

## Documenting Selected Potential Impacts to CO Farmers and Ranchers of SB21-087 Agricultural Workers' Rights

### Bottom Line

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- Almost half (30-50%) of all agricultural workers in Colorado worked more than 40 hours per week in the peak season over the last few years; and, these workers worked an average of 53-67 hours per week in peak season.
- Agricultural workers on crop operations work more hours each week than agricultural workers on livestock operations, so crop operations are expected to face more economic implications from the proposed bill.
- Depending on how employers respond to the proposed bill, at one extreme the overtime provisions as originally introduced in SB21-087 could lead to additional weekly pay of \$90-\$190 for the workers currently working more than 40 hours per week for a single agricultural business. On the other extreme, the law could lead to a loss of \$190-\$390 in weekly pay for workers.
- We expect small-scale<sup>1</sup> crop operations to face the largest changes from the bill as introduced.
  - Small-scale operators are most likely to report paying less than \$12 per hour.
  - Among operations with workers currently working more than 40 hours per week, small-scale crop operations have the highest per-worker weekly hours.
  - Small-scale operations have higher labor expenses as a share of their gross revenues compared with mid- and large-scale operations (12% of gross cash farm income, compared to 7% and 11%, respectively).
  - There are more small-scale operations that have workers who would qualify for overtime when compared to mid-scale or large-scale operations.
  - However, depending on how employers respond, the majority of additional payroll would likely come from large-scale employers who employ more overtime workers overall.

### Context

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The [Agricultural Workers' Rights bill, SB21-087](#), as introduced, includes provisions that would remove the exemption of agricultural labor from state and local minimum wage laws and require the director of the Division of Labor Standards and Statistics to promulgate rules to

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<sup>1</sup> We define small, mid, and large scale farm operations based on the U.S. Department of Agriculture Economic Research Services' Farm Typology: <https://www.ers.usda.gov/publications/pub-details/?pubid=43744>. Small farms have \$1,000 - <\$350,000 in gross cash farm income. Medium farms have \$350,000 - <\$1,000,000 in gross cash farm income. And, large farms have >=\$1,000,000 in gross cash farm income.

establish overtime pay for agricultural employees for hours worked in excess of 40 hours per week or 12 hours in one day. Farmers and ranchers have expressed concerns about the implications of the bill. Accordingly, Colorado State University researchers assessed what the economic implications of the bill might be to farmers and ranchers in Colorado, including by commodity and scale.

Currently, Colorado farm workers are exempt from overtime laws and workers for small employers (those with fewer than 500 “man days” per quarter) are exempt from both overtime and minimum wage laws. This is an artifact of farm workers being excluded from the 1938 Fair Labor Standards Act.<sup>2</sup> We acknowledge that the exemption of farm workers from this law stems from historical discrimination and widespread racial and social injustice.<sup>3</sup> The process of righting these historical injustices requires enacting policies that improve employment conditions for agricultural workers and that are also economically viable for agricultural employers (or allow for time to adjust with new business strategies to accommodate a higher labor pay rate). We acknowledge that accomplishing both of these objectives is important beyond economics, but the purpose of this brief is to highlight potential economic implications from the proposed SB21-087. We leave the vitally important analysis of the potential implications for social justice, systemic racism, and beyond to other researchers with this area of expertise.

This policy brief aims to depict the potential economic implications of two components of the proposed SB21-087 legislation: changes in overtime and minimum wage coverage for Colorado agricultural workers. In doing so, we will highlight the employers and employees who are most likely to be impacted by these changes, according to the best available data.<sup>4</sup>

## What We Found

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- On average, roughly 30-50% of agricultural workers worked more than 40 hours per week over the last ten years (figure 1).
- Of workers who usually worked more than 40 hours per week, they worked 53-67 hours on average (figure 2, table 1).
- Among those operations whose workers worked more than 40 hours per week:

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<sup>2</sup> For details on the coverage of agricultural workers under the FLSA, see <https://www.dol.gov/agencies/whd/fact-sheets/12-flsa-agriculture>

<sup>3</sup> Linder, M. (1987) Farm Workers and the Fair Labor Standards Act: Racial Discrimination in the New Deal. *Texas Law Review*, 65: 1335-1393.

