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Food Systems Report

An Overview of Coloradans' Perceptions of Agriculture

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Starting in 1996, the Colorado Department of Agriculture identified the need to better understand how: a) the citizens of Colorado viewed the agricultural industry as a whole; b) the public perceives emerging policies meant to support or influence the role of agriculture in Colorado; c) the Department's own programs were valued. In 2016, as they have every five years since 1996, they partnered with Colorado State University to frame a survey that would evaluate the public's attitudes about such issues as food prices, food safety, pesticide use, environmental practices, wildlife and agriculture, animal welfare, land use, population growth and agricultural land preservation, among other things.

A final report of all results was developed. However, a set of shorter, focused reports on key topics is also available, including this overview to explore a couple of key topics in more depth. In addition to a broad overview of all topics covered in this survey, this report has a particular focus on how a respondent's history and depth of experience in agriculture may influence their opinions on several key issues.

This overview of Colorado Attitudes about Food and Agriculture has a few key findings.

1) There is broad-based agreement that agriculture is an important part of Colorado's economy, and its quality of life and serves the state well in providing safe food at a reasonable cost.
2) There are some minor differences in the strength of support and confidence between those who live or were raised on a farm and those without such background.
3) Agricultural production practices are generally believed to be usually necessary to feed the population and safe; however, this is one area where there is some level of disagreement among our citizens, particularly related to Genetically Modified Organisms (GMOs).
4) There appears to be a role for Colorado Department of Agriculture programs, information relayed through labels, produce calendars and contacts at food retail sites, and agritourism, so these programs should be a priority for additional funding in the future.

A Summary of Respondent Characteristics and their Background in Agriculture

Colorado State University contracted with TNS (www.tns-us.com) to disseminate the survey online in August-September of 2016 to 1000 Colorado residents. The survey instrument (see Appendix of the full report) contains multiple choice and open-ended questions, most of which have been asked since 1996;

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however, new questions were added to the 2016 survey. The average length of residence among respondents was just under 16 years, down from over 20 years in the 2011 survey. The average respondent was just below 50 years in age and the respondents were 42% male and 58% female. The median income for this survey was between $50,000 and $75,000, which is consistent with the state's median income of $55,000 in 2015.

In order to get a sense of the context each respondent had about agriculture, (Figure 1) the first question on the survey consisted of three parts: a) Do you currently live or work on a farm or ranch? b) Have you ever lived or worked on a farm or ranch? c) Does your household raise any of its own food products?

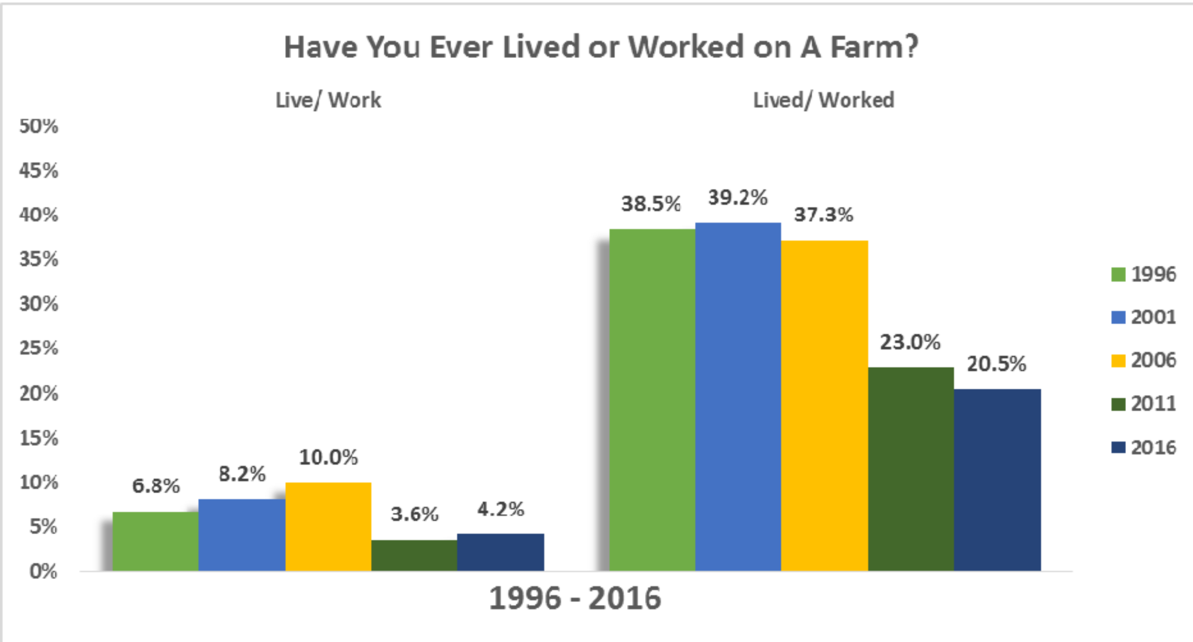

Figure 1

Only about one fifth of all respondents (20.5%) reported having lived or worked on a farm at some point in their lives, a number that is significantly lower than 1996 (38.5%), 2001 (39.2%) and 2006 (37.3%) and more reflective of 2011 (23%). Less than 5% currently live or work on a farm or ranch, down substantially from early surveys, but up slightly from 2011 (3.6%). It should be noted that no criteria were given to respondents as to what constituted living or working on a farm or ranch and sampling design for each survey was slightly different (the 2011 and 2016 surveys were conducted online as compared to by phone or mail in the earlier surveys of 2006, 2001, and 1996), so changes in results should be interpreted carefully.

For the first time in 2016, we asked respondents about their own household food production since there is a perception that households are increasingly interested in producing some of their own food (Figure 2). More than one-third (34.6%) of Coloradans raise at least some of their own vegetables and 13.3% also raise fruits for their own household, while a much smaller percentage raise poultry or livestock (3% total).

