

CORN & SOYBEAN OUTLOOK UPDATE

OCTOBER 14, 2022

James Mintert, Professor & Director, Center for Commercial Agriculture

Nathan Thompson, Associate Professor, Department of Agricultural Economics

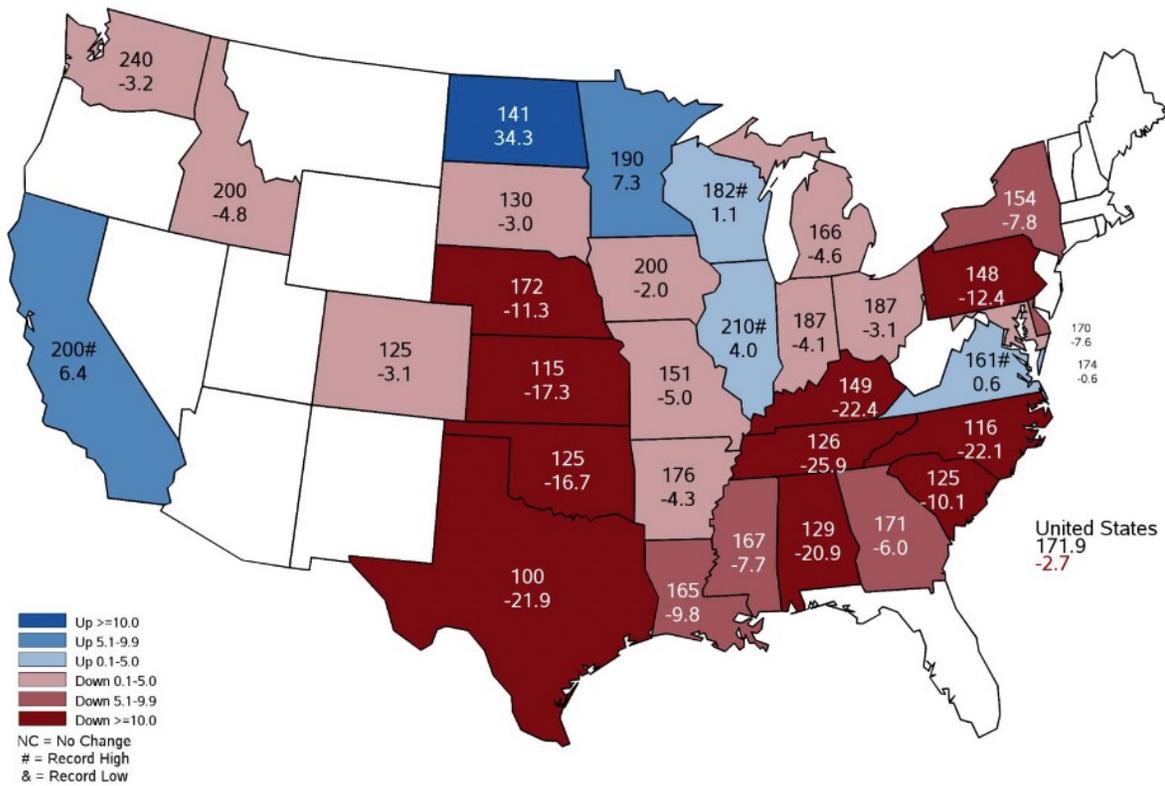
Michael Langemeier, Professor, Department of Agricultural Economics



