

Background, Methodology and Limitations

Colorado Agricultural Labor Survey for Employers 2021

Background

In spring of 2020 Adrian Card, CSU Extension, and Dr. Ali Hill, CSU Department of Agriculture and Resource Economics, launched a research project to quantify employer perspectives regarding farm, ranch and green industry labor and develop a regional analysis of labor supply and demand, characterize challenges and opportunities for maintaining a viable workforce, and identify resource gaps. A survey exploring these elements had not been conducted in Colorado for at least two decades. The authors found no evidence of any survey of this nature and relied on colleagues for a look back to confirm the absence of any related survey summary for the past 20 years. The dearth of data to address current anecdote describing labor challenges supports the need for such research contributing facts to inform policy, practices and resource development for stakeholders.

The project received a mini-grant from the USDA Western Center for Risk Management Education (Ali Hill as PI) to conduct an online survey and disseminate the findings at agricultural conferences and events in Colorado.

Methodology

The 46 question survey instrument was developed by Colorado State University research and extension, with input from the Colorado Department of Labor and Employment, Colorado Farm Bureau, Colorado Fruit and Vegetable Growers Association, Colorado Livestock Association, Colorado Nursery and Greenhouse Association, National Young Farmers Coalition, and Rocky Mountain Farmers Union.

Data was gathered from Nov 1, 2020 – Jan 31, 2021 through anonymous email solicitation with the help of partners listed above, requesting an online survey response from agricultural and green industry businesses with at least one employee. Partners were asked to send the request for responses to their email lists and the project team also sent on CSU email listservs.

The survey received 354 responses with a majority of responses (60%) from small-scale operations (less than \$350,000 in gross annual sales from agricultural products), 25% of responses from midscale operations (\$350,000-\$1M in annual agricultural sales), and 15% from largescale operations (>\$1M). Compared with the population of Colorado agricultural businesses according to the 2017 U.S. Census of Agriculture (CoA), the survey included relatively more midscale and largescale operations compared with small-scale operations. According to the CoA, among all Colorado agricultural operations with some expenses for hired labor, 67% are small scale (the CoA uses less than \$250,000 in annual sales from agricultural products as this threshold), 22% are midscale (\$250,000-\$1M), and 11% are largescale (>\$1M).

Limitations

The survey was not randomly administered and, therefore, is not representative of all Colorado agricultural businesses. The survey does not include sample weights to construct a representative sample. The survey was restricted to agricultural businesses with at least one employee. The survey did not collect information on hours worked. Responses to wage questions were not required, and only 213 respondents provided wage information. The median wage range found in the survey (\$13-\$15 per hour) is consistent with the most recent (2019) average wage according to the FLS (\$14.30).

There is potentially response bias in terms of the employers who chose to respond to the survey and the wage questions if there was any perception the survey could lead to changes in workforce policy. For example, past policies to establish “adverse effect” wages (paid to H-2A employees) used prevailing wages so employers may be hesitant to share such information (if they are paying higher wage levels). But, it is also possible that employers who pay relatively high wages were more willing to respond to this question to promote their good hiring practices.

In short, bias could go either way, but the consistency with the USDA Farm Labor Survey (see source in policy brief [Documenting Selected Potential Impacts to Colorado Farmers and Ranchers of SB21-087 Agricultural Workers’ Rights](#)) is a strong indicator these are representative findings.



COLORADO STATE UNIVERSITY
EXTENSION



AGRICULTURAL AND
RESOURCE ECONOMICS
COLORADO STATE UNIVERSITY