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AS AGRICULTURE GOES, SO GOES IOWA:

THE FULL FOOTPRINT OF THE STATE'S FARM ECONOMY

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ABOUT COMMON SENSE INSTITUTE

Common Sense Institute is a non-partisan research organization dedicated to the protection and promotion of Iowa's economy. CSI is at the forefront of important discussions concerning the future of free enterprise and aims to have an impact on the issues that matter most to Iowans. CSI's mission is to examine the fiscal impacts of policies, initiatives, and proposed laws so that Iowans are educated and informed on issues impacting their lives. CSI employs rigorous research techniques and dynamic modeling to evaluate the potential impact of these measures on the economy and individual opportunity.

TEAMS & FELLOWS STATEMENT

CSI is committed to independent, in-depth research that examines the impacts of policies, initiatives, and proposed laws so that Iowans are educated and informed on issues impacting their lives. CSI's commitment to institutional independence is rooted in the individual independence of our researchers, economists, and fellows. At the core of CSI's mission is a belief in the power of the free enterprise system. Our work explores ideas that protect and promote jobs and the economy, and the CSI team and fellows take part in this pursuit with academic freedom. Our team's work is informed by data-driven research and evidence. The views and opinions of fellows do not reflect the institutional views of CSI. CSI operates independently of any political party and does not take positions.

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INTRODUCTION

Both sides of the political aisle call agriculture the backbone of Iowa's economy, and the label is easy to accept.¹ Iowa leads the nation in corn, pork, and egg production, and farming anchors local economies across most of the state's 99 counties.² Yet industry-level employment and GDP data published by the federal government fail to capture the full extent of agriculture's impact on Iowa's economy. Federal data place just 11% of Iowa's workforce on farms, and attribute 6.2% of its Gross Domestic Product (GDP) to agriculture, forestry, fishing and hunting—the sector into which the federal government groups agriculture.³ A sector that truly serves as the backbone of Iowa's economy would be expected to account for far more of both. That gap reflects how federal agencies classify economic activity. A tractor plant, a meatpacker, and a farm lender all depend on Iowa farms, yet the data file each one under manufacturing or finance rather than agriculture. The sector's true size depends on how far beyond the farm gate the count extends.

Several studies have attempted to quantify the true impact of agriculture. In December 2025, Iowa State University's Center for Agricultural and Rural Development estimated that agriculture and related industries account for roughly one in five Iowa jobs.⁴ An earlier analysis by Decision Innovation Solutions reached a similar estimate.⁵ However, these studies limit agriculture's reach to a defined set of agriculture-related industries, such as food processing and farm machinery. This report also aims to quantify the direct and indirect impact of agriculture in Iowa but differs from these previous studies in its approach and methodology. It first documents how concentrated agriculture is in Iowa compared with the Midwest and the nation, and why federal classification systems understate the sector's size. The report then apportions the agricultural share of every sector of Iowa's economy, including banking, insurance, transportation, and wholesale trade. Common Sense Institute runs those shares through the Regional Economic Models, Inc. (REMI) Tax-PI+ model to estimate the jobs, output, and income that agriculture sustains. Finally, the report tests whether agriculture's fortunes and the broader economy have moved together over the past two decades.

KEY FINDINGS

- **Agriculture supports roughly one in four Iowa jobs—about 534,000 in 2026—and about a third of the state's GDP** (table 2).
 - The impact peaks in 2028 at **nearly 587,000 jobs, or 27.7% of statewide employment.**
- In terms of direct, indirect, and induced effects, CSI's model simulation finds that **from 2026 through 2030 agriculture will support approximately—**
 - **\$556 billion in GDP,**
 - **\$1.2 trillion in economic output,**
 - **\$258 billion in personal income.**
- **Agriculture's share of Iowa's GDP is 6.33 times its national share, the fourth highest concentration in the nation** (figure 2).
 - In 69.7% of Iowa's counties, agriculture employs a larger share of private workers than it does nationally (figure 1).
- **Agriculture's reach runs deepest through its supply chain** (table 3). Agriculture supports—
 - 44.9% of transportation and warehousing employment,
 - 42.6% of wholesale trade employment,
 - 38.2% of manufacturing employment, or nearly two of every five manufacturing jobs,
 - 27.1% of real estate employment and 18.4% of retail trade employment, sectors with no direct tie to farming.
- **Measured by its full footprint, agriculture moves with Iowa's economy.** Growth in CSI's agriculture-related measure has a 0.77 correlation with Iowa's total real GDP growth, compared with 0.51 for agriculture as federal data define it (figure 4).
 - The broader measure lines up with nearly 60% of the variation in Iowa's growth, more than double the narrow measure's share.

- **Since the pandemic, agriculture has determined where Iowa's economy ranks among the 50 states (figure 5).**
 - > When agriculture-related growth outpaced the rest of Iowa's economy by three percentage points or more, **Iowa ranked among the 13 fastest-growing states, including first in the nation one quarter.**
 - > When agriculture trailed by more than one percentage point, **Iowa ranked 39th or worse. It ranked last in the nation three times.**

IOWA'S AGRICULTURE LANDSCAPE

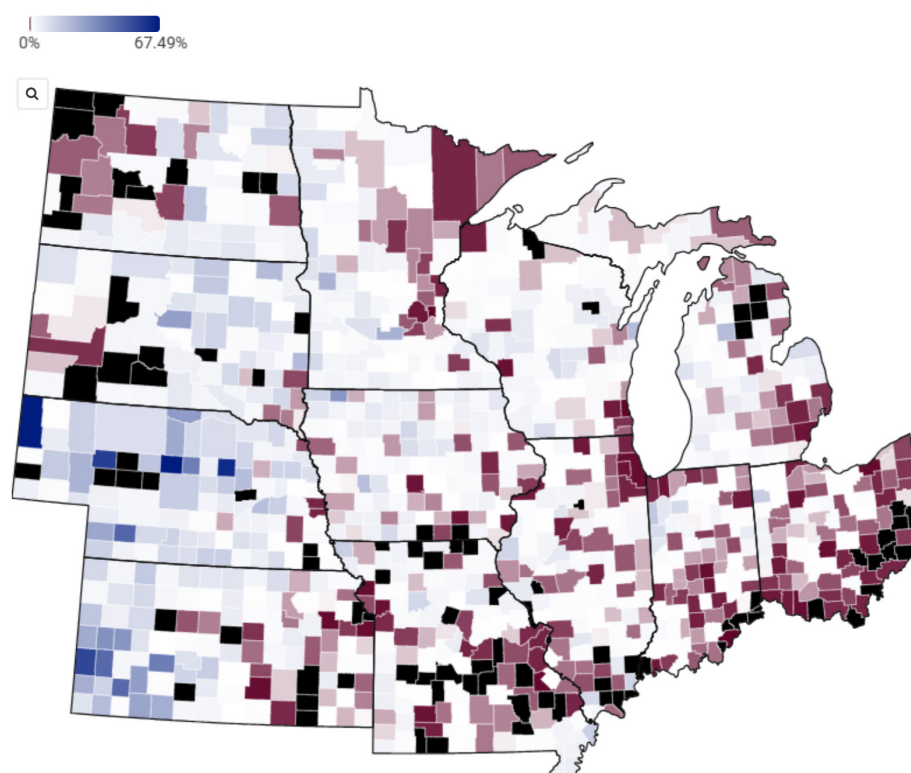
Agriculture is an economic engine across the Midwest. Sitting at the heart of the country's most agriculturally productive region, Iowa leads the nation in corn, pork, and egg production and ranks among the top producers of soybeans.⁶ Within Iowa, that production is dispersed. Unlike other sectors that concentrate in a handful of metropolitan centers, agriculture anchors local economies across most of the state's 99 counties.