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October 2022 Corn Yield

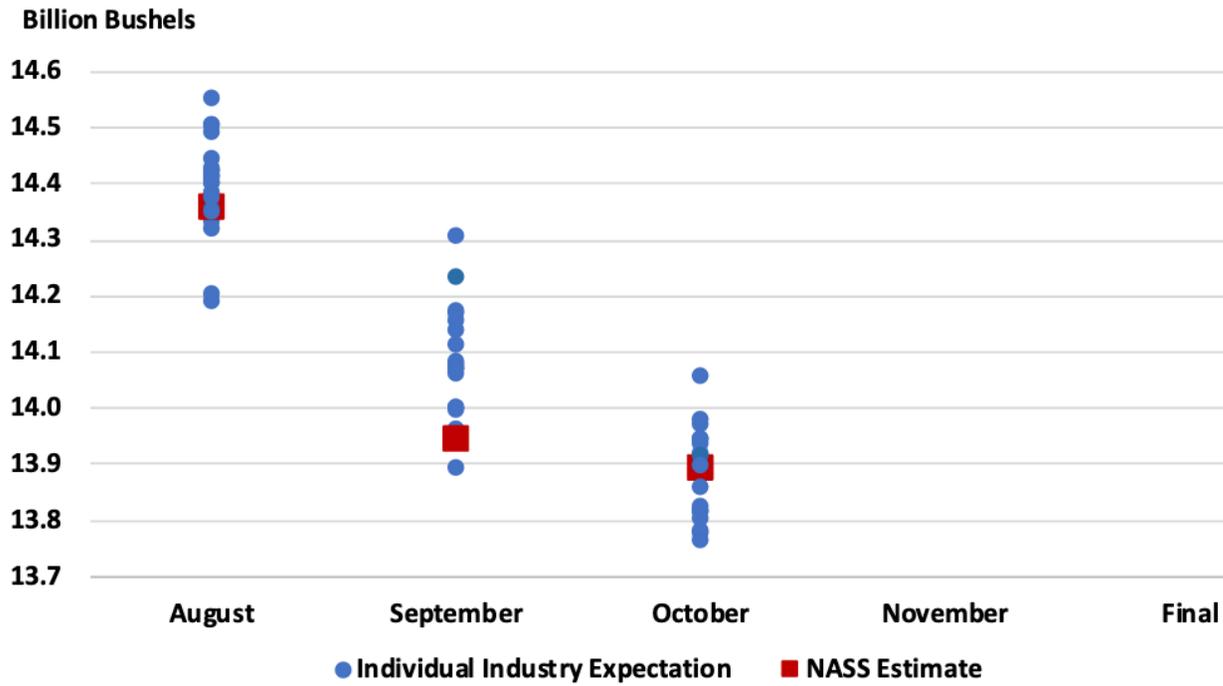
Bushels and Percent Change from Previous Year