<sup>4</sup> SB21-087 has numerous other provisions that are beyond the scope of this brief. In addition, this brief does not address questions about changes in non-wage compensation, effects of minimum wage increases for workers already earning above the minimum wage, wage schemes (e.g. changes from hourly paid to salaried workers), the implications for contract labor, prison labor, H-2A workers, unpaid labor, or other employee types that are not captured in available survey data sources.

- those at smaller-scale operations (\$1,000 - \$349,999 in gross cash farm income, GCFI) worked longer hours compared to those at midscale or large operations (table 1);
- workers at small-scale operations had the highest median hours worked per worker in the peak seasons (July-September and April-September) when compared to mid-scale operations (\$350,000-<\$1M in GCFI) or large-scale enterprises (>\$1M in GCFI).
- In relative terms, large operations were most likely to have any workers working more than 40 hours per week (36%), followed by mid-scale (16%), and small-scale (5%).
  - But, since there are more small-scale operations, there were more small-scale operations with workers working more than 40 hours per week (1,195), compared with mid-scale (972), and large operations (1,165) (table 1).
- In terms of the relative implications of increased wages, labor expenses as a percentage of gross farm income was highest for small-scale operations (12%), second highest for large scale operations (11%), and lowest for midscale operations (7%) (table 2).
- In the peak seasons (April-June and July-September), agricultural workers on crop operations worked more hours than those on livestock operations (table 3).
- Among a non-representative sample of Colorado agricultural employers, small-scale operations were the most likely to report paying entry level workers below the current Colorado minimum wage of \$12 per hour (19%), compared with mid-scale (10%) and large-scale operations (4%) (table 4).
- The same sample of Colorado agricultural employers reported median hourly wages for entry level workers between \$13-\$15 in 2020 (table 4). Consistently, the 2019 Farm Labor Survey reported mean hourly base wages for hired agricultural workers in Colorado, Nevada, and Utah as \$14.30.

### **Potential Economic Impacts of Minimum Wage and Overtime Provisions in SB21-087**

- The net impacts of the law depend on how employers respond to higher minimum wages and more stringent standards for overtime pay.
- Higher minimum wages will only directly affect 1) employers currently paying workers, and 2) workers currently earning below the state minimum wage of \$12 per hour. However, there may be *trickle-up effects*<sup>5</sup> from these higher base wages, resulting in “indirect” effects for employers paying and workers earning above the state minimum wage. Based on the data, it appears that Colorado’s small-scale operations will be most directly impacted by the new minimum wage standards, as they are the most likely to report paying less than \$12 per hour.

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<sup>5</sup>In this context, trickle-up effects (also known as ripple effects) refer to increases in the wage rates of workers who are already earning above the minimum wage.

- Mandated overtime pay after 40 hours a week could result in additional income or a loss of income for the 30-50% of workers who currently report working more than 40 hours per week, depending on how employers respond. See calculations in Table 5.
  - At one extreme, if employers do not change current worker hours of 53-67 hours per week or staffing, the law could lead to additional weekly pay of \$90 - \$190 at \$14.30 per hour for the workers currently working more than 40 hours per week for a single agricultural business.
  - At the other extreme, employers could respond by hiring more workers to eliminate paying any of their workers overtime, in which case the law could lead to a loss of \$190 - \$390 in weekly pay per employee, with increases in the number of employees. This is estimated at current average base wages (\$14.30) when employers pay only for 40 hours per worker per week.

## Data Sources

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All available data on farmworkers, hours worked, and wages have limitations. Accordingly, we utilized all available national data sources, and a 2021 survey of Colorado agricultural businesses in putting together this policy brief. More detail about each of the surveys is included below.

1. U.S. Census, American Community Survey (ACS)
  - Nationally representative household-based survey. Collects information on roughly 2 million households annually.
  - We restrict the sample to all workers in Colorado with primary occupation codes 170 (crop production) and 180 (animal production)
  - Question: “During the weeks worked in year X, how many hours did this person usually work each week?”
  - Data presented span 2003-2019.
  - Limitations: information on hours is not necessarily for only one employer, and not necessarily for only ag employers; “usual hours of work” does not specify time of year; includes all individuals who report working in the industries for crop and animal production.
2. U.S. Census, Current Population Survey (CPS)
  - Nationally representative household-based survey. Collects information on roughly 98,000 households annually.
  - All workers in Colorado with primary occupation codes 170 (crop production) and 180 (animal production)
  - Question: “During the weeks worked in year X, how many hours did this person usually work each week?”
  - Data presented span 2002-2020.

