A background image of a Purdue University campus. In the foreground, there is a large, modern fountain with several tall, curved, metallic structures. In the background, a large, classical-style building with a portico and columns is visible. The scene is set outdoors with trees and a clear sky.

Crop Net Return Prospects

December 11, 2024

Michael Langemeier

Department of Agricultural Economics

Purdue University

Outline

- Expected Crop Prices
- Net Return Projections
- Cash Rent and Land Value Projections

Expected Crop Prices

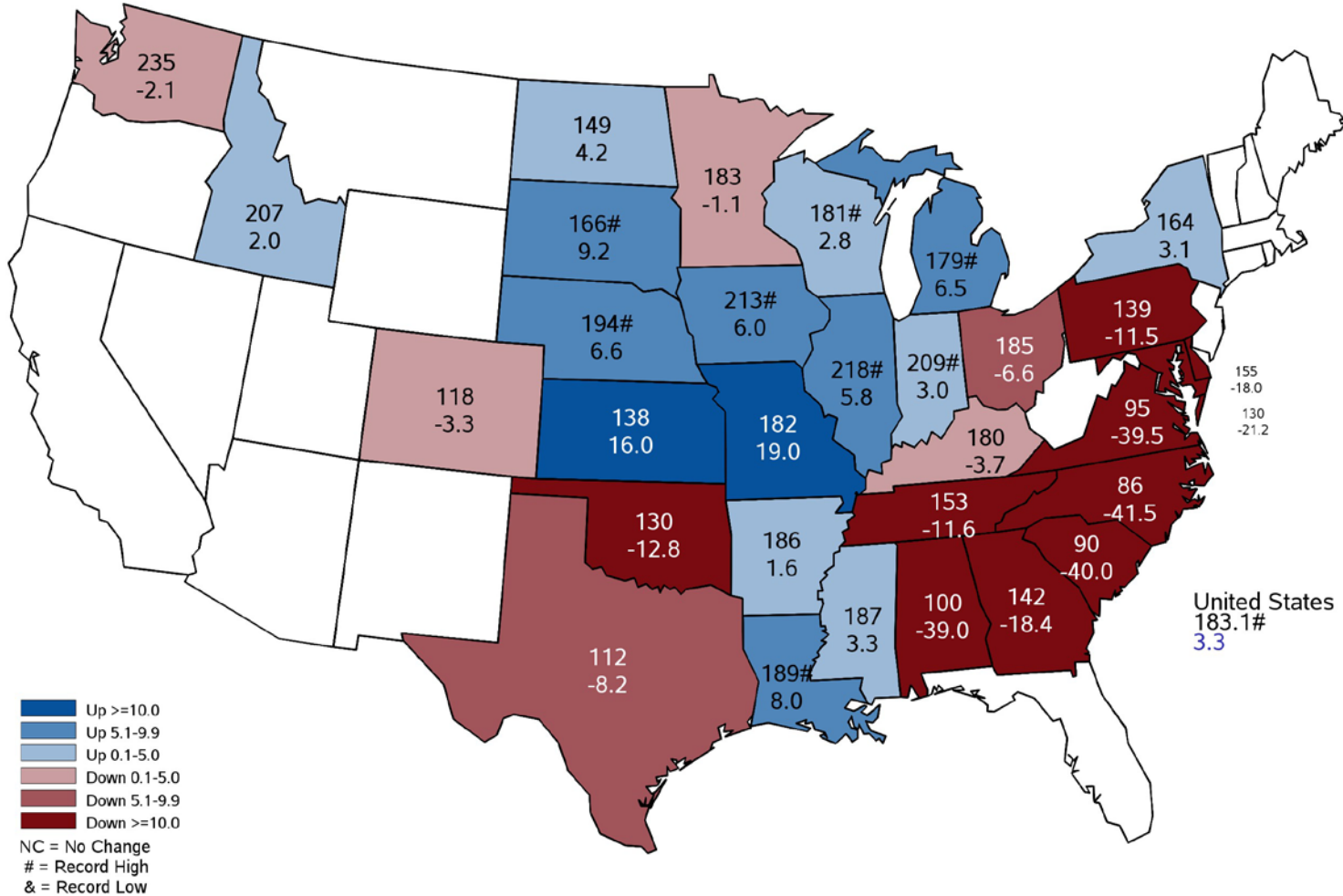
November WASDE Report: Corn

% Changes from 2023/24

- **Supply (24/25):**
 - Acreage: 4.1% decrease (94.6 to 90.7)
 - Yield: 3.3% increase (177.3 to 183.1)
 - Production: 1.3% decrease
- **Demand (24/25):**
 - Feed: 0.3% increase
 - Ethanol: 0.5% decrease
 - Exports: 1.4% increase
- **Stocks to Use: 11.8% to 12.9%**
- **Corn Price: \$4.55 to \$4.10 (9.9% decrease)**

November 2024 Corn Yield

Bushels and Percent Change from Previous Year

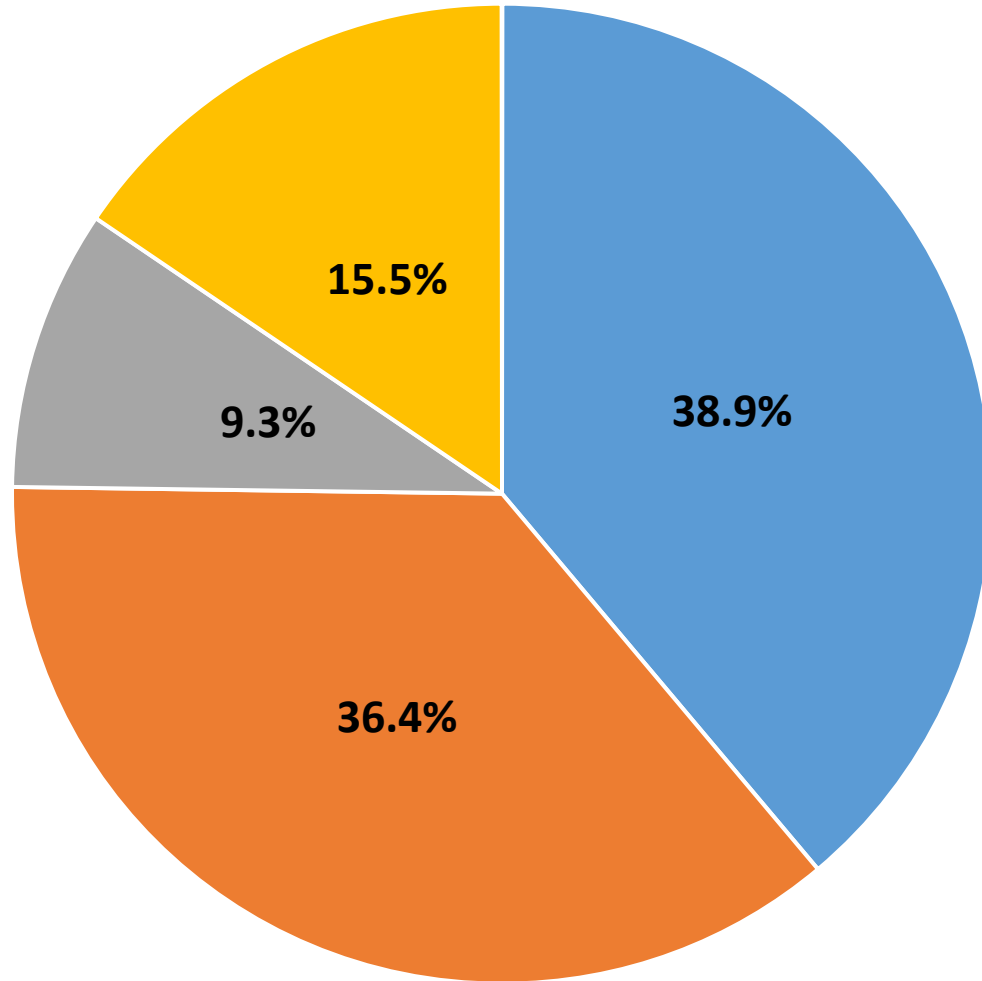




U.S. Corn Use: Forecasts 2024/25

Source: WASDE, November 2024

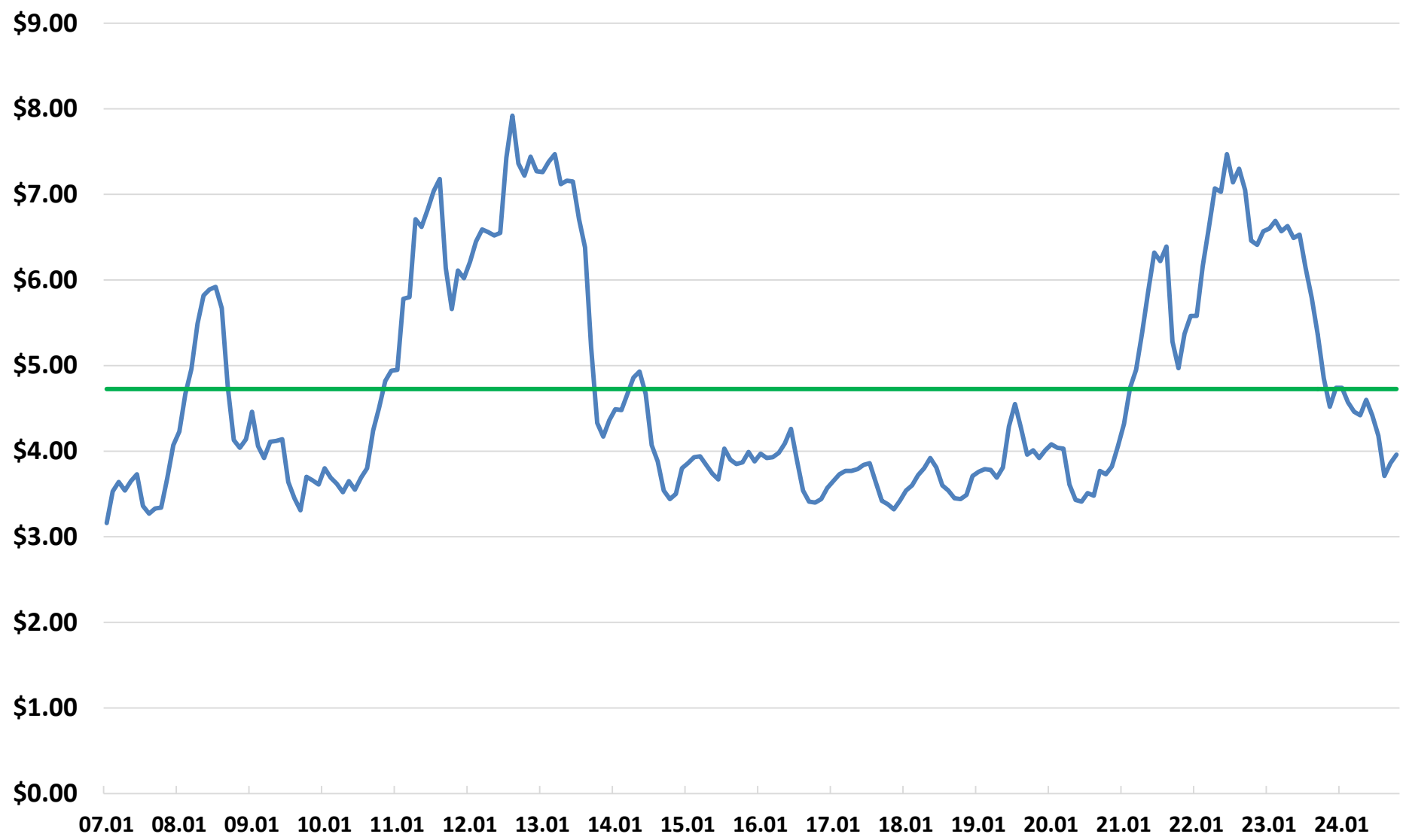
■ Feed ■ Ethanol ■ Other Industrial ■ Exports





