	$\chi^2 = 29.83*$	30	32	38	24.98*
\$100,000 and over	32	24	45	(.000)	43	29	28	(.000)
Age		(n = 1095	5)			(n = 109)	92)	
19 - 29	13	34	53		24	34	42	
30 - 39	25	27	48		39	35	25	
40 - 49	28	13	58		37	23	40	$\chi^2 =$
50 - 64	32	27	41	$\chi^2 = 49.77*$	39	35	26	42.60*
65 and older	18	31	51	(.000)	25	33	43	(.000)
Gender		(n = 1081)			(n = 108)	81)	$\chi^2 =$
Male	31	25	45	$\chi^2 = 25.79^*$	43	28	29	47.27*
Female	18	28	55	(.000)	23	36	41	(.000)
Marital Status		(n = 1067	')			(n = 107)	70)	
Married	26	27	47		35	33	32	
Never married	17	26	57		31	30	40	$\chi^2 =$
Divorced/separated	21	24	55	$\chi^2 = 11.31$	27	28	44	11.66
Widowed	16	30	54	(.079)	24	32	44	(.070)
Education		(n = 1073))			(n = 107)	75)	
H.S. diploma or less	18	25	57		28	31	42	$\chi^2 =$
Some college	22	25	52	$\chi^2 = 12.77*$	31	31	38	13.06*
Bachelors/grad degree	29	27	44	(.012)	38	33	29	(.011)
Occupation		(n = 800))			(n = 79	(8)	
Mgt, prof or education	27	30	43		37	35	29	
Sales or office support	24	24	53		32	21	47	
Constrn, inst or maint	29	28	44		38	29	33	
Prodn/trans/warehsing	28	19	52		43	24	33	
Agriculture	35	17	48		54	28	19	r
Food serv/pers. care	14	28	59	2	20	34	46	$\chi^2 =$
Hithcare supp/safety	19	35	46	$\chi^2 = 21.74$	24	45	31	45.02*
Other	26	21	53	(.084)	30	30	40	(.000)

How concerned are you about each? More frequent severe storms

	Not/not very concerned	Somewhat concerned	Concerned/very concerned	Chi-square (sig)
		P	ercentages	
Total	29	31	40	
Community Size		(n = 1083)	3)	
Less than 500	27	35	38	
500 - 999	29	30	41	
1,000 - 4,999	27	31	42	
5,000 - 9,999	31	20	49	$\gamma^2 = 11.22$
10.000 and up	32	32	36	(.190)
Region		(n = 109)	5)	
Panhandle	34	22	44	
North Central	25	36	39	
South Central	30	28	43	
Northeast	33	34	33	$\gamma^2 = 17.04*$
Southeast	23	32	45	(030)
Individual Attributes.	25	52	75	(.050)
Income Level		(n = 103)	5)	
Under \$40,000	21	(II = 105. 31	A7	
\$40 000 - \$74 999	21	35	30	
\$75,000 - \$74,999	20	22	39	$u^2 - 27.61*$
\$100,000 - \$99,999	27	52 26	42	$\chi = 27.01^{\circ}$
\$100,000 and over	40	20 (n - 100)	54	(.000)
Age 10 20	20	(n - 1090)	27	
19 - 29	29	24 24	37 28	
30 - 39	20 21	24 22	20	
40 - 49	31 22	23	4/	2 26 72*
50 - 64	33	32	35	$\chi^2 = 36./3*$
65 and older	19	32	49	(.000)
Gender	20	(n = 1080)	5)	2 50 52*
Male	39	26	35	$\chi^2 = 50.53^*$
Female	20	35	45	(.000)
Marital Status	22	$(n = 10^{7})$	1)	
Married	33	31	36	
Never married	24	31	45	2
Divorced/separated	22	27	51	$\chi^2 = 24.61*$
W1dowed	17	28	55	(.000)
Education		(n = 1078)	8)	
H.S. diploma or less	25	30	45	2
Some college	27	30	43	$\chi^2 = 13.10^*$
Bachelors/grad degree	35	32	34	(.011)
Occupation		(n = 798)	5)	
Mgt, prof or education	31	31	38	
Sales or office support	24	36	40	
Constrn, inst or maint	30	35	35	
Prodn/trans/warehsing	39	23	38	
Agriculture	48	21	32	
Food serv/pers. care	18	48	34	2
Hlthcare supp/safety	30	33	37	$\chi^2 = 25.37*$
Other	32	26	42	(.031)