Figure 1 visualizes employment for the agriculture, forestry, fishing and hunting sector as a share of total private employment by Midwest county, averaged from 2021 through 2025.

Counties exceeding the national share cluster densely across Nebraska, the Dakotas, Minnesota, and Iowa, then thin out moving east through Illinois, Indiana, and Ohio. Iowa lands near the center of the band. The pattern runs opposite to the geography of manufacturing, which concentrates in the eastern half of the region.⁷ From 2021 through 2025, 69.7% of Iowa's counties carried an agriculture employment share above the national average, among the highest shares

FIGURE 1.

Average Agriculture, Forestry, Fishing and Hunting Employment as Share of Total Private Employment, Midwest Counties, 2021-2025



Source: [U.S. Bureau of Labor Statistics](#)

Note: The midpoint of the figure's color legend is 0.96% to reflect agriculture's share of total private employment in the nation. Counties colored in blue exceed the national share, whereas those colored in red do not. Counties colored in black reflect suppressed or unavailable data.

of the 12 Midwest states. In roughly seven of every ten Iowa counties, agriculture employs a larger share of private workers than it does nationally.

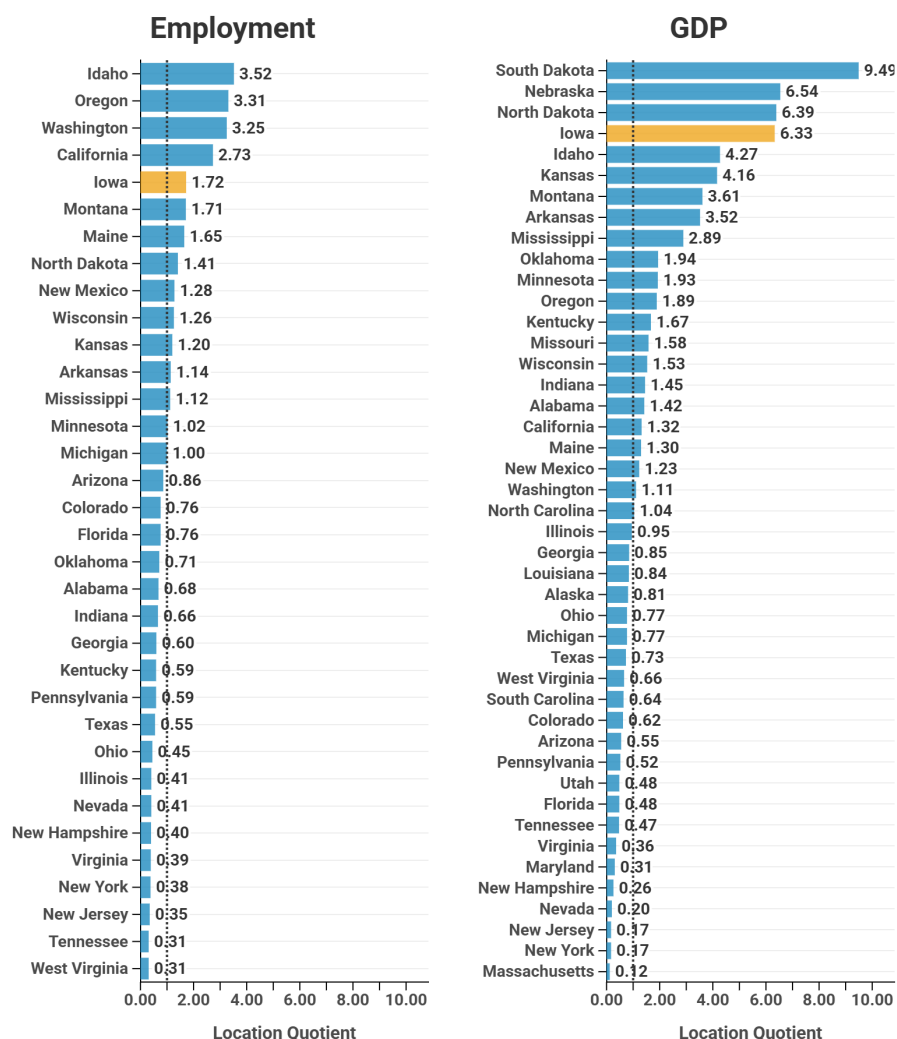
Nebraska leads the region at 84.9% of counties exceeding the national rate, followed by Minnesota (74.7%), Wisconsin (73.6%), and South Dakota (72.7%). At the eastern end of the region, agriculture exceeds the national norm in 46.7% of Indiana's counties and 28.4% of Ohio's.⁸ Figure 6 in the appendix quantifies the share of each state's counties in which agriculture employs more than the national average.

Location quotients (LQ) offer another way to measure concentration. An LQ compares a sector's share of a state's economy with its share of the national economy. For example, if a value of 1.0 indicates parity with the national norm, an LQ of 2.0 means the sector's share of a state's economy runs twice its share nationally. Figure 2 presents employment and GDP location quotients for agriculture, forestry, fishing and hunting across all available states as of 2025.

Iowa ranks among the most agriculturally concentrated states in the country on both measures, though its standing is stronger on output than on employment. The agriculture, forestry, fishing and hunting sector's share of Iowa's GDP is 6.33 times its share of U.S. GDP. That location quotient trails only South Dakota (9.49), Nebraska (6.54), and North Dakota (6.39), placing Iowa fourth nationally. Iowa's employment location quotient of 1.72 ranks fifth, comfortably above the national norm but well behind Idaho (3.52), Oregon (3.31), Washington (3.25), and California (2.73).

FIGURE 2.