Monthly Indiana Corn Prices, 2007 to 2024

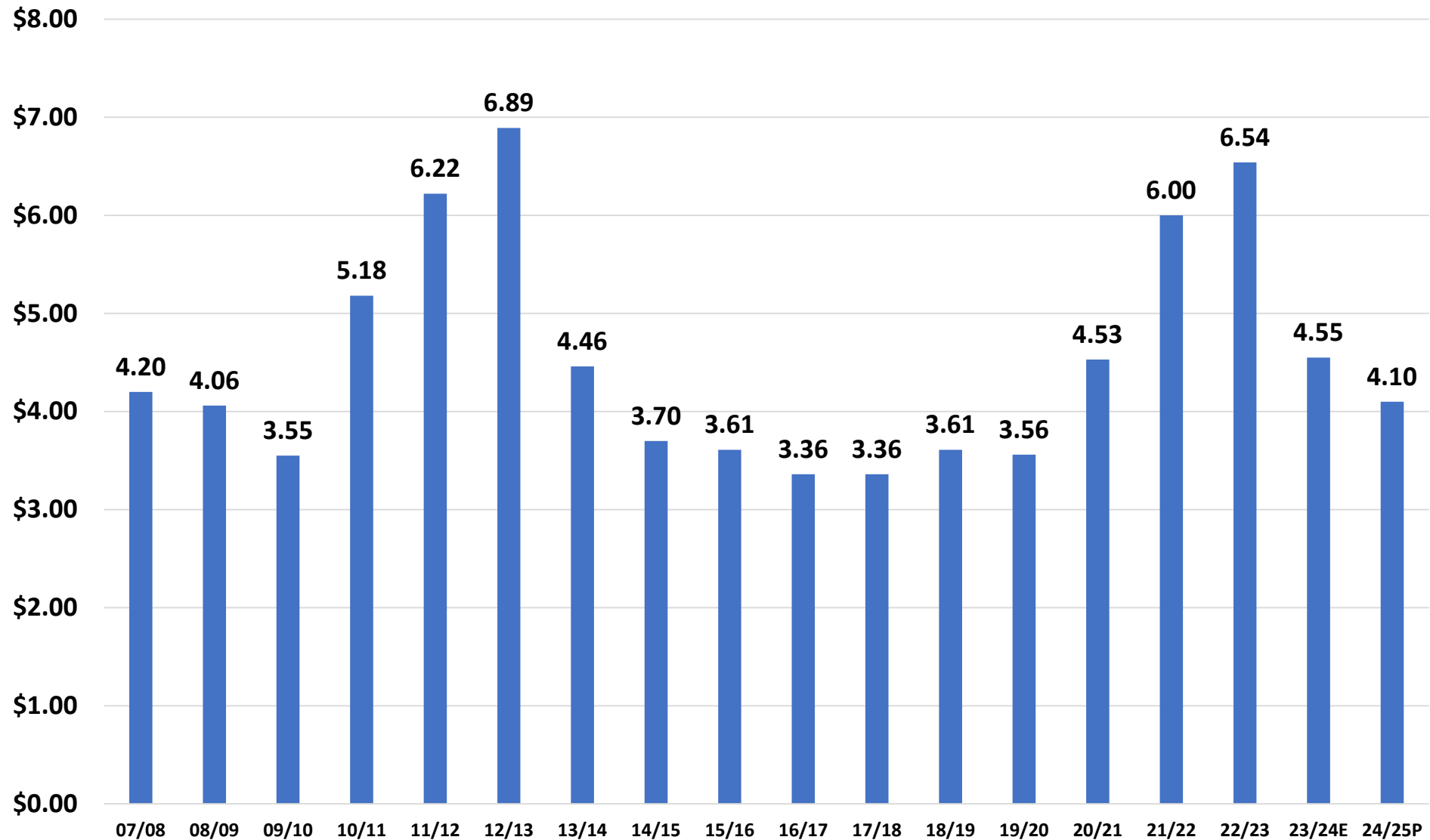
Corn Price 2007-2024 Price





U.S. Marketing Year Price for Corn

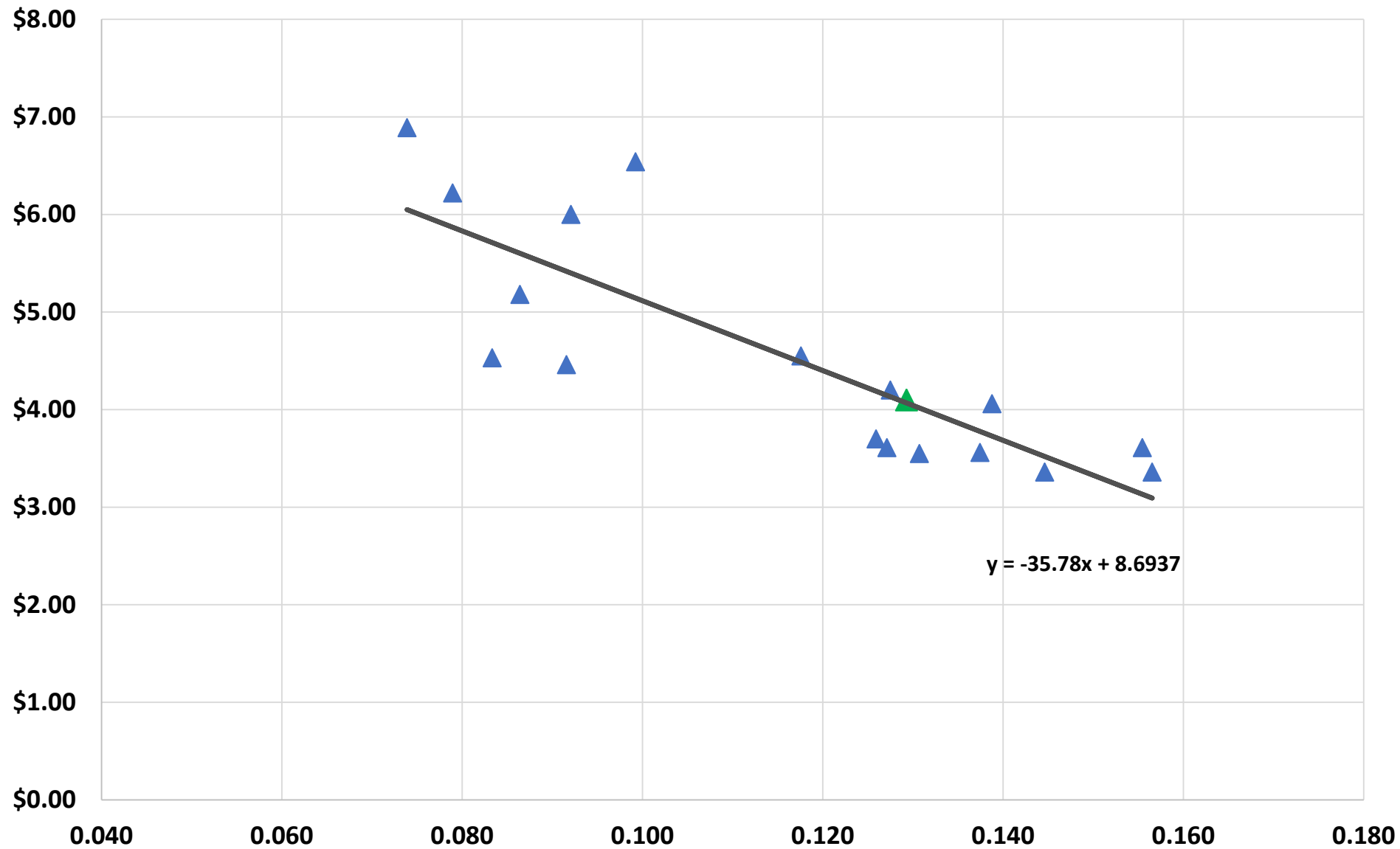
USDA - WASDE Reports





U.S. Marketing Year Average Corn Price and Ending Stocks to Use Ratio

USDA - WASDE Reports



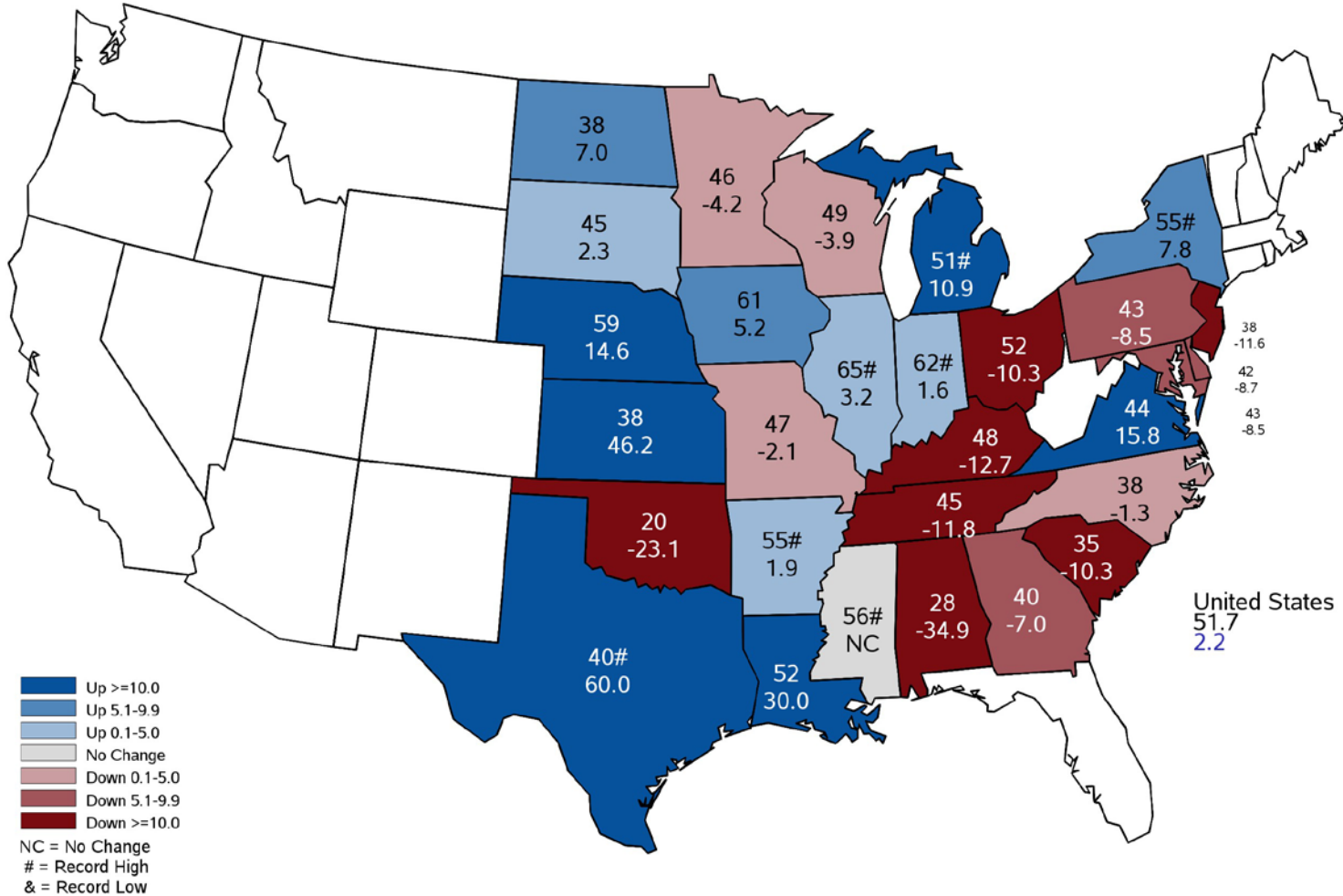
August WASDE Report: Soybeans

% Changes from 2023/24

- **Supply (24/25):**
 - Acreage: 4.2% increase (83.6 to 87.1)
 - Yield: 2.2% increase (50.6 to 51.7)
 - Production: 7.2% increase
- **Demand (24/25):**
 - Crush: 5.4% increase
 - Exports: 7.7% increase
- **Stocks to Use: 8.3% to 10.8%**
- **Soybean Price: \$12.40 to \$10.80 (12.9% decrease)**