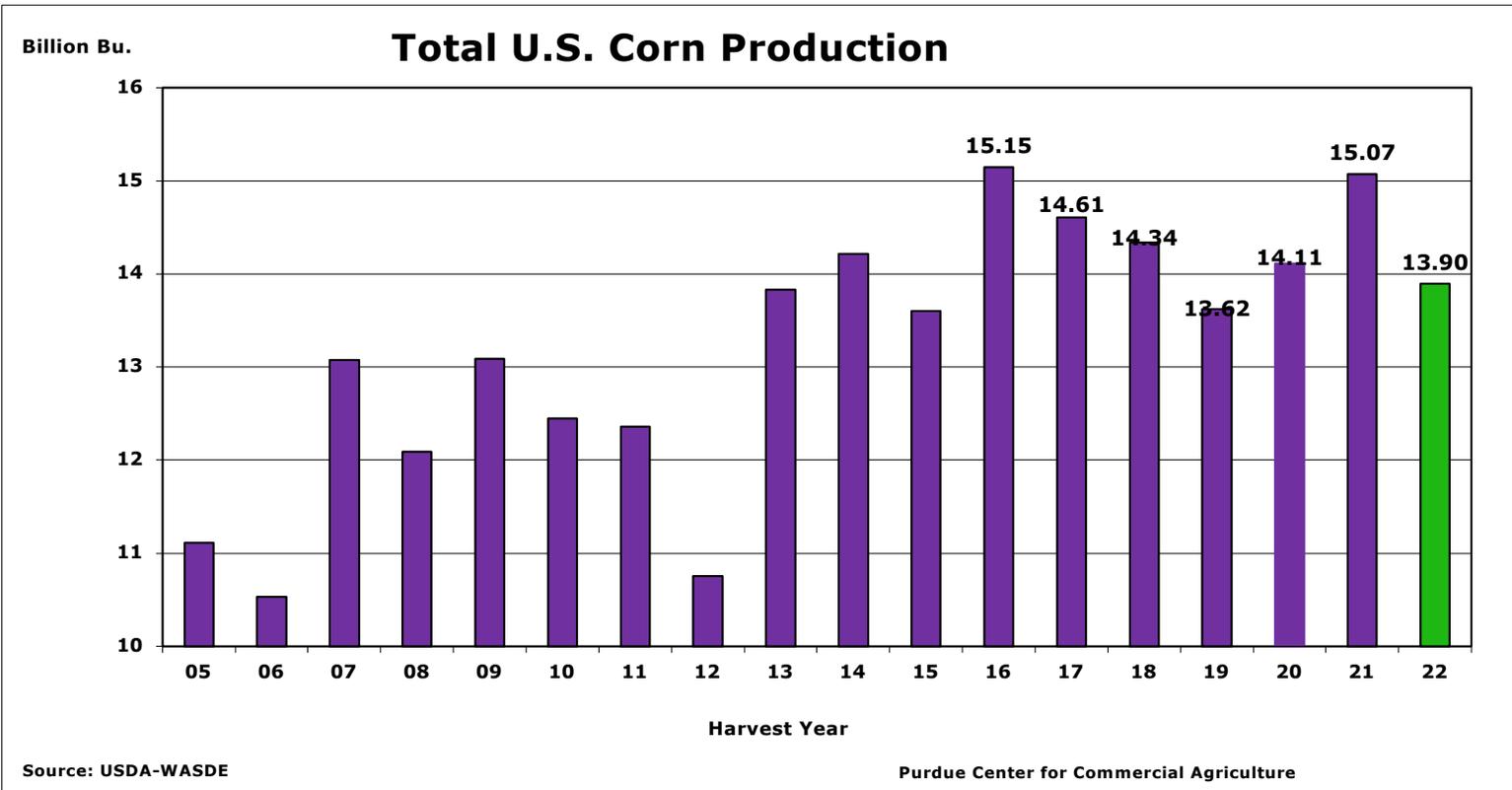


2022 U.S. Corn Production

Industry Expectations vs NASS



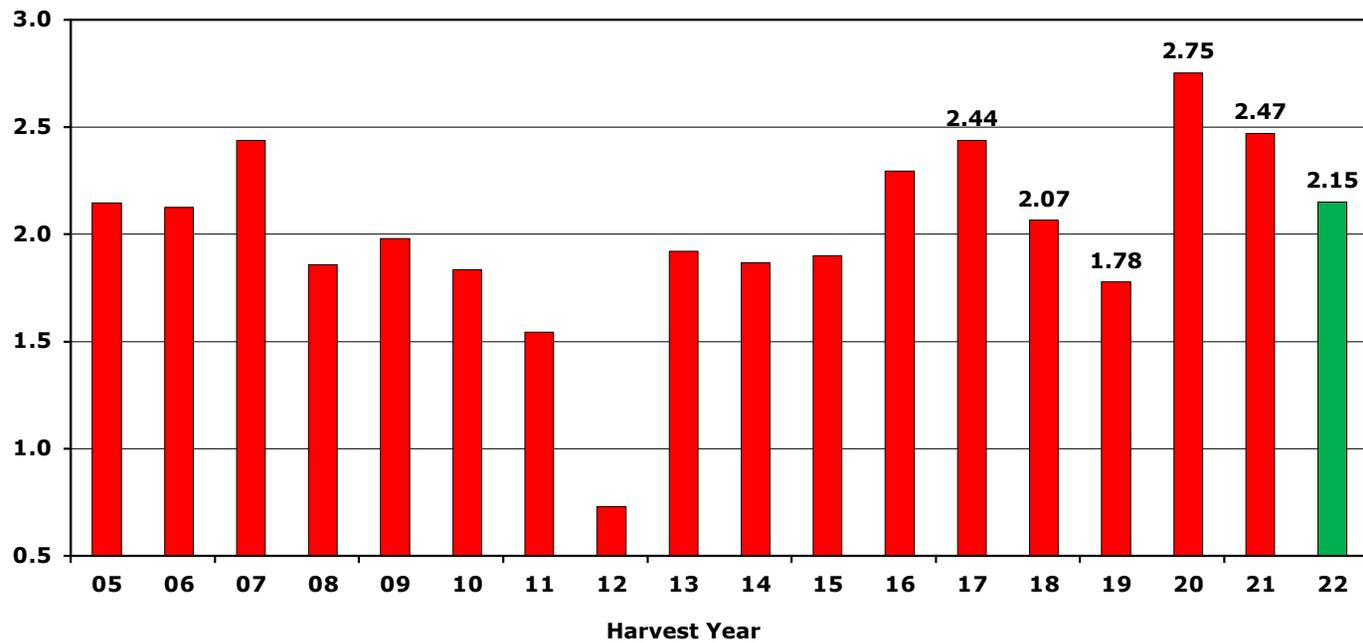
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Billion Bu.