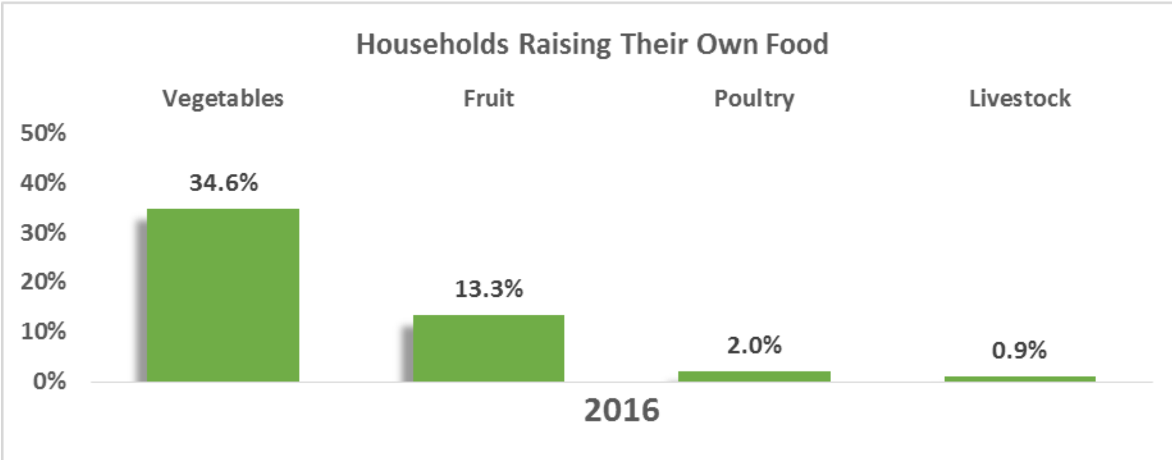

Figure 2

Perceptions of Agriculture's Role in Colorado Public Life

To ascertain how important agriculture was to Coloradans in several dimensions, we asked a series of questions about economics, quality of life and food buying behavior. First, we asked how important agriculture was, relative to other economic sectors in Colorado (Figure 3) and, while agriculture (14.8%) is still notable to some, more visible sectors, such as education, public service and tourism are perceived as more important to Coloradans. It should be noted that education and public service were added as survey choices in 2011 based on increased mentions in the "other" write-in responses, so comparisons to earlier years are not appropriate.

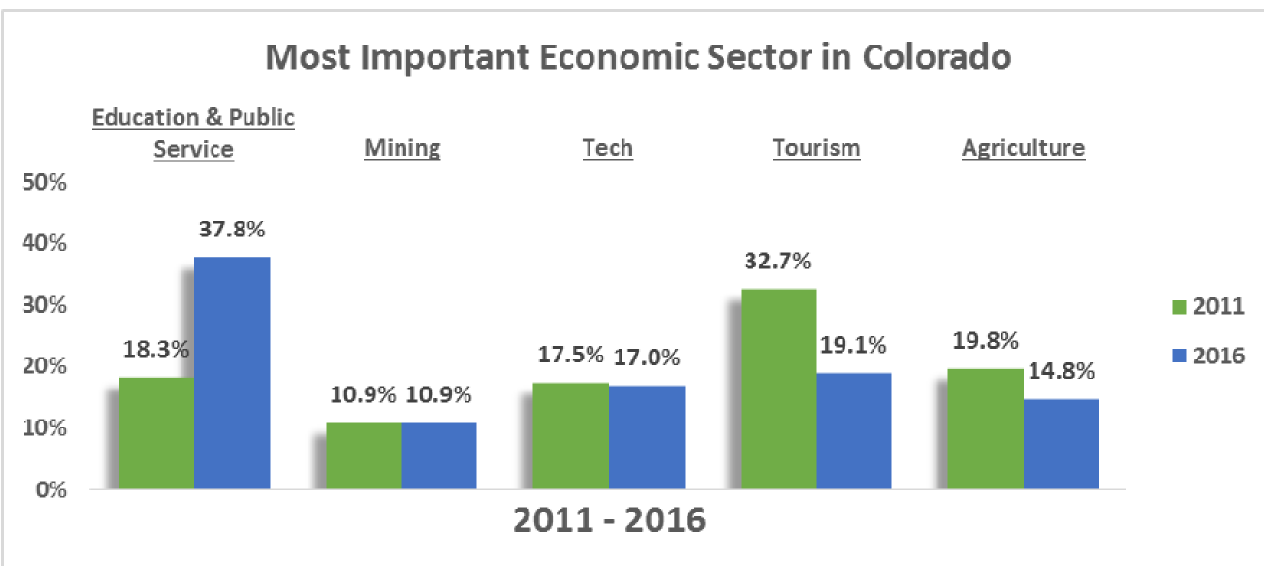

Figure 3

To explore whether there were differences in how the importance of agriculture as an economic sector differed by a respondent's experience with agriculture, Figure 4 shows how different respondents (as defined by Figure 1), ranked agriculture, compared to other economic sectors, depending on their level of experience with agriculture. Not surprisingly, those either currently on a farm or ranch or who have ever lived on a farm or ranch were significantly more likely to rank agriculture as either the first or second most important sector.