November 2024 Soybean Yield

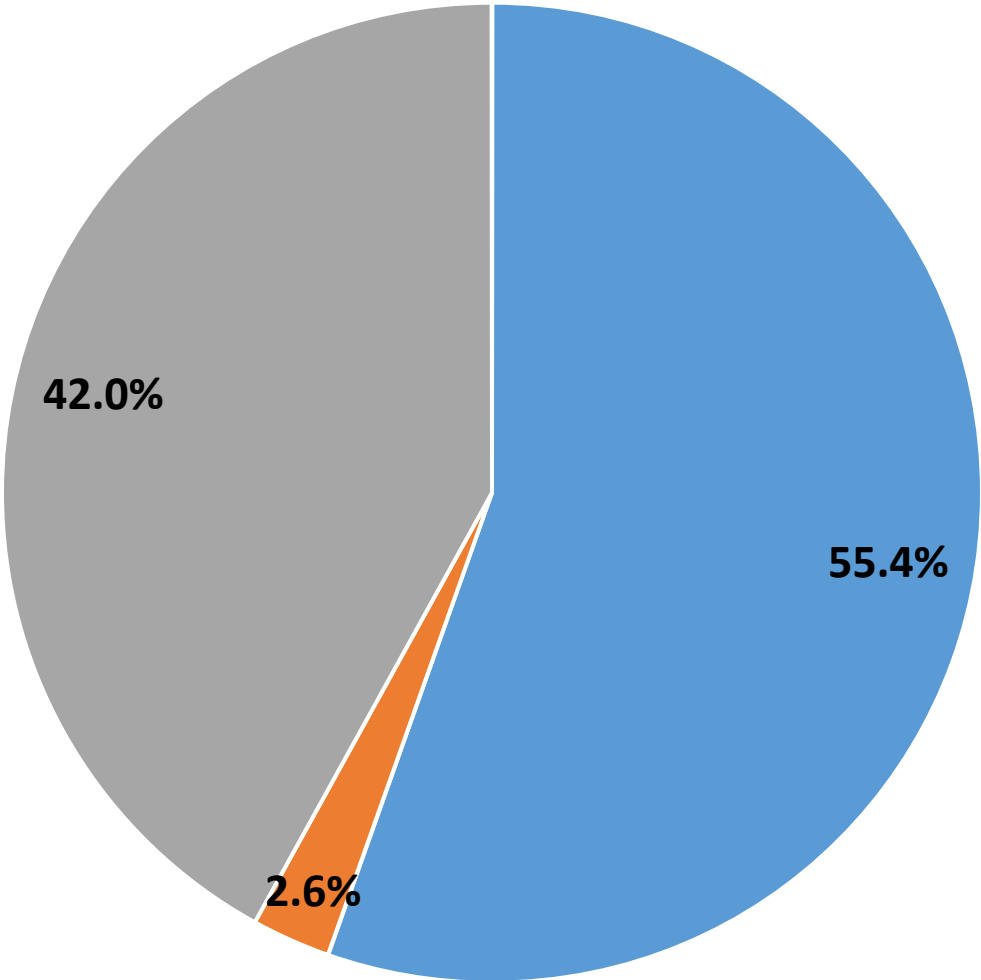
Bushels and Percent Change from Previous Year