	contributing to climate change.			related to climate change.				
	Disagree	Neither	Agree	Significance	Disagree	e Neither	Agree	Significance
				Percent	tages			
<u>Total</u>	25	23	52		29	24	47	
<u>Community Size</u>		(n = 1082)			(n = 1080)		
Less than 500	25	31	44		31	33	36	
500 - 999	31	27	42		36	19	45	
1,000 - 4,999	24	20	56		24	25	51	
5,000 - 9,999	23	19	57	$\chi^2 = 16.44^*$	32	23	45	$\chi^2 = 21.41*$
10,000 and up	24	21	56	(.036)	29	20	51	(.006)
Region		(n = 1093)			(n = 1091)		
Panhandle	27	21	53		28	29	43	
North Central	23	23	53		35	27	38	
South Central	25	20	55		32	18	50	
Northeast	23	25	52	$\chi^2 = 5.27$	27	25	49	$\chi^2 = 17.33^*$
Southeast	25	27	48	(.729)	23	26	51	(.027)
Individual Attributes:				. ,				
Income Level		(n = 1033)			(n = 1031)		
Under \$40,000	20	21	59		26	24	50	
\$40,000 - \$74,999	23	27	50		26	26	49	
\$75,000 - \$99,999	26	20	53	$\chi^2 = 9.92$	25	26	49	$\chi^2 = 8.64$
\$100,000 and over	28	21	51	(.128)	35	21	44	(.195)
Age		(n = 1097)			(n = 1095)		
19 - 29	13	16	71		18	21	60	
30 - 39	27	25	48		36	23	41	
40 - 49	24	19	57		30	28	42	
50 - 64	32	30	38	$\chi^2 = 49.45^*$	34	25	41	$\chi^2 = 29.51*$
65 and older	25	23	52	(.000)	26	21	53	(.000)
Gender		(n = 1082)			(n = 1082)		
Male	32	26	42	$\chi^2 = 49.70^*$	37	25	39	$\chi^2 = 38.68*$
Female	18	20	63	(.000)	21	24	55	(.000)
Marital Status		(n = 1072)			(n = 1069)		
Married	28	23	49		32	25	43	
Never married	20	19	61		25	20	55	
Divorced/separated	19	21	60	$\chi^2 = 14.64*$	25	24	51	$\chi^2 = 14.37^*$
Widowed	17	27	56	(.023)	17	27	56	(.026)
Education		(n = 1077)			(n = 1076)		
H.S. diploma or less	23	31	46		25	28	47	
Some college	28	25	48	$\chi^2 = 22.10*$	31	29	41	$\chi^2 = 22.70*$
Bachelors/grad degree	22	18	60	(.000)	29	18	54	(.000)
Occupation		(n = 797)				(n = 794)		
Mgt, prof or education	22	15	64		25	21	54	
Sales or office support	19	35	46		26	30	44	
Constrn, inst or maint	35	33	32		32	31	37	
Prodn/trans/warehsing	40	19	40		36	27	36	
Agriculture	45	33	23		49	26	25	
Food serv/pers. care	12	29	59	2	18	24	58	2
Hithcare supp/safety	19	20	61	$\chi^2 = 89.55^*$	31	17	53	$\chi^2 = 47.11^*$
Other	20	15	65	(.000)	11	42	4/	(.000)

Appendix Table 7. Opinions about Climate Change by Community Size, Region and Individual Attributes

	Too muc	h attention i	is paid to	We will learn to live with					
	global	l climate ch	ange.		and adapt to climate				
	0		0			change.			
	Disagree	Neither	Agree	Significance	Disagree	Neither	Agree	Significance	
	0		0	Percent	tages		0	0 /	
Total	33	22	44		13	24	63		
Community Size		(n = 1079)			(1	n = 1070)			
Less than 500	29	27	44		9	24	67		
500 - 999	24	29	48		10	28	62		
1,000 - 4,999	32	24	45		12	23	65		
5,000 - 9,999	34	22	45	$\chi^2 = 14.86$	16	21	64	$\chi^2 = 10.07$	
10,000 and up	38	18	44	(.062)	16	25	59	(.260)	
Region		(n = 1088)			(1	n = 1079)			
Panhandle	31	21	49		15	23	62		
North Central	28	22	50		10	20	70		
South Central	32	25	43		12	29	58		
Northeast	37	19	44	$\gamma^2 = 10.03$	14	24	62	$\chi^2 = 14.20$	
Southeast	36	26	38	(.263)	16	18	66	(.077)	
Individual Attributes:									
Income Level		(n = 1026)			(1	n = 1023)			
Under \$40,000	34	22	44		14	30	56		
\$40,000 - \$74,999	31	26	43		15	22	63		
\$75,000 - \$99,999	37	24	39	$\gamma^2 = 7.74$	15	22	63	$\gamma^2 = 12.47$	
\$100,000 and over	33	18	49	(.258)	9	22	68	(.052)	
Age		(n = 1091)			(1	n = 1085)			
19 - 29	34	29	37		13	26	60		
30 - 39	30	24	46		12	17	71		
40 - 49	35	25	40		12	26	62		
50 - 64	27	22	51	$\gamma^2 = 22.84^*$	12	28	60	$\gamma^2 = 11.03$	
65 and older	39	15	46	(.004)	17	23	61	(.200)	
Gender		(n = 1076)			(1	n = 1071)			
Male	27	20	53	$\gamma^2 = 36.22^*$	11	21	69	$\gamma^2 = 15.96^*$	
Female	40	25	35	(.000)	16	28	57	(.000)	
Marital Status		(n = 1064)			(1	n = 1059)			
Married	32	20	48		13	21	66		
Never married	31	30	39		12	33	55		
Divorced/separated	41	23	35	$\chi^2 = 16.34^*$	17	24	59	$\chi^2 = 18.12^*$	
Widowed	40	23	37	(.012)	20	28	52	(.006)	
Education		(n = 1072)			(1	n = 1065)			
H.S. diploma or less	28	32	41		15	28	57		
Some college	29	24	48	$\chi^2 = 25.61*$	11	26	63	$\chi^2 = 11.38^*$	
Bachelors/grad degree	40	17	43	(.000)	15	19	66	(.023)	
Occupation		(n = 790)			(n = 788)			
Mgt, prof or education	43	22	36		17	18	65		
Sales or office support	14	29	57		4	35	61		
Constrn, inst or maint	23	26	51		18	23	60		
Prodn/trans/warehsing	20	29	52		6	40	54		
Agriculture	16	15	69		9	16	76		
Food serv/pers. care	46	30	24		2	31	67		
Hlthcare supp/safety	38	18	44	$\chi^2 = 70.70*$	10	25	66	$\chi^2 = 53.44*$	
Other	21	37	42	(.000)	16	53	32	(.000)	