U.S. Corn Exports



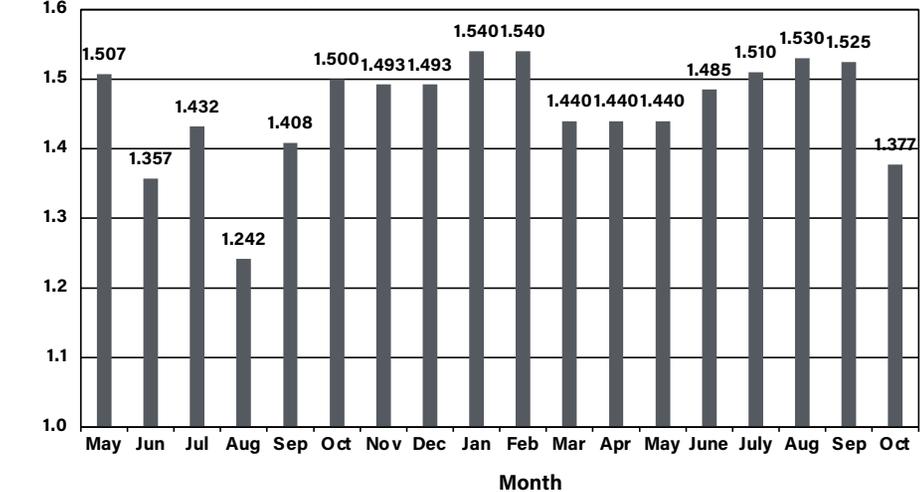
Source: USDA-WASDE

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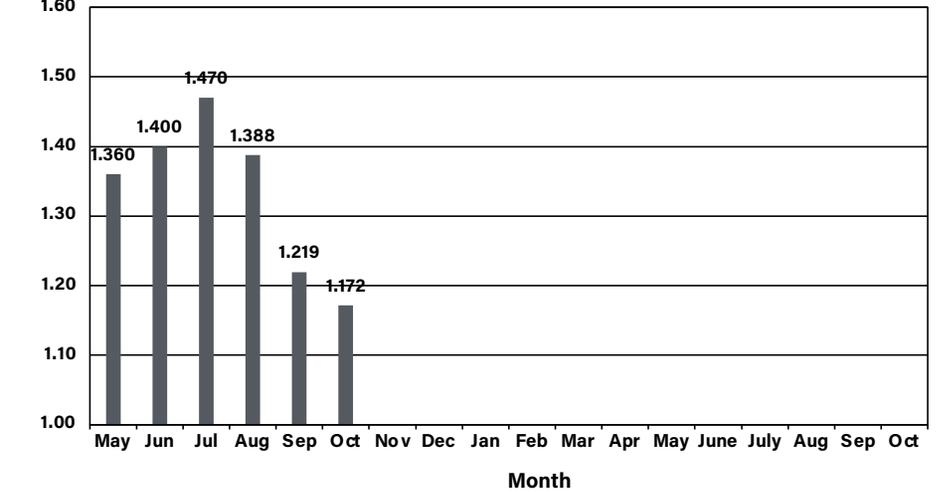
USDA's 2021 Crop Year U.S. Corn Ending Stocks Forecasts
By Month When Forecast Was Published



Source: USDA-WASDE

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USDA's 2022 Crop Year U.S. Corn Ending Stocks Forecasts
By Month When Forecast Was Published