U.S. Soybean Use: Forecasts 2024/25

Source: WASDE, November 2024

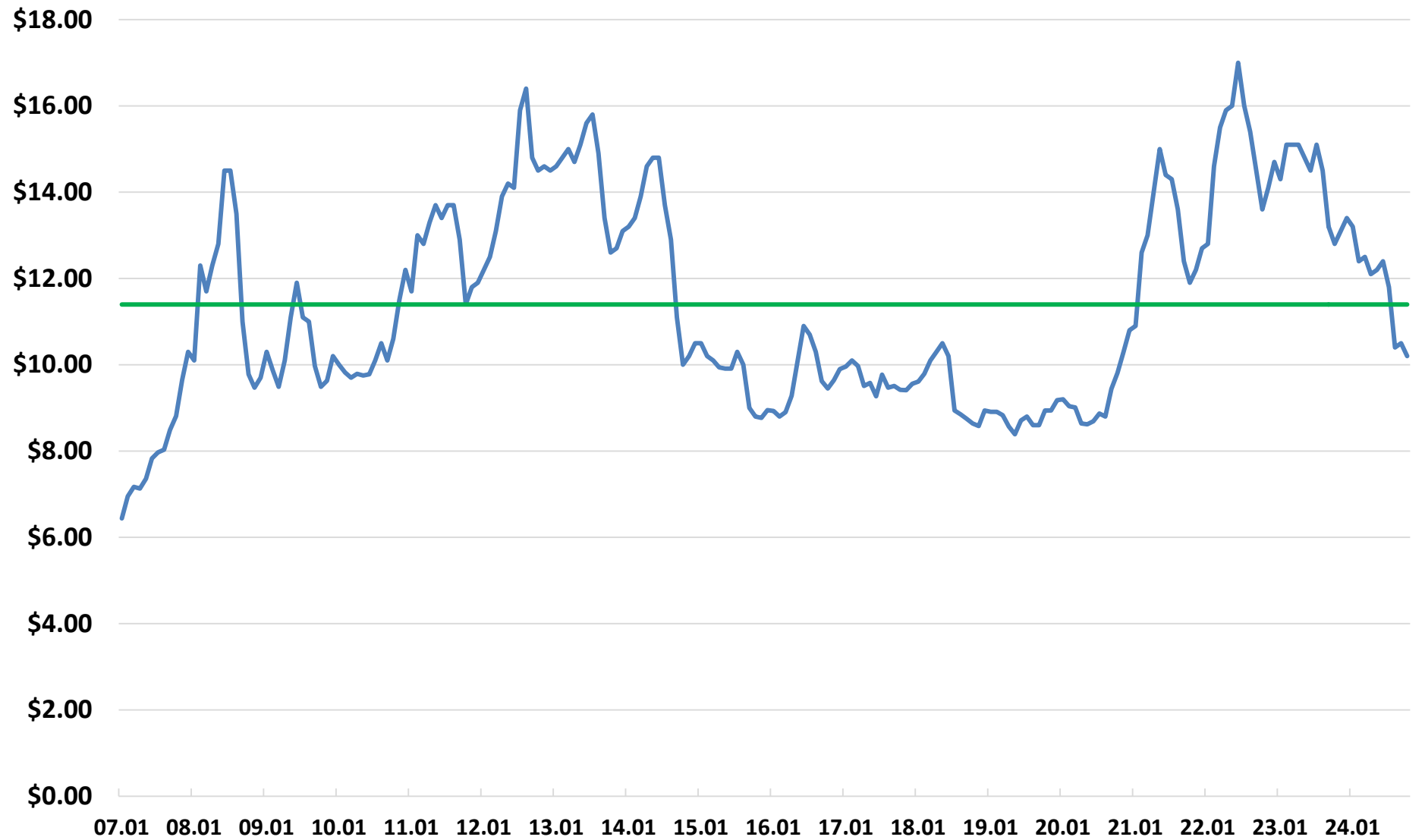
■ Crush ■ Seed and Residual ■ Exports





Monthly Indiana Soybean Prices, 2007 to 2024

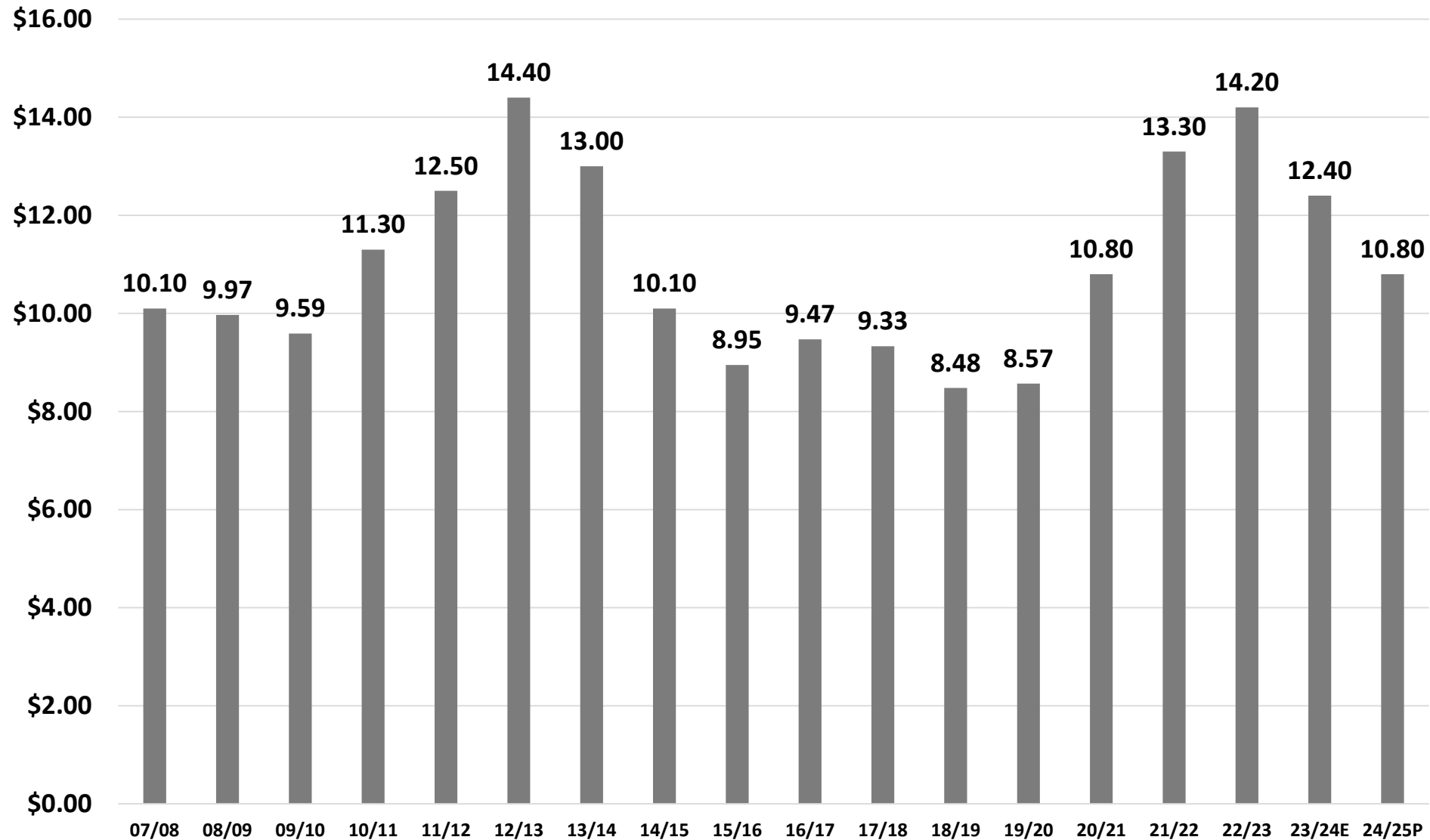
— Soybean Price — 2007-2024 Price





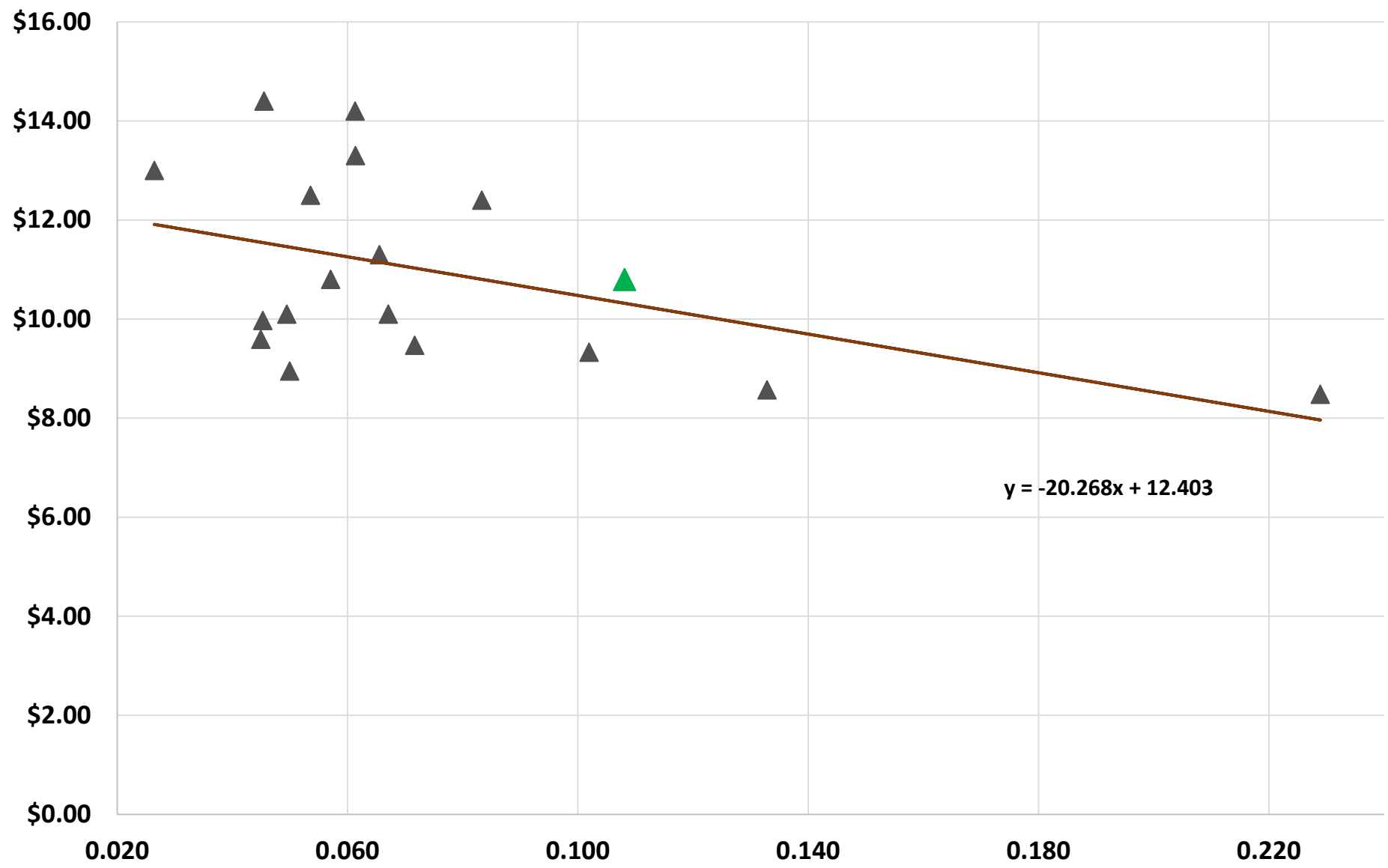
U.S. Marketing Year Price for Soybeans

USDA - WASE Reports





U.S. Marketing Year Average Soybean Price and Ending Stocks to Use Ratio USDA - WASDE Reports



What about Prices in Fall 2025?

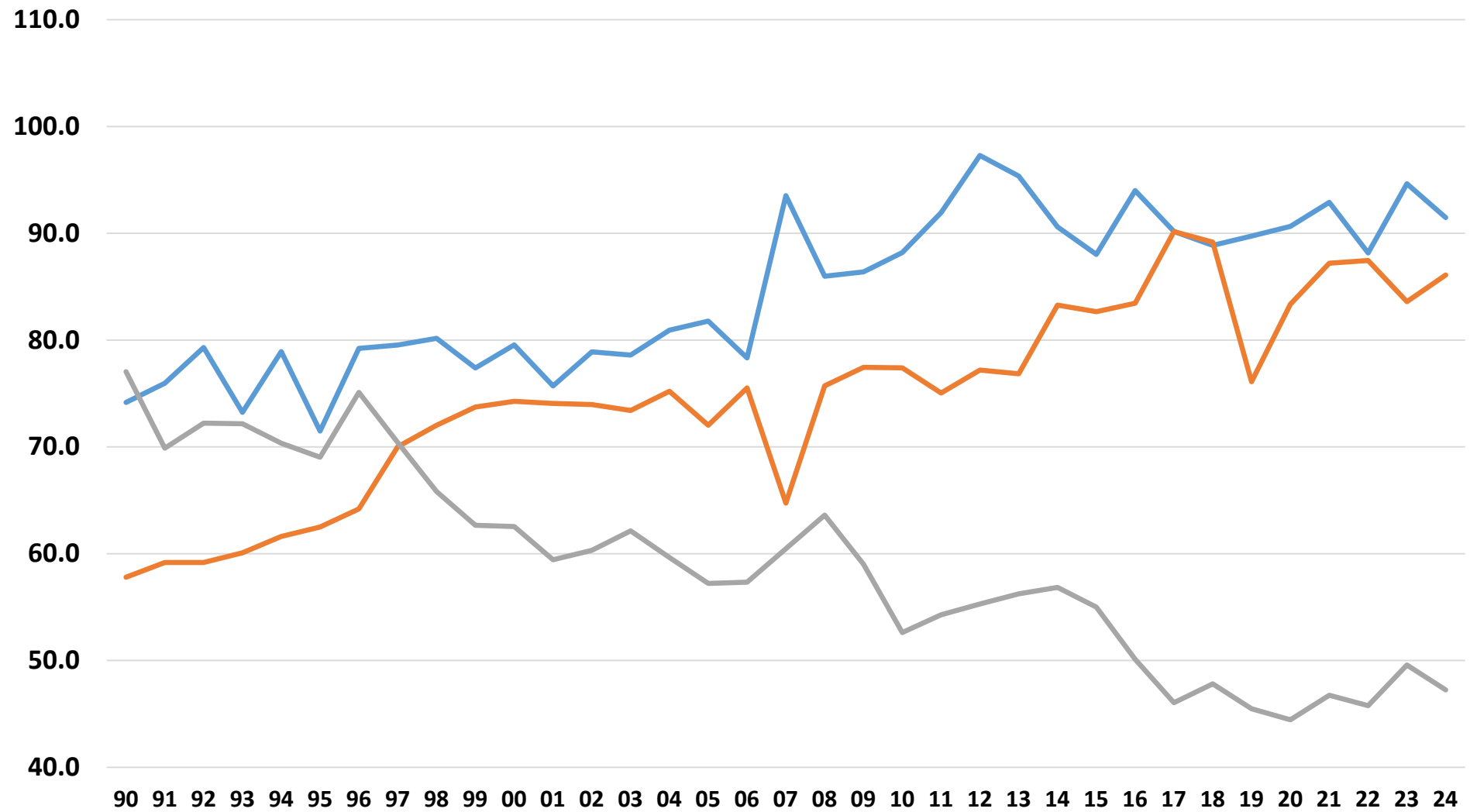




U.S. Corn, Soybean, and Wheat Acres (millions)

Source: USDA-NASS, Quick Stats

Corn Soybeans Wheat





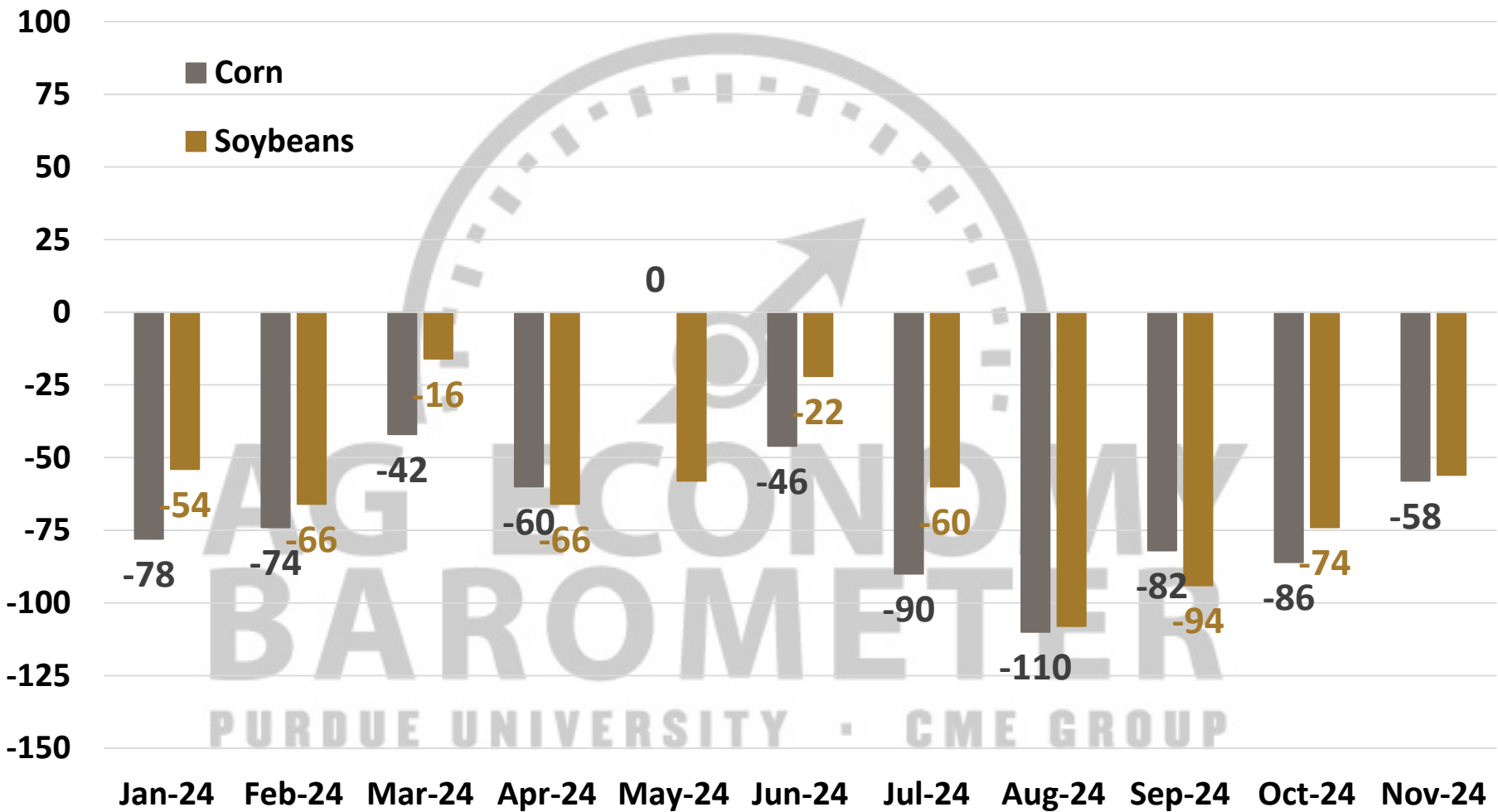
Fall 2025 Futures Prices (12/8)

Source: iFarm Price Distribution Tool

At Expiration Probability Below	Corn (Dec)	Soybeans (Nov)
25%	3.71	8.88
50%	4.27	9.92
75%	4.91	11.07