						We have	a responsib	oility to	
		Global	climate cha	inge is		future gei	nerations to	reduce	
		somethin	g people car	n reduce.		the effects	of climate	change.	
		Disagree	Neither	Agree	Significance	Disagree	e Neither	Agree	Significance
					Percen	etages			
<u>Total</u>		22	31	48		14	27	59	
<u>Community Size</u>			(n = 1071)			(1	n = 1077)		
Less than	n 500	18	38	44		15	31	53	
500 -	- 999	22	31	47		12	33	55	
1,000 - 4	1,999	26	31	44		12	28	60	
5,000 - 9	9,999	21	27	52	$\chi^2 = 11.18$	14	23	63	$\chi^2 = 9.44$
10,000 ar	nd up	20	28	52	(.192)	15	23	62	(.306)
Region			(n = 1082)			(1	n = 1089)		
Panha	andle	26	25	49		18	22	61	
North Ce	entral	31	26	43		17	29	53	
South Ce	entral	18	36	46		13	27	60	
Nort	heast	22	29	49	$\gamma^2 = 17.82^*$	11	30	59	$\chi^2 = 12.86$
Sout	heast	18	30	51	(.023)	17	21	62	(.117)
Individual Attribu	ites:	10		01	()	1,			((117)
Income Level			(n = 1021)			(*	n = 1030		
Under \$4	0.000	16	31	52		11	26	62	
\$40,000 - \$74	4 999	17	37	46		12	20 27	61	
\$75,000 - \$99	9 999	20	25	55	$\gamma^2 = 31.62*$	12	19	67	$\gamma^2 = 15.75^*$
\$100,000 and	over	31	23	42	(000)	17	32	52	(015)
400,000 und		51	(n = 1084)	12	(.000)	17	n = 1093	52	(.015)
19) _ 29	13	39	47		13	18	68	
30	$\frac{2}{30}$	28	28	44		13	28	58	
50 40) _ 49	20	28	49		13	30	58	
) - 64	23	34	44	$\gamma^2 = 20.91*$	13	32	51	$\gamma^2 = 17.90*$
65 and	older	22	25	 5/	$\chi = 20.91$	17	22	51 64	$\chi = 17.90$
Gandar	oluci		(n - 1072)	54	(.007)	15	n = 1078	04	(.022)
Genuer	Mala	27	(1 - 10/2)	11	$x^2 - 21.10*$	20	11 - 1078	51	$\alpha^2 - 1152*$
Fa	molo	16	20	51	$\chi = 21.19^{\circ}$	20	29 25	68	$\chi = 44.32$
Marital Status	maic	10	(n - 1050)	51	(.000)	0	23 = 1067	08	(.000)
Mariai Siaias	rriad	24	(11 - 1039)	19		15	n = 1007	59	
Nover me	urriad	24 14	20	40		15	20	50	
Divorced/sone	ratad	20	39	47 51	$n^2 - 15.40*$	13	23	64	$n^2 - 5.80$
Divoiced/sepa	awad	20	30	55	$\chi = 13.40^{\circ}$	12	24	64	$\chi = 3.89$
Education VV IU	oweu	1 /	20 (n - 1067)	33	(.017)	1	29 = 1074	04	(.430)
Laucation	 1	10	(n - 1007)	16		12	n = 10/4	56	
	r less	10	27	40	2 - 7 47	15	52 21	50	$x^2 = 14.76*$
Some co	nege	22	32	4/ 50	$\chi^2 = /.4/$	13	31 21	55 (5	$\chi^2 = 14.70^{\circ}$
Bachelors/grad de	egree	24	26	50	(.113)	14	21	65	(.005)
Occupation	<i>.</i> .	10	(n = 792)	50		10	(n = 794)	(0)	
Migt, prof or educ	cation	18	<i>5</i> 0	52		12	19	69	
Sales or office su	ipport	10	48	42		16	25	59	
Constrn, inst or	maint	22	33	46		18	29	53	
Prodn/trans/ware	hsing	39	32 27	29		24	37	39	
Agrici	uiture	41	27	32 50		54	28	58 50	
rood serv/pers	. care	10	51 21	59 15	$x^2 = 50.02*$	6	33 24	59 57	~2 - (5 5 1*
rinicale supp/s	Other	∠4 11	51 52	43 27	$\chi = 39.92^{*}$	ð 5	24 26	51 68	$\chi = 03.34^{*}$
	Junet	11	55	51	(.000)	5	20	00	(.000)