- Limitations: same as ACS, smaller sample size, grouped in 2-year increments due to sample size limitations.
3. U.S. Department of Labor, National Agricultural Worker Survey (NAWS)
    - Nationally representative random sample of hired US crop workers. Interviews are administered at the place of work during the peak employment season. The NAWS does not include H-2A workers.
    - Question: “How many hours did you work last week at your current farm job?”
    - Data presented span 2002-2018.
    - Limitations: only crop workers; representative at the 12 region-level (we present information from the Mountain region which includes Colorado, Utah, Wyoming, Nevada, Idaho, and Montana); representative in 2-year increments.
  4. U.S. Department of Agriculture, National Agricultural Statistics Service, Farm Labor Survey (FLS)
    - Nationally representative random sample of all farms and ranches in the U.S. with \$1,000 or more in annual agricultural sales
    - Employers record the total number of workers and hours worked in a reference week. The available data aggregate these estimates to average annual hours by region.
    - Questions:
    - Data presented come from the 2019 FLS.
    - Limitations: available at aggregate (averages) only; only available at the region-level (Colorado, Nevada, Utah)
  5. U.S. Department of Agriculture, Agricultural Resource Management Survey (ARMS)
    - Nationally representative sample using a complex survey design targeted at ~30,000 farms annually.
    - Questions:
      - On average, in the time periods April – June and July – September 2018, about how many hours per week (work and management time) did:
        - You (the principal operator) work for this farm/ranch?
          - Of these hours, how many were unpaid
        - Your spouse (the principal operator’s) work for this farm/ranch?
          - Of these hours, how many were unpaid
        - All other operators and household members work for this farm/ranch?
          - Of these hours, how many were unpaid
        - All other paid workers not previously reported work for this farm/ranch?
          - Of these hours, how many were unpaid
      - In 2018, what was the average number of full-time wage and salary workers employed at this operation during each three-month period?

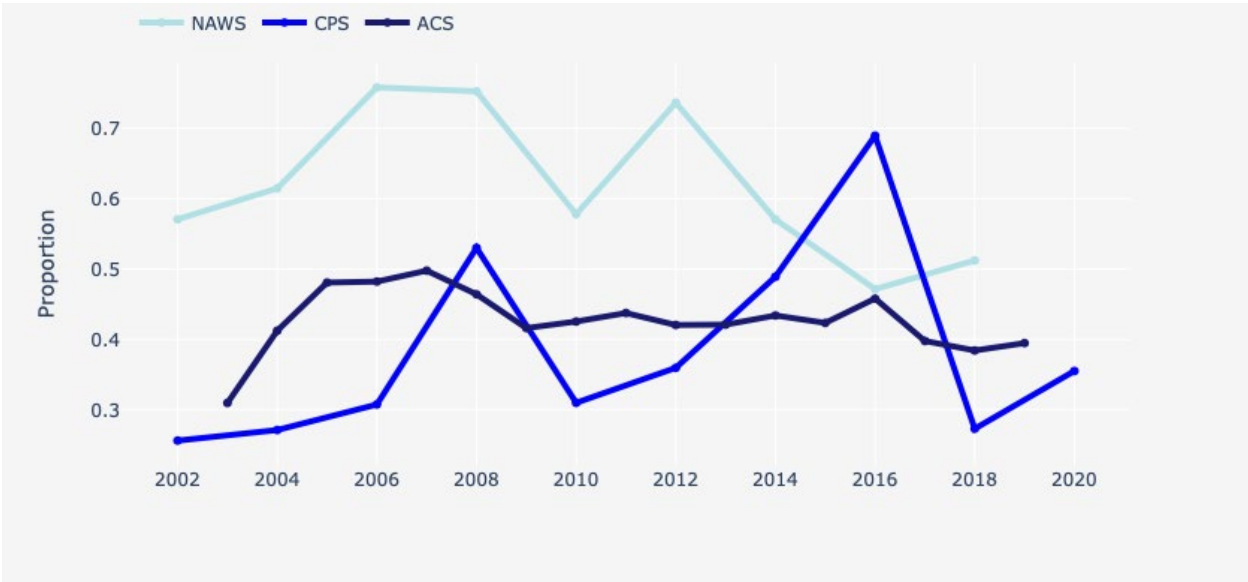
a week or more on average in the time periods April – June and July – September?