Producers' Corn & Soybean Commodity Price Expectation Indices

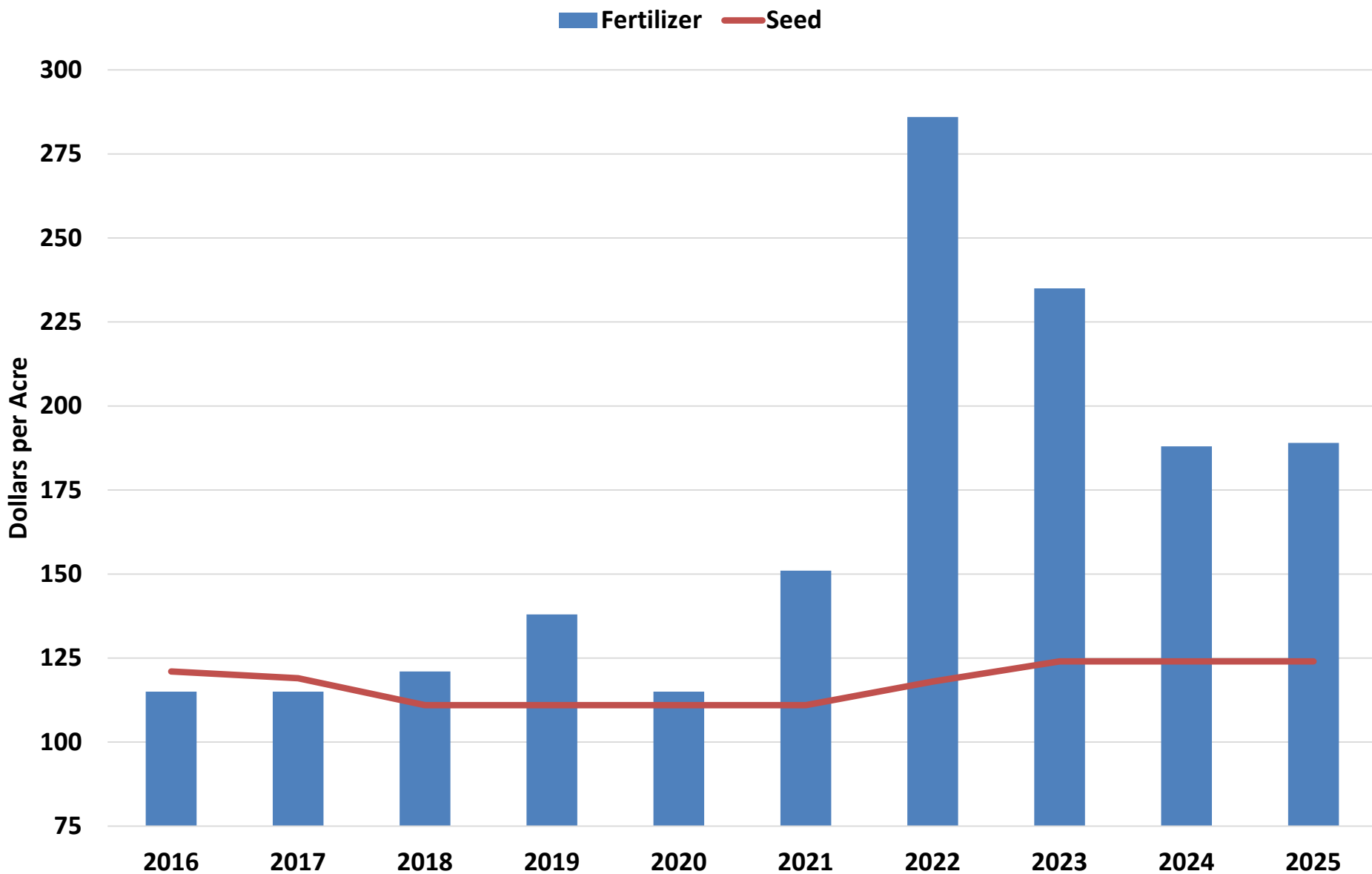
Index



Source: Purdue University Center for Commercial Agriculture, Producer Survey, November 2024

Net Return Projections

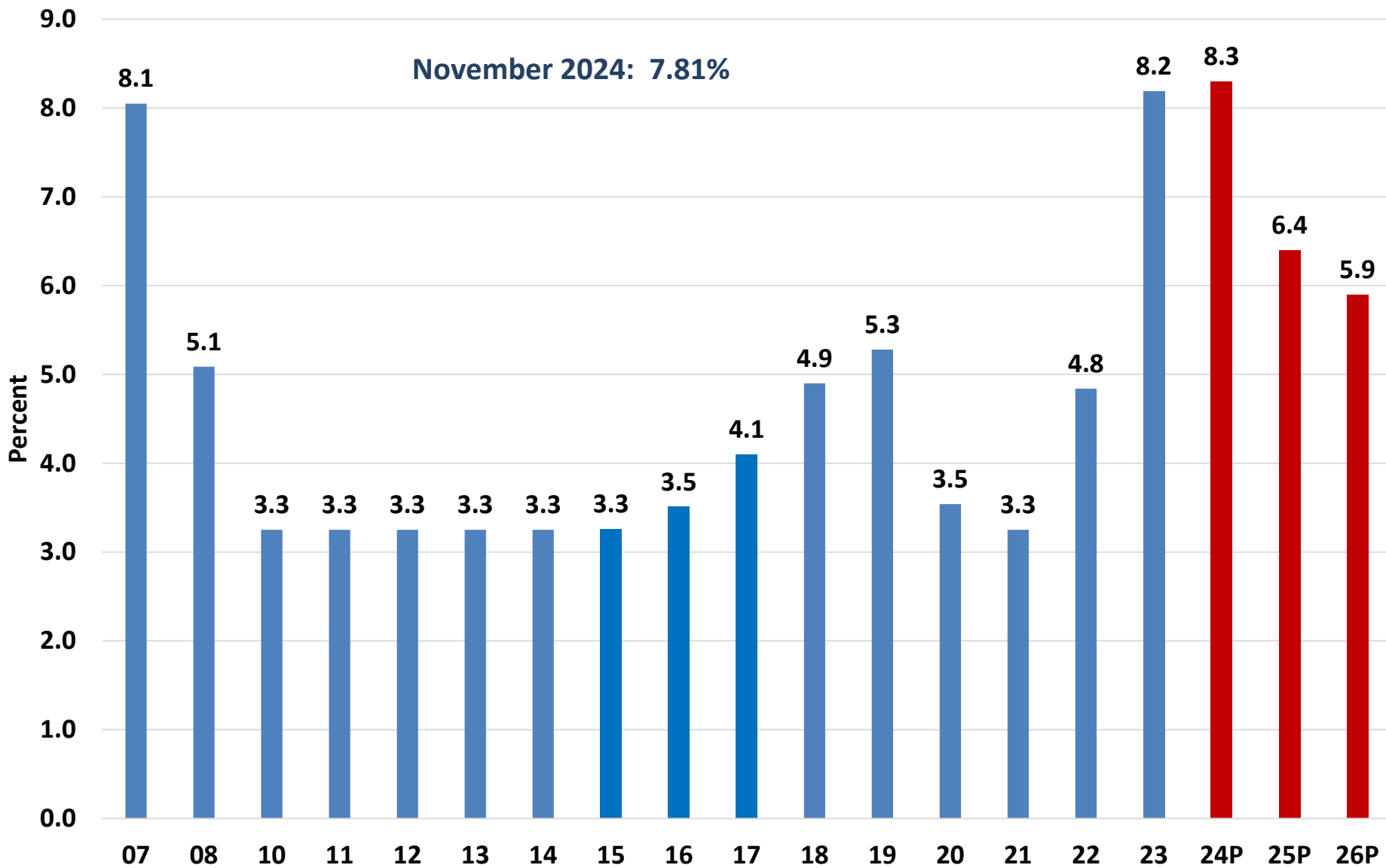
Fertilizer and Seed Costs for Rotation Corn (Average Productivity Soil)





