

Agricultural Labor in the Federal Reserve System | Annual Averages, 2024 A Comparative Analysis of Federal Reserve Districts 7, 8, 9, 10, 11, and 12

The 2024 agricultural labor data for the six primary agricultural Federal Reserve districts reveal a three-tiered labor economy across U.S. agriculture (North American Industry Classification System [NAICS] code 11 - Agriculture, Forestry, Fishing and Hunting):

- 1. The Labor Giant – District 12 (San Francisco)**
Dominates covered agricultural employment in the group, with roughly two thirds of all NAICS 11 jobs and the highest average wages among the six districts.
- 2. The Wage Outlier – District 11 (Dallas)**
Has a much smaller agriculture workforce than District 12 but pays significantly higher agricultural wages than neighboring districts, reflecting competition from nearby energy and construction employers.
- 3. The Efficiency Belt – Districts 7, 8, and 9 (Chicago, St. Louis, Minneapolis)**

Together form a lean, grain-oriented region with relatively low agricultural wages, higher mechanization, and heavier reliance on seasonal labor and owner-operators instead of large permanent hired staffs.

Across these six districts:

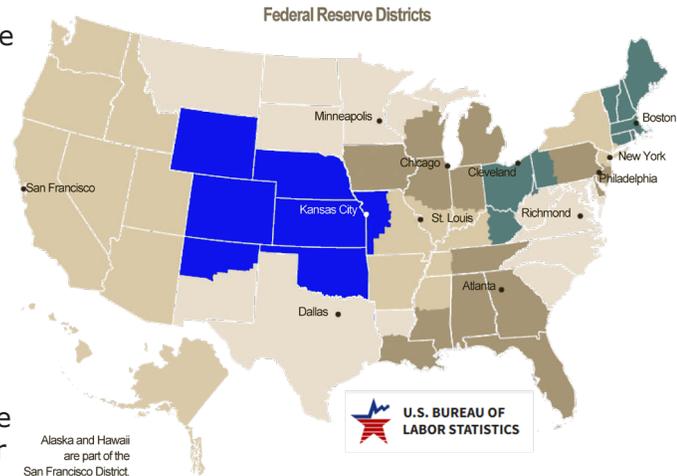
- Agriculture (NAICS 11) employs 894,981 covered workers, or about 1.3 percent of the 70.4 million covered private workers in these districts.
- Average annual wages in agriculture are about \$36,600, versus about \$58,900 across all private industries in the same districts.

Yet the sector's local importance is far larger in key rural counties, where agriculture and related support services remain central to employment, income, and community stability.

About this report

This Ag Labor Update report:

- Summarizes 2024 annual average employment, establishments, and wages in agriculture (NAICS 11) for the six primary agricultural Federal Reserve districts
- Uses the RightRisk QCEW-based profiles for Districts 7, 8, 9, 10, 11, and 12, derived from



the U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) program (private ownership only)

Coverage and limitations

All numbers in this report are taken from QCEW annual average tables:

- Private ownership only
- Reporting establishments only
- Covered workers only (workers covered by state unemployment-insurance programs)

The data therefore:

- Exclude most self-employed farm and ranch operators
- Exclude most unpaid family workers and some small or non-UI-covered farm employers
- Understate the true number of agricultural employers and workers, especially in smaller, non-covered operations

As a result, the establishment and employment figures in this report should be interpreted as a conservative lower bound on the size of agricultural labor in each district, not a complete census of all farm and ranch workers.

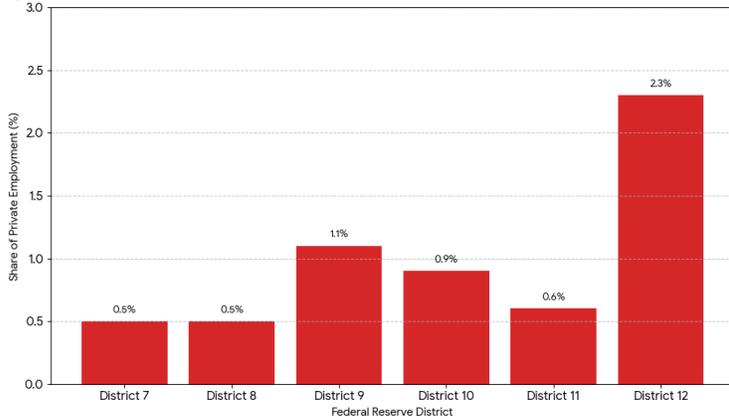
Significant insights from the 2024 annual report