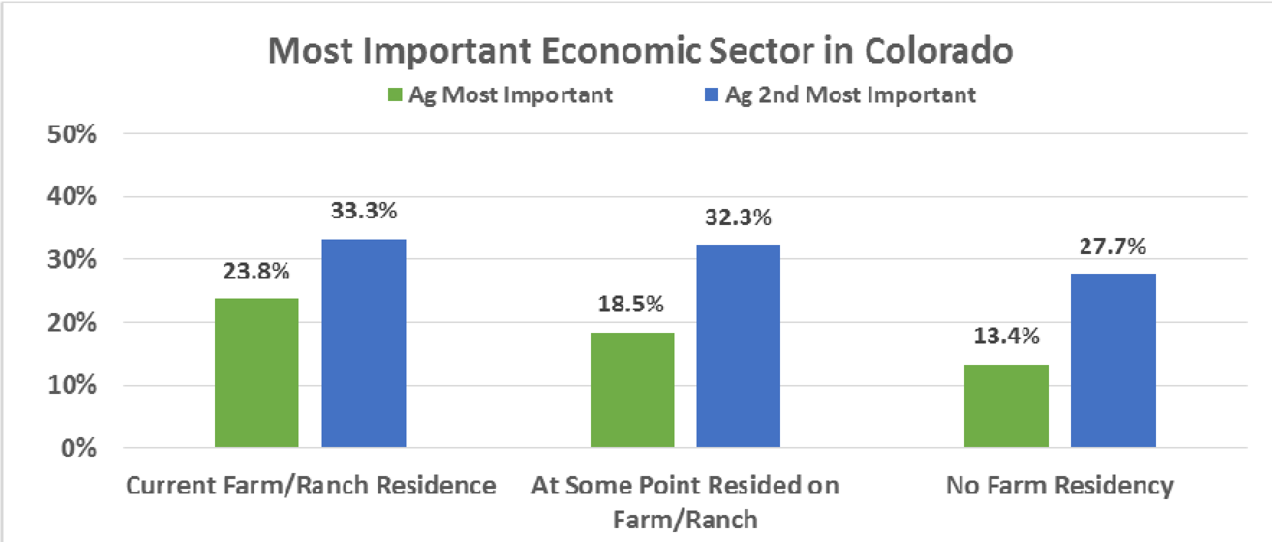

Figure 4

It appears that agriculture is also a key element of the quality of life respondents experience living in Colorado. Overwhelmingly (90%) respondents indicated that the presence of ranches, farms and agriculture was either moderately to very important to their quality of life in Colorado (Figure 5). This does represent a slight decrease from previous years, however, particularly the share rating agriculture as very important to quality of life.