Annual Prime Interest Rate

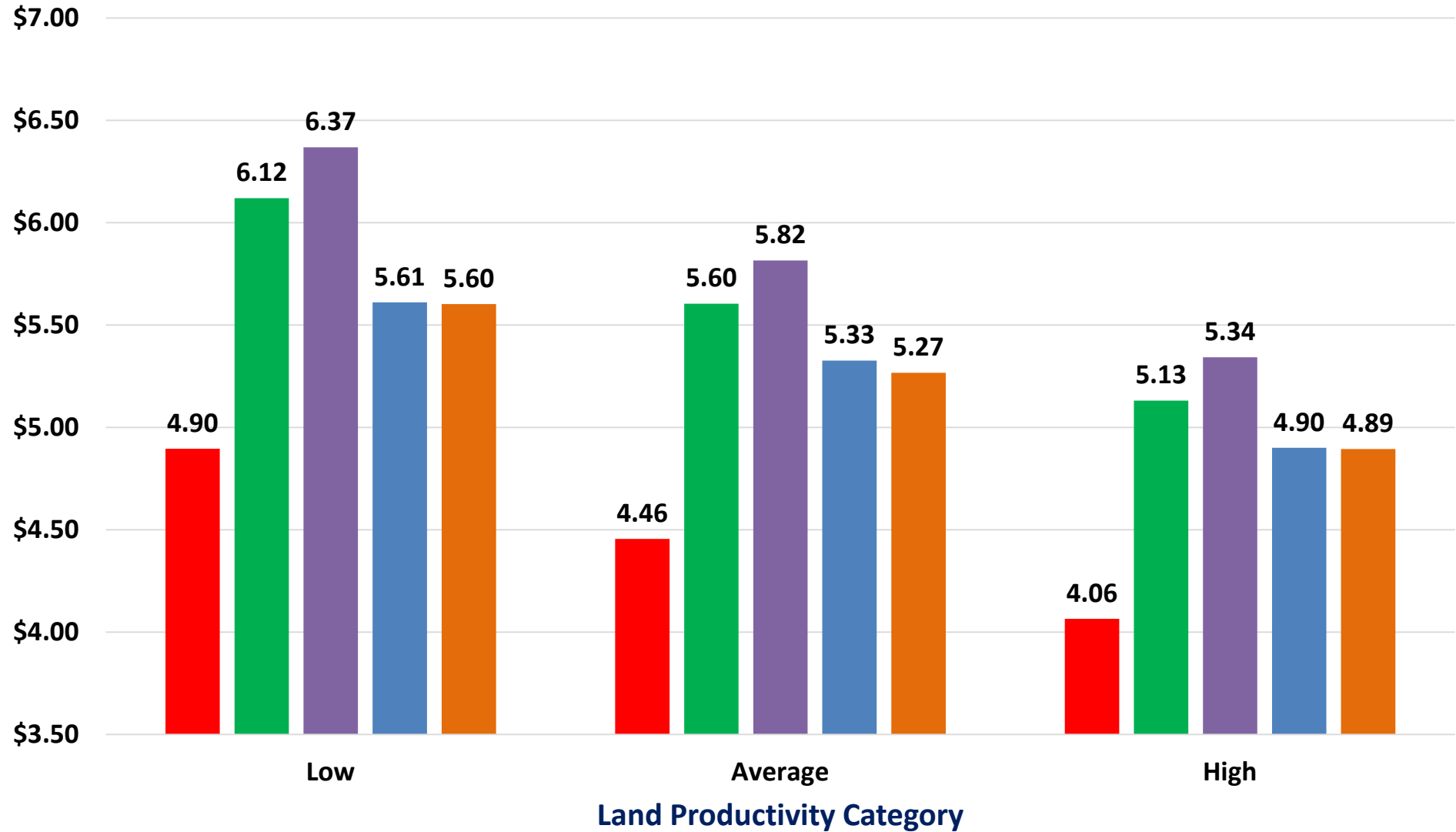
Source: Federal Reserve Economic Data





Breakeven Prices for Rotation Corn in Indiana

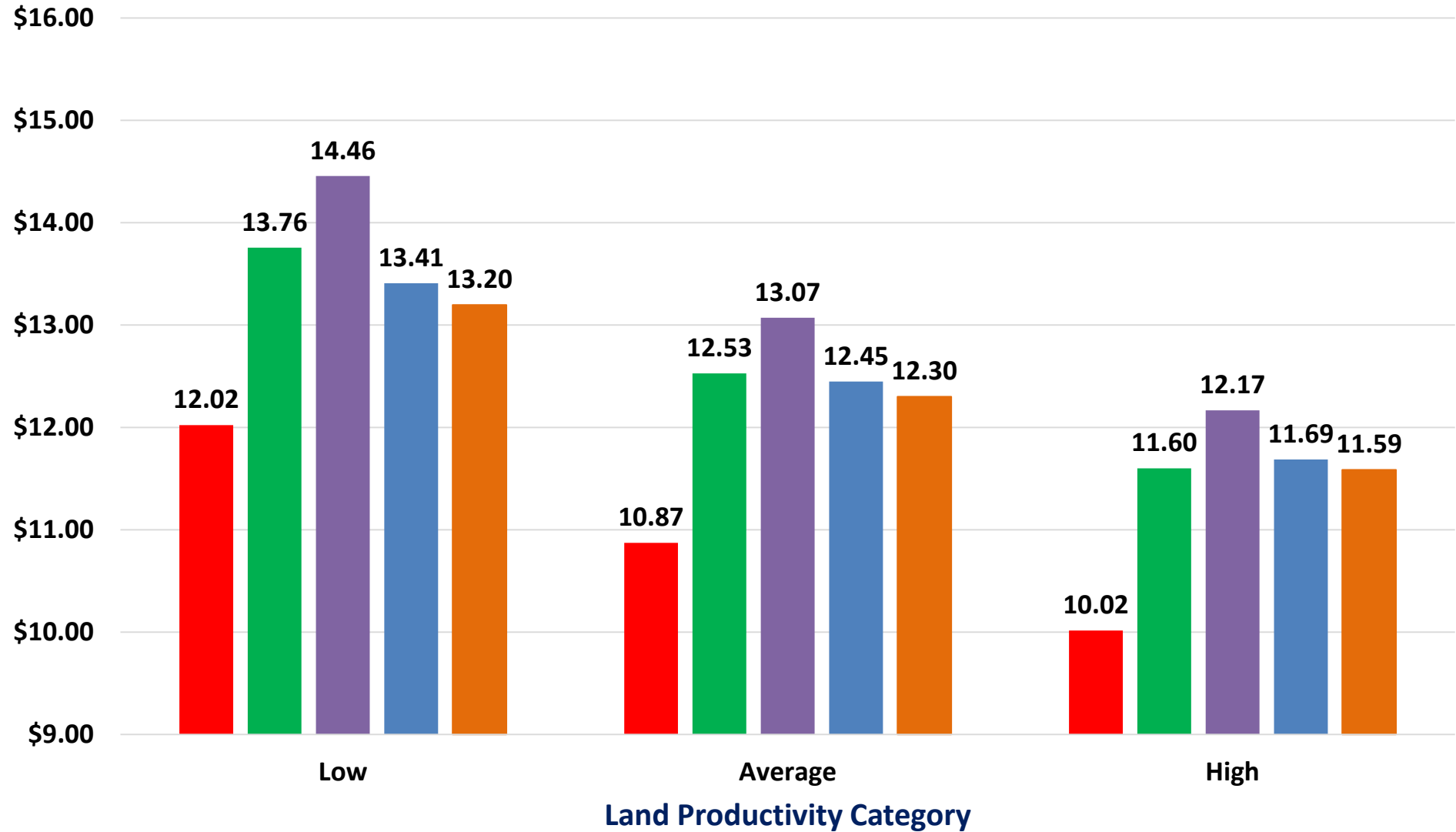
2021 2022 2023 2024 2025





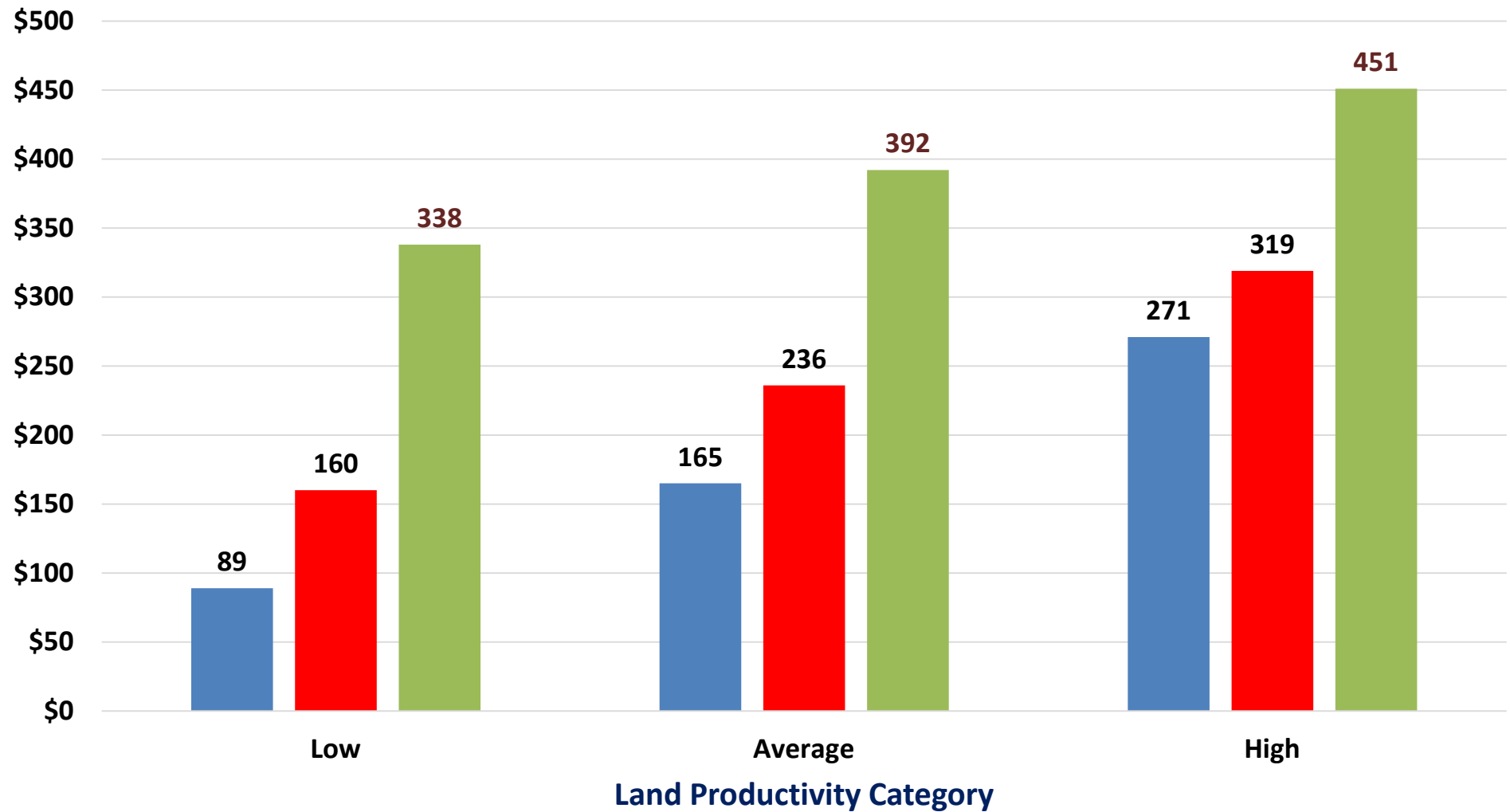
Breakeven Prices for Rotation Soybeans in Indiana