Agriculture is a small but meaningful share of reported private employment. Using QCEW data

for 2024, agriculture (NAICS 11, private ownership, covered workers) accounts for the following shares of total reported private employment in each primary agricultural district, Figure 1:

- District 7 (Chicago) – 0.5 percent
- District 8 (St. Louis) – 0.5 percent
- District 9 (Minneapolis) – 1.1 percent
- District 10 (Kansas City) – 0.9 percent
- District 11 (Dallas) – 0.6 percent
- District 12 (San Francisco) – 2.3 percent

Figure 1. Agricultural Share of Total Private Employment by District



Across all six districts combined, agriculture employs about 895,000 covered workers out of 70.4 million private workers, or about 1.3 percent.

At the county level, however, agriculture’s employment share is often much higher, especially in counties specializing in livestock, irrigated crops, or permanent plantings.

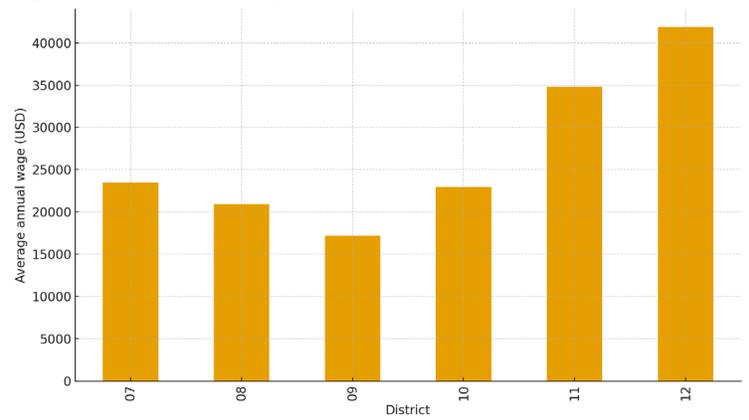
Three-tiered labor economy within agriculture

The district data naturally fall into three groups, Figure 2:

1. *Tier 1 – Scale leader (District 12)*
 - NAICS 11 employment: 617,138 workers
 - Ag share of group NAICS 11 employment (Districts 7–12): about 69 percent
 - Highest average annual ag wage: \$41,897
2. *Tier 2 – High-wage mid-tier (District 11)*
 - NAICS 11 employment: 68,177
 - Average annual ag wage: \$34,822, substantially above most other districts
3. *Tier 3 – Lean wage, lean staff (Districts 7, 8, 9, 10)*
 - NAICS 11 wages range from \$17,174 (District 9) to \$22,918 (District 10)
 - Agriculture’s share of total covered employment is small, but the sector supports large shares of land use and output, especially in grain-dominated counties

This three-tier framing helps explain why labor pressures feel different across regions: in some areas

Figure 2. Total Employment (NAICS 11) by District



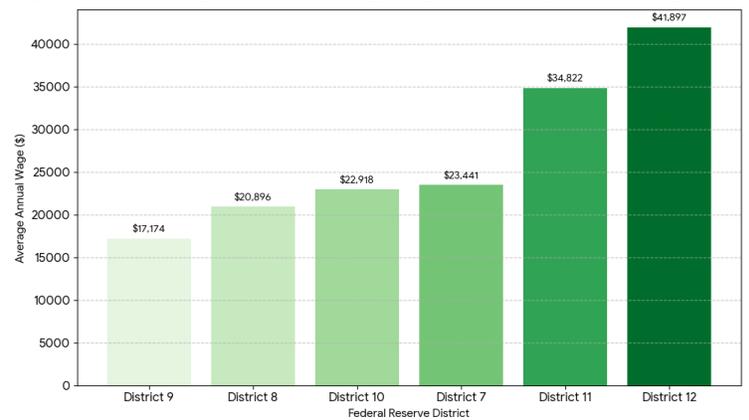
the challenge is scale and coordination (District 12), in others it is wage competition with other sectors (District 11), and in the grain belt the focus is often cost control, mechanization, and seasonal help (Districts 7–9).

Agricultural wages lag district averages, but gaps differ sharply by region

Average annual agricultural wages (NAICS 11) are below the all-industry average in every district, Figure 3:

- District 7 – agriculture \$23,441 vs all industries \$54,316
- District 8 – agriculture \$20,896 vs all industries \$49,397
- District 9 – agriculture \$17,174 vs all industries \$49,220
- District 10 – agriculture \$22,918 vs all industries \$48,767
- District 11 – agriculture \$34,822 vs all industries \$45,883
- District 12 – agriculture \$41,897 vs all industries \$73,148

Figure 3. Average Annual Wage by District (Low to High)



Across the six districts as a group:

- Employment-weighted agricultural wage is about \$36,600.
- Employment-weighted all-industry wage is about \$58,900.