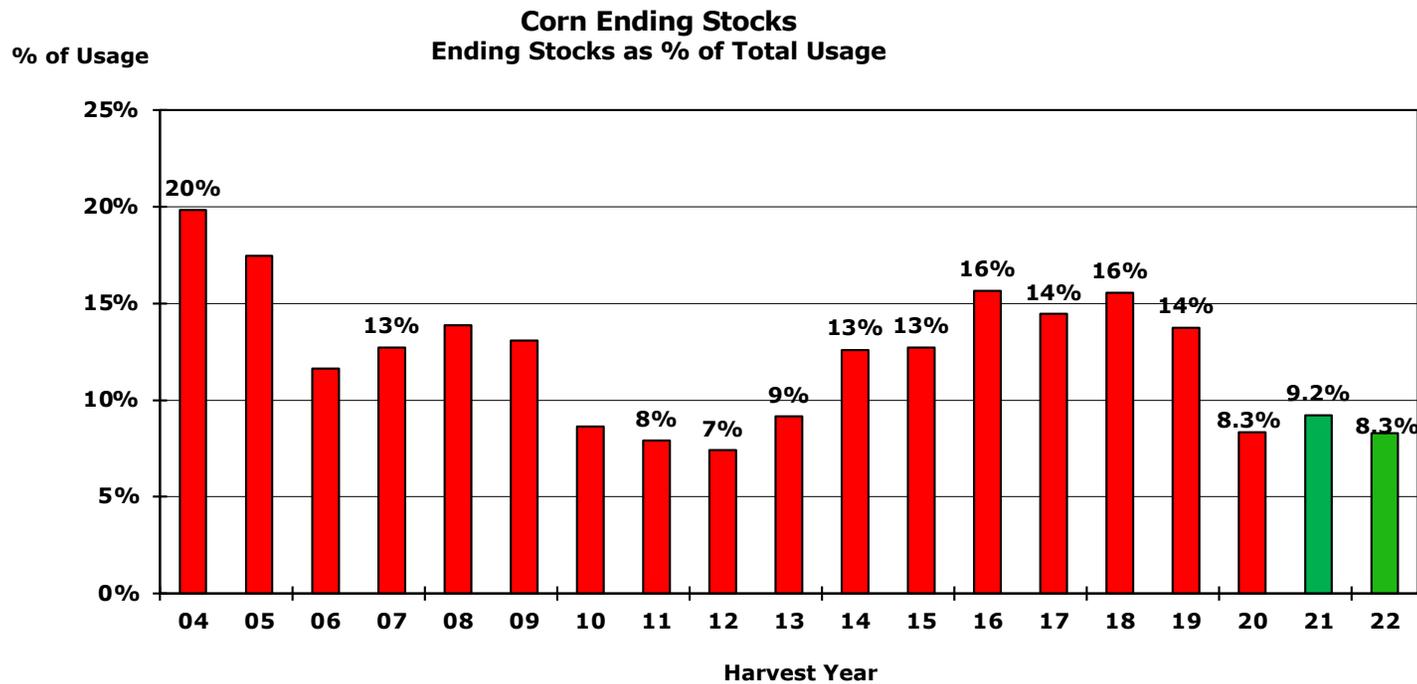


Source: USDA-WASDE

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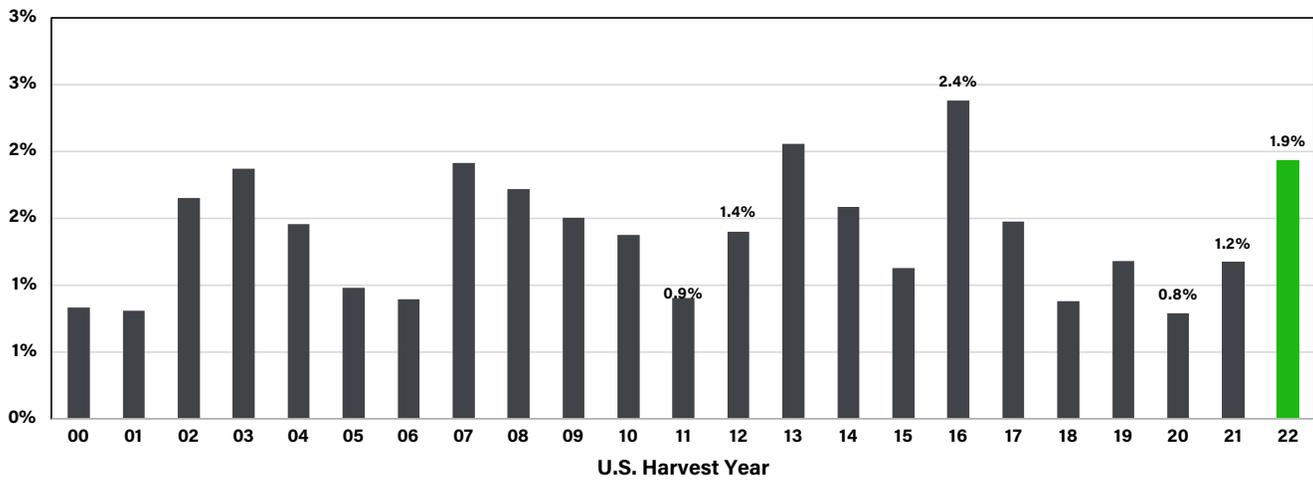
Source: USDA WASDE