2021 2022 2023 2024 2025

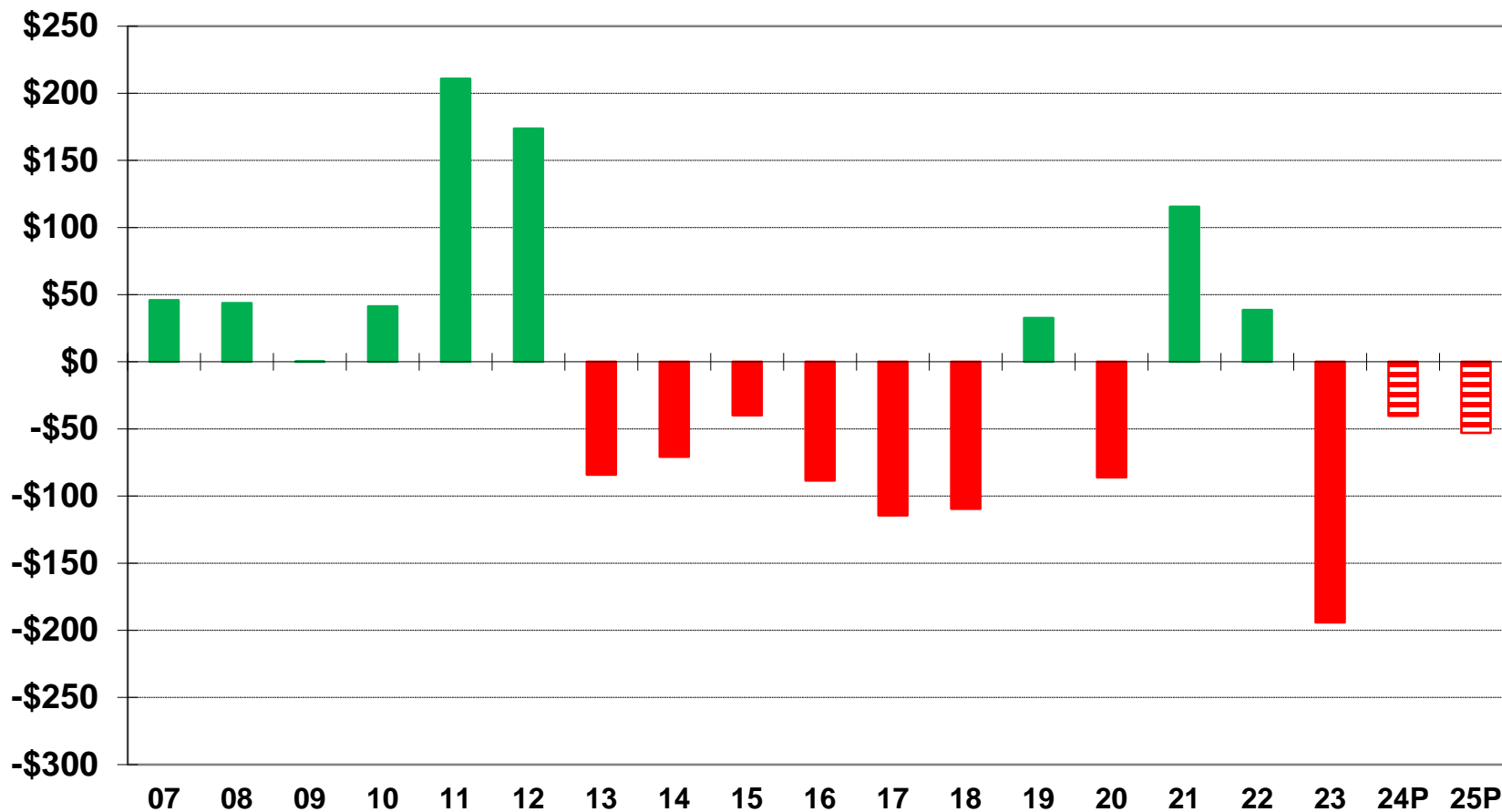


2025 Contribution Margin per Acre for Rotation Corn and Soybeans in Indiana

■ Corn ■ Soybeans ■ Overhead



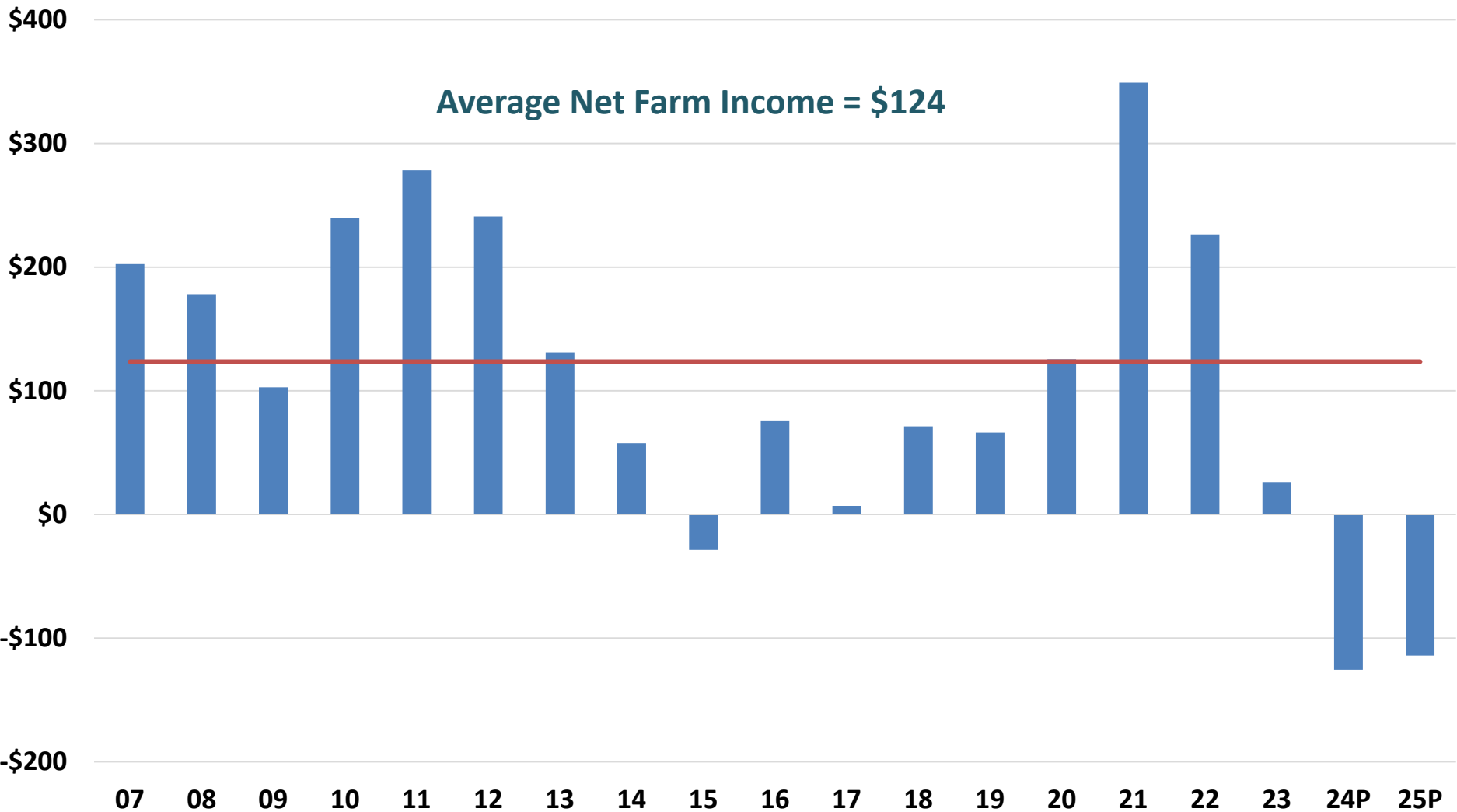
Difference in Earnings per Acre West Central Indiana (Corn Minus Soybeans)





Net Farm Income, Corn/Soybean Rotation (\$ per Acre) West Central Indiana Case Farm

■ Annual — Average, 2007 to 2024



Cash Rent and Land Value Projections

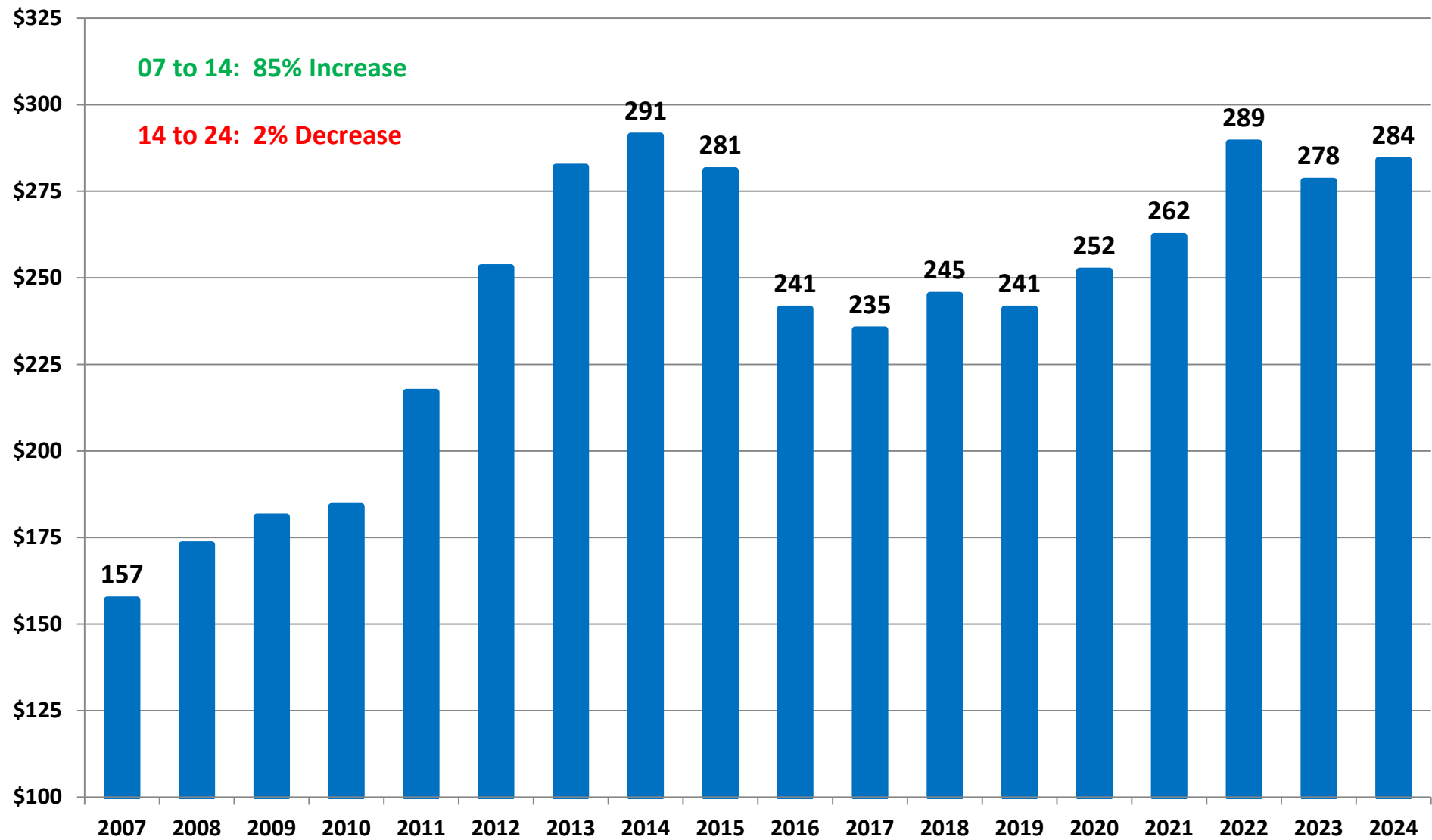
Indiana Cash Rents

2024 Survey Results, State Averages by Land Quality

Land Quality	Yield (Bu/Ac)	2023 Value (\$/A)	2024 Value (\$/A)	Percent Change
Top	226	\$306	\$313	2.3%
Average	196	\$257	\$260	0.9%
Poor	167	\$212	\$204	-3.7%



Cash Rent, West Central Indiana Average Land Productivity



Indiana Farmland Values

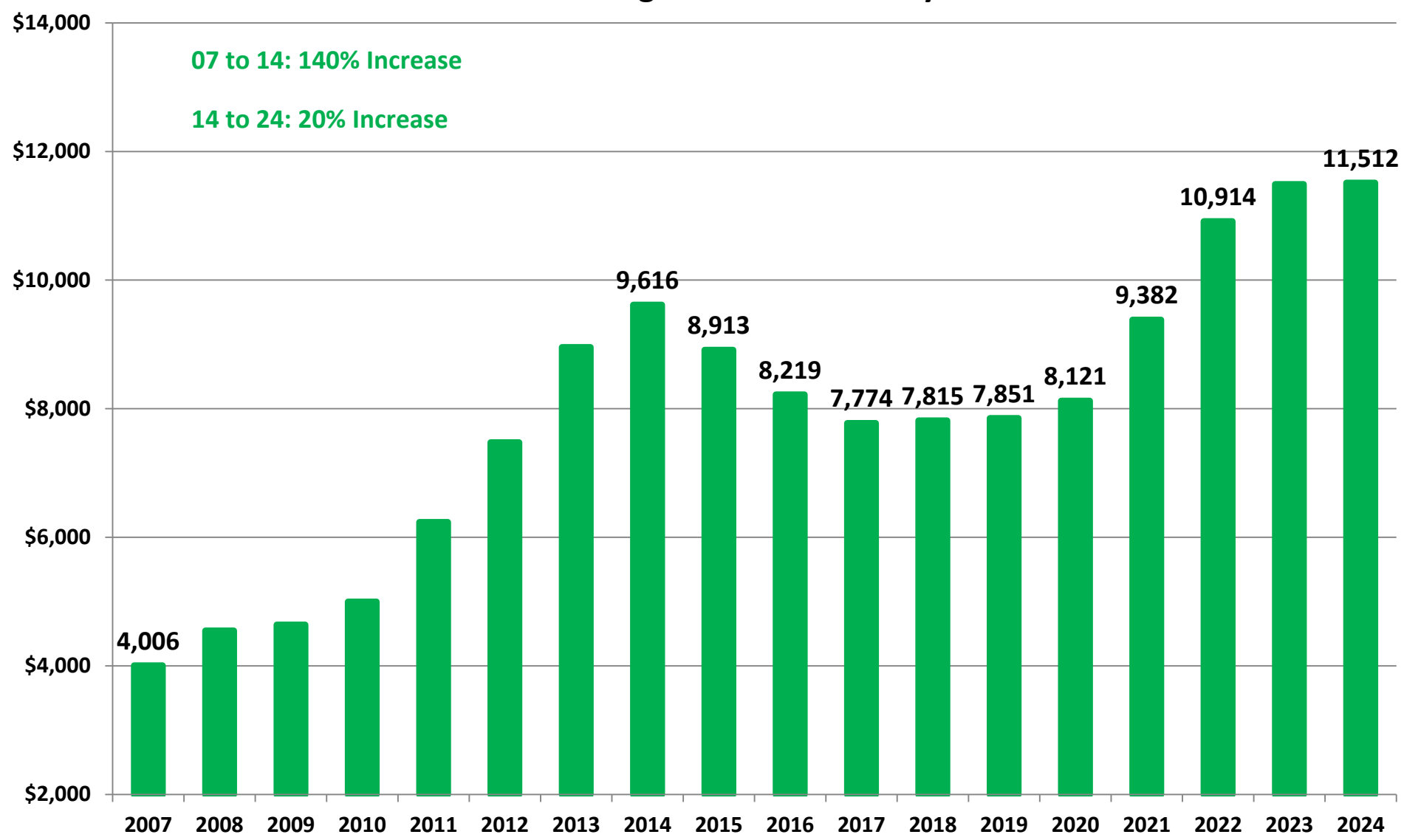
2024 Survey Results, State Averages by Land Quality

Land Quality	Yield (Bu/Ac)	2023 Value (\$/A)	2024 Value (\$/A)	Percent Change
Top	226	\$13,739	\$14,392	4.8%
Average	196	\$11,210	\$11,630	3.7%
Poor	167	\$8,689	\$9,071	4.4%