This pattern is broadly consistent with national occupational data for farming, fishing, and forestry occupations, which show an average annual wage near \$40,000 compared with about \$65,000 across all occupations.

The size of the gap between agriculture and all industries varies by district:

- The wage gap is smallest in District 11, where agriculture is closer to local averages due to competition from higher-paying energy and construction jobs.
- The wage gap is largest in Districts 8, 9, and 10, where agricultural wages are relatively low even though overall private-sector wages are similar to those in the other primary agricultural districts.

Crop, animal, and support activities play different roles across districts

Breaking NAICS 11 into its three major subsectors:

- NAICS 111 – Crop production
- NAICS 112 – Animal production and aquaculture
- NAICS 115 – Support activities for agriculture and forestry

These three subsectors reveal distinct regional profiles.

Across Districts 7–12 in 2024, QCEW counts indicate:

- Crop production (111) – 384,647 covered workers
- Animal production (112) – 192,579 covered workers
- Support activities (115) – 332,470 covered workers

Patterns by district:

1. Districts 7 and 8

- Large crop workforces: 44,300 (District 7) and 14,997 (District 8) workers in NAICS 111
- Substantial animal production employment, especially in District 7 (41,594 workers in NAICS 112)

2. Districts 9, 10, and 11

- Higher animal-production employment shares, consistent with their cattle, hog, and dairy specializations

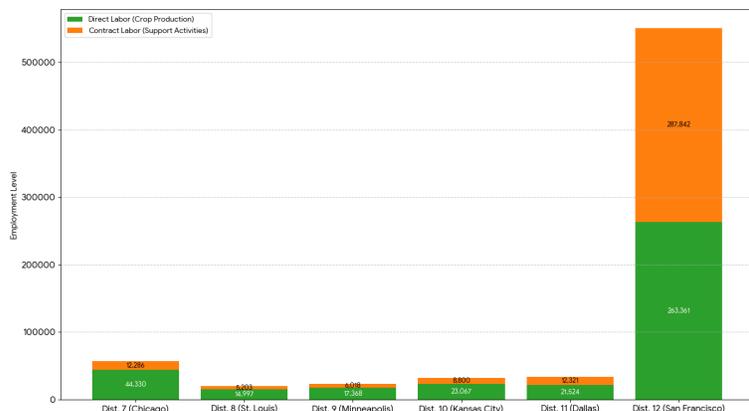
3. District 12

- Very large employment in both crop production (263,361 workers) and support activities (287,842 workers)

Structural differences: contract labor vs direct-hire

A key structural difference revealed by the QCEW data is the relative importance of support activities (NAICS 115) compared with crop production (NAICS 111), Figure 4.

Figure 4. Employment ratio of NAICS 111 (Crop Production) vs. NAICS 115 (Support Activities)



1. The West – Contract model (District 12)

- NAICS 115 employs 287,842 workers, more than crop production itself (263,361 workers).
- Indicates heavy reliance on farm-labor contractors, custom fieldwork, and specialized support services.
- Many growers effectively outsource labor management, relying on contractor firms to handle recruitment, scheduling, and regulatory compliance.

2. The Midwest – Direct-hire model (District 7)

- Crop production employs 44,330 workers, versus 12,286 in support activities.
- Indicates a more traditional owner-operator and direct-hire system, with farm and ranch employers managing their own crews.

Strategically, these differences matter because:

- Contractor-heavy systems may be more flexible but also more exposed to regulatory changes affecting contractors (e.g., joint employment rules, AEW interpretation).
- Direct-hire systems may retain more control but face greater direct exposure to wage increases, overtime rules, and worker recruitment challenges.

Regulatory wage floors and the role of H-2A

Higher average agricultural wages in Districts 11 and 12 are not solely market-driven. Regulatory and program factors also play a role:

1. H-2A Adverse Effect Wage Rates (AEWR)

- H-2A employers must pay the higher of the Adverse Effect Wage Rate, state or federal minimum wage, prevailing wage, or contract wage.
- AEWRs are commonly the binding minimum for participating employers and have risen faster than many local wage benchmarks in recent years.

2. State-level mandates in District 12

- California and some other western states have adopted higher minimum wages and overtime requirements for agricultural workers, particularly for larger employers and year-round operations.