Agriculture, Forestry, Fishing & Hunting Employment and GDP Location Quotients, 2025



Source: [U.S. Bureau of Labor Statistics](#), [U.S. Bureau of Economic Analysis](#)

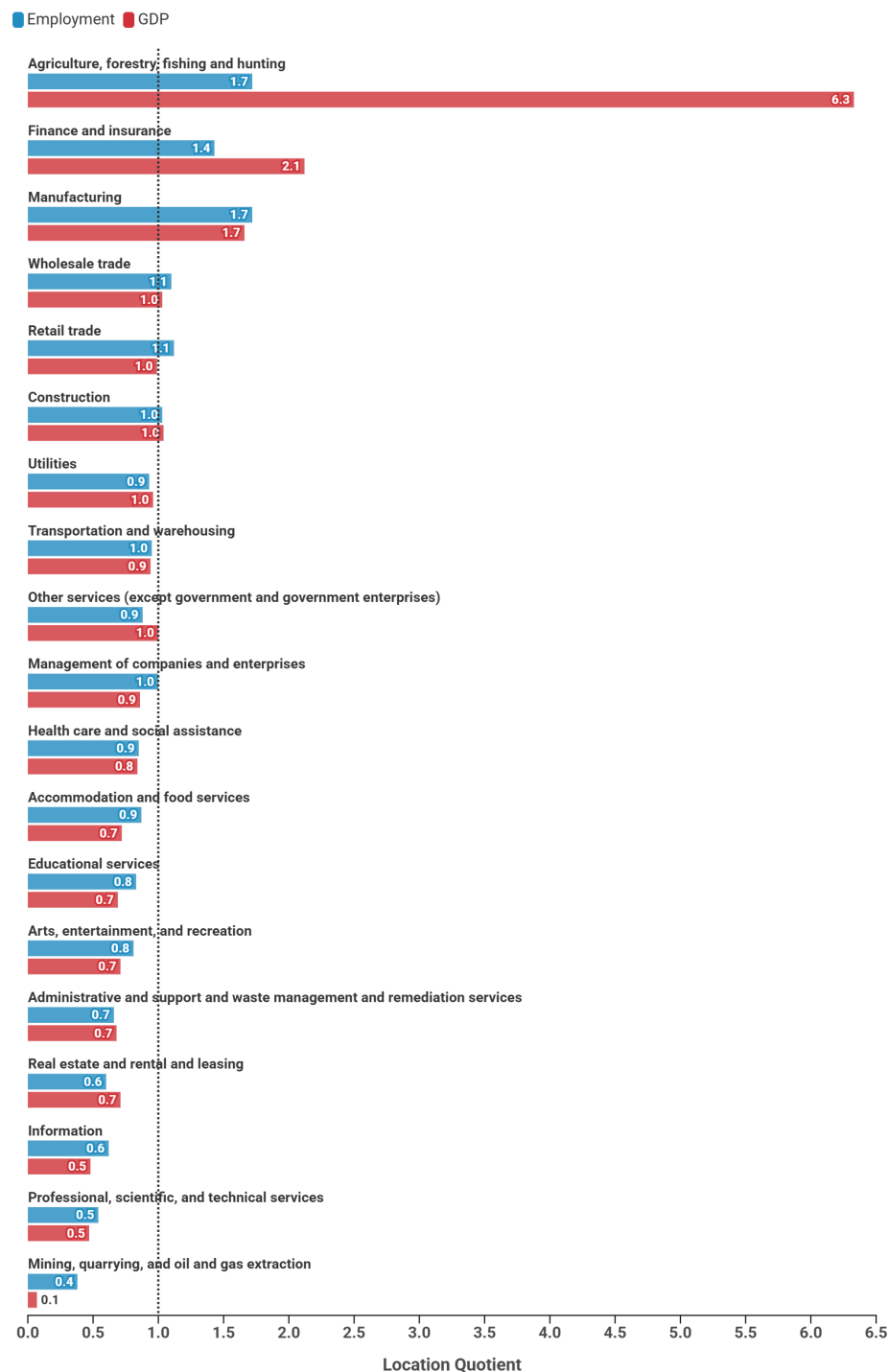
Note: The GDP location quotient divides agriculture, forestry, fishing and hunting's share of each state's total GDP by the sector's share of **total** U.S. GDP. The employment location quotient does the same with QCEW covered employment.

The more telling feature is the distance between Iowa's two location quotients. Iowa's output concentration runs more than three and a half times its employment concentration. Two factors drive that separation: capital intensity and measurement.

Capital intensity describes how much land, machinery, and other capital a sector uses relative to labor to produce its output. Modern row-crop and livestock operations run on land, machinery, and purchased inputs rather than headcount, and that dynamic has grown more pronounced over time. Common Sense Institute's July 2026 report, "[Made in Iowa: The Outsized Contribution of Manufacturing in the State's Economy](#)," found that the number of jobs required to generate \$1 million in Iowa agricultural GDP fell 25.6% between Q4 2005 and Q4 2025.⁹ This decline is largely a result of automation spurring higher productivity per worker.¹⁰ Agriculture generates enormous output per worker, so its share of what Iowa produces far outstrips its share of who Iowa employs.

FIGURE 3.

Iowa Location Quotients, Employment and GDP, 2025



Source: [U.S. Bureau of Labor Statistics](#), [U.S. Bureau of Economic Analysis](#)

Note: The dotted line marks a location quotient of 1.0, parity with the national share. The GDP location quotient divides each sector's share of Iowa's total GDP by that sector's share of **total** U.S. GDP. The employment location quotient does the same with QCEW covered employment.

Measurement describes how federal statistics count workers, and the standard count misses much of Iowa's agricultural workforce. The location quotients in figure 2 rely on data from the Quarterly Census of Employment and Wages (QCEW), which counts only employment covered by unemployment insurance (UI).¹¹ The QCEW excludes proprietors, the unincorporated self-employed, unpaid family members, and certain farm workers.¹² Because owner-operators run a large share of Iowa farms, many of the people who work in Iowa agriculture do not appear in the QCEW dataset. Counting only covered workers rather than the full agricultural workforce understates the industry's footprint by a wide margin.

Bureau of Labor Statistics data for 2022 counted 20,195 workers in agriculture, forestry, fishing and hunting in Iowa.¹³ The U.S. Department of Agriculture's (USDA) 2022 Census of Agriculture identified 153,680 farm producers in Iowa.¹⁴ Alongside 71,748 additionally hired workers, 225,428 people worked on Iowa farms that year.¹⁵ Even measured by federal data that undercount actual farm employment, agriculture maintains a larger direct economic footprint in Iowa's economy than nearly any other sector. Figure 3 presents employment and GDP location quotients for each of Iowa's major sectors as of 2025.

Measured through employment location quotients, Iowa's economy concentrates around three main sectors: agriculture, finance and insurance, and manufacturing. Agriculture, forestry, fishing and hunting posted an employment LQ of 1.7 in 2025, tying manufacturing for the highest in the state. Finance and insurance followed third at 1.4. No other sector clears the national norm (LQ=1) on employment concentration by a meaningful margin. The same pattern is visible in GDP location quotients. Agriculture GDP concentrates most heavily in Iowa at 6.3 times relative to the nation. Again, only finance and insurance (2.1) and manufacturing (1.7) follow. Every other sector sits at or below the national norm.

