



NEBRASKA RURAL POLL

A Research Report

Perceptions of Production and Animal Agriculture in Nonmetropolitan Nebraska

2020 Nebraska Rural Poll Results

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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

Agriculture has and continues to play a critical role in Nebraska's economy. A recent University of Nebraska-Lincoln study indicates that approximately one in four jobs in the state are related to agriculture. In addition, 48% of Nebraska farms have livestock or poultry operations. Given these conditions, how are rural Nebraskans connected to agriculture? How do they feel about the Livestock Friendly County designation and livestock development in the state? This paper provides a detailed analysis of these questions.

This report details 1,979 responses to the 2020 Nebraska Rural Poll, the 25th annual effort to understand rural Nebraskans' perceptions. Respondents were asked a series of questions about agriculture. Comparisons are made among different respondent subgroups, that is, comparisons by age, occupation, region, etc. Based on these analyses, some key findings emerged:

- ***Most rural Nebraskans have farming or ranching history in their family.*** Twenty-six percent of rural Nebraskans currently practice farming or ranching as an occupation or have in the past. Almost one-half (46%) reported that their parents farmed or ranched, 65 percent that their grandparents had and 61 percent that their great-grandparents farmed or ranched.
- ***One-half of rural Nebraskans (50%) are one generation or less removed from the farm or ranch.*** Nineteen percent are two generations removed from the farm/ranch and four percent are three generations removed. Just under three in ten households (28%) have no farming or ranching history in their family in the previous four generations. These same questions were asked in 2010. Rural Nebraskans' connection to agriculture has not changed much in the last ten years.
 - ✓ *Persons living in or near smaller communities are more likely than persons living in or near larger communities to be one generation or less removed from the farm or ranch.* Almost two-thirds of persons living in or near communities with populations less than 1,000 are one generation or less removed from the farm or ranch. In comparison, four in ten persons living in or near the largest communities are one generation or less removed from the farm or ranch.
- ***Most rural Nebraskans view their economic well-being as being dependent on both production agriculture in general and animal agriculture in particular.*** Four in ten rural Nebraskans (40%) say their economic well-being is very much dependent on the economic success of production agriculture in general. Nearly an additional one-quarter (23%) say some of their economic well-being is tied to production agriculture. When looking at animal agriculture in particular, one-third of rural Nebraskans (33%) say their economic well-being is very much dependent on it and nearly an additional one-quarter (23%) say it impacts some of their economic well-being.
 - ✓ *Panhandle residents are more likely than residents of other regions to say their household is very much or somewhat dependent on production agriculture in general. Residents of both the Panhandle and North Central regions are more likely than residents of other regions of the state to say their household's economic well-being is at least somewhat dependent on animal agriculture in particular.* Over six in ten residents of these two regions say the economic success

of animal agriculture very much or somewhat affects their household's economic well-being, compared to just over one-half of residents of the other three regions.

- ***Most rural Nebraskans say the economic well-being of their community or county is very much dependent on the economic success of both production agriculture and animal agriculture.*** Three-quarters of rural Nebraskans (75%) say the economic well-being of their community or county is very much affected by the economic success of production agriculture in general. In addition, just over seven in ten rural Nebraskans (71%) say the economic well-being of their community or county is very much dependent on animal agriculture in particular.
- ***Most rural Nebraskans are supportive of new livestock development and having a logical process for approving that development.*** Approximately seven in ten rural Nebraskans agree that both encouraging new livestock development is beneficial for their county and that it is important to have a logical, predictable approval process for new livestock development in their county.
- ***Many rural Nebraskans are not familiar with the Livestock Friendly County designation.*** While four in ten rural Nebraskans agree that they know whether or not their county is currently designated as a Livestock Friendly County, almost three in ten disagree and almost one-third (32%) neither agree nor disagree. Separately, almost one-third (32%) agree that they are familiar with and understand what the designation means, while just over one-third (35%) disagree and one-third (33%) neither agree nor disagree.
 - ✓ *Persons with occupations in agriculture are more likely than persons with different occupations to agree that they are familiar with and understand what the designation means.* Just over one-half (52%) of persons with occupations in agriculture agree with this statement, compared to just over two in ten persons with management, professional or education occupations (23%).
- ***Opinions are also mixed on the impacts of the designation.*** Just under two in ten rural Nebraskans (19%) agree with a statement that the designation would limit local/county control and limit local input in the process. However, 17 percent disagree and almost two-thirds (65%) neither agree nor disagree with the statement. Similarly, equal proportions both agree and disagree that encouraging new livestock development would not be beneficial for their county if the growth is primarily large scale operations. Three in ten rural Nebraskans (30%) agree with that statement, just over three in ten (31%) disagree and almost four in ten (39%) neither agree nor disagree.
 - ✓ *Persons living in or near the smallest communities are most likely to agree that encouraging new livestock development would not be beneficial for their county if the growth is primarily large scale operations.* Just over four in ten persons living in or near the smallest communities (43%) agree with this statement, compared to 22 percent of persons living in or near the largest communities.

Introduction

Agriculture has and continues to play a critical role in Nebraska's economy. A recent University of Nebraska-Lincoln study indicates that approximately one in four jobs in the state are related to agriculture. In addition, 48% of Nebraska farms have livestock or poultry operations. Given these conditions, how are rural Nebraskans connected to agriculture? How do they feel about the Livestock Friendly County designation and livestock development in the state? This paper provides a detailed analysis of these questions.

This report details 1,979 responses to the 2020 Nebraska Rural Poll, the 25th annual effort to understand rural Nebraskans' perceptions. Respondents were asked a series of questions about agriculture.

Methodology and Respondent Profile

This study is based on 1,979 responses from Nebraskans living in 86 counties in the state.¹ A self-administered questionnaire was mailed in March and April to 6,033 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 pertaining to well-being, community, weather events, resilience, and agriculture. This paper reports only results from the agriculture sections.

A 33% 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.
2. The questionnaire was mailed with an informal letter signed by the project manager approximately ten days later.
3. A reminder postcard was sent to those who had not yet responded approximately ten days after the questionnaire had been sent.
4. Those who had not yet responded within approximately 20 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 2014 - 2018 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 the various issues presented in this report. The margin of error for this study is plus or minus two 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

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.

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-nine percent are married (Appendix Table 1) and 69 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 27 years. Fifty-eight percent are living in or near towns or villages with populations less than 5,000. Ninety-seven percent have attained at least a high school diploma.

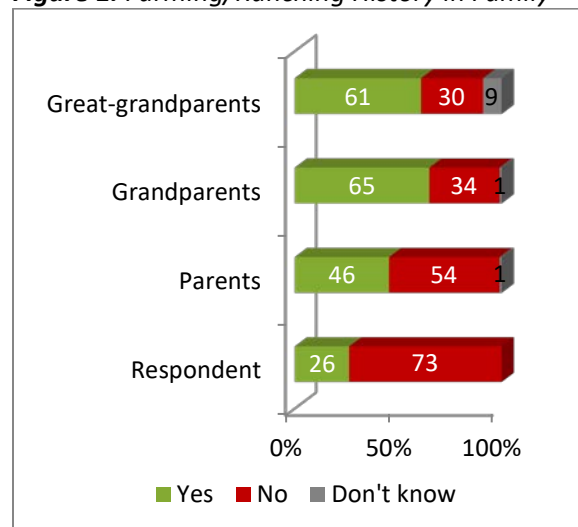
Twenty-two percent of the respondents report their 2019 approximate household income from all sources, before taxes, as below \$40,000. Sixty percent report incomes over \$60,000. Seventy-eight percent were employed in 2019 on a full-time, part-time, or seasonal basis. Eighteen percent are retired. Thirty-three percent of those employed reported working in a management, professional, or education occupation. Fifteen percent indicated they were employed in agriculture.