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**Competing Major Exporters Corn Ending Stocks
(Argentina, Brazil, S. Africa, Ukraine, Russia)
% of World Usage, 2000-2022**



Source: USDA

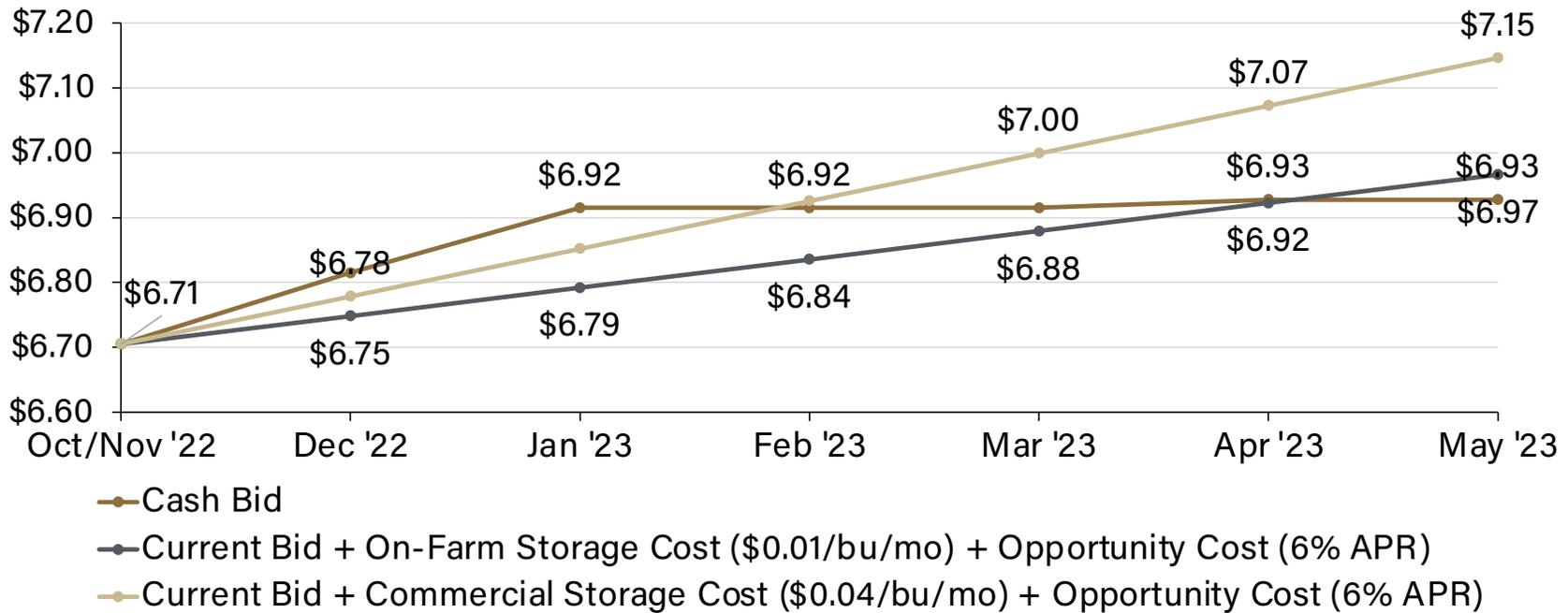
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Storage opportunities for corn?