	Actions chang	Actions to address climate change will benefit the			Actions to address climate change will benefit the					
	econom	y in the sho	ort term.		econom	y in the long	g term.			
	Disagree	Neither	Agree	Significance	Disagre	e Neither	Agree	Significance		
				Percen	tages					
<u>Total</u>	43	35	22		28	30	42			
Community Size		(n = 1078)				(n = 1080)				
Less than 500	44	42	13		29	45	26			
500 - 999	45	40	16		33	36	32			
1,000 - 4,999	43	35	23		30	28	42			
5,000 - 9,999	38	34	28	$\chi^2 = 20.76*$	31	26	43	$\chi^2 = 46.76^*$		
10,000 and up	44	30	26	(.008)	25	23	52	(.000)		
Region		(n = 1088)				(n = 1090)				
Panhandle	50	30	20		33	28	40			
North Central	44	39	17		37	35	28			
South Central	39	39	23		25	30	45			
Northeast	45	32	23	$\chi^2 = 11.53$	29	26	45	$\chi^2 = 18.32*$		
Southeast	43	31	26	(.173)	25	32	43	(.019)		
Individual Attributes:										
Income Level		(n = 1028)				(n = 1030)				
Under \$40,000	31	40	28		21	33	46			
\$40,000 - \$74,999	39	39	22		26	30	44			
\$75,000 - \$99,999	43	34	24	$\chi^2 = 31.01*$	27	29	44	$\chi^2 = 16.25^*$		
\$100,000 and over	54	29	17	(.000)	36	29	35	(.012)		
Age		(n = 1088)				(n = 1091)				
19 - 29	50	32	18		29	29	42			
30 - 39	43	39	18		28	33	39			
40 - 49	43	34	23		30	28	43			
50 - 64	46	35	19	$\chi^2 = 17.90*$	34	33	33	$\chi^2 = 19.70^*$		
65 and older	36	34	30	(.022)	22	27	51	(.012)		
Gender		(n = 1080)		2		(n = 1079)		2		
Male	55	27	18	$\chi^2 = 61.79^*$	41	23	37	$\chi^2 = 77.99^*$		
Female	32	42	26	(.000)	17	36	47	(.000)		
Marital Status	10	(n = 1064)	10		•	(n = 1067)	• •			
Married	48	32	19		31	30	39			
Never married	36	36	28	2 25 00*	26	30	43	2 10 60		
Divorced/separated	36	39	25	$\chi^2 = 27.99*$	22	26	52	$\chi^2 = 12.60$		
Widowed	24	40	36	(.000)	17	33	50	(.050)		
Education	24	(n = 10/3)	25		24	(n = 10/4)	20			
H.S. diploma or less	34	41	25	2 1010*	24	38	38	2 10 (0*		
Some college	42	38	20	$\chi^2 = 16.16^*$	31	30	39	$\chi^2 = 10.60^*$		
Bachelors/grad degree	48	29	23	(.003)	28	21	46	(.031)		
Occupation Mat. mof. on advastion	11	(n = /95)	22		24	(n = /96)	40			
Mgi, prof or education	44	33 44	23		24	27	49			
Construction for the support	- 53	44	24 14		24 42	38 20	39 20			
Drodn/trans/warsheim	- 33 - 50	33 25	14 17		42	29	29 20			
rioui/trans/warensing	, 38 , 60	23 27	10 12		42 52	20 24	5∠ 24			
Food serv/ners_care	2 00 24	∠ / 56	15 20		52 10	24 45	∠4 45			
Hlthcare supplies. eare	2 4 45	32	20	$\gamma^2 = 41.63^*$	26	33	41	$\gamma^2 = 62.29*$		
Other	16	47	37	(.000)	15	45	40	(.000)		

Appendix Table 7 continued.