Connection to Agriculture

Rural Nebraskans were asked a series of questions to determine their connection to agriculture. First, they were asked if they practice farming or ranching as an occupation or had in the past as well as if some of their family members do or had in the past.

Most rural Nebraskans have farming or ranching history in their family. Twenty-six percent of rural Nebraskans currently practice farming or ranching as an occupation or have in the past (Figure 1). Almost one-half (46%) reported that their parents farmed or ranched while 65 percent reported that their grandparents had and 61 percent reported that

Figure 1. Farming/Ranching History in Family

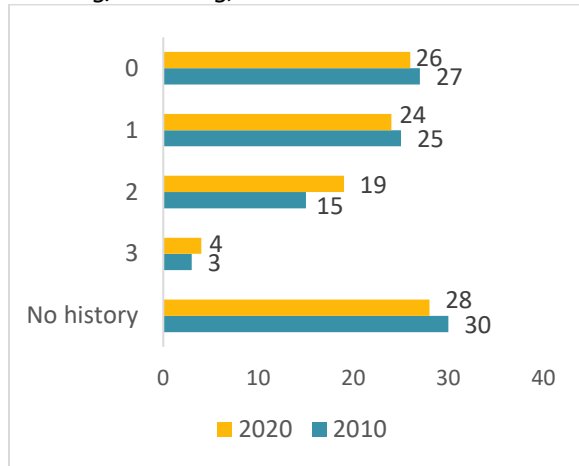


their great-grandparents farmed or ranched.

Combining this data together reveals that one-half of rural Nebraskans (50%) are one generation or less removed from the farm or ranch (Figure 2). Nineteen percent are two generations removed from the farm/ranch and four percent are three generations removed. Just under three in ten households (28%) have no farming or ranching history in their family in the previous four generations. These same questions were asked in 2010. Rural Nebraskans' connection to agriculture has not changed much in the last ten years.

Persons living in or near smaller communities are more likely than persons living in or near larger communities to be one generation or less removed from the farm or ranch (Appendix Table 2). Almost two-thirds of persons living in or near communities with populations less than 1,000 are one generation or less removed from the farm or ranch. In comparison, four in ten persons living in or near the largest communities are one generation or less removed from the farm or ranch.

Figure 2. Generations Removed from Farming/Ranching, 2010 and 2020



Persons living in the Southeast region are more likely than persons living in other regions of the state to be one generation or less removed from the farm or ranch. Over one-half of residents of the Southeast region (55%) are one generation or less removed from farming or ranching, compared to 46 percent of Panhandle residents (see Appendix Figure 1 for the counties included in each region).

The majority of residents with occupations in agriculture (which can include more than farming or ranching) are one generation or less removed from the farm or ranch. Over eight in ten persons with occupations in agriculture (83%) are one generation or less removed from farming or ranching.

Older persons are more likely than younger persons to be one generation or less removed from farming or ranching. Almost six in ten persons age 65 and older (57%) are one generation or less removed from the farm or ranch, compared to less than one-half of persons age 40 to 64.

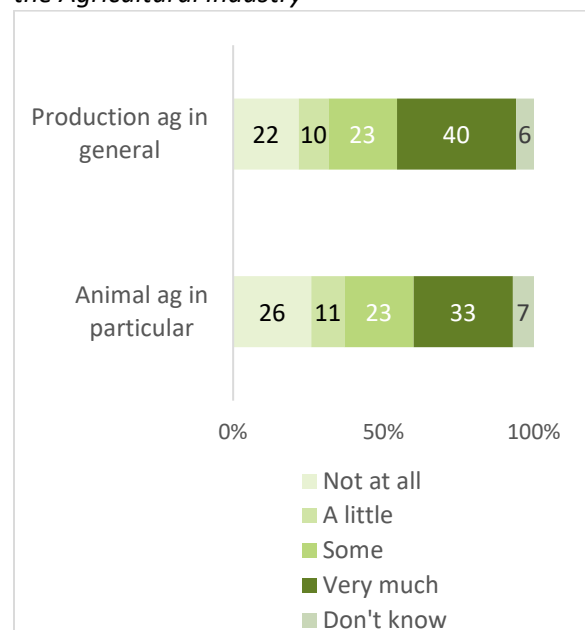
Next, respondents were asked to what extent their economic well-being was dependent on

the economic success of the agricultural industry. They were asked to what extent the economic success of both production agriculture in general and animal agriculture in particular affects their household's economic well-being.

Most rural Nebraskans view their economic well-being as being dependent on both production agriculture in general and animal agriculture in particular. Four in ten rural Nebraskans (40%) say their economic well-being is very much dependent on the economic success of production agriculture in general (Figure 3). Nearly another one-quarter (23%) say some of their economic well-being is tied to production agriculture. When looking at animal agriculture in particular, one-third of rural Nebraskans (33%) say their economic well-being is very much dependent on it and nearly another one-quarter (23%) say it impacts some of their economic well-being.

The household's economic dependence on the

Figure 3. Household's Economic Dependence on the Agricultural Industry

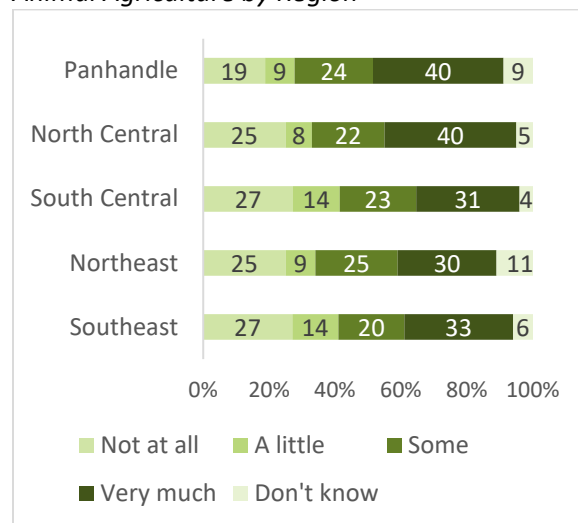


agricultural industry differs by community size and various individual attributes (Appendix Table 3). Persons living in or near smaller communities are more likely than persons living in or near larger communities to say their economic well-being is very much or somewhat dependent on both production agriculture in general and animal agriculture in particular. Approximately seven in ten persons living in or near communities with populations less than 1,000 say their household's economic well-being has very much or some dependence on the production agriculture sector, compared to 54 percent of persons living in or near communities with populations of 10,000 or more. And, almost seven in ten persons living in or near communities with populations under 500 (69%) say their household's economic well-being is very much or somewhat dependent on the economic success of animal agriculture in particular. In comparison, just under one-half of persons living in or near communities with populations of 10,000 or more (49%) share this opinion.