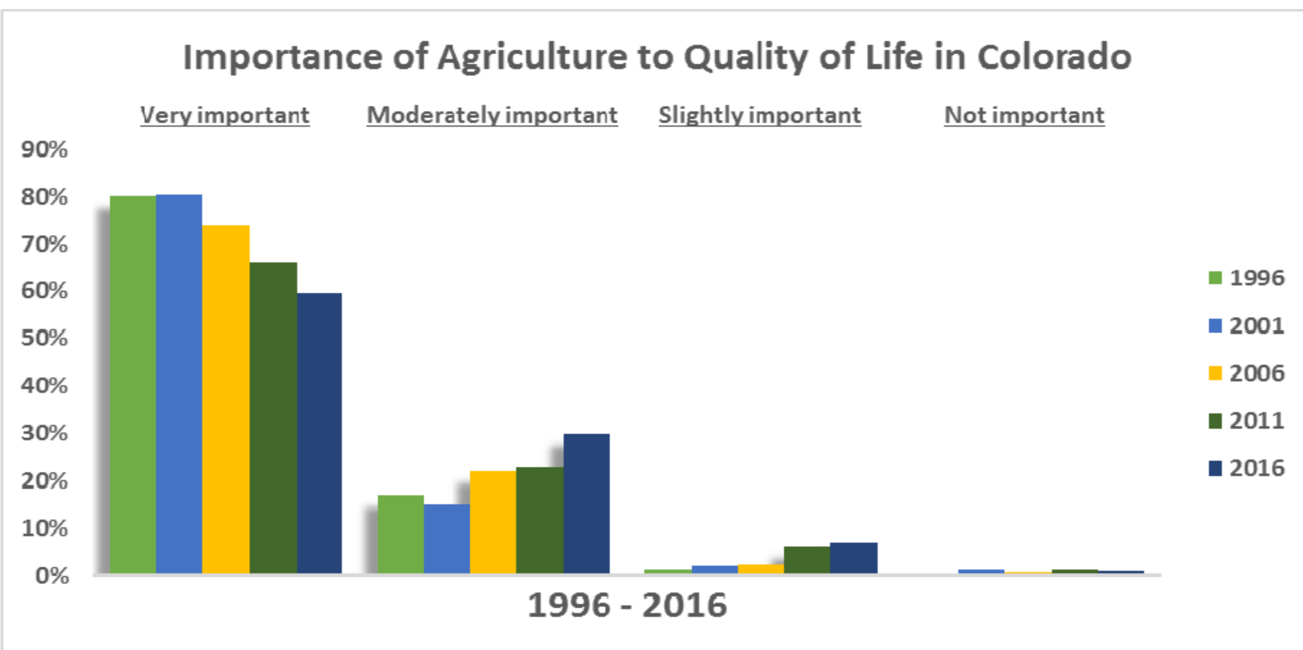

Figure 5

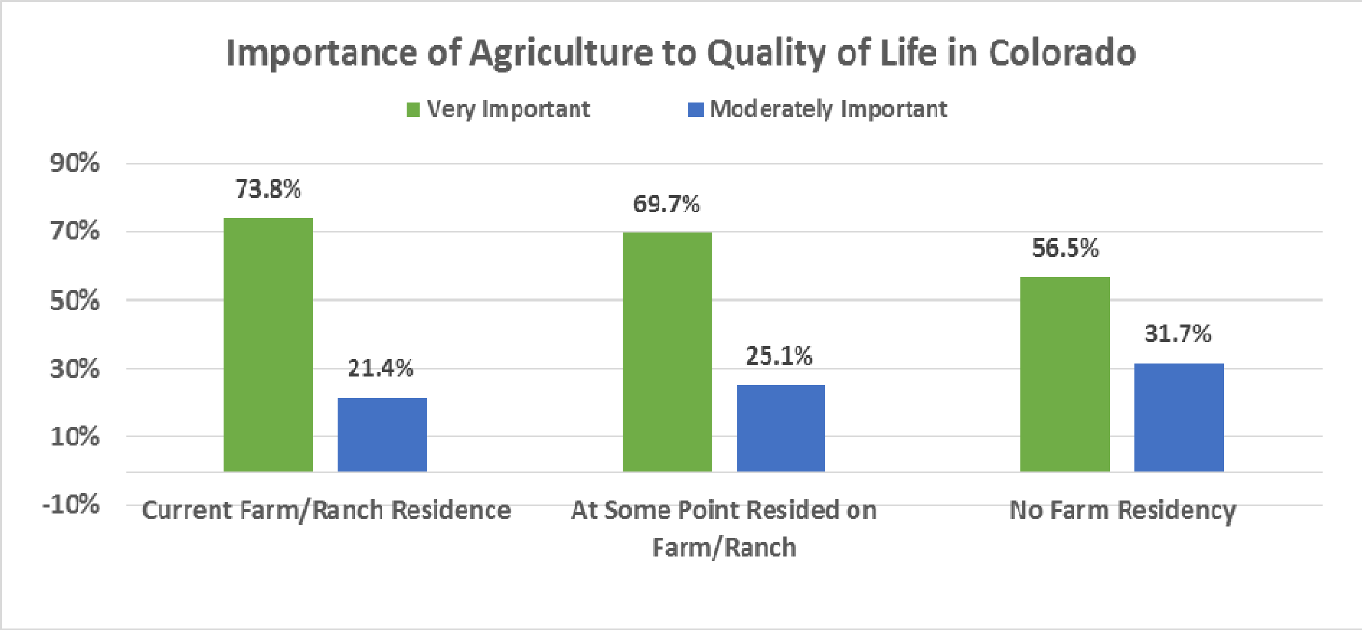

Figure 6

Again, when we explore the same question across groups with a different background in agriculture, we find some interesting results (Figure 6). Those who currently or sometime during their life have lived on a farm or ranch were even more likely to note that agriculture is important to their quality of life. So, Coloradans generally have positive perceptions towards agriculture, but the strongest support is from those with relatively more context with the sector.

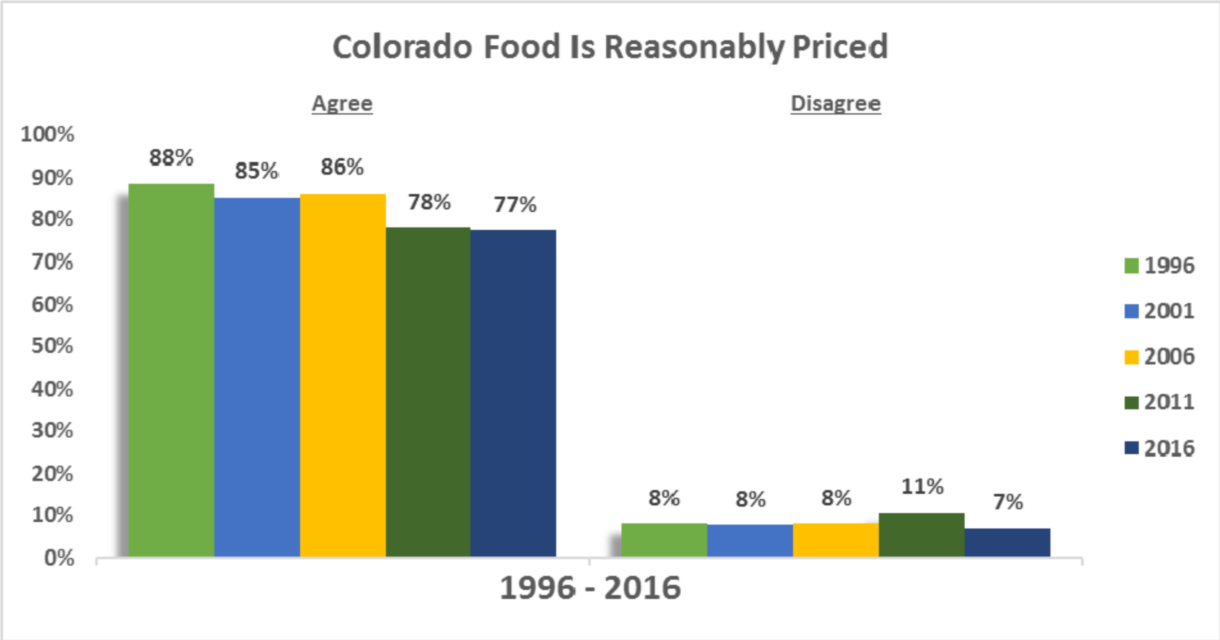

Figure 7

Figure 7 shows that most Coloradans agreed (77%) that agriculture provides food at a reasonable price in Colorado. These responses were similar to 1996, 2001 and 2006, but there may be some rising concerns or lack of awareness surrounding this issue in 2016, compared to previous surveys (as about 16% chose "do not know" to this question). Again, we checked the responses with those who have a background in agriculture and, similar to other key aspects of life, those with more history with agriculture were significantly more likely to respond yes (95% for current farm/ranch residents and 84% among those who had ever lived on farms and ranches). Perhaps it is because they understand the business and economic factors driving food prices more than the average citizen.