		Tax crea	Tax credits for businesses to				Tax credits for buying				
		US	e clean ener	gy		electric ve	hicles and	l trucks			
		Oppose	Neither	Favor	Significance	Oppose	Neither	Favor	Significance		
					Percent	ages					
<u>Total</u>		21	29	50		49	22	29			
C	• •		(1070)			(1071)				
Commu	inity Size	26	(n = 10/2)	27		(r	n = 10/1	10			
	Less than 500	26	38	3/		65	22	13			
	500 - 999	20	31	49		51	22	27			
	1,000 - 4,999	1/	30	53	2 26 51*	45	23	33	2 22 74*		
	5,000 - 9,999	34 10	19	4/	$\chi^2 = 36.51^*$	49	22	29	$\chi^2 = 32./4*$		
л ·	10,000 and up	19	25	56	(.000)	45	22	33	(.000)		
Region	D 1 11 .	25	(n = 1082)	15		(ľ	n = 1082	24			
	Pannandle Nextle Centrel	25	30 27	45		55	23	24			
	North Central	27	27	4/		50	28	23			
	South Central	19	25	56	2 11 50	47	21	32	2 16 00*		
	Northeast	19	31	50	$\chi^2 = 11.72$	53	1/	30	$\chi^2 = 16.90^*$		
	Southeast	21	33	46	(.164)	43	29	27	(.031)		
Individu	<u>ual Attributes:</u>		(1024)			(1000				
Income	Level	10	(n = 1024)	50		(r	n = 1022)	20			
¢.	Under \$40,000	18	32	50		49	23	28			
\$4 #7	10,000 - \$74,999	18	33	50	2 11 46	50	27	23	2 15 01*		
\$7	/5,000 - \$99,999	26	24	50	$\chi^2 = 11.46$	48	16	36	$\chi^2 = 15.91^*$		
\$1	00,000 and over	23	25	53	(.075)	4/	20	34	(.014)		
Age	10 20	0	(n = 1084)	50		(r	n = 1085)	22			
	19 - 29	8	34	58		47	21	32			
	30 - 39	1/	33	50		51	21	28			
	40 - 49	22	23	54	.2 10.10*	44	23	33	.2 11.09		
	50 - 64	31	28	41	$\chi^2 = 40.18^*$	53	26	21	$\chi^2 = 11.98$		
Cal	65 and older	23	$\frac{2}{(1072)}$	50	(.000)	49	21 1072)	30	(.152)		
Genaer	M.1.	20	(n = 10/2)	40	2 50.20*	(r	n = 10/2	22	2 22 41*		
	Male Escale	29 12	29	42	$\chi^2 = 50.32^*$	50 42	21	23	$\chi^2 = 22.41^*$		
Marital	Female	15	28 (n - 1050)	39	(.000)	42	24 = 1050	54	(.000)		
Marilai	Status	22	(n = 1039)	40		(I	1 = 1039	20			
	Nover merried	16	29	49 56		51 47	21	20			
Dir	voread/separated	25	28	30 49	$x^2 - 5.04$	47	23	29	$n^2 - 4.65$		
DI	Widowed	23 16	27	40 54	$\chi = 3.94$	43	20 10	27	$\chi = 4.03$		
Educatio	w luoweu	10	(n - 1065)	54	(.430)	49	19 = 1064	55	(.390)		
HS	dinloma or less	22	(11 - 1003)	46		54	1 - 100 + j 28	18			
11.5.	Some college	22	32	40	$n^2 - 15.51*$	54	28	23	$\gamma^2 - 30.11*$		
Bachel	ors/grad degree	17	25	40 58	$\chi = 13.31$	12 12	22	30	$\chi = 39.11$		
Occupat	ion	1 /	(n = 791)	50	(.004)		n = 790	57	(.000)		
Mot	prof or education	10	(11 - 7)(1)	60		45	17	30			
Sales	or office support	15	30	54		т 5 56	27	18			
Cons	strn inst or maint	20	30	34		50 69	17	10			
Prode	n/trans/warehsing	10	Δ 3	37		51	21	28			
11001	Agriculture	36		37		61	26	13			
Fo	od serv/pers. care	8	39	53		29	45	26			
Hlt	hcare supp/safety	16	32	52	$\gamma^2 = 54.06^*$	36	23	42	$\chi^2 = 70.99*$		
	Other	32	16	53	~ (.000)	50	30	20	(.000)		

Appendix Table 8. Opinions about Proposals to Reduce Effects of Climate Change by Community Size, Region and Individual Attributes