3. Real farm wages over time

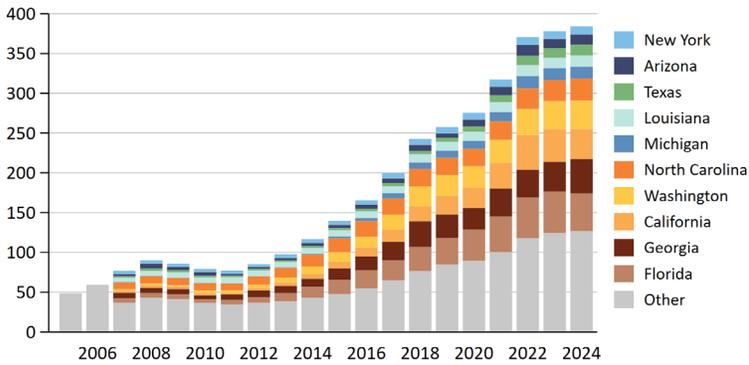
- USDA’s Economic Research Service reports that real farm wages for nonsupervisory crop and livestock workers rose at about 1.2 percent per year from 1990 to 2024, and faster over the last decade, while still remaining below nonfarm wages (about 60 percent of the nonfarm wage in 2024).

These trends help explain why wage gaps between districts are widest where:

- Regulatory wage floors are higher.
- H-2A use is more extensive.
- Nonfarm sectors (especially mining and energy in District 11) offer significantly higher pay and pull workers away from agriculture.

Figure 5. U.S. H-2A (temporary agricultural employment of foreign workers) positions certified by state, FY 2005-24

Seasonal positions certified (thousand)



Source: USDA, Economic Research Service using data from U.S. Department of Labor, Office of Foreign Labor Certification.

Labor supply pressures and H-2A growth

Beyond QCEW counts, other data sources underscore tight agricultural labor markets:

- USDA ERS notes that real farm wages have been rising faster than nonfarm wages over the past decade, consistent with reports of worker scarcity.
- The number of positions certified under the H-2A program has risen sharply since the mid-2000s, indicating growing reliance on temporary foreign workers for peak-season labor, Figure 5.

For farm and ranch managers in all six districts, these trends translate into:

- Higher expected baseline wages for hired labor
- Increased need to compete with nonfarm employers for a shrinking pool of domestic workers
- Greater interest in mechanization, technology adoption, and restructuring to reduce labor risk

Outlook for 2025 and Beyond

Two opposing forces will likely shape agricultural labor conditions in the next few years:

1. *Mechanization and technology vs capital costs*
 - Grain-oriented districts (in the Efficiency Belt) have substantial scope for additional mechanization, precision agriculture, and automation.
 - High interest rates and equipment costs may slow the pace of labor-saving investments, especially for smaller operators.
2. *Labor supply constraints and wage competition*
 - In high-wage districts (especially District 11 and parts of District 12), agricultural employers already pay a competition premium to attract workers relative to other local sectors.
 - Continued growth in H-2A use, rising AEWs, and persistent nonfarm wage growth may put continued upward pressure on farm wages, especially for labor-intensive crops and support services.

Taken together, the data suggest:

- Consolidation pressure on smaller, labor-intensive

operations that cannot absorb higher wage and compliance costs.

- Growing roles for farm-labor contractors and specialized service firms, especially where regulatory and scale advantages favor centralized labor management.
- Long-run pressure on producers to adapt production systems and crop mixes to a world in which agricultural labor remains relatively scarce and increasingly costly.

Conclusions and Next Steps

QCEW data for 2024 highlight both the small share of agriculture in district-wide covered employment and its outsized importance in specific regions within the primary agricultural Federal Reserve districts:

- Agriculture remains a relatively low-wage sector on average, though wage levels and gaps vary sharply by district and subsector.
- Crop production, animal production, and support activities play distinct roles across districts, with District 12 standing out for its scale and reliance on support activities, and District 11 for its unusually high agricultural wages relative to other districts.
- Regulatory wage floors, H-2A requirements, and competition from nonfarm sectors are reshaping wage and hiring dynamics, particularly in the South and West.
- Long-run trends point toward rising real farm wages, greater use of foreign guest workers, continued mechanization, and potential consolidation among labor-intensive operations.

While QCEW captures only reporting and UI-covered establishments, it provides a consistent benchmark for tracking agriculture’s covered employment and wages across districts and over time. Similar profiles compiled for more time periods would further clarify agriculture’s role in the U.S. labor market and help inform both policy discussions and on-the-ground management decisions.