Panhandle residents are more likely than residents of other regions to say their household is very much or somewhat dependent on production agriculture in general. Residents of both the Panhandle and North Central regions are more likely than residents of other regions of the state to say their household's economic well-being is at least somewhat dependent on animal agriculture in particular. Over six in ten residents of these two regions say the economic success of animal agriculture very much or somewhat affects their household's economic well-being, compared to just over one-half of residents of the other three regions (Figure 4).

Other groups most likely to say their household is very much or somewhat economically dependent on both production agriculture in

Figure 4. Household Economic Dependence on Animal Agriculture by Region

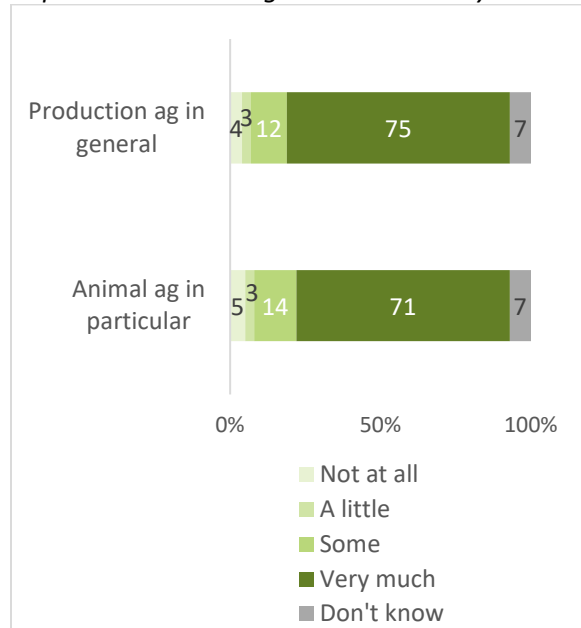


general and animal agriculture in particular include: persons with higher education levels, persons with occupations in agriculture and persons currently involved in farming or ranching.

Next, respondents were asked to what extent the economic success of both production agriculture in general and animal agriculture in particular affect their community or county's economic well-being. Most rural Nebraskans say the economic well-being of their community or county is very much dependent on the economic success of both production agriculture and animal agriculture. Three-quarters of rural Nebraskans (75%) say the economic well-being of their community or county is very much affected by the economic success of production agriculture in general (Figure 5). In addition, just over seven in ten rural Nebraskans (71%) say the economic well-being of their community or county is very much dependent on animal agriculture in particular.

The responses to these questions are examined by community size, region and various

Figure 5. Community or County's Economic Dependence on the Agricultural Industry



individual attributes (Appendix Table 4).

Persons living in or near smaller communities are more likely than persons living in or near the largest communities to say the economic success of production agriculture affects their community or county very much.

Approximately eight in ten persons living in or near communities with populations under 10,000 say their community or county is very much economically dependent on production agriculture in general, compared to just under seven in ten persons living in or near the largest communities (69%). When asked about animal agriculture in particular, persons living in or near mid-sized communities (populations of 500 to 9,999) are the group most likely to say the economic well-being of their community or county is very much impacted by it.

The other groups most likely to say their community or county is very much affected by the economic success of both production and animal agriculture include: persons with higher household incomes, younger persons, persons

with higher education levels, persons with occupations in agriculture and persons with some farming or ranching history in their family.

Perceptions of the Livestock Friendly County Designation

Finally, respondents were given a list of statements about the Livestock Friendly County (LFC) designation administered by the Nebraska Department of Agriculture and adopted by many counties across the state. Respondents were asked to indicate the extent to which they agree or disagree with each statement.

Most rural Nebraskans are supportive of new livestock development and having a logical process for approving that development. Approximately seven in ten rural Nebraskans agree that both encouraging new livestock development is beneficial for their county and that it is important to have a logical, predictable approval process for new livestock development in their county (Table 1).

Many rural Nebraskans are not familiar with the Livestock Friendly County designation. While four in ten rural Nebraskans agree that they know whether or not their county is currently designated as a Livestock Friendly County, almost three in ten disagree and almost one-third (32%) neither agree nor disagree. And, only about one-third (32%) agree that they are familiar with and understand what the designation means, while just over one-third (35%) disagree and one-third (33%) neither agree nor disagree.

Opinions are also mixed on the impacts of the designation. Just under two in ten rural Nebraskans (19%) agree with a statement suggesting that the designation would limit local/county control and limit local input in the process. However, 17 percent disagree and

Table 1. Perceptions about the Livestock Friendly County Designation

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither</i>	<i>Agree</i>	<i>Strongly Agree</i>
I know whether or not my county is currently designated as a Livestock Friendly County.	16%	13%	32%	29%	11%
I am familiar with and understand what the designation means.	18	17	33	26	6
Encouraging new livestock development is beneficial for my county.	3	3	23	52	20
It is important to have a logical, predictable approval process for new livestock development in my county.	2	2	27	51	19
The designation would limit local/county control and limit local input in the process.	5	12	65	16	3
Encouraging new livestock development would not be beneficial for my county if the growth is primarily large scale operations.	9	22	39	20	10

almost two-thirds (65%) neither agree nor disagree with the statement. Similarly, respondents are split on the idea that encouraging new livestock development would not be beneficial for their county if the growth is primarily large scale operations. Three in ten rural Nebraskans (30%) agree with that statement, just over three in ten (31%) disagree and almost four in ten (39%) neither agree nor disagree.

The perceptions of the designation are examined by community size, region and individual attributes (Appendix Table 5). Persons living in or near mid-sized communities are more likely than persons living in or near both smaller and larger communities to agree that they know whether or not their county is currently designated as a Livestock Friendly County. Almost one-half of persons living in or near communities with populations ranging from 500 to 999 agree with this statement,

compared to just over three in ten (31%) of persons living in or near the largest communities.

Older persons are more likely than younger persons to agree that they know whether or not their county is currently designated as a Livestock Friendly County. Almost one-half of persons age 65 and older (46%) agree with this statement, compared to less than four in ten persons under the age of 50.

Other groups most likely to agree that they know whether or not their county is currently designated as a Livestock Friendly County include: residents of the Southeast region, persons with middle-level incomes, males, persons with lower education levels, widowed persons, married persons and persons with occupations in agriculture.

Persons with occupations in agriculture are

more likely than persons with different occupations to agree that they are familiar with and understand what the designation means. Just over one-half (52%) of persons with occupations in agriculture agree with this statement, compared to just over two in ten persons with management, professional or education occupations (23%) (Figure 6).

Other groups most likely to agree that they are familiar with and understand what the designation means include: residents of the Southeast region, older persons, males, persons with less than a four year college degree, widowed persons and married persons.

Younger persons are more likely than older persons to agree that encouraging new livestock development is beneficial for their county. Over eight in ten persons age 19 to 29 (84%) agree with this statement, compared to just under seven in ten persons age 30 and older.