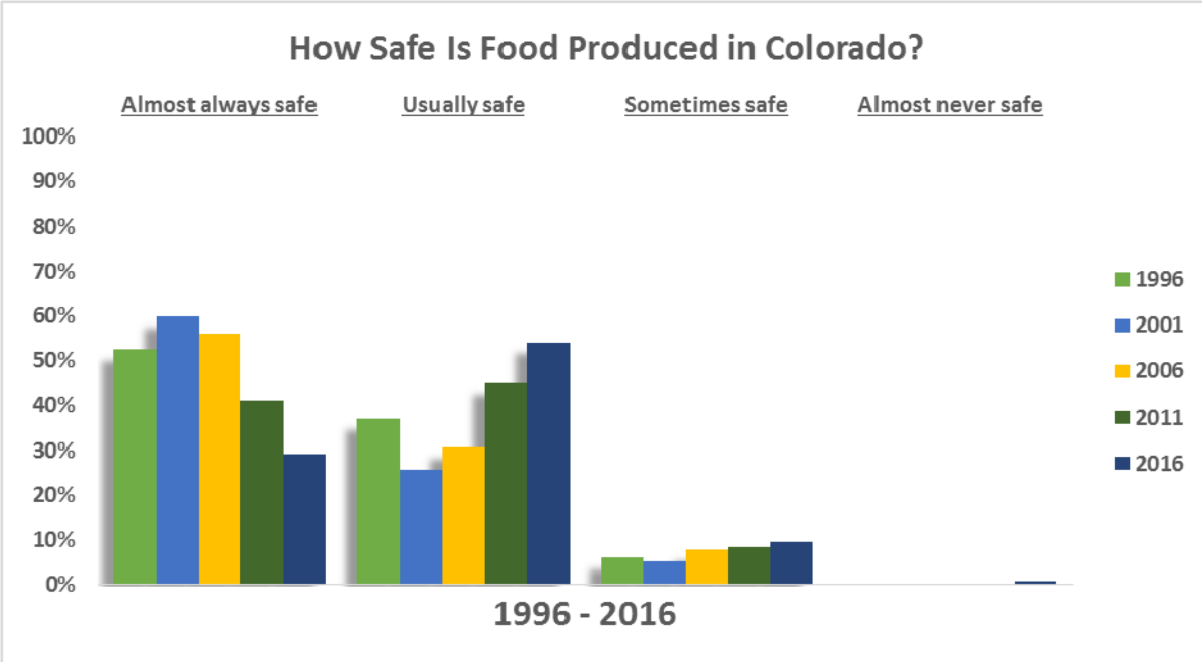

Figure 8

Perceptions of the Necessity and Safety of Production Practices

For a series of questions, including one inquiring about the perceived safety of food, we chose to explore how responses varied by a respondent's background with agriculture. Rather than showing the complete detail of responses [from Almost (1) to Usually (2) to Somewhat (3) to Almost Never (4)], a sample of which are highlighted in Figure 8, the mean of these responses was compared instead. Figure 9 shows the means of these rankings for a variety of questions, and how they vary by type of respondent.

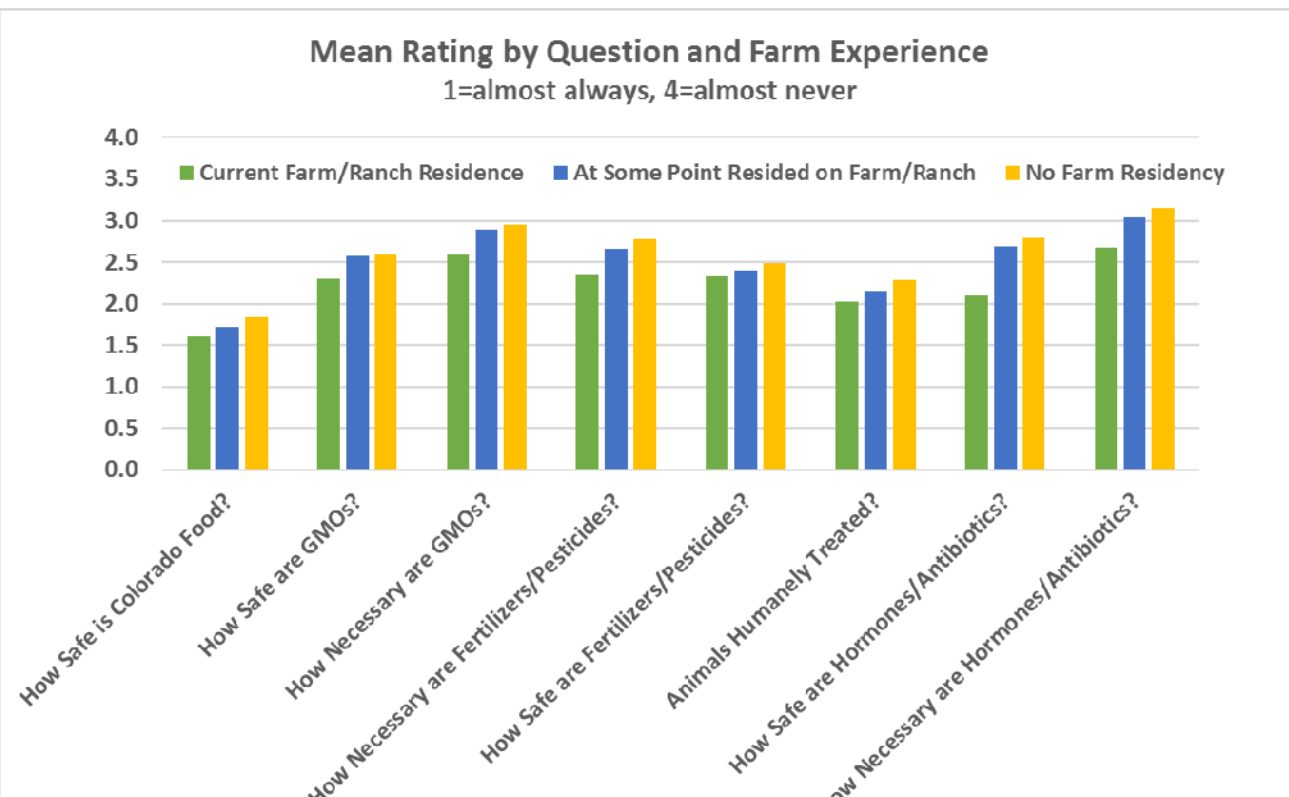

Figure 9

Overall, those who currently live on a farm or ranch or those who once lived on a farm or ranch were generally more in agreement that current production practices were appropriate, necessary and safe to use in agriculture (and this difference was found to be significant in almost all comparisons). There were a few exceptions. Those who had lived on a farm or ranch in the past had similar feelings as the general sample about GMOs, both in terms of safety and necessity, with an average rating closer to sometimes safe and necessary than usually or always safe and necessary. Those with some history in agriculture also felt more similarly about the safety of pesticides/fertilizers and hormones/antibiotics; but, in this case, the concerns were not as high in general and both those with and without experience in ag felt these practices were usually safe.