These three sectors disproportionately determine the state's economic fortunes. When one of them expands or contracts, Iowa feels the effect more acutely than the nation does.¹⁶ Common Sense Institute has documented that outsized reach for both insurance and manufacturing in prior reports. A November 2025 report, "[Insuring Iowa's Future: Understanding the Role of Insurance and Natural Disasters in Iowa's Economy](#)," found that Iowa's insurance subsector directly employs about 47,000 workers and supports an additional 104,000 jobs outside the subsector.¹⁷ In total, this amounts to nearly 10% of all nonfarm jobs in the state. A July 2026 report, "[Made in Iowa: The Outsized Contribution of Manufacturing in the State's Economy](#)," found that manufacturing employed roughly 216,000 Iowans, approximately 14% of all nonfarm workers in the state in 2025.¹⁸

Like manufacturing and finance and insurance, agriculture makes an outsized contribution to Iowa's economy. In absolute terms, neither the employment data published by the United States Bureau of Labor Statistics (BLS) nor the output data published by the United States Bureau of Economic Analysis (BEA) shows its full impact. The North American Industry Classification System (NAICS) groups agriculture, forestry, fishing, and hunting into a single sector under the two-digit code 11.¹⁹ In Iowa that sector is overwhelmingly farming, with crop production and animal production together accounting for nearly 82% of its employment. In 2025, the sector employed just 21,149 Iowans against more than 1.3 million private-sector workers statewide, placing only 1.6% of Iowa's private workforce directly in agriculture.²⁰ The USDA's fuller tally, which counts the self-employed farmers the covered data miss, puts roughly

225,000 people on Iowa farms in 2022, equal to about 10.7% of Iowa's 2.1 million jobs that year.²¹ On the GDP side, agriculture, forestry, fishing, and hunting accounted for 6.2% of Iowa GDP in 2025, according to the BEA.²² Manufacturing accounted for 16.6% during this same period.²³ Each of these data sources fall short of demonstrating the agricultural sector's full impact on Iowa's economy.

Economic-impact studies published in 2024 and 2025 estimate that agriculture supports about one in five Iowa jobs.²⁴ A more holistic look at the sector's impact on Iowa's economy explains the gap between these estimates and federal data sources that track direct agriculture employment.

Counting workers who plant and harvest captures only the start of the supply chain. The one-in-five figure also counts the workers who turn Iowa corn and soybeans into ethanol, feed, and food products and who manufacture the fertilizer, seed, and machinery that farms run on. These jobs fall under the manufacturing sector in the official federal statistics, but Iowa's farms created the demand for the manufactured goods that brought those jobs here. Federal data built to file each worker under a single sector miss those kinds of connections.

The analysis that follows sets out to demonstrate holistically the economic impact of agriculture on Iowa's economy. It follows not only the obvious links—like the connection between farming and food or chemical manufacturing—but every job across Iowa's economy that agricultural activity directly or indirectly sustains. The analysis's methodology includes more sector analysis than the previous economic impact reports that show one in five Iowa jobs connected to agriculture. The result shows a comprehensive accounting of the sector's footprint in the state.

A HOLISTIC LOOK AT IOWA'S AGRICULTURAL ECONOMY

The federal data presented in the section entitled “Iowa’s Agriculture Landscape” rest on a classification system built to measure production rather than dependence. The NAICS assigns each establishment to an industry according to what it primarily produces or the process it primarily uses, not according to the market it serves or the input it relies on.²⁵ It classifies a facility that manufactures tractors as a machinery manufacturer even if it produces tractors exclusively for farmers.²⁶ It classifies a lender simply as a financial institution whether its loan book is secured by farmland or by commercial real estate.²⁷ This methodology produces consistent and comparable industry statistics. But it also means that an economy organized around agriculture will show most of its agricultural activity filed under other sectors.

John Deere illustrates the point plainly. The company’s Waterloo operations build row-crop tractors and its Ankeny facility produces planters and sprayers.²⁸ Every unit those plants ship exists because someone farms. Under the NAICS, both establishments fall under farm machinery and equipment manufacturing, an industry within the machinery manufacturing subsector.²⁹ None of the employment or output they generate appears anywhere in the agriculture, forestry, fishing and hunting sector. The same holds across the state. Iowa’s meatpacking plants are food manufacturers.³⁰ Its ethanol producers and nitrogen fertilizer plants are chemical manufacturers.³¹ Its grain elevators are wholesale traders.³² Its crop insurers and farm lenders are financial institutions.³³

Many establishments under non-agriculture subsectors depend on Iowa agriculture for their existence but do not count as agriculture in federal datasets. Studies that trace those linkages find agriculture’s footprint is far larger than the federal data suggest. Iowa State University’s Center for Agricultural and Rural Development (CARD) reported in December 2025 that agriculture and related industries accounted for 415,835 Iowa jobs in 2024, or 19.4% of the state’s 2.1 million jobs, and \$62.9 billion in value added, or 23.4% of Iowa’s GDP.³⁴ An earlier analysis by Decision Innovation Solutions put the total at 385,322 jobs, or close to one in five Iowa jobs.³⁵

Common Sense Institute’s analysis builds on this body of work and pursues the same underlying question with different tools and assumptions. This report differs from the cited studies in two respects. First, it apportions the agricultural share of every sector rather than counting a set of industries in full. This also extends the net effect beyond food processing and manufacturing. This analysis includes the banks that lend against farmland, the insurers that underwrite crop risk, and the transportation networks that move grain and livestock to market. Second, this report runs the estimate through the REMI Tax-PI+ model,

which lets employment, wages, migration, and the state budget respond over time rather than holding them in the fixed proportions a static input-output framework assumes. Note that neither economic impact approach supersedes the other. Rather, each estimate measures the same sector through different lenses and assumptions.

Model Assumptions

Before any model can run, the analysis must establish which industries depend on Iowa agriculture and what share of each properly belongs to it. This section establishes the estimated scope of Iowa's agricultural footprint subsector by subsector.

First, CSI checks whether a federal industry code directly identifies agriculture-linked activity within a sector. If one does, that code sets the expected share of employment tied to agriculture. For example, NAICS separates farm machinery and equipment manufacturing (333111) from the rest of the machinery subsector. In 2025, that industry employed 11,864 Iowans, or 31.5% of the subsector's workforce, so 31.5% becomes the expected agricultural share of machinery manufacturing.³⁶ If no such code exists, CSI looks for publicly available data that measure the link between agriculture and the sector's business. For example, no NAICS code separates crop insurance from other insurance lines. Instead, CSI compares agricultural premiums reported by the U.S. Department of Agriculture's Risk Management Agency with total premiums written in Iowa.³⁷ The result is an assumed agricultural share of 2.9% of the subsector's output. Where no direct source exists, the analysis relies on input-output tables from the U.S. Bureau of Economic Analysis.³⁸

Input-output tables show how much each industry must produce, directly and indirectly, to support a dollar of output in another industry. Suppose a farm buys fuel, fertilizer, and equipment repair. Those suppliers in turn buy electricity, trucking, and legal services. The total requirements table captures that full chain, revealing the share of each industry's output that ultimately depends on farm production. Common Sense Institute takes the final expected share of agriculture's impact and compares it against REMI's own baseline response to the loss of the farm sector, using the larger of the two as the input for its model simulation. Since REMI already models many of these supply-chain links internally, its baseline response captures a large part of agriculture's reach on its own. However, REMI bases those links on national averages, which can understate dependence in a state where farm-linked manufacturing, lending, and freight run well above the national norm. Using the larger estimate ensures the model does not undercount those Iowa-specific relationships.

For nearly every industry, REMI's baseline response is already the larger and the industry is left to the model. For the industries where the measured share runs higher, CSI enters the net difference as a shock. This way, the same dependence is not counted twice. Because each industry is credited with the higher of the two estimates, the result is an upper-bound account of agriculture's footprint. Table 1 lists every industry CSI shocks within its simulation and its primary source.

Common Sense Institute supplements the national input-output tables with direct, Iowa-specific estimates in four sectors: manufacturing, finance and insurance, transportation, and wholesale trade. It relies on the BEA tables alone for all other sectors. Two reasons drive that choice.

