May 2025 Report

July 7, 2025

The Iowa Leading Indicators Index (ILII) increased to 107.1 (100=1999) in May from 106.9 in April (0.1 percent). The monthly diffusion index increased to 68.8 in May from 56.3 in April. The Iowa nonfarm employment coincident index recorded a 0.05 percent decrease in May. The Iowa nonfarm employment coincident index has experienced decreases in eight of the last nine months. However, long term trends in the ILII suggest that nonfarm employment will increase over the next three to six months.

During the six-month span through May 2025, the ILII increased 0.8 percent (an annualized rate of 1.5 percent). The six-month diffusion index remained unchanged at 62.5 in May for the sixth month in a row. The ILII was constructed to signal economic turning points with two key metrics that when seen together are considered a signal of a coming contraction: a six-month annualized change in the index below -2.0 percent and a six-month diffusion index below 50.0. Five of the eight component indicators increased more than 0.05 percent over the last half-year: average manufacturing hours, diesel fuel consumption, the Iowa Stock Market index, the national yield spread, and residential building permits. The agricultural futures profits index (AFPI), initial unemployment insurance claims, and the new orders index, were the components to decrease by more than 0.05 percent over the last six months.

Five of the eight components increased month-over-month in May 2025: The Iowa Stock Market Index, the AFPI, the national yield spread, residential building permits, and the new orders index. Diesel fuel consumption, average weekly manufacturing hours, and average weekly unemployment claims (inverted) were the three components that detracted from the Index.

Figure 1. Iowa Leading Indicators Index and Iowa Nonfarm Employment Coincident Index: January 1999 - May 2025