Awareness of Colorado Department of Agriculture Programs, Preferred Sources of Information and Agritourism as an Interactive Ag Experience

In the past, respondents have been asked about their familiarity with Colorado Department of Agriculture (CDA) programs. However, they have not been asked how they value such programs. Follow-ups to this question (below) highlight an interesting trend. While only 9% of respondents said they were able to name any CDA programs, including 4-H (not a CDA program), Colorado Proud, Farmer's Markets, State Fair, Water Conservation, etc., Figure 10 shows that well over half believe these programs are valuable or very valuable (60.5%).

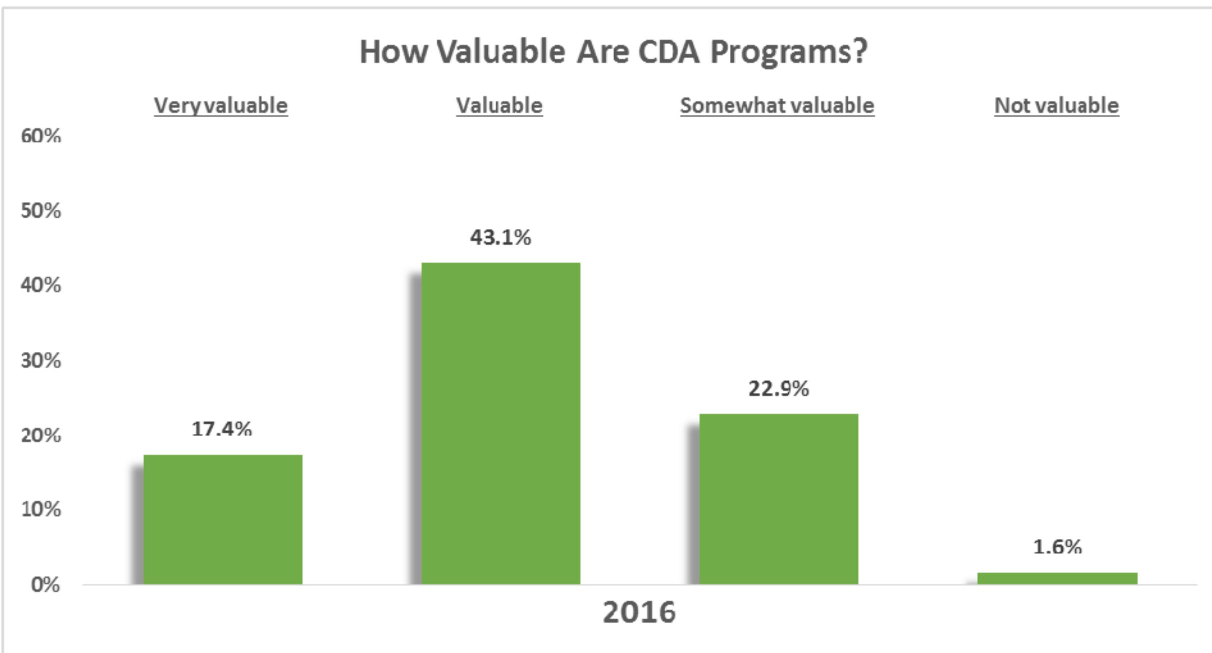

Figure 10

If we analyze this same question by analyzing how the value of CDA programs aligns with the context the respondent has with agriculture, we see quite a few differences (Figure 11). Over one-third of those currently on farms and ranches find CDA programs very valuable, with another third noting they are valuable, so those that are more likely affected by CDA programming note more perceived value. Since there seems to be an interest in supporting Colorado agriculture and food products, and support for CDA programs (but perhaps a lack of awareness among Coloradans on what those programs are specifically), promotion and public relations may prove effective. In an attempt to understand where Coloradans get their information about Colorado food and agriculture, a new question was introduced in 2016.