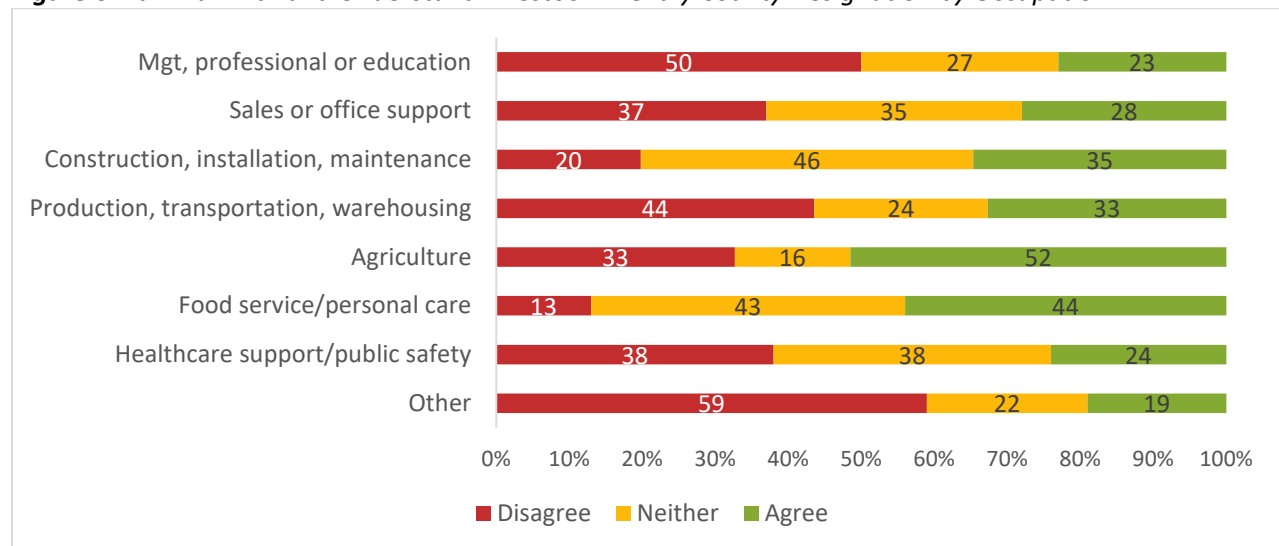
Persons with higher education levels are more likely than persons with less education to agree that encouraging new livestock development is

beneficial for their county. Just over three-quarters of persons with at least a four year college degree (77%) agree with this statement, compared to just over six in ten persons with a high school diploma or less education (62%).

Other groups most likely to agree that encouraging new livestock development is beneficial for their county include: persons living in or near mid-sized communities (populations from 500 to 9,999), persons with higher household incomes, males, married persons, persons with healthcare support and public safety occupations and persons with occupations in agriculture.

Persons with occupations in agriculture are more likely than persons with different occupations to agree that it is important to have a logical, predictable approval process for new livestock development in their county. Almost nine in ten persons with occupations in agriculture (87%) agree with this statement, compared to just over six in ten persons with food service or personal care occupations (63%).

Figure 6. Familiar with and Understand Livestock Friendly County Designation by Occupation



Other groups most likely to agree that it is important to have a logical, predictable approval process for new livestock development in their county include: persons living in or near communities with populations ranging from 500 to 999, residents of the South Central region, persons with higher household incomes, younger persons, males, persons with higher education levels, married persons and persons who have never married.

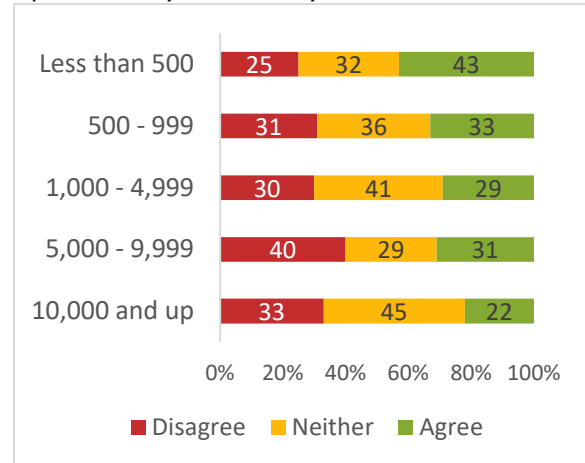
Persons with occupations in agriculture are more likely than persons with different occupations to agree that the designation would limit local/county control and limit local input in the process. Just over one-quarter (28%) of persons with occupations in agriculture agree with this statement, compared to 13 percent of persons with management, professional or education occupations.

Other groups most likely to agree that the designation would limit local/county control and limit local input in the process include: persons living in or near smaller communities, residents of the Southeast region, persons age 65 and older, males, persons with lower education levels and persons who have never married.

Persons living in or near the smallest communities are most likely to agree that encouraging new livestock development would not be beneficial for their county if the growth is primarily large scale operations. Just over four in ten persons living in or near the smallest communities (43%) agree with this statement, compared to 33 percent or less in other communities and just 22 percent of persons living in or near the largest communities (Figure 7).

Persons with construction, installation or maintenance occupations are more likely than

Figure 7. Encouraging New Livestock Development Would Not be Beneficial for County if Growth is Primarily Large Scale Operations by Community Size



persons with different occupations to agree that encouraging new livestock development would not be beneficial for their county if the growth is primarily large scale operations. When comparing responses by age and marital groups, persons age 30 to 49 and persons who are divorced/separated are the groups *least* likely to agree with this statement.