Aı	эp	endix	Table	8	continued.
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	Taxing of the amou	corporations l nt of carbon they produce	based on emissions		Tax credits to use technology that captures and stores carbon emissions				
	Oppose	Neither	Favor	Significance	Oppose	Neither	Favor	Significance	
				Percent	ages				
<u>Total</u>	31	26	43		21	37	42		
<u>Community Size</u>		(n = 1073)			(n	= 1071)			
Less than 500	36	28	37		28	44	28		
500 - 999	40	30	30		22	44	34		
1,000 - 4,999	30	26	44		21	35	44		
5,000 - 9,999	39	15	46	$\chi^2 = 25.31^*$	18	36	46	$\chi^2 = 27.33*$	
10,000 and up	25	27	48	(.001)	19	32	49	(.000)	
Region		(n = 1084)			(n	= 1081)			
Panhandle	48	17	35		11	47	43		
North Central	34	24	42		24	41	36		
South Central	27	28	45		22	35	43		
Northeast	27	28	45	$\chi^2 = 23.33^*$	24	36	41	$\chi^2 = 15.32$	
Southeast	32	27	41	(.003)	19	34	47	(.053)	
Individual Attributes:									
Income Level		(n = 1023)			(n	= 1024)			
Under \$40,000	26	31	44		16	41	43		
\$40,000 - \$74,999	29	26	45		19	42	39		
\$75,000 - \$99,999	31	22	47	$\chi^2 = 10.47$	22	31	48	$\chi^2 = 10.91$	
\$100,000 and over	37	24	39	(.106)	23	34	43	(.091)	
Age		(n = 1087)			(n	= 1083)			
19 - 29	32	18	50		18	32	50		
30 - 39	34	28	38		14	52	34		
40 - 49	30	28	42		20	38	42		
50 - 64	33	28	40	$\chi^2 = 11.79$	27	34	39	$\chi^2 = 29.78*$	
65 and older	27	27	46	(.161)	22	33	46	(.000)	
Gender		(n = 1072)			(n	= 1070)			
Male	40	27	33	$\chi^2 = 52.27*$	26	36	39	$\chi^2 = 14.49^*$	
Female	22	26	53	(.000)	16	39	45	(.000)	
Marital Status		(n = 1059)			(n	= 1057)			
Married	35	26	39		23	34	43		
Never married	26	29	45		17	39	45		
Divorced/separated	20	28	53	$\chi^2 = 16.71*$	18	46	37	$\chi^2 = 9.28$	
Widowed	24	24	51	(.010)	16	40	44	(.159)	
Education		(n = 1068)			(n	= 1065)			
H.S. diploma or less	28	33	40		22	40	39		
Some college	33	26	41	$\chi^2 = 7.83$	22	43	35	$\chi^2 = 20.59*$	
Bachelors/grad degree	30	24	46	(.098)	20	31	50	(.000)	
Occupation		(n = 790)			(1	n = 789)			
Mgt, prof or education	30	22	49		21	31	49		
Sales or office support	25	42	33		14	43	44		
Constrn, inst or maint	38	30	32		22	47	32		
Prodn/trans/warehsing	34	25	40		20	43	37		
Agriculture	57	23	20		38	29	33		
Food serv/pers. care	10	44	46		8	54	38		
Hlthcare supp/safety	27	25	48	$\chi^2 = 65.30^*$	20	39	41	$\chi^2 = 38.53*$	
Other	20	20	60	(.000)	15	35	50	(.000)	

	Toug	her restrictio	ons on		Tougher fuel-efficiency				
	ca	rbon emissio	ons		standara	ls for cars/	/trucks		
	Oppose	Neither	Favor	Significance	Oppose	Neither	Favor	Significance	
				Percent	ages				
<u>Total</u>	30	34	36		33	29	38		
<u>Community Size</u>		(n = 1061)			(1	n = 1076)			
Less than 500	42	31	27		43	30	28		
500 - 999	33	39	28		30	33	37		
1,000 - 4,999	31	35	34		27	32	42	2	
5,000 - 9,999	30	30	40	$\chi^2 = 24.33^*$	31	23	46	$\chi^2 = 20.65^*$	
10,000 and up	24	35	41	(.002)	35	27	38	(.008)	
Region		(n = 1074)			(1	n = 1087)			
Panhandle	36	31	33		43	21	36		
North Central	38	33	30		30	34	36		
South Central	25	39	36	2	31	33	36	2	
Northeast	33	30	37	$\chi^2 = 15.21$	35	23	42	$\chi^2 = 19.41*$	
Southeast	28	34	38	(.055)	28	34	39	(.013)	
Individual Attributes:									
Income Level		(n = 1013)			(1	n = 1027)			
Under \$40,000	22	39	40		29	25	46		
\$40,000 - \$74,999	29	33	37		33	36	32		
\$75,000 - \$99,999	26	35	39	$\chi^2 = 18.90^*$	29	28	43	$\chi^2 = 20.90*$	
\$100,000 and over	39	32	29	(.004)	38	25	37	(.002)	
Age		(n = 1076)			(1	n = 1089)			
19 - 29	34	32	34		42	32	26		
30 - 39	37	37	27		33	36	31		
40 - 49	30	40	30		34	30	36		
50 - 64	31	35	34	$\chi^2 = 32.66^*$	33	27	41	$\chi^2 = 31.83*$	
65 and older	23	28	49	(.000)	26	25	49	(.000)	
Gender		(n = 1061)		2	(1	n = 1075)		2	
Male	38	34	28	$\chi^2 = 38.22*$	41	27	33	$\chi^2 = 30.51*$	
Female	23	35	43	(.000)	25	32	43	(.000)	
Marital Status		(n = 1049)			(1	n = 1064)			
Married	36	31	34		36	29	36		
Never married	25	42	33	2	35	34	31	2	
Divorced/separated	17	39	44	$\chi^2 = 34.32^*$	17	35	48	$\chi^2 = 30.69^*$	
Widowed	16	30	54	(.000)	20	24	56	(.000)	
Education		(n = 1056)			(1	n = 1071)			
H.S. diploma or less	29	35	37	2	34	30	36		
Some college	32	36	32	$\chi^2 = 6.17$	35	30	34	$\chi^2 = 6.76$	
Bachelors/grad degree	30	31	39	(.187)	30	27	43	(.149)	
Occupation	• •	(n = 786)			(n = 790)			
Mgt, prot or education	28	27	45		29	29	42		
Sales or office support	31	49	20		47	20	33		
Constrn, inst or maint	41	37	23		34	43	23		
Prodn/trans/warehsing	39 52	35	26		38 52	18	44		
Agriculture	52	29 54	19		33 10	21 42	19		
Hitheare supplies fature	10	34 11	22 28	$u^2 - 7660*$	18	43 20	39 26	$x^2 - 56.00*$	
Other	26	63	11	$\chi = 70.09^{\circ}$	35	29 55	10	$\chi = 50.09^{\circ}$	