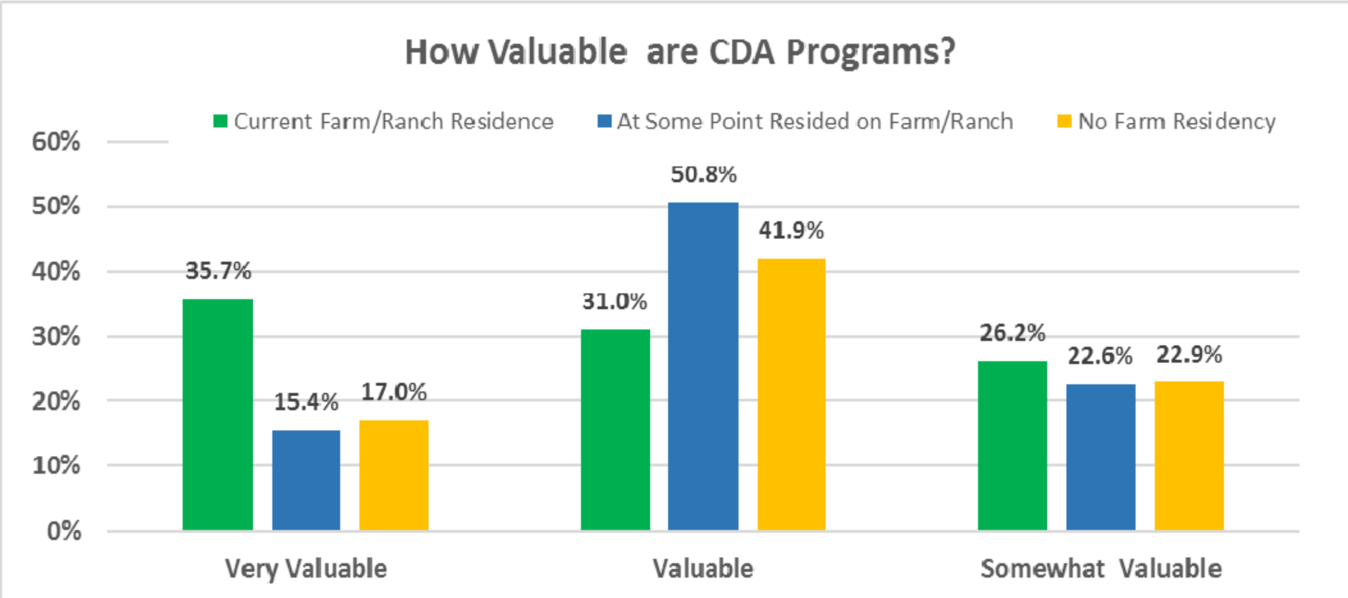

Figure 11

According to Figure 12, more respondents (40%) prefer labels to any other method, so the Colorado Proud program seems well suited to that preference. In addition, the produce availability calendar (22%) and produce/meat/department managers (21%) were also preferred methods of gaining information on agriculture. Interestingly, social media (never used by 52%), newspaper (never used by 40%), and radio (never used by 40%) advertisements were the least preferred methods.

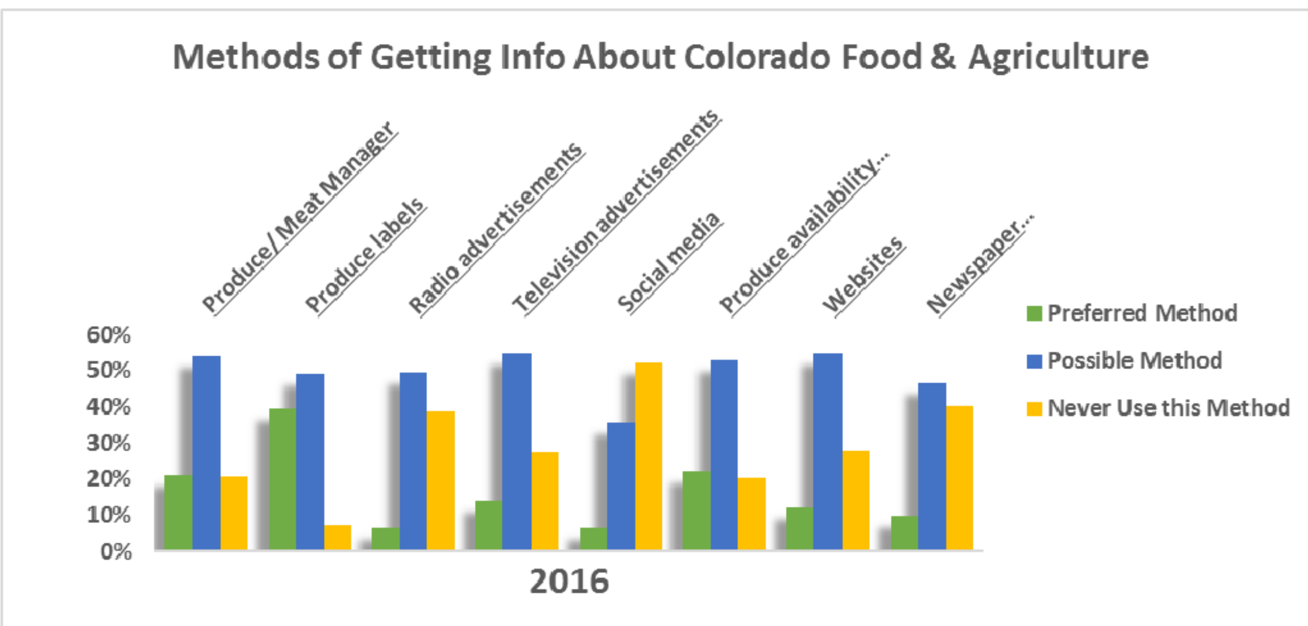

Figure 12

Although more detailed questions on agritourism were asked in previous years, in 2016, a shorter question to assess Coloradans' participation levels in agritourism was added. Only a small percentage (14%) of respondents participated in such activities in the last year. However, when asked more broadly about frequency of participation overall, there appears to be more popularity (or at least interest) (Figure 13).