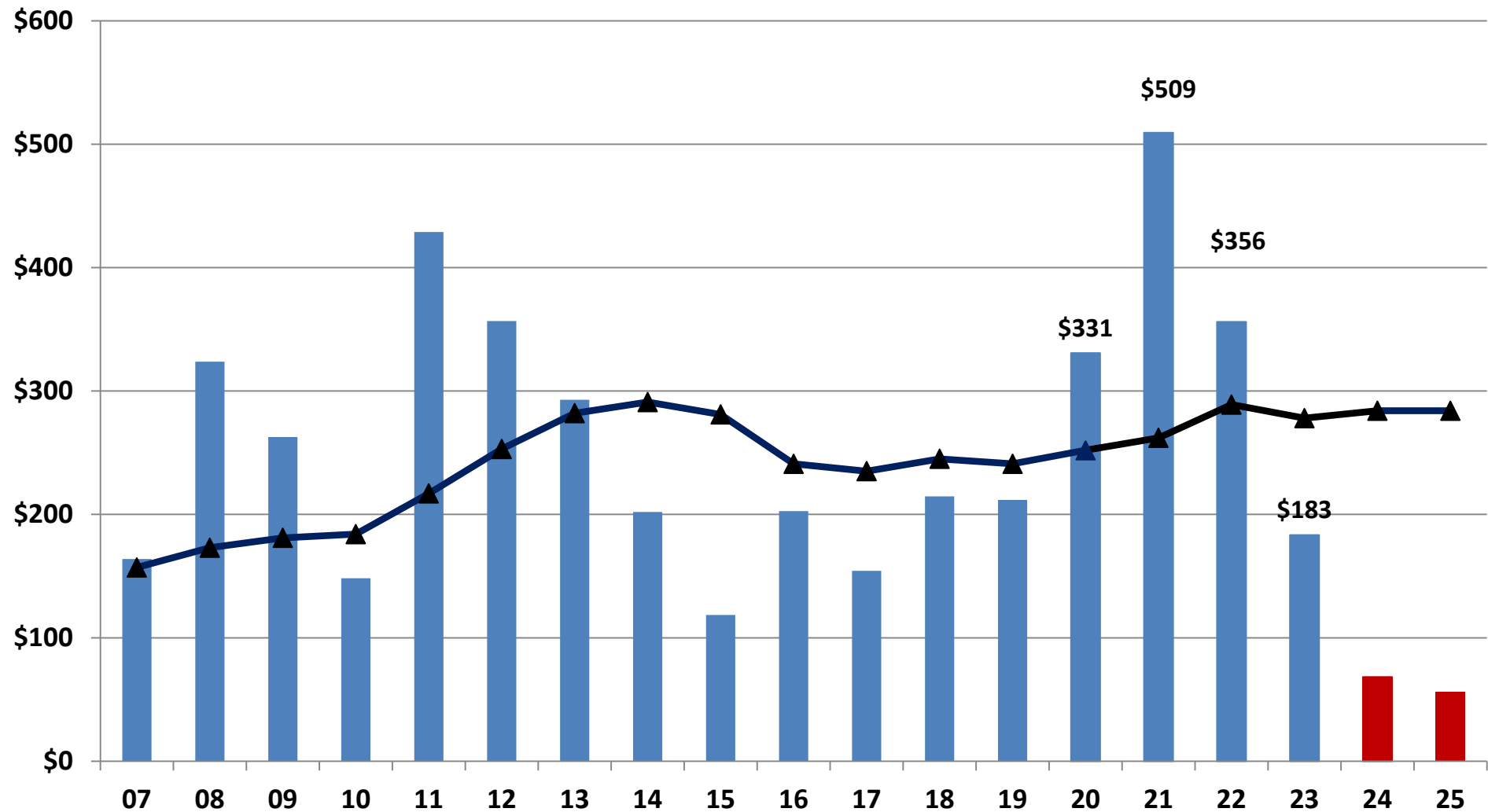
Land Values, West Central Indiana

Average Land Productivity



Cash Rent and Net Return to Land (\$/Acre) West Central Indiana

Net Return to Land Cash Rents



Compared to 2024, what are your expectations for cash rents in your area in 2025?

Question was only posed to corn, soybean, wheat, and cotton producers

% of respondents

100

80

60

40

20

0

7/24

8/24

15.1

14.2

72.0

70.2

12.9

15.6

Higher

About the Same

Lower

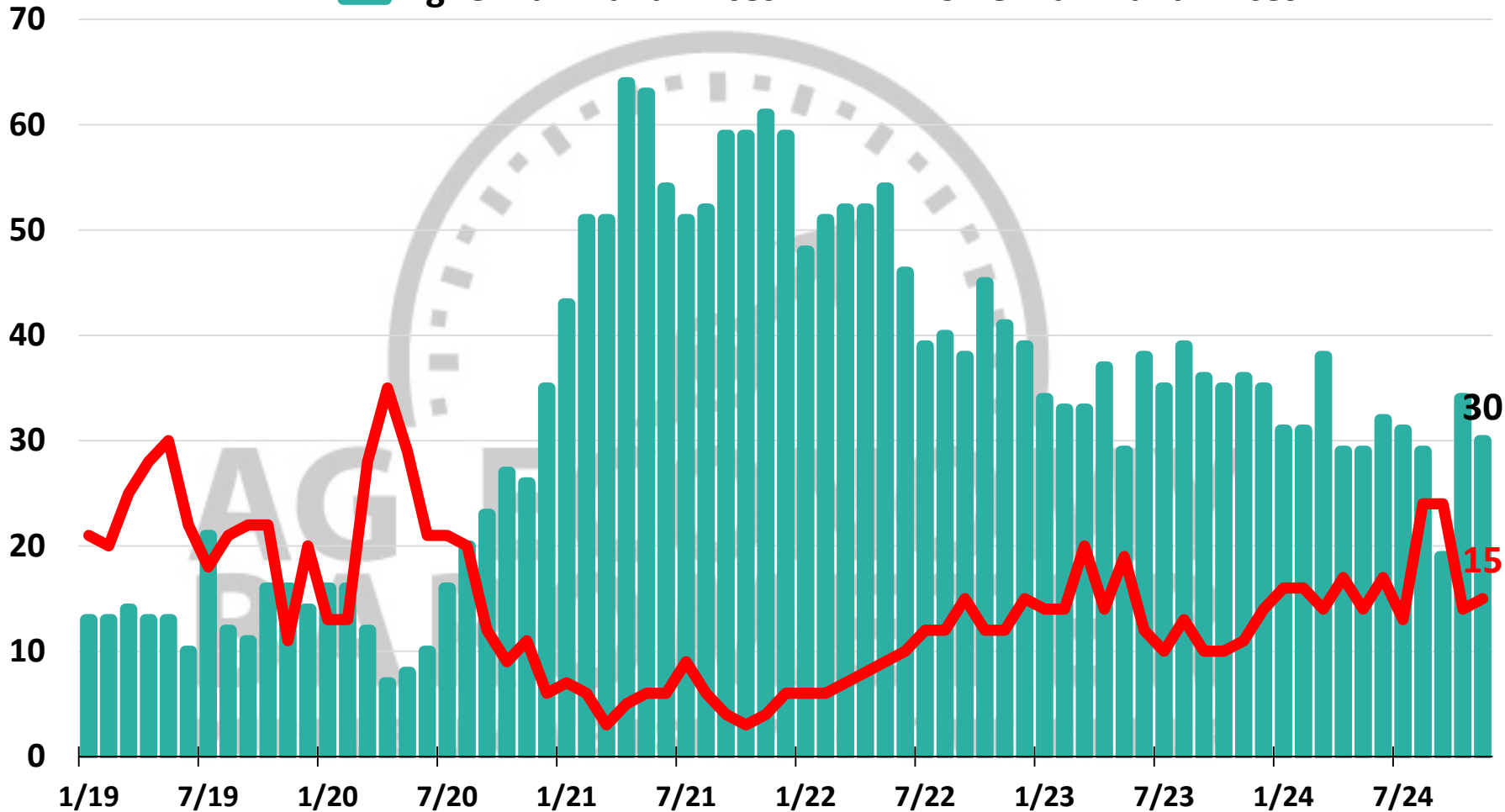
Source: Purdue Center for Commercial Agriculture, Producer Survey, August 2024

Farmland Price Expectations, 12 Months Ahead

% of respondents

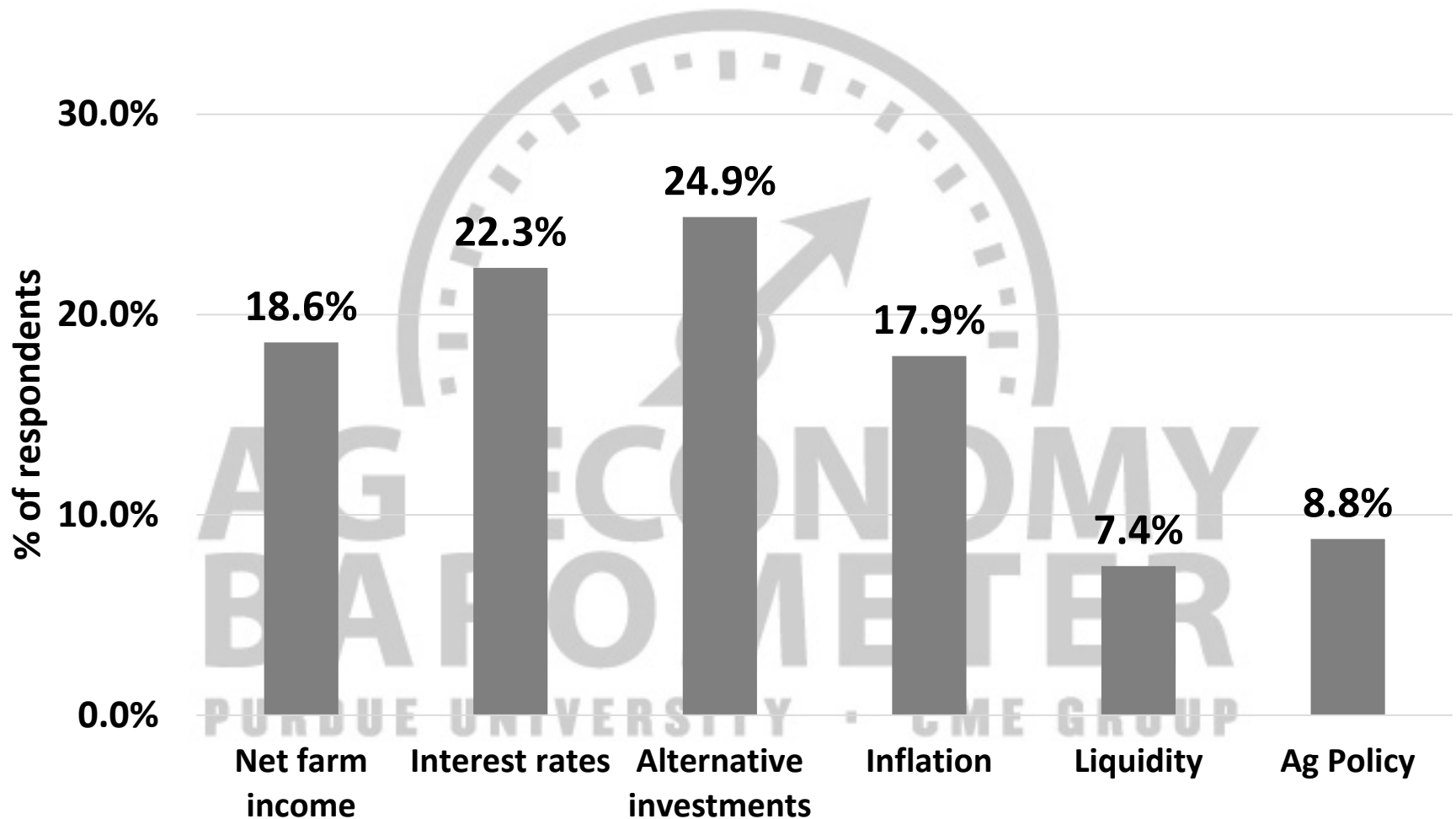
Higher Farmland Prices

Lower Farmland Prices



Source: Purdue Center for Commercial Agriculture, Producer Survey, November 2024

Which of the following factors is having the most influence on farmland values in your area (check up to two items)?



Source: Purdue Center for Commercial Agriculture, Producer Survey, November 2024

Final Thoughts

- Long-Run Average IN Crop Prices (2007 to 2024)
 - Corn = \$4.73
 - Soybeans = \$11.41
 - Projections for 2024 and 2025 are substantially below these long-run averages

Final Thoughts (continued)

- Financial Stress:
 - Low profit margins (negative)
 - High debt to asset ratios (above 0.70)
 - Profit margins are expected to be low for most farms in 2024. However, most farms still have a strong balance sheet.
- Vulnerable farms:
 - Any farm with a debt to asset ratio above 0.50
 - Crop farms that cash rent the vast majority of their acreage
 - Beginning farms and farms with less experience (this is particularly true if they do not farm with an older generation)

Questions, Comments

www.ag.purdue.edu/commercialag