Appendix Table 8 continued.

		Coal			Wind				
		Same				Same			
	Less	Amount	More	Significance	Less	Amount	More	Significance	
				Percente	ages				
<u>Total</u>	26	51	23		30	25	45		
<u>Community Size</u>		(n = 1057)			(n	= 1067)			
Less than 500	20	53	27		38	32	29		
500 - 999	29	49	22		33	23	44		
1,000 - 4,999	26	53	21		31	22	48		
5,000 - 9,999	31	47	22	$\chi^2 = 7.26$	28	14	59	$\chi^2 = 33.49*$	
10,000 and up	28	50	23	(.509)	26	26	48	(.000)	
Region		(n = 1065)			(n	= 1077)			
Panhandle	16	56	28		29	25	46		
North Central	19	52	29		41	22	37		
South Central	29	50	21		29	24	46		
Northeast	29	52	19	$\gamma^2 = 19.04*$	32	22	46	$\chi^2 = 17.04*$	
Southeast	32	46	22	(.015)	23	33	45	(.030)	
Individual Attributes:								~ /	
Income Level		(n = 1009)			(n	= 1018)			
Under \$40,000	26	57	16		24	25	51		
\$40,000 - \$74,999	26	54	21		30	22	48		
\$75,000 - \$99,999	29	51	20	$\gamma^2 = 17.60^*$	23	29	48	$\gamma^2 = 16.74^*$	
\$100,000 and over	28	43	30	(.007)	37	23	40	(.010)	
Age		(n = 1069)			(n	= 1080)		()	
19 - 29	24	66	11		39	13	47		
30 - 39	20	49	31		37	21	42		
40 - 49	27	50	22		31	29	40		
50 - 64	23	48	30	$\gamma^2 = 46.54*$	29	29	42	$\gamma^2 = 34.16^*$	
65 and older	36	46	19	(.000)	21	27	52	(.000)	
Gender		(n = 1057)			(n	= 1065)		()	
Male	27	47	27	$\chi^2 = 12.74^*$	38	24	38	$\chi^2 = 33.33^*$	
Female	26	56	18	(.002)	22	26	52	(.000)	
Education		(n = 1051)			(n	= 1061)		~ /	
H.S. diploma or less	28	45	27		26	25	49		
Some college	19	58	23	$\chi^2 = 27.63^*$	30	29	41	$\chi^2 = 12.16^*$	
Bachelors/grad degree	34	46	20	(.000)	32	20	48	(.016)	
Occupation		(n = 781)			(1	n = 789)			
Mgt, prof or education	29	53	18		29	20	51		
Sales or office support	13	68	20		26	41	33		
Constrn, inst or maint	20	49	31		42	30	28		
Prodn/trans/warehsing	24	36	39		34	22	43		
Agriculture	15	52	33		55	21	24		
Food serv/pers. care	37	41	22		24	22	55		
Hlthcare supp/safety	30	45	25	$\chi^2 = 46.15^*$	28	18	53	$\chi^2 = 74.63^*$	
Other	5	75	20	(.000)	11	63	26	(.000)	

Appendix Table 9. Suggested Levels of Investment in Sources of Electrical Energy Over Next Several Years by Community Size, Region and Individual Attributes