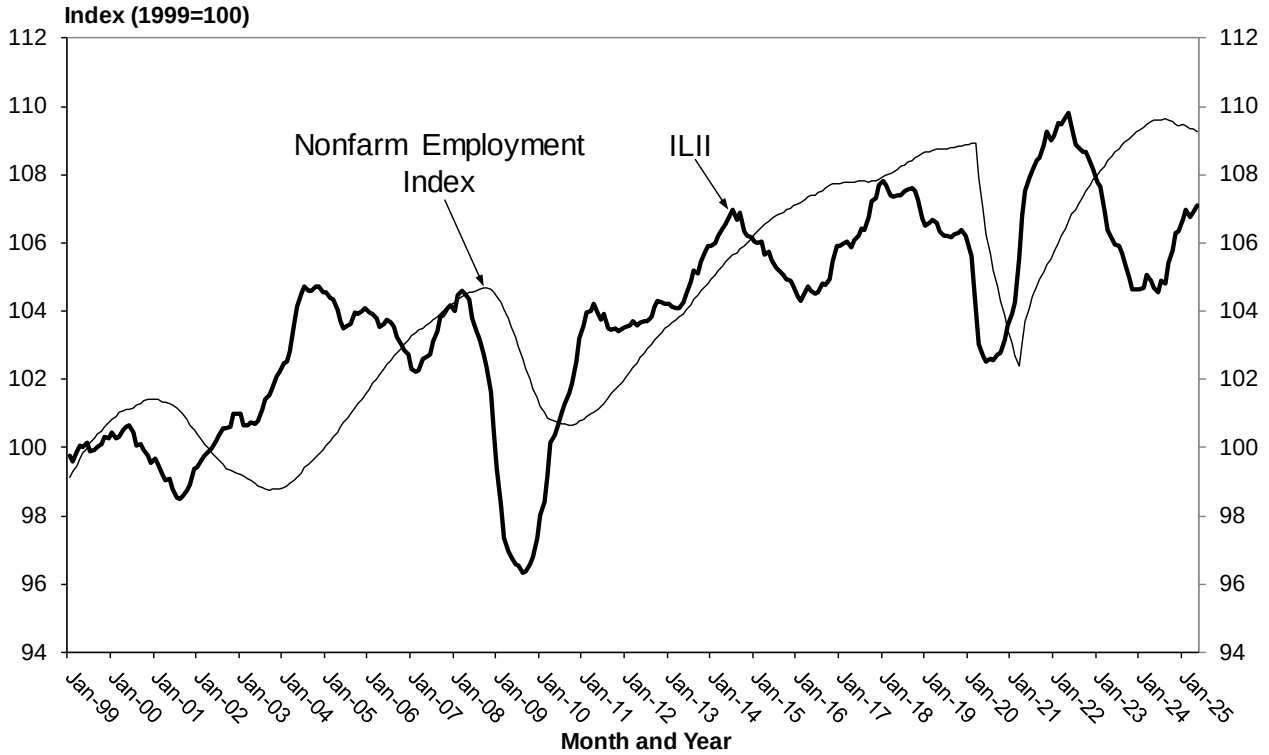

Table 1. Iowa Leading Indicators Index: Six Month Overview

Monthly Values	2024 Dec	2025 Jan	Feb	Mar	Apr	May
ILII	106.3	106.7	107.0	106.8	106.9	107.1
Percentage Change[a]	0.0%	0.3%	0.3%	-0.2%	0.1%	0.2%
Diffusion Index[b]	37.5	62.5	62.5	50.0	56.3	68.8

Six-Month Values	Jul to Dec	Aug to Jan	Sep to Feb	Oct to Mar	Nov to Apr	Dec to May
ILII						
Percentage Change	1.7%	1.7%	2.1%	1.3%	1.0%	0.8%
Annualized Percentage Change	3.4%	3.4%	4.1%	2.6%	2.0%	1.5%
Diffusion Index	62.5	62.5	62.5	62.5	62.5	62.5

Source: Tax Research Bureau, Iowa Department of Revenue, produced July 3, 2025.
a. Percentage changes in the ILII do not always equal changes in the level of the ILII due to rounding.
b. A diffusion index measures the proportion of components that are rising based on the actual changes (not the standardized contributions to the ILII). Components experiencing increases greater than 0.05 percent are assigned a value of 1.0, components that experience changes less than an absolute value of 0.05 percent are assigned a value of 0.5, and components experiencing decreases greater than 0.05 percent are assigned a value of 0.0.

Table 2. Iowa Leading Indicators Index Components: Six Month Overview

Component Series Monthly Values[a]		2024 Dec	2025 Jan	Feb	Mar	Apr	May
AFPI[b]	↑[c]						
Corn Profits (cents per bushel)		-26.5	-27.6	-25.8	-26.1	-26.0	-26.3
Soybean Profits (cents per bushel)		-105.3	-107.7	-104.6	-106.8	-108.0	-110.5
Hog Profits (cents per pound)		31.2	29.6	30.2	31.0	29.1	33.2
Cattle Profits (cents per pound)		12.4	10.5	9.5	8.6	7.0	8.2
Iowa Stock Market Index (10=1984-86)	↑	153.55	156.77	163.24	155.22	146.36	159.75
Yield Spread (10-year less 3-month)	↑	0.00	0.29	0.12	-0.06	-0.04	0.06
Residential Building Permits	↑	998	1,019	1,039	1,069	1,092	1,101
Average Weekly Unemployment Claims[d]	↓	2,609	2,553	2,591	2,600	2,582	2,592
Average Weekly Manufacturing Hours	↓	40.73	40.97	40.99	41.07	41.18	41.17
New Orders Index (percent)	↑	48.7	48.5	48.4	49.0	48.4	48.6
Diesel Fuel Consumption (mil gallons)	↓	65.26	65.18	65.99	65.08	65.54	65.23

Source: Tax Research Bureau, Iowa Department of Revenue, produced July 3, 2025.
a. For all component series except for the yield spread and the Iowa stock market index, the values represent 12-month backward moving averages.
b. The agricultural futures profits index is computed as the sum of the standardized symmetric percent changes in the four series, each weighted by the commodity's annual share of Iowa cash farm income (updated September 12, 2024).
c. Arrows indicate the direction of the series' contribution to the ILII for the latest month.
d. Changes in average weekly initial unemployment insurance claims are inverted when added to the ILII, thus a negative change in the series contributes positively to the index.