First, these are the four sectors where Iowa's dependence on agriculture departs most sharply from the national norm. Iowa's manufacturers process and supply an unusually large farm economy.³⁹ Its banks and insurers hold portfolios with large concentrations in agriculture.⁴⁰ Local freight networks move farm commodities in volumes few states match.⁴¹ Its grain elevators and farm-supply distributors anchor one of the nation's largest grain storage networks; Iowa is one of five states that together hold more than half of all off-farm grain storage capacity in the country.⁴² Because the BEA tables describe the average U.S. industry, they can understate these relationships where Iowa is well above average.

Second, each of the four sectors carries a credible Iowa-specific source that measures the link directly rather than inferring it. For the remaining sectors, where agriculture's share is smaller and no comparable Iowa source exists, the input-output comparison against REMI's baseline carries the estimate. For more in-depth information on CSI's assumptions for each subsector, see the "Methodology" section at the end of the report.

TABLE 1.

Agriculture-Linked Industry Shocks and Data Sources in CSI's REMI Model

Industry	Sector	Variable Shocked	Source	NAICS (if applicable)
Beverage and tobacco manufacturing	Manufacturing	Output	U.S. Bureau of Economic Analysis	
Chemical manufacturing	Manufacturing	Employment	U.S. Bureau of Labor Statistics	3253
Computer and electronic product manufacturing	Manufacturing	Output	U.S. Bureau of Economic Analysis	
Electrical equipment, appliance, and component manufacturing	Manufacturing	Output	U.S. Bureau of Economic Analysis	
Food manufacturing	Manufacturing	Employment	U.S. Bureau of Labor Statistics	311
Forestry and Logging; Fishing, hunting and trapping	Forestry, fishing, and hunting	Output	U.S. Bureau of Economic Analysis	
Insurance carriers and related activities	Finance and Insurance	Output	U.S. Department of Agriculture, Iowa Insurance Division	
Machinery manufacturing	Manufacturing	Employment	U.S. Bureau of Labor Statistics	333111
Management of companies and enterprises	Management of companies and enterprises	Output	U.S. Bureau of Economic Analysis	
Monetary authorities - central bank, credit intermediation, and related activities	Finance and Insurance	Output	Iowa Division of Banking, Iowa Bankers Association	
Paper manufacturing	Manufacturing	Output	U.S. Bureau of Economic Analysis	
Petroleum and coal products manufacturing	Manufacturing	Output	U.S. Bureau of Economic Analysis	
Primary metal manufacturing	Manufacturing	Output	U.S. Bureau of Economic Analysis	
Rail transportation	Transportation and warehousing	Output	U.S. Department of Agriculture	
Truck transportation	Transportation and warehousing	Output	U.S. Department of Transportation	
Wholesale trade	Wholesale trade	Employment	U.S. Bureau of Labor Statistics	42382, 4245, 42491

Source: CSI analysis

THE AGRICULTURE SECTOR'S IMPACT ON IOWA'S ECONOMY

The analysis in this section uses the REMI model to simulate the economic impact of agriculture throughout the state of Iowa. First, CSI simulates the primary macroeconomic contribution of the sector by assuming all employment in the “Farm” industry falls to zero from 2026 through 2030. This simulation is based upon REMI’s accounting of jobs in the sector.⁴³ But this input alone cannot illustrate the true extent of Iowa’s agricultural network throughout the state’s economy. The baseline model assumes key agriculture-related operations in areas such as manufacturing and finance will continue operating thanks to imported resources and exported production. To capture these linkages, CSI goes one step further and directly shocks the employment or output of each industry whose measured dependence on agriculture exceeds REMI’s baseline response. The size of each shock reflects how closely that industry is tied to Iowa agriculture.

The “Model Assumptions” subsection of the section entitled “A Holistic Look at Iowa’s Agricultural Economy” explains how CSI derives its industry estimates for the REMI simulation. For more in-depth information on the assumptions and methodology used for the model simulation, see the “Methodology” section.

Agriculture Supports One in Four Iowa Jobs

The simulation results shown in table 2 suggest that if Iowa completely lost its agricultural sector, the state would fall into a deep recession. From 2026 through 2030, the state would see a cumulative decline in GDP, business sales, personal income, and disposable personal income of—

\$556 billion in GDP,

\$1.2 trillion in statewide business sales (output),

\$258 billion in statewide personal income,

\$226 billion in statewide disposable personal income.

TABLE 2.

Economic Impact of Agriculture in Iowa

Year	Total Employment	Population	Gross Domestic Product (Billions)	Output (Billions)	Personal Income (Billions)	Disposable Personal Income (Billions)
2026	-534,096	-189,758	-\$96.3	-\$211.1	-\$41.9	-\$36.6
2027	-573,701	-313,746	-\$108.5	-\$232.9	-\$48.3	-\$42.1
2028	-586,914	-404,115	-\$114.2	-\$243.4	-\$52.9	-\$46.3
2029	-581,503	-470,102	-\$117.5	-\$249.7	-\$56.1	-\$49.2
2030	-567,060	-519,126	-\$119.4	-\$253.8	-\$58.6	-\$51.4

Source: REMI, CSI analysis

The scale of the disruption compounds across the forecast horizon. In 2026, CSI's REMI model estimates agriculture would affect roughly 534,000 jobs, or about one in four jobs statewide. The impact deepens through 2028, when employment bottoms out at nearly 587,000 jobs affected—27.7% of all Iowa employment. Gross domestic product (GDP) follows a similar trajectory, falling \$96.3 billion in 2026 and widening to \$119.4 billion by 2030. This implies agriculture affects roughly a third of statewide GDP every year. Table 3 ranks Iowa's sectors by the share of employment affected by agriculture.

Agriculture's reach runs deepest through its supply chain. Outside farming itself, the largest effects in 2026 fall on forestry, fishing, and hunting (69.8%) and construction (53.4%). Next come transportation and warehousing (44.9%), wholesale trade (42.6%), and manufacturing (38.2%), much of which in Iowa processes food and agricultural inputs. The effects also reach industries with no direct tie to agriculture. Agriculture accounts for 27.1% of real estate employment, 18.4% of retail trade, and 11.5% of health care and social assistance. Across all sectors, agriculture affects 25.2% of Iowa employment in 2026 and 26.8% in 2030. Only a handful of sectors, such as information, private education, and management of companies, see minimal effects.

Agriculture is not a standalone sector but the foundation of a supply chain and a consumer economy that reaches every corner of Iowa's labor market. The following section measures whether the sector's fortunes and the state's broader economic fortunes rise and fall together.

TABLE 3.