Conclusion

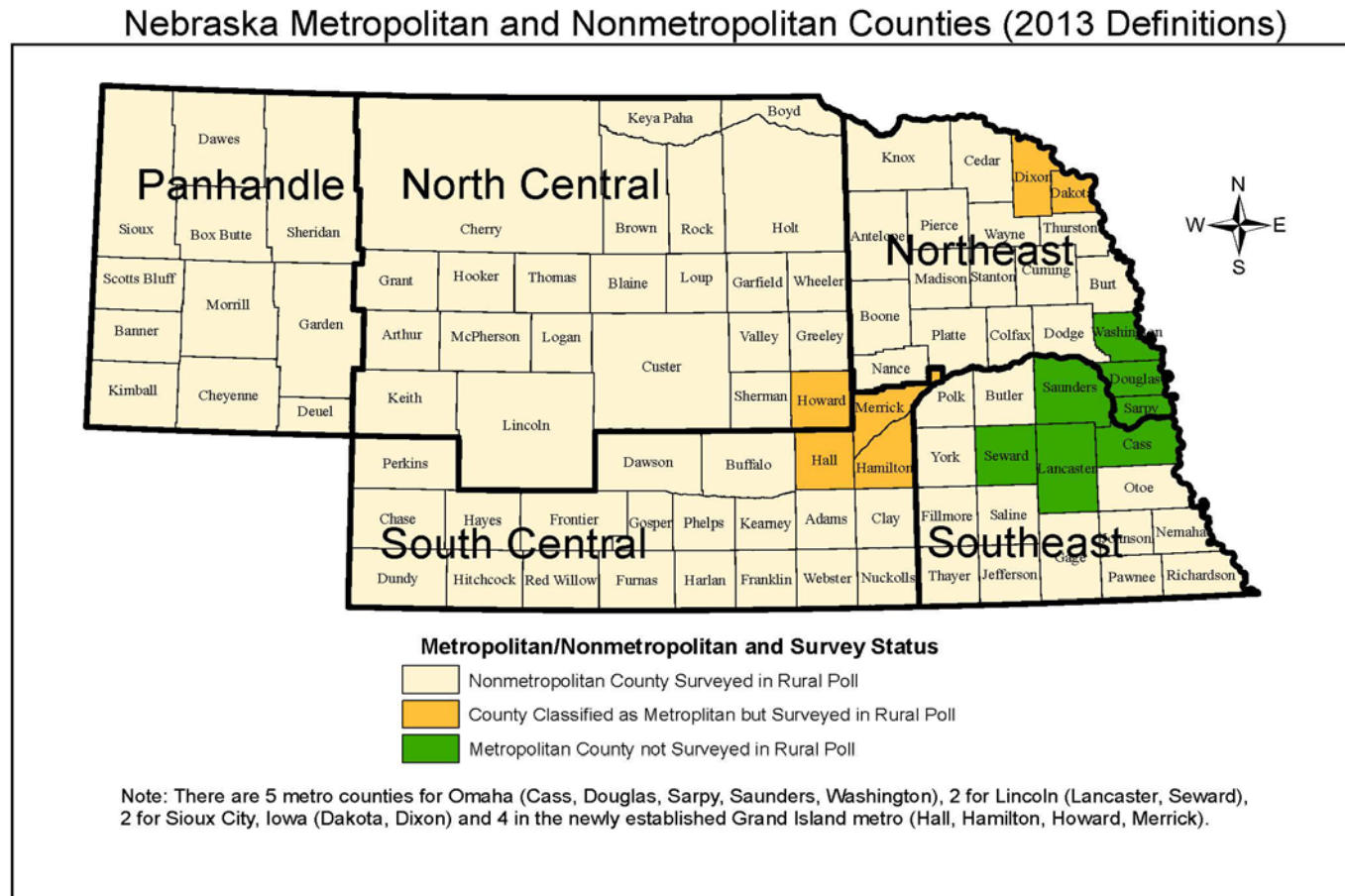
Most rural Nebraskans have farming or ranching history in their family. In fact, one-half of rural Nebraskans are one generation or less removed from the farm or ranch. Rural Nebraskans' connection to agriculture has not changed much in the last ten years.

Most rural Nebraskans view their economic well-being as being dependent on both production agriculture in general and animal agriculture in particular. Furthermore, most rural Nebraskans say the economic well-being of their community or county is very much dependent on the economic success of both production agriculture and animal agriculture.

Most rural Nebraskans are supportive of new livestock development and having a logical process for approving that development. However, many rural Nebraskans are not familiar with the Livestock Friendly County designation. Four in ten rural Nebraskans report that they know whether or not their county is currently designated as a Livestock Friendly County and just under one-third agree that they are familiar with and understand what the designation means.

Opinions are also mixed on the impacts of the designation. Just under two in ten rural Nebraskans (19%) agree that the designation would limit local/county control and limit local input in the process. However, 17 percent disagree and almost two-thirds neither agree nor disagree with the statement. Similarly, equal proportions both agree and disagree that encouraging new livestock development would not be beneficial for their county if the growth is primarily large scale operations.

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

Appendix Table 1. Demographic Profile of Rural Poll Respondents¹ Compared to 2014 – 2018 American Community Survey 5 Year Average for Nebraska*

	2020 Poll	2019 Poll	2018 Poll	2017 Poll	2016 Poll	2015 Poll	2014 - 2018 ACS
Age : ²							
20 - 39	32%	32%	32%	32%	31%	31%	32%
40 - 64	44%	44%	44%	44%	45%	45%	43%
65 and over	24%	24%	24%	24%	24%	24%	25%
Gender: ³							
Female	55%	55%	55%	56%	59%	58%	51%
Male	46%	45%	46%	44%	41%	42%	49%
Education: ⁴							
Less than 9 th grade	1%	0.3%	1%	1%	1%	1%	4%
9 th to 12 th grade (no diploma)	2%	1%	2%	2%	2%	2%	6%
High school diploma (or equiv.)	16%	15%	18%	18%	21%	22%	32%
Some college, no degree	18%	18%	23%	22%	21%	23%	26%
Associate degree	24%	24%	17%	16%	19%	15%	11%
Bachelors degree	26%	29%	25%	25%	23%	24%	14%
Graduate or professional degree	14%	13%	13%	16%	14%	13%	6%
Household Income: ⁵							
Less than \$20,000	7%	7%	9%	10%	11%	12%	16%
\$20,000 - \$39,999	14%	15%	18%	18%	22%	18%	22%
\$40,000 - \$59,999	19%	18%	22%	26%	22%	23%	18%
\$60,000 - \$74,999	16%	16%	17%	12%	14%	15%	12%
\$75,000 - \$99,999	21%	19%	33%	34%	32%	32%	14%
\$100,000 - \$149,999	15%	16%	**** ⁶	***	***	***	13%
\$150,000 - \$199,999	5%	5%	***	***	***	***	3%
\$200,000 or more	4%	3%	***	***	***	***	3%
Marital Status: ⁷							
Married	69%	70%	71%	68%	69%	68%	61%
Never married	12%	12%	10%	13%	11%	13%	18%
Divorced/separated	10%	9%	11%	11%	10%	10%	12%
Widowed/widower	8%	8%	8%	8%	9%	8%	8%

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

² 2014-2018 American Community Survey universe is non-metro population 20 years of age and over.

³ 2014-2018 American Community Survey universe is non-metro population 20 years of age and over.

⁴ 2014-2018 American Community Survey universe is non-metro population 18 years of age and over.

⁵ 2014-2018 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 2014-2018 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.

Appendix Table 2. Generations Removed from Farming or Ranching by Community Size, Region and Individual Attributes

Generations Removed From Farming or Ranching						
	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>No History</i>	<i>Chi-Square (sig.)</i>
<u>Total</u>	26	24	19	4	28	
	<i>Percentages</i>					
<u>Community Size</u>		(n = 1819)				
Less than 500	45	20	14	0.3	22	
500 - 999	39	25	16	3	17	
1,000 - 4,999	28	23	19	3	27	
5,000 - 9,999	21	22	15	5	37	$\chi^2 = 163.99^*$
10,000 and up	12	28	24	6	31	(.000)
<u>Region</u>		(n = 1887)				
Panhandle	27	19	20	2	32	
North Central	33	17	22	3	25	
South Central	21	28	22	4	26	
Northeast	25	25	17	5	28	$\chi^2 = 54.21^*$
Southeast	34	21	13	1	31	(.000)
<u>Income Level</u>		(n = 1744)				
Under \$40,000	31	19	13	3	34	
\$40,000 - \$74,999	23	25	19	5	28	
\$75,000 - \$99,999	25	25	27	3	20	$\chi^2 = 49.38^*$
\$100,000 and over	25	27	19	2	28	(.000)
<u>Age</u>		(n = 1892)				
19 - 29	32	20	20	4	26	
30 - 39	26	24	22	6	22	
40 - 49	23	24	20	4	31	
50 - 64	22	24	21	4	30	$\chi^2 = 34.02^*$
65 and older	31	26	14	2	27	(.005)
<u>Education</u>		(n = 1832)				
H.S. diploma or less	30	18	12	2	38	
Some college	28	23	18	3	29	$\chi^2 = 65.12^*$
Bachelors or grad degree	24	28	23	5	20	(.000)
<u>Occupation</u>		(n = 1388)				
Mgt, prof or education	17	31	24	2	26	
Sales or office support	14	24	22	8	32	
Constrn, inst or maint	21	23	16	4	37	
Prodn/trans/warehsing	12	28	24	3	34	
Agriculture	72	11	12	1	5	
Food serv/pers. care	17	25	21	5	33	
Hlthcare supp/safety	15	26	18	4	38	$\chi^2 = 339.30^*$
Other	25	21	18	11	25	(.000)

* Chi-square values are statistically significant at the .05 level.