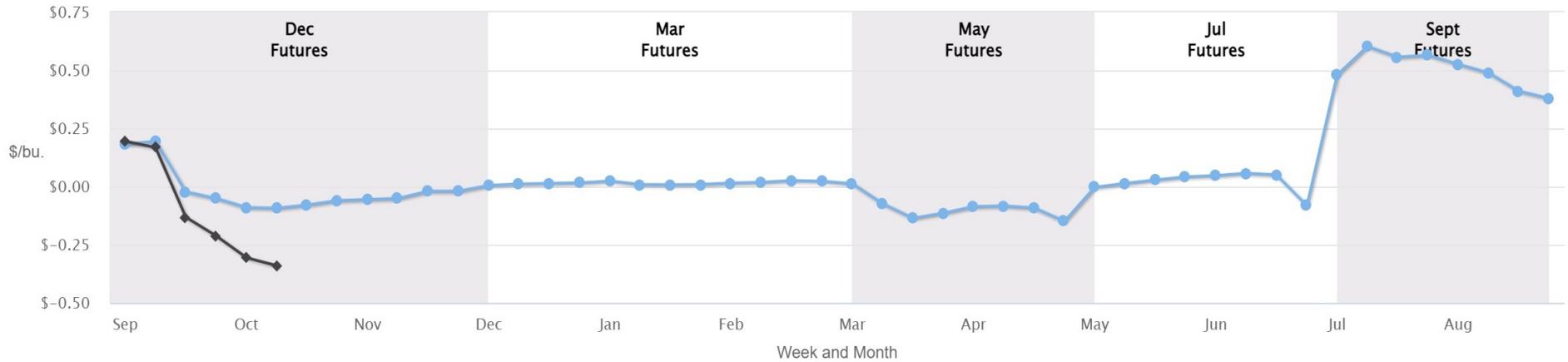
Cash Forward Contract Corn Bids East Central Indiana



Corn basis - Central Indiana - 3 year average

Purdue Center for Commercial Agriculture Crop Basis Tool

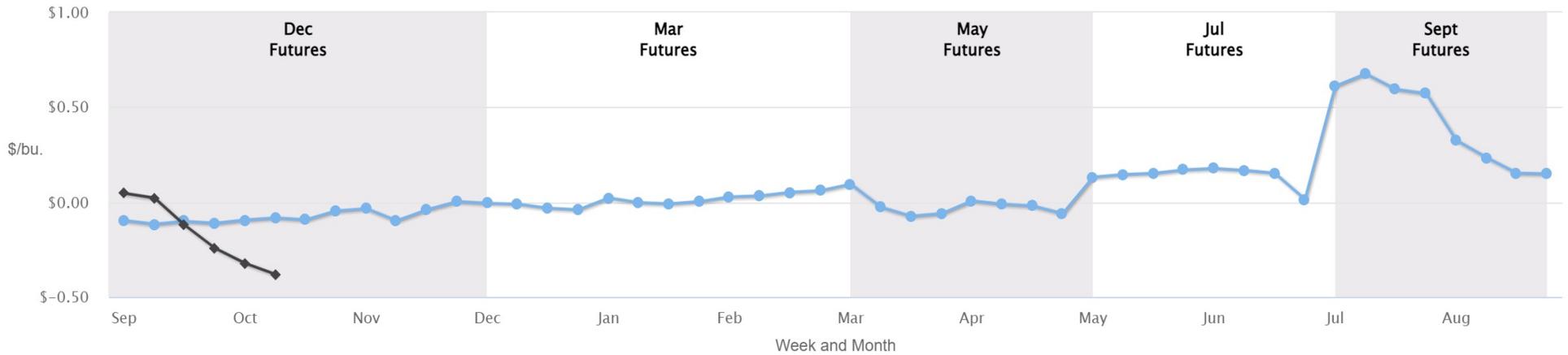
Corn: IN CENTRAL Region, Nearby Basis, Weekly
 Avg. of Selected Historical Crop Years [2019-2020,2020-2021,2021-2022]
 vs. Current Crop Year



Corn basis - Southwest Indiana - 3 year average

Purdue Center for Commercial Agriculture Crop Basis Tool

Corn: IN SW Region, Nearby Basis, Weekly
 Avg. of Selected Historical Crop Years [2019-2020, 2020-2021, 2021-2022]
 vs. Current Crop Year