- In 2018, what was the total number of hours worked each week by all part-time workers in the time periods April – June and July – September?
  - Data presented come from the Phase III 2018 ARMS.
  - Limitations: the number of workers used to calculate hours per worker is both full-time and part-time. We cannot disentangle which hours are worked by each type of worker. Only available at the region-level (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming).
6. Colorado Agricultural Labor Survey for Employers:
- Includes data gathered from Nov 1, 2020 – Jan 31, 2021.
  - Survey of Colorado agricultural businesses with at least one employee, administered online to business owners and operators.
  - The survey 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.
  - 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).
  - Question: “What is the hourly wage range of a non H-2A entry level worker at your agricultural business? Use an average equivalent if you pay by a piece rate.”
  - 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

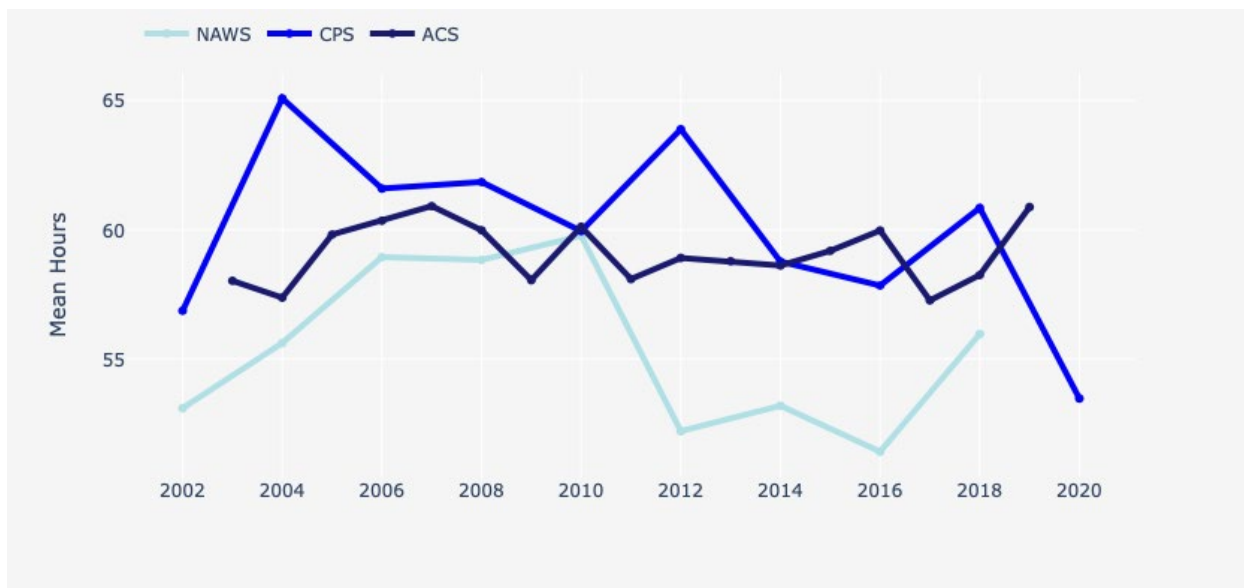
response bias in terms of the employers who chose to respond to the survey and the wage questions if there was any perception the survey could lead to changes in workforce policy. For example, past policies to establish “adverse effect” wages used prevailing wages so employers may be hesitant to share 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 FLS is a strong indicator these are representative findings.

**Tables and Figures**

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**Figure 1.** Proportion of agricultural workers working more than 40 hours per week. Data come from: the U.S. Census, American Community Survey (ACS); the U.S. Census, Current Population Survey (CSP); and, the U.S. Department of Labor, National Agricultural Worker Survey (NAWS). More detail about the data sources including limitation is provided above.



**Figure 2.** Average hours worked by agricultural worker working more than 40 hours per week. Data come from: the U.S. Census, American Community Survey (ACS); the U.S. Census, Current Population Survey (CSP); and, the U.S. Department of Labor, National Agricultural Worker Survey (NAWS). More detail about the data sources, including limitations, is provided above.