Iowa's Most Impacted Sectors from Agriculture, Employment, 2026-2030

Industry	2026	2028	2030
Farm	-100.0%	-100.0%	-100.0%
Forestry, fishing, and hunting	-69.8%	-69.3%	-68.8%
Construction	-53.4%	-75.9%	-64.5%
Transportation and warehousing	-44.9%	-44.6%	-43.2%
Wholesale trade	-42.6%	-42.6%	-41.4%
Manufacturing	-38.2%	-38.1%	-37.2%
Real estate and rental and leasing	-27.1%	-29.0%	-28.5%
All Industries	-25.2%	-27.7%	-26.8%
Retail trade	-18.4%	-20.7%	-20.6%
Other services (except public administration)	-18.2%	-18.1%	-17.4%
Administrative, support, waste management, and remediation services	-18.1%	-18.7%	-17.9%
Utilities	-17.1%	-17.5%	-17.0%
Mining	-14.9%	-16.4%	-14.5%
Accommodation and food services	-14.6%	-16.9%	-17.9%
Professional, scientific, and technical services	-14.1%	-16.1%	-15.6%
Finance and insurance	-11.9%	-10.9%	-9.9%
Health care and social assistance	-11.5%	-11.3%	-10.7%
State and Local Government	-11.4%	-19.9%	-21.8%
Arts, entertainment, and recreation	-10.8%	-9.7%	-8.5%
Information	-4.8%	-4.7%	-4.3%
Educational services; private	-3.7%	-3.8%	-3.5%
Management of companies and enterprises	-1.1%	-0.7%	-0.2%

Source: REMI, CSI analysis

LINKING AGRICULTURE TO BROADER ECONOMIC PERFORMANCE

Earlier sections of this report estimate that agriculture supports about a third of Iowa's GDP once all agriculture-related activity is counted. A sector that large affects the overall performance of the state's economy. Logically, when the farm economy has a strong year, Iowa's overall economy should grow faster, and when the farm economy struggles, Iowa's overall growth should slow. This section checks that assumption. First, it compares agriculture's growth with Iowa's total economic growth quarter by quarter. Then it asks whether agriculture's performance helps explain how Iowa's economic growth ranks against other states.

To compare growth of Iowa's agricultural sector with the state's total economic growth quarter by quarter, CSI first needs a measure of agriculture's output. As established in previous sections of the report, federal data do not provide a measure that captures agriculture's full size. The U.S. Bureau of Economic Analysis publishes each state's GDP by sector every quarter, but it counts only farms, forestry, fishing, and hunting as agriculture (NAICS code 11).⁴⁴ Most of the activity that depends on Iowa farms, from tractor plants to grain elevators to farm lenders, is recorded under other sectors. Using BEA's definition alone would leave out most of agriculture's footprint.

To build a fuller quarterly measure, Common Sense Institute uses the results of its REMI simulation. The simulation estimates what share of each Iowa sector depends on agriculture. For example, CSI's analysis attributes 38.2% of manufacturing and 44.9% of transportation and warehousing to agriculture (table 3). For each quarter, CSI multiplies every sector's real GDP by its agriculture-related share. If manufacturing produced \$10 billion in a quarter, \$3.82 billion of that output counts as agriculture related. The sum across all sectors is Iowa's agriculture-related output for that quarter. Whatever output remains is Iowa's non-agriculture-related output.

Figure 4 shows how much the definition of agriculture matters. The left panel plots the growth of agriculture under the BEA definition against the growth of Iowa's total real GDP. The right panel plots the growth of CSI's broader agriculture-related classification against the change in Iowa's total real GDP. Both panels use year-over-year changes in GDP, or the percentage change in real output compared with the same quarter one year earlier.

Two statistics summarize how closely each agriculture line in figure 4 tracks Iowa's total economic growth. The first is the correlation, which ranges from -1 to 1. A correlation near 1 means two lines rise and fall together, and a correlation near 0 means they move independently of each other. The second is

R^2 , which is the correlation squared. R^2 shows how much of the rise and fall in Iowa's total growth lines up with the rise and fall in agriculture's growth. For example, an R^2 of 0.50 means half of the quarter-to-quarter variation in Iowa's total growth can be statistically matched to variation in agriculture's growth, while the other half reflects factors outside agriculture.

Measured by the BEA's narrow definition, agriculture's output is volatile and shows a relatively weak correlation to Iowa's overall economic performance. Affected by changes in weather,

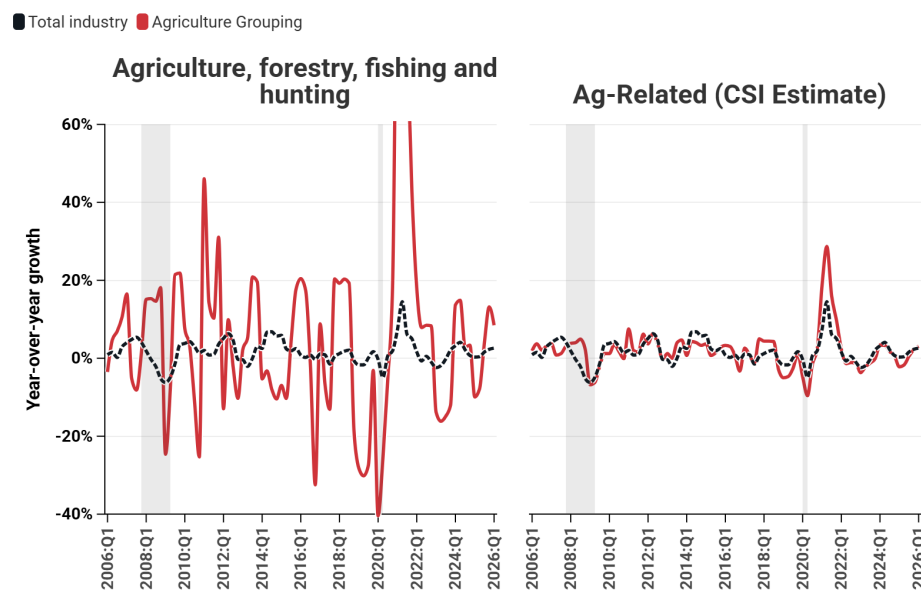
harvests, and global commodity prices, its growth swings from gains above 50% to losses near 40%.⁴⁵ Its correlation with Iowa's total growth is a moderate 0.51, and it lines up with only about 26% of the movement in Iowa's total growth. Measured by CSI's broader definition of agriculture-related economic activity, the correlation increases significantly. Its growth stays within the same range as Iowa's total growth, and the correlation rises to 0.77. Agriculture-related growth lines up with nearly 60% of the movement in Iowa's total growth. Counted fully, agriculture's growth moves with the growth of Iowa's economy rather than independently of it.

Figure 4 shows how agriculture-related growth moves closely with Iowa's total growth. Figure 5 examines whether Iowa's rank among the 50 states in real GDP growth depends on how its agricultural economy performs.

Each dot in figure 5 represents one quarter between Q1 2021 and Q1 2026. A dot's position on the x axis shows how much faster or slower Iowa's agriculture-related output grew than the rest of Iowa's economy in that quarter, measured year over year. Dots to the right of zero represent quarters where agriculture-related output grew faster than the rest of Iowa's economy. Dots to the left of zero are quarters when it grew slower. A dot's position on the y axis indicates where Iowa's total real GDP growth ranked among the 50 states in that quarter. The y axis is flipped so that the first place rank sits at the top of the axis. Dots near the top represent quarters where Iowa's economy grew faster than nearly every other state. Dots near the bottom represent quarters where Iowa's economy grew slower than nearly every other state. The line shows the overall trend.

FIGURE 4.