Appendix	Table 9	continued.
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	Solar			Hydroelectric				
		Same			11	Same	•	
	Less	Amount	More	Significance	Less	Amount	More	Significance
				Percent	ages			8 2
Total	16	21	62		7	43	50	
Community Size		(n = 1067)				(n = 1059)		
Less than 500	22	29	50		8	51	41	
500 - 999	19	24	57		5	45	50	
1,000 - 4,999	17	21	62		7	41	52	
5,000 - 9,999	11	11	77	$\chi^2 = 28.97*$	14	37	49	$\chi^2 = 19.78^*$
10,000 and up	14	18	67	(.000)	5	40	55	(.011)
Region		(n = 1075)		(n = 1066)				
Panhandle	9	16	75		8	41	50	
North Central	17	30	53		7	48	45	
South Central	17	21	62		5	46	49	
Northeast	20	19	61	$\chi^2 = 19.57*$	6	35	58	$\chi^2 = 16.38^*$
Southeast	14	23	63	(.012)	10	45	45	(.037)
Individual Attributes:								
Income Level		(n = 1016)				(n = 1009)		
Under \$40,000	15	22	63		13	46	41	
\$40,000 - \$74,999	16	21	64		5	46	50	
\$75,000 - \$99,999	16	20	64	$\chi^2 = 0.79$	5	38	57	$\chi^2 = 24.59^*$
\$100,000 and over	17	20	63	(.992)	6	38	56	(.000)
Age		(n = 1076)				(n = 1066)		
19 - 29	18	13	68		3	45	53	
30 - 39	20	24	56		4	43	53	
40 - 49	17	17	65		13	41	46	
50 - 64	16	26	58	$\gamma^2 = 19.36^*$	8	40	52	$\chi^2 = 21.09*$
65 and older	12	24	64	(.013)	6	45	49	(.007)
Gender		(n = 1064)				(n = 1055)		
Male	21	19	61	$\chi^2 = 16.94*$	7	35	58	$\chi^2 = 28.81^*$
Female	12	24	64	(.000)	7	51	42	(.000)
Education		(n = 1060)				(n = 1049)		
H.S. diploma or less	11	26	63		7	47	47	
Some college	17	24	59	$\chi^2 = 13.28^*$	6	45	49	$\chi^2 = 4.80$
Bachelors/grad degree	17	16	67	(.010)	8	39	54	(.308)
Occupation		(n = 788)				(n = 783)		
Mgt, prof or education	14	20	67		5	48	47	
Sales or office support	12	21	68		3	40	57	
Constrn, inst or maint	27	28	45		13	39	48	
Prodn/trans/warehsing	21	13	66		5	31	65	
Agriculture	19	23	58		8	34	58	
Food serv/pers. care	12	14	75		16	28	56	
Hlthcare supp/safety	19	13	69	$\chi^2 = 44.98*$	5	35	60	$\chi^2 = 35.08*$
Other	5	60	35	(.000)	5	63	32	(.001)

Appendix Table 9 continued.

		Nuclear			Na	utural gas		
		Same			1 14	Same		
	Less	Amount	More	Significance	Less	Amount	More	Significance
				Percento	ages			
<u>Total</u>	27	37	36		13	46	41	
<u>Community Size</u>		(n = 1055)			(n	= 1065)		
Less than 500	30	43	27		8	51	40	
500 - 999	26	38	36		19	41	40	
1,000 - 4,999	27	37	36		10	48	42	
5,000 - 9,999	28	37	34	$\chi^2 = 11.64$	17	38	45	$\chi^2 = 16.25^*$
10,000 and up	26	33	41	(.168)	15	44	41	(.039)
Region		(n = 1063)			(n	= 1076)		
Panhandle	30	34	36		13	45	42	
North Central	32	41	27		6	50	44	
South Central	27	41	32		14	47	39	
Northeast	26	30	44	$\gamma^2 = 19.50^*$	14	38	48	$\chi^2 = 20.41*$
Southeast	24	41	35	(.012)	15	53	32	(.009)
Individual Attributes:				()				()
Income Level		(n = 1008)			(n	= 1018)		
Under \$40,000	31	43	26		15	47	38	
\$40,000 - \$74,999	33	35	33		15	50	36	
\$75,000 - \$99,999	27	36	38	$\chi^2 = 25.72^*$	12	43	45	$\chi^2 = 12.56$
\$100,000 and over	21	34	45	(.000)	11	41	48	(.051)
Age		(n = 1065)			(n	= 1077)		()
19 - 29	32	24	45		11	53	37	
30 - 39	21	49	30		18	43	39	
40 - 49	28	41	31		17	49	34	
50 - 64	28	38	34	$\gamma^2 = 29.12^*$	9	42	49	$\gamma^2 = 23.41^*$
65 and older	26	34	39	(.000)	12	43	46	(.003)
Gender		(n = 1054)			(n	= 1063)		()
Male	22	28	51	$\gamma^2 = 107.21*$	12	38	50	$\gamma^2 = 31.50*$
Female	33	47	21	(.000)	14	53	33	(.000)
Education		(n = 1049)			(n	= 1058)		()
H.S. diploma or less	38	37	26		16	43	41	
Some college	25	39	37	$\gamma^2 = 15.70^*$	9	46	44	$\gamma^2 = 10.28^*$
Bachelors/grad degree	26	35	39	(.003)	16	46	38	(.036)
Occupation		(n = 783)		()	(1	n = 787)		()
Mgt, prof or education	27	37	37		17	47	37	
Sales or office support	14	49	36		3	46	51	
Constrn, inst or maint	19	28	53		19	44	37	
Prodn/trans/warehsing	26	33	41		17	29	55	
Agriculture	26	34	40		2	52	46	
Food serv/pers. care	45	37	18		16	52	32	
Hlthcare supp/safety	36	38	26	$\chi^2 = 51.42*$	17	46	37	$\chi^2 = 41.74*$
Other	0	79	21	(.000)	0	74	26	(.000)

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