**Table 1.** Overtime hours and operations with overtime, by scale

	All operations, (N = 3,332)	\$1,000 to \$349,999, (N = 1,195)	\$350,000 to \$1M, (N = 972)	over \$1M, (N = 1,165)
Hours per worker (April-June)	50	51	46	50
Hours per worker (July-Sept)	75	81	63	60
Hours per worker (April-Sept)	67	66	56	60
Percent of operations with overtime	8%	5%	16%	39%

Statistics presented: Median and percent

Notes: Data come from the U.S. Department of Agriculture, Agricultural Resource Management Survey (ARMS), 2018. Scale is defined by gross cash farm income, overtime is hours per worker over 40, and data are weighted using ARMS sampling weights. More detail about ARMS, including limitations, is provided above. N gives the number of operations (by scale) with any employees working more than 40 hours per week. Hours per worker gives the median number of hours worked on all operations with overtime hours. Percent of operations with overtime gives the (weighted) number of operations within the scale category with employees working more than 40 hours per week as a percent of the total number of operations with positive labor expenditures.



**Table 2.** Labor expenses as percent of income, by scale

	\$1,000 to \$349,999, (N = 22,784)	\$350,000 to \$1M, (N = 9,721)	over \$1M, (N = 1,651)
Labor expenses as a share of gross farm income	12%	7%	11%

Statistics presented: Median percent

Notes: Data come from the U.S. Department of Agriculture, Agricultural Resource Management Survey (ARMS), 2018. Data are weighted using ARMS sampling weights, includes only farms with positive labor expenditures, and are divided by gross cash farm income. N gives the number of operations (by scale) with positive labor expenditures. Labor expenditures as a share of gross farm income show the median of labor expenditures as a percent of (gross) farm income.

**Table 3.** Median weekly hours worked per worker, by commodity (for operations with overtime hours only)

	All crops (N = 2,522)	Livestock (N = 810)
Hours per workers (April-June)	50	50
Hours per worker (July-Sept)	81	60
Hours per worker (April-Sept)	67	50

Statistics presented: Median

Notes: Data come from the U.S. Department of Agriculture, Agricultural Resource Management Survey (ARMS), 2018. Production specialty is defined as at least 50% of the total value of production in the category, overtime is hours per worker over 40, and data are weighted using ARMS sampling weights. More detail about ARMS, including limitations, is provided above.

**Table 4.** Average hourly wages reported by Colorado ag businesses for entry level positions

	All operations, (N = 213)	\$1,000 to \$349,999, (N = 135)	\$350,000 to \$1M, (N = 48)	over \$1M, (N = 29)
Median hourly wage	13-15	13-15	13-15	13-15
Percent paying <\$12 per hour	14.5%	18.5%	10.4%	3.5%

Notes: Data come from the 2021 Colorado Agricultural Labor Survey for Employers. More detail about the survey, including limitations, is provided above.

**Table 5.** Estimating effects for worker pay

	Status quo	<b>SB21-087</b> and no change in hours per worker	<b>SB21-087</b> and reduction in hours, eliminate overtime
Mean hourly wage (FLS)	\$14.30	\$14.30	\$14.30
Weekly hours worked above 40	13 - 27	13 - 27	0
Implied weekly earnings for workers working >40 hours per week	\$760 - \$960	\$850 - \$1150	\$570
Change in weekly wages from status quo		+\$90 to +\$190	-\$190 to -\$390

Notes: Mean hourly wage comes from the Farm Labor Survey mean hourly wage for base hours only (excluding pay for overtime) for Colorado, Nevada, and Utah in 2019. In the analyzed data, weekly hours worked by those employed in agriculture and working more than 40 hours per week range from 53 hours (Current Population Survey) to 67 hours (Agricultural Resource Management Survey). Implied weekly earnings are estimated using:  $\$14.30 \times 40 \text{ hours} + \text{overtime wage} \times \text{overtime hours}$ . For the status quo, this implies weekly earnings of  $\$14.30 \times 40 + \$14.30 \times 13 \approx \$760$  to  $\$14.30 \times 40 + \$14.30 \times 27 \approx \$960$ . For SB21-087, this implies weekly earnings of  $\$14.30 \times 40 + \$14.30 \times 1.5 \times \text{hours range of 53-67 hours/week}$ .

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