Real Year-Over-Year GDP Growth, Total Industry versus Agriculture Groupings, Q1 2006 to Q1 2026



Source: [U.S. Bureau of Economic Analysis](#), CSI analysis

Note: Gray bars indicate recessions. Agriculture-related shares are held at their 2026 level. Correlation with Iowa's total real GDP growth is 0.51 for NAICS 11 ($R^2 = 0.26$) and 0.77 for the CSI estimate ($R^2 = 0.59$).

The dots in figure 5 suggest a relationship between Iowa's relative rank and whether the agriculture-related sector outperforms non-agriculture sectors. Iowa climbed the national rankings in quarters when its agricultural economy outperformed the rest of its economy. Conversely, Iowa fell toward the bottom of the rankings in quarters when agriculture lagged.

In the three quarters where agriculture-related growth beat the rest of Iowa's economy by three percentage points or more, Iowa ranked among the 13 fastest-growing states. In the first quarter of 2021, agriculture-related GDP outperformed non-agriculture sector GDP by 4 points, the most of any quarter in the dataset. That same quarter, Iowa's total economic output growth was first in the nation.

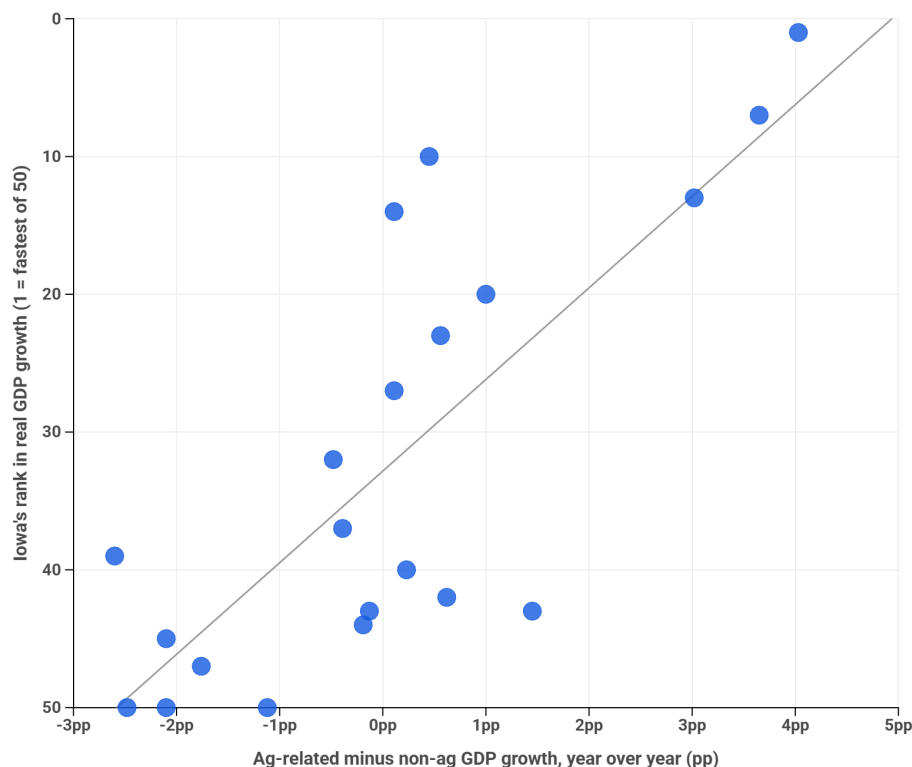
In the six quarters when agriculture-related growth trailed the rest of Iowa's economy by more than one percentage point, Iowa ranked 39th or worse. During these slumps in agriculture relative to the non-agriculture sectors, the state also ranked last three times, each of them consecutively from Q1 through Q3 2023.

Across all 21 quarters, the correlation between agriculture's relative performance and Iowa's national rank is -0.78. Agriculture's relative performance lines up with about 61% of the variation in Iowa's national rank. This result differs from correlation measured in figure 4 because it covers a different timeframe and measures different variables. Yet, the relationship holds by both measures. Because agriculture-related activity makes up about a third of Iowa's output, a strong or weak stretch for the farm economy can move the entire state up or down the rankings. Since the pandemic, Iowa's economy has climbed the state rankings when agriculture has outperformed and fallen behind when agriculture has lagged.

FIGURE 5.

Agriculture's Growth Gap and Iowa's GDP Growth Rank, Q1 2021 to Q1 2026

Correlation of -0.783 ($R^2 = 0.612$). Quarters when agriculture-related growth outpaced the rest of Iowa's economy tended to be quarters when Iowa ranked higher among the 50 states.



Source: [U.S. Bureau of Economic Analysis](#), CSI analysis

Note: Each point represents one quarter. Growth is real and measured year over year. The correlation is negative because a better rank is a smaller number.

BOTTOM LINE

Agriculture has a far larger impact on Iowa's economy than the official statistics suggest. Federal data file most of the economic activity related to agriculture under manufacturing, finance, transportation, and trade, leaving only farm production under the agriculture sector itself. After attributing all agriculture-related economic activity to agriculture, CSI's analysis finds that the sector supports roughly one in four Iowa jobs and about a third of the state's GDP. Because of the sector's broad impact, it can have an outsized effect on the state's overall economic performance. Measured by its full footprint, agriculture has moved with the rest of Iowa's economy for two decades, pulling it down when the sector did poorly and lifting it up when it outperformed.

That reach has implications for policy. Decisions on trade, taxation, regulation, and energy that affect the farm economy spread well beyond farms to the manufacturers, lenders, insurers, and freight networks that depend on them. Policymakers weighing the economic stakes of such proposals should measure their economic effects based on the full agricultural economy, not just by the narrow footprint reflected in federal statistics. This approach captures the costs and benefits Iowa actually experiences. The same concentration that makes agriculture a source of strength also leaves Iowa more exposed than most states when the agriculture sector suffers. Future CSI research will examine how specific shocks to the farm economy pass through to Iowa's labor market and state budget.

METHODOLOGY

CSI Assumptions: Manufacturing

Four of the 21 NAICS subsectors within manufacturing carry industry detail fine enough to approximate agriculture-related employment in each. Those four are food, chemical, fabricated metal product, and machinery manufacturing. Within each, CSI's analysis assumes all that employment is agriculture related. The remaining subsectors carry no industry codes clearly tied to agriculture in the Bureau of Labor Statistics' QCEW database.⁴⁶ For those, CSI models agriculture's connection as an input-output relationship, drawing on the U.S. Bureau of Economic Analysis's industry-by-industry total requirements table. That table traces the output each industry must produce to support a dollar of production elsewhere in the economy.⁴⁷

Entered into REMI alongside the shocks for every other agriculture-linked industry, these inputs set the full chain of direct and indirect effects in motion. Table 4 isolates what that chain means for manufacturing employment. Stripped of the activity Iowa agriculture supports, manufacturing would employ 38.2% fewer workers in 2026 and 37.2% fewer in 2030. In other words, nearly two of every five manufacturing jobs in Iowa trace back to agriculture.