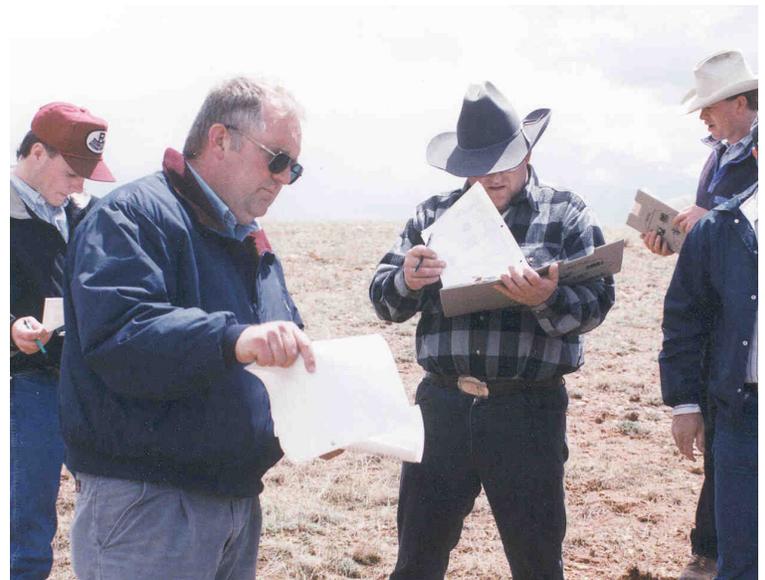


Table 1. Agriculture (NAICS 11) vs All Private Industries, 2024

Primary Agricultural Federal Reserve Districts (7–12) <i>Annual averages, QCEW, private ownership only; reporting establishments and covered workers</i>								
Federal Reserve District	Total establishments (all industries)	Total employment (all industries)	Avg annual wage (all industries, \$)	Ag establishments (NAICS 11)	Ag employment (NAICS 11)	Avg annual ag wage, \$	Ag share of reported private employment, %	Ag share of NAICS 11 employment across Districts 7–12, %
7 – Chicago	909,525	13,909,630	54,316	11,593	75,948	23,441	0.5	8.5
8 – St. Louis	437,113	5,419,501	49,397	6,689	25,821	20,896	0.5	2.9
9 – Minneapolis	373,269	4,103,757	49,220	8,013	44,367	17,174	1.1	5.0
10 – Kansas City	666,943	7,219,507	48,767	9,234	63,530	22,918	0.9	7.1
11 – Dallas	872,041	12,381,013	45,883	11,481	68,177	34,822	0.6	7.6
12 – San Francisco	2,873,253	27,394,484	73,148	32,953	617,138	41,897	2.3	69.0
Total, Districts 7–12	6,132,144	70,427,892	about 58,900	79,963	894,981	about 36,600	1.3	100.0

Source: RightRisk QCEW-based annual average profiles for Districts 7, 8, 9, 10, 11, and 12, 2024

Table 2. Agriculture Subsectors (NAICS 111, 112, 115) by District, 2024

Primary Agricultural Federal Reserve Districts (7–12) <i>Annual averages, QCEW, private ownership only; reporting establishments and covered workers</i>						
Panel A – Establishments and employment						
District	Crop production (111) establishments	Crop production (111) employment	Animal production (112) establishments	Animal production (112) employment	Support activities (115) establishments	Support activities (115) employment
7 – Chicago	5,756	44,330	3,561	41,594	1,855	12,286
8 – St. Louis	3,458	14,997	1,304	7,868	1,173	5,203
9 – Minneapolis	3,407	17,368	2,488	21,524	1,344	6,018
10 – Kansas City	4,139	23,067	3,475	31,345	1,459	8,800
11 – Dallas	3,942	21,524	5,063	32,273	1,754	12,321
12 – San Francisco	17,501	263,361	5,297	57,975	7,765	287,842
Panel B – Average annual wages (nominal dollars)						
District	Crop wage (111), \$	Animal wage (112), \$	Support wage (115), \$			
7 – Chicago	37,647	27,930	19,926			
8 – St. Louis	23,476	13,174	11,181			
9 – Minneapolis	18,996	22,624	15,725			
10 – Kansas City	23,171	24,909	22,308			
11 – Dallas	16,084	20,304	25,631			
12 – San Francisco	44,276	49,170	49,664			

Source: RightRisk QCEW-based annual average profiles for Districts 7, 8, 9, 10, 11, and 12, 2024

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