ILII Components

- **Iowa stock market index:** Capitalization-weighted index of 27 Iowa-based or Iowa-concentrated publicly-traded companies. During May, 22 of the 27 companies gained value, and all 9 financial-sector companies increased in value. With nearly all of the stocks experiencing gains, the index increased to 159.75 in May from 146.36 in April, contributing 0.14 to the ILII.
- **Agricultural futures profits index:** Composite measure of corn and soybean expected profits, measured as the 12-month moving average of the futures price less estimated breakeven costs, and cattle and hog expected profits, measured as the average of the crush margin for the next 12 months, weighted by the respective share of Iowa annual cash receipts averaged over the prior ten calendar years. During May 2025, this component contributed 0.12 to the ILII; expected profit increased in both livestock commodities as both crop commodities experienced expected profit decreases. Compared to last year, new crop corn prices were 4.1 percent lower while soybean prices were 13.9 percent lower. The May crush margin for cattle increased 15.8 percent from April while the crush margin for hogs increased 14.0 percent from April.
- **Yield spread:** Difference between the yield on 10-year Treasury bonds and 3-month Treasury bills. During May, the yield spread improved, and broke out of inversion territory (below 0.00 percent), up from -0.04 percent in April to 0.06 in May. The long-term rate increased by 14 basis points in May while the short-term rate increased by 4 basis points. For the month, the yield spread contributed 0.03 to the ILII value.
- **Residential building permits:** Number of total permits issued in Iowa for the construction of residential housing units. Changes are calculated based on a 12-month moving average. In May, permits were 1,175, up from 894 in May 2024. This component contributed 0.03 to the May 2025 ILII with the 12-month moving average increasing to 1,101 in May from 1,092 in April. May 2025 permits were 12.13 percent above May 2024, yet 16.6 percent below the monthly historical average (1998-2024).
- **New orders index:** Diffusion index measuring the share of purchasing managers in Iowa reporting increases in orders received for manufacturing output. Changes are calculated based on a 12-month moving average. In May, the new orders index decreased to 50.2 from 52.6 in April. However, the 12-month moving average of the new orders index increased to 48.6 from 48.4 in April, and contributed 0.01 to the ILII.
- **Average weekly unemployment claims:** Weekly average of initial claims for unemployment insurance in Iowa. Changes are calculated based on a 12-month moving average and are inverted when added to the ILII. This component detracted 0.01 from the ILII value, with the 12-month moving average of claims increasing from 2,582 to 2,592. Unemployment claims were 6.5 percent above May 2024 claims, yet 31.4 percent below average historical claims for May (1988-2024).
- **Average weekly manufacturing hours:** Weekly average of hours worked in the manufacturing sector in Iowa. Changes are calculated based on a 12-month moving average. For May, this component detracted 0.01 from the ILII with the 12-month moving average decreasing to 41.17 in May from 41.19 in April. In May, average hours were 40.9, less than a quarter hour below the historical monthly average (1996-2024).
- **Diesel fuel consumption:** Number of taxable gallons of diesel fuel sold in Iowa. Changes are calculated based on a 12-month moving average. Diesel fuel consumption decreased 5.9 percent between May 2024 and May 2025. The 12-month moving average decreased to 65.23 million gallons in May from 65.54 million in April, detracting 0.08 from the ILII value.

Table 3. ILII Components and Standardization Factors for FY 2024

Iowa Leading Indicator Index Components	Standardization Factor
Agricultural Futures Profits Index	0.035
Iowa Stock Market Index	0.016
Yield Spread	0.349
Residential Building Permits	0.032
Average Weekly Unemployment Claims	0.014
Average Weekly Manufacturing Hours	0.325
New Orders Index	0.064
Diesel Fuel Consumption	0.166

Source: Tax Research Bureau, Iowa Department of Revenue, produced September 12, 2024

The standardization factors are the inverse of the standard deviation of the month-to-month changes in each component over the January 1999 to June 2024 period. These factors equalize the volatility of the contribution from each component and are normalized to one. The month-to-month changes are based on 12-month backward moving averages for all components except the agricultural futures profits index, the Iowa stock market index, and yield spread. The yield spread and new orders index changes are simple arithmetic changes; month-to-month changes for the rest of the components are computed as symmetric percentage changes.

The factors are updated annually during August.

Comments

The Iowa Leading Indicators Index (ILII) is designed to forecast the future direction of economic activity in the state of Iowa. The techniques used to build the ILII follow those used by The Conference Board to construct the national Leading Economics Index (LEI) prior to the 2001 revisions. A one-month movement in such an index does not produce a clear signal, rather it is necessary to consider the direction of the index over several consecutive months. A contraction signal in the ILII is considered reliable when two conditions are met: 1. The index declines by at least two percent over a six-month period (using an annualized rate); and, 2. A majority of the individual components decline over those six months (the six-month diffusion index less than 50.0).

The Iowa nonfarm employment coincident index measures the change in non-seasonally adjusted, total nonfarm employment in the state of Iowa. Changes are based on a 12-month moving average of employment and are computed as symmetric percentage changes. The index is a representation of overall economic activity in Iowa.

The employment index and the ILII are constructed to have a value of 100 in the year 1999.