TABLE 4. ECONOMIC IMPACT OF AGRICULTURE ON MANUFACTURING EMPLOYMENT, 2026 AND 2030

Sector	2026	2030
Manufacturing	-38.2%	-37.2%

Source: REMI, CSI analysis

CSI Assumptions: Finance and Insurance

Two of the sector's subsectors carry data specific enough to measure agriculture directly. For insurance carriers, CSI measured the agricultural share of premiums written in Iowa, using U.S. Department of Agriculture Risk Management Agency (RMA) data.⁴⁸ For credit intermediation, CSI measured the agricultural share of lending.⁴⁹ The remaining subsectors carry no comparable measure, so CSI models their connection as an input-output relationship through the U.S. Bureau of Economic Analysis's industry-by-industry total requirements table.

These shares are inputs rather than results. Run through REMI alongside every other agriculture-linked shock, they produce the effect shown in table 5. Stripped of the activity Iowa agriculture supports, finance and insurance would employ 11.9% fewer workers in 2026 and 9.9% fewer in 2030—roughly one in ten of the sector's jobs.

TABLE 5. ECONOMIC IMPACT OF AGRICULTURE ON FINANCE & INSURANCE EMPLOYMENT, 2026 AND 2030

Sector	2026	2030
Finance & Insurance	-11.9%	-9.9%

Source: REMI, CSI analysis

CSI Assumptions: Transportation and Warehousing

Two of the sector's subsectors carry data specific enough to measure agriculture directly. For rail transportation, CSI relies on U.S. Department of Agriculture data on Iowa rail shipments, which indicate that roughly 85% of rail freight in the state is agriculture related.⁵⁰ For truck transportation, CSI draws on the Federal Motor Carrier Safety Administration's Company Census File, which records the commodities each registered carrier reports hauling on its MCS-150 filing.⁵¹ Of the 26,807 USDOT numbers registered in Iowa, 24,536 list at least one agriculture-linked commodity. Because most carriers list several of these commodities and some haul non-agricultural loads within the same categories, CSI reduces that count by 25%, to roughly 18,400 carriers. The result is an agricultural share of roughly 69% for Iowa trucking. The remaining subsectors carry no comparable measure, so CSI models their connection as an input-output relationship through the U.S. Bureau of Economic Analysis's industry-by-industry total requirements table.

These shares are inputs rather than results. Run through REMI alongside every other agriculture-linked shock, they produce the effect shown in table 6. Stripped of the activity Iowa agriculture supports, transportation and warehousing would employ 44.9% fewer workers in 2026 and 43.3% fewer in 2030, which is nearly half of the sector's jobs.

TABLE 6. ECONOMIC IMPACT OF AGRICULTURE ON TRANSPORTATION AND WAREHOUSING EMPLOYMENT, 2026 AND 2030

Sector	2026	2030
Transportation & Warehousing	-44.9%	-43.2%

Source: REMI, CSI analysis

CSI Assumptions: Wholesale Trade

Three wholesale industries carry NAICS codes that tie them directly to agriculture. The first is farm and garden machinery and equipment merchant wholesalers (423820), which covers equipment dealers.⁵² The second is farm product raw material merchant wholesalers (4245), which covers grain elevators and livestock dealers.⁵³ The third is farm supplies merchant wholesalers (424910), which distribute feed, seed, fertilizer, and agricultural chemicals.⁵⁴ In 2025, these industries employed 21,827 Iowans, or 32.8% of the sector's workforce, according to the Bureau of Labor Statistics' QCEW database.⁵⁵ Common Sense Institute treats that employment as agriculture related and enters the resulting share as an employment shock in its REMI model. Other wholesale industries, such as grocery wholesalers that distribute processed food, receive no manual shock, so any additional dependence on agriculture is left to REMI's baseline response.

This share is an input rather than a result. Run through REMI alongside every other agriculture-linked shock, they produce the effect shown in table 7. Stripped of the activity Iowa agriculture supports, wholesale trade would employ 42.6% fewer workers in 2026 and 41.4% fewer in 2030, which is more than two of every five jobs in the sector.

TABLE 7. ECONOMIC IMPACT OF AGRICULTURE ON WHOLESALE TRADE EMPLOYMENT, 2026 AND 2030

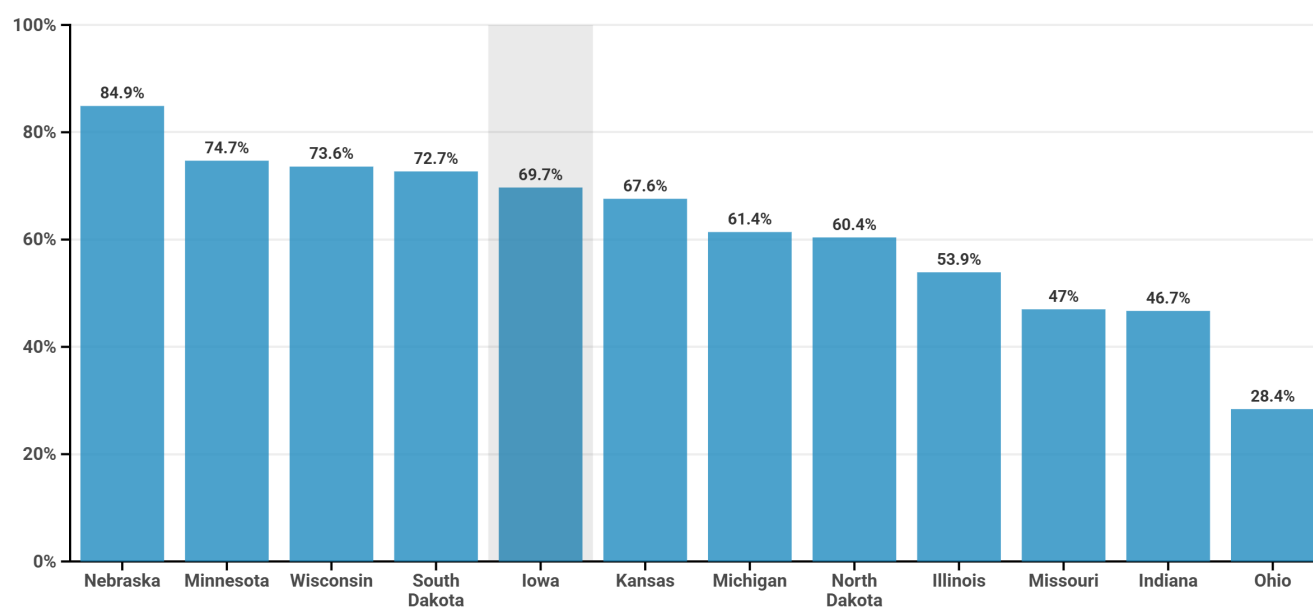
Sector	2026	2030
Wholesale	-42.6%	-41.4%

Source: REMI, CSI analysis

APPENDIX

FIGURE 6.

Share of Counties Above the National Avg Agriculture Share of Private Employment, by Midwest State, 2021-2025



Source: [U.S. Bureau of Labor Statistics](#)

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2024 (\$1.02 billion), as reported by the Risk Management Agency, by total premiums written in Iowa across all lines in 2024 (\$35.76 billion), as reported by the Iowa Insurance Division. The result is an agricultural share of 2.9%. Both figures cover the 2024 business year.

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