Appendix Table 3. Household's Economic Dependence on Agriculture by Community Size, Region and Individual Attributes

<i>To what extent does the economic success of <u>production agriculture in general</u> affect you or your household's economic well-being?</i>						
	<i>Not at all</i>	<i>A little</i>	<i>Some</i>	<i>Very much</i>	<i>Don't know</i>	<i>Significance</i>
Total	22	10	23	40	6	
<i>Percentages</i>						
Community Size			(n = 1803)			
Less than 500	18	8	25	45	4	$\chi^2 =$ 56.18* (.000)
500 - 999	17	8	19	52	4	
1,000 - 4,999	19	10	20	44	7	
5,000 - 9,999	24	10	24	37	6	
10,000 and up	26	13	24	30	6	
Region			(n = 1865)			
Panhandle	17	7	23	44	9	$\chi^2 =$ 44.66* (.000)
North Central	25	8	21	40	6	
South Central	22	13	24	38	4	
Northeast	21	7	23	39	10	
Southeast	22	12	20	42	3	
Income Level			(n = 1731)			
Under \$40,000	25	7	18	41	9	$\chi^2 =$ 36.78* (.000)
\$40,000 - \$74,999	19	11	26	37	6	
\$75,000 - \$99,999	19	13	21	42	5	
\$100,000 and over	24	9	23	41	3	
Age			(n = 1868)			
19 - 29	20	12	22	45	2	$\chi^2 =$ 29.71* (.020)
30 - 39	23	9	28	34	6	
40 - 49	23	11	19	40	7	
50 - 64	19	10	23	41	7	
65 and older	24	8	22	38	8	
Education			(n = 1811)			
H.S. diploma or less	24	9	19	35	13	$\chi^2 =$ 47.74* (.000)
Some college	20	10	21	43	6	
Bachelors or grad degree	22	11	25	39	3	
Occupation			(n = 1383)			
Mgt, prof or education	22	14	26	34	4	$\chi^2 =$ 233.83* (.000)
Sales or office support	14	13	22	43	8	
Constrn, inst or maint	15	15	33	33	5	
Prodn/trans/warehsing	34	13	27	20	6	
Agriculture	2	1	15	82	0	
Food serv/pers. care	23	6	21	44	6	
Hlthcare supp/safety	32	10	17	34	7	
Other	22	15	26	30	7	
Generations from Farm			(n = 1867)			
0	4	6	18	70	3	$\chi^2 =$ 370.30* (.000)
1	20	16	28	32	4	
2	27	14	24	30	5	
3	34	12	19	25	11	
No farming history	35	7	22	25	12	

* Chi-square values are statistically significant at the .05 level.

<i>To what extent does the economic success of animal agriculture in particular affect you or your household's economic well-being?</i>						
	<i>Not at all</i>	<i>A little</i>	<i>Some</i>	<i>Very much</i>	<i>Don't know</i>	<i>Significance</i>
Total	26	11	23	33	7	
<i>Percentages</i>						
Community Size			(n = 1795)			
Less than 500	21	7	27	42	4	
500 - 999	20	10	24	41	5	$\chi^2 =$
1,000 - 4,999	24	11	24	34	8	55.61*
5,000 - 9,999	28	14	19	28	11	(.000)
10,000 and up	31	14	22	27	6	
Region			(n = 1858)			
Panhandle	19	9	24	40	9	
North Central	25	8	22	40	5	$\chi^2 =$
South Central	27	14	23	31	4	49.67*
Northeast	25	9	25	30	11	(.000)
Southeast	27	14	20	33	6	
Income Level			(n = 1722)			
Under \$40,000	28	8	20	35	10	$\chi^2 =$
\$40,000 - \$74,999	24	13	25	32	7	27.30*
\$75,000 - \$99,999	23	14	24	34	5	(.007)
\$100,000 and over	28	12	24	33	3	
Age			(n = 1864)			
19 - 29	26	14	18	38	4	
30 - 39	24	16	28	26	7	$\chi^2 =$
40 - 49	25	9	22	36	7	35.60*
50 - 64	23	10	26	35	6	(.003)
65 and older	29	9	22	31	9	
Education			(n = 1806)			
H.S. diploma or less	27	12	21	28	13	$\chi^2 =$
Some college	23	10	23	36	8	47.08*
Bachelors or grad degree	27	13	24	34	3	(.000)
Occupation			(n = 1374)			
Mgt, prof or education	27	14	23	32	4	
Sales or office support	16	12	29	31	13	
Constrn, inst or maint	19	22	26	28	6	
Prodn/trans/warehsing	40	14	23	17	6	
Agriculture	5	8	29	57	1	$\chi^2 =$
Food serv/pers. care	26	7	21	42	5	162.28*
Hlthcare supp/safety	33	11	15	34	7	(.000)
Other	21	4	43	25	7	
Generations from Farm			(n = 1859)			
0	11	8	20	58	3	
1	23	16	29	28	4	$\chi^2 =$
2	32	16	24	24	4	288.33*
3	34	12	26	17	11	(.000)
No farming history	36	8	21	22	14	

* Chi-square values are statistically significant at the .05 level.

Appendix Table 4. Community or County's Economic Dependence on Agriculture by Community Size, Region and Individual Attributes