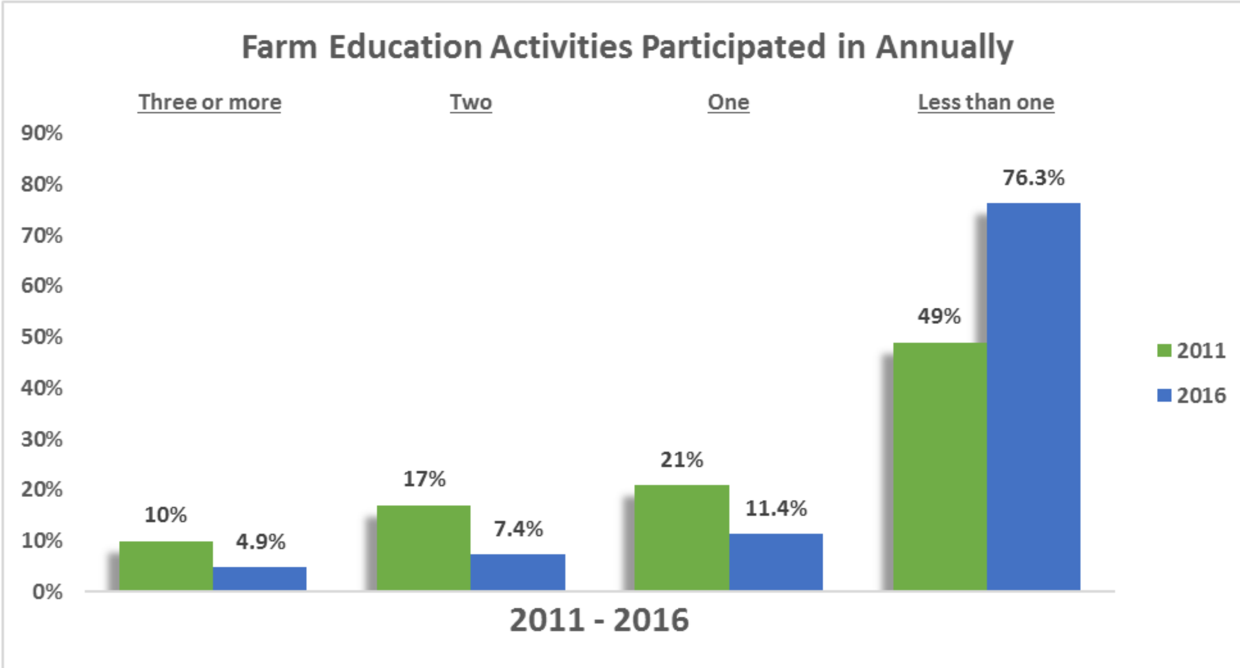

Figure 13

Figure 13 shows that more than three-fourths of respondents (76.3%) indicate they typically participate in agritourism activities one or fewer times per year. However, 23.7% indicated more frequent anticipated visitation. In general, about 10% more respondents claim to visit farms than have actually visited them in the last year. Agritourism is a growing outlet for education on agricultural issues. The survey's final question asked respondents about their motivations for participating in agritourism (Figure 14). This question was first asked in 2011. In the 2016 survey, we added two new categories: to purchase directly from the producer and to learn more about the producer. Nearly half of all responses (48%) visited farms in order to purchase products directly from the farmer. Just over a third (37%) participated in agritourism because it provided them with something different or unique to do. More than half of respondents visited farms to learn more about the producer or agriculture in general. It is important to note that 16% of respondents visited a farm because they became interested in it after purchasing the farmer's products elsewhere.

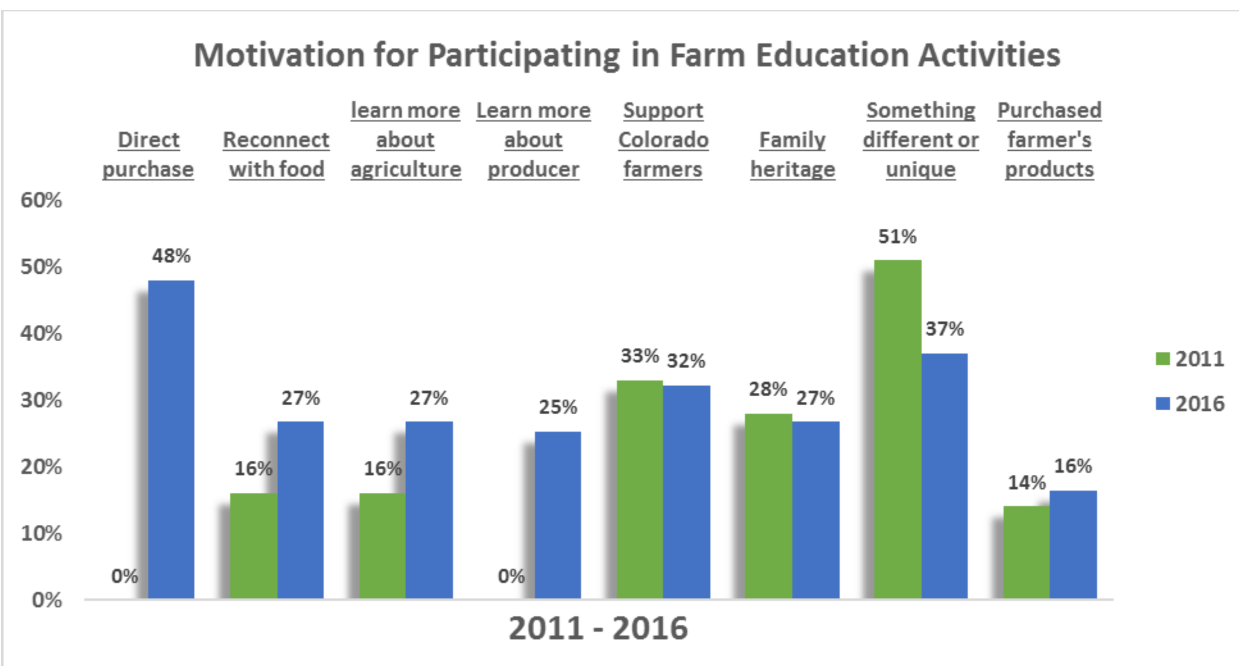

Figure 14

This overview of Colorado Attitudes about Food and Agriculture illustrates there is strong support and interest in agriculture and Colorado food products, and accordingly, most Coloradans view agriculture as an important part of the state's economy, its quality of life and access to safe food at a reasonable cost. Although there are differences in the strength of support between those who live or were raised on a farm and those without such background, this support is broad-based.

ACKNOWLEDGEMENTS

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