<i>To what extent does the economic success of <u>production</u> agriculture in general affect your community or county's economic well-being?</i>						
	<i>Not at all</i>	<i>A little</i>	<i>Some</i>	<i>Very much</i>	<i>Don't know</i>	<i>Significance</i>
Percentages						
Total	4	3	12	75	7	
Community Size			(n = 1805)			
Less than 500	4	3	10	77	6	$\chi^2 =$ 31.99* (.010)
500 - 999	3	1	11	80	6	
1,000 - 4,999	3	2	9	79	7	
5,000 - 9,999	4	3	8	77	9	
10,000 and up	5	3	16	69	6	
Region			(n = 1863)			
Panhandle	3	1	8	80	8	$\chi^2 =$ 36.77* (.002)
North Central	3	3	16	72	7	
South Central	3	3	12	77	5	
Northeast	5	2	12	70	10	
Southeast	5	3	7	79	6	
Income Level			(n = 1731)			
Under \$40,000	10	2	13	65	10	$\chi^2 =$ 95.20* (.000)
\$40,000 - \$74,999	2	3	15	72	8	
\$75,000 - \$99,999	3	1	9	83	4	
\$100,000 and over	2	4	9	83	3	
Age			(n = 1871)			
19 - 29	2	4	8	82	4	$\chi^2 =$ 38.32* (.001)
30 - 39	4	2	15	73	6	
40 - 49	4	3	10	76	8	
50 - 64	4	2	14	74	6	
65 and older	7	3	10	71	10	
Education			(n = 1812)			
H.S. diploma or less	8	6	12	61	14	$\chi^2 =$ 96.71* (.000)
Some college	5	2	12	74	7	
Bachelors or grad degree	2	2	11	83	3	
Occupation			(n = 1382)			
Mgt, prof or education	2	1	13	80	5	$\chi^2 =$ 127.64* (.000)
Sales or office support	1	1	8	75	14	
Constrn, inst or maint	3	4	11	77	6	
Prodn/trans/warehsing	6	9	22	60	3	
Agriculture	0	1	9	90	1	
Food serv/pers. care	8	1	15	71	6	
Hlthcare supp/safety	4	5	5	78	8	
Other	0	4	4	82	11	
Generations from Farm			(n = 1868)			
0	1	2	9	85	3	$\chi^2 =$ 168.83* (.000)
1	3	3	12	78	4	
2	2	1	12	81	4	
3	5	0	12	76	8	
No farming history	9	5	13	58	15	

* Chi-square values are statistically significant at the .05 level.

<i>To what extent does the economic success of animal agriculture in particular affect your community or county's economic well-being?</i>						
	<i>Not at all</i>	<i>A little</i>	<i>Some</i>	<i>Very much</i>	<i>Don't know</i>	<i>Significance</i>
Total	5	3	14	71	7	
<i>Percentages</i>						
Community Size			(n = 1800)			
Less than 500	5	4	15	71	5	
500 - 999	4	1	12	77	7	$\chi^2 =$
1,000 - 4,999	3	4	12	74	7	36.96*
5,000 - 9,999	6	2	6	80	7	(.002)
10,000 and up	5	3	18	65	8	
Region			(n = 1861)			
Panhandle	4	2	9	77	9	
North Central	3	3	14	74	6	$\chi^2 =$
South Central	4	4	15	72	6	39.22*
Northeast	6	2	13	67	12	(.001)
Southeast	7	5	14	71	4	
Income Level			(n = 1727)			
Under \$40,000	11	3	14	62	10	$\chi^2 =$
\$40,000 - \$74,999	2	4	16	70	8	87.07*
\$75,000 - \$99,999	3	1	12	78	5	(.000)
\$100,000 and over	3	5	11	78	3	
Age			(n = 1865)			
19 - 29	2	4	10	80	4	
30 - 39	4	4	18	67	7	$\chi^2 =$
40 - 49	4	3	11	75	8	52.71*
50 - 64	4	3	16	71	6	(.000)
65 and older	8	3	14	64	11	
Education			(n = 1807)			
H.S. diploma or less	9	6	14	58	14	$\chi^2 =$
Some college	5	2	14	72	7	74.15*
Bachelors or grad degree	2	3	14	77	4	(.000)
Occupation			(n = 1376)			
Mgt, prof or education	3	2	14	76	6	
Sales or office support	1	3	8	77	10	
Constrn, inst or maint	4	4	11	76	5	
Prodn/trans/warehsing	6	10	24	56	3	
Agriculture	1	2	16	81	1	$\chi^2 =$
Food serv/pers. care	8	1	13	71	8	95.02*
Hlthcare supp/safety	5	4	7	76	8	(.000)
Other	0	4	11	75	11	
Generations from Farm			(n = 1867)			
0	3	3	14	77	3	
1	3	3	12	77	5	$\chi^2 =$
2	2	2	14	75	7	117.78*
3	5	0	14	74	8	(.000)
No farming history	9	5	14	57	14	

* Chi-square values are statistically significant at the .05 level.

Appendix Table 5. Perceptions about the Livestock Friendly County Designation by Community Size, Region and Individual Attributes.

	<i>I know whether or not my county is currently designated as a Livestock Friendly County.</i>				<i>I am familiar with and understand what the designation means.</i>			
	<i>Disagree</i>	<i>Neither</i>	<i>Agree</i>	<i>Significance</i>	<i>Disagree</i>	<i>Neither</i>	<i>Agree</i>	<i>Significance</i>
	<i>Percentages</i>							
Total	29	32	39		35	33	32	
Community Size	(n = 1768)				(n = 1765)			
Less than 500	27	32	41		30	37	33	
500 - 999	29	24	47		34	25	41	
1,000 - 4,999	25	32	43		31	34	34	
5,000 - 9,999	25	34	41	$\chi^2 = 32.00^*$	34	27	39	$\chi^2 = 44.79^*$
10,000 and up	36	33	31	(.000)	43	33	23	(.000)
Region	(n = 1826)				(n = 1821)			
Panhandle	26	36	38		32	32	36	
North Central	30	29	41		35	34	31	
South Central	32	31	37		40	31	29	
Northeast	31	31	38	$\chi^2 = 16.63^*$	38	32	30	$\chi^2 = 32.09^*$
Southeast	21	34	45	(.034)	22	38	40	(.000)
Household Income Level	(n = 1700)				(n = 1693)			
Under \$40,000	20	44	36		29	40	31	
\$40,000 - \$74,999	32	27	41		36	33	31	
\$75,000 - \$99,999	27	29	44	$\chi^2 = 51.51^*$	35	33	31	$\chi^2 = 30.43^*$
\$100,000 and over	38	29	33	(.000)	46	24	31	(.000)
Age	(n = 1833)				(n = 1828)			
19 - 29	37	27	35		39	35	25	
30 - 39	34	34	32		48	28	25	
40 - 49	35	28	37		42	28	30	
50 - 64	26	32	42	$\chi^2 = 59.97^*$	32	33	35	$\chi^2 = 85.33^*$
65 and older	16	38	46	(.000)	19	40	41	(.000)
Gender	(n = 1827)				(n = 1822)			
Male	25	27	48	$\chi^2 = 52.21^*$	32	28	41	$\chi^2 = 54.82^*$
Female	33	36	31	(.000)	39	37	24	(.000)
Education	(n = 1774)				(n = 1769)			
High school diploma or less	17	38	46		25	39	36	
Some college	22	34	44	$\chi^2 = 107.72^*$	27	37	36	$\chi^2 = 93.34^*$
Bachelors or grad degree	43	26	31	(.000)	49	26	26	(.000)
Marital Status	(n = 1806)				(n = 1800)			
Married	30	29	40		38	29	33	
Never married	31	36	32		27	44	29	
Divorced/separated	27	40	34	$\chi^2 = 19.73^*$	38	37	25	$\chi^2 = 34.13^*$
Widowed	19	37	43	(.003)	24	42	34	(.000)
Occupation	(n = 1369)				(n = 1371)			
Mgt, prof or education	43	27	30		50	27	23	
Sales or office support	31	33	36		37	35	28	
Constrn, inst or maint	17	42	42		20	46	35	
Prodn/trans/warehsing	36	27	36		44	24	33	
Agriculture	20	16	63		33	16	52	
Food serv/pers. care	12	51	37		13	43	44	
Hlthcare supp/safety	32	34	34	$\chi^2 = 125.37^*$	38	38	24	$\chi^2 = 135.09^*$
Other	39	32	29	(.000)	59	22	19	(.000)

* Chi-square values are statistically significant at the .05 level.

	<i>Encouraging new livestock development is beneficial for my county.</i>				<i>It is important to have a logical, predictable approval process for new livestock development in my county.</i>			
	<i>Disagree</i>	<i>Neither</i>	<i>Agree</i>	<i>Significance</i>	<i>Disagree</i>	<i>Neither</i>	<i>Agree</i>	<i>Significance</i>
	<i>Percentages</i>							
Total	6	23	71		4	27	70	
Community Size		(n = 1769)				(n = 1766)		
Less than 500	6	26	69		7	31	63	
500 - 999	9	17	74		4	19	77	
1,000 - 4,999	4	24	73		3	30	67	
5,000 - 9,999	3	20	77	$\chi^2 = 18.96^*$	3	24	73	$\chi^2 = 26.43^*$
10,000 and up	7	24	70	(.015)	3	24	73	(.001)
Region		(n = 1826)				(n = 1822)		
Panhandle	4	23	74		4	29	67	
North Central	5	21	74		5	31	64	
South Central	5	25	70		3	23	74	
Northeast	9	22	70	$\chi^2 = 12.67$	5	25	70	$\chi^2 = 19.18^*$
Southeast	4	24	72	(.124)	2	30	68	(.014)
Household Income Level		(n = 1698)				(n = 1696)		
Under \$40,000	7	35	59		7	37	57	
\$40,000 - \$74,999	7	19	74		3	24	73	
\$75,000 - \$99,999	4	20	76	$\chi^2 = 44.80^*$	2	23	75	$\chi^2 = 41.40^*$
\$100,000 and over	5	19	76	(.000)	3	23	74	(.000)
Age		(n = 1830)				(n = 1828)		
19 - 29	4	12	84		2	16	83	
30 - 39	7	24	69		4	33	63	
40 - 49	6	24	69		5	28	67	
50 - 64	5	27	68	$\chi^2 = 32.82^*$	2	29	69	$\chi^2 = 36.57^*$
65 and older	7	25	69	(.000)	5	26	69	(.000)
Gender		(n = 1824)				(n = 1824)		
Male	6	20	74	$\chi^2 = 9.99^*$	3	22	75	$\chi^2 = 20.37^*$
Female	6	26	69	(.007)	4	30	65	(.000)
Education		(n = 1773)				(n = 1772)		
High school diploma or less	3	35	62		3	33	64	
Some college	5	25	70	$\chi^2 = 51.92^*$	4	29	67	$\chi^2 = 26.80^*$
Bachelors or grad degree	8	16	77	(.000)	4	20	76	(.000)
Marital Status		(n = 1802)				(n = 1802)		
Married	6	20	75		4	25	71	
Never married	6	33	62		3	24	73	
Divorced/separated	5	28	67	$\chi^2 = 26.55^*$	4	35	61	$\chi^2 = 14.23^*$
Widowed	6	30	64	(.000)	6	32	62	(.027)
Occupation		(n = 1373)				(n = 1370)		
Mgt, prof or education	9	20	72		4	27	69	
Sales or office support	5	21	75		6	26	68	
Constrn, inst or maint	5	34	61		1	33	66	
Prodn/trans/warehsing	2	30	68		3	30	68	
Agriculture	4	17	79		2	11	87	
Food serv/pers. care	1	36	63		0	37	63	
Hlthcare supp/safety	4	15	81	$\chi^2 = 52.20^*$	5	24	70	$\chi^2 = 46.43^*$
Other	11	11	78	(.000)	4	26	70	(.000)

* Chi-square values are statistically significant at the .05 level.

	<i>The designation would limit local/county control and limit local input in the process.</i>				<i>Encouraging new livestock development would not be beneficial for my county if the growth is primarily large scale operations.</i>			
	<i>Disagree</i>	<i>Neither</i>	<i>Agree</i>	<i>Significance</i>	<i>Disagree</i>	<i>Neither</i>	<i>Agree</i>	<i>Significance</i>
	<i>Percentages</i>							
Total	16	65	19		31	39	30	
Community Size		(n = 1726)				(n = 1762)		
Less than 500	14	64	22		25	32	43	
500 - 999	19	60	22		31	36	33	
1,000 - 4,999	19	62	19		30	41	29	
5,000 - 9,999	12	65	24	$\chi^2 = 19.09^*$	40	29	31	$\chi^2 = 53.62^*$
10,000 and up	15	70	15	(.014)	33	45	22	(.000)
Region		(n = 1784)				(n = 1816)		
Panhandle	16	63	21		33	39	28	
North Central	13	65	22		32	38	30	
South Central	20	65	16		33	39	28	
Northeast	16	68	16	$\chi^2 = 22.70^*$	28	42	31	$\chi^2 = 6.52$
Southeast	14	60	26	(.004)	31	37	33	(.589)
Household Income Level		(n = 1663)				(n = 1694)		
Under \$40,000	12	68	20		27	43	30	
\$40,000 - \$74,999	20	62	18		33	39	28	
\$75,000 - \$99,999	15	66	20	$\chi^2 = 12.63^*$	30	41	29	$\chi^2 = 6.91$
\$100,000 and over	16	66	18	(.049)	32	36	32	(.329)
Age		(n = 1786)				(n = 1824)		
19 - 29	14	67	18		35	31	33	
30 - 39	13	72	15		35	41	24	
40 - 49	15	69	16		33	44	23	
50 - 64	17	63	20	$\chi^2 = 29.53^*$	26	41	32	$\chi^2 = 33.02^*$
65 and older	21	55	24	(.000)	28	37	35	(.000)
Gender		(n = 1782)				(n = 1819)		
Male	20	58	22	$\chi^2 = 27.24^*$	35	34	31	$\chi^2 = 18.41^*$
Female	14	70	16	(.000)	28	44	29	(.000)
Education		(n = 1728)				(n = 1767)		
High school diploma or less	14	62	25		25	45	31	
Some college	14	68	19	$\chi^2 = 17.40^*$	31	40	29	$\chi^2 = 10.38^*$
Bachelors or grad degree	20	64	17	(.002)	34	36	30	(.035)
Marital Status		(n = 1760)				(n = 1796)		
Married	18	65	18		33	37	30	
Never married	13	59	28		28	39	33	
Divorced/separated	12	77	12	$\chi^2 = 26.72^*$	25	51	24	$\chi^2 = 15.82^*$
Widowed	20	62	19	(.000)	27	40	33	(.015)
Occupation		(n = 1345)				(n = 1368)		
Mgt, prof or education	16	72	13		34	39	28	
Sales or office support	13	69	18		33	43	23	
Constrn, inst or maint	15	70	14		26	34	41	
Prodn/trans/warehsing	12	72	17		35	44	21	
Agriculture	28	44	28		36	26	38	
Food serv/pers. care	12	68	21		22	56	23	
Hlthcare supp/safety	14	66	20	$\chi^2 = 61.39^*$	32	37	31	$\chi^2 = 40.84^*$
Other	19	70	11	(.000)	35	39	27	(.000)

* Chi-square values are statistically significant at the .05 level.