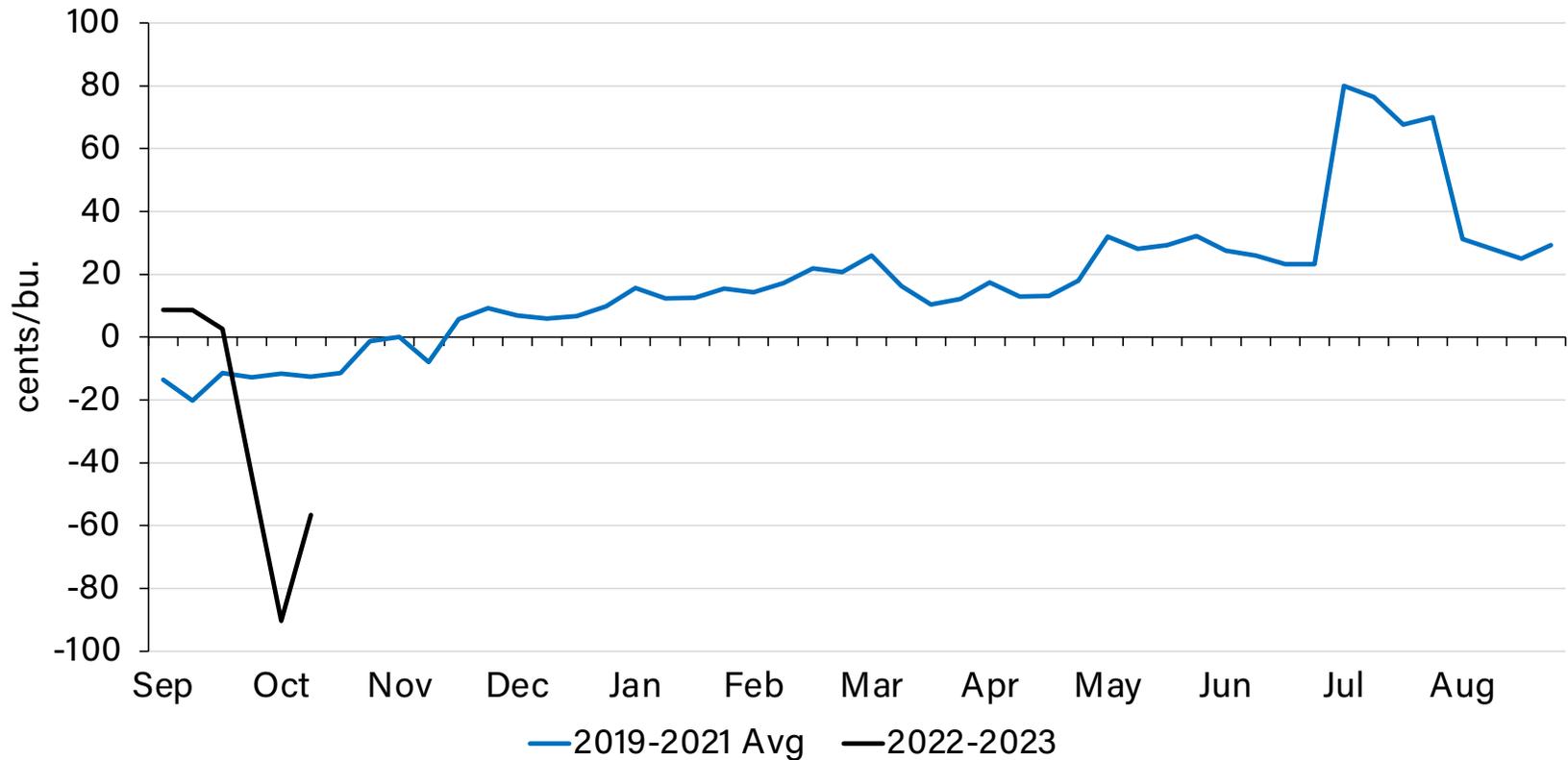
● Historical Nearby Basis, Avg of Selected Crop Years ◆ 2022-2023 Regional Nearby Basis

<https://www.purdue.edu/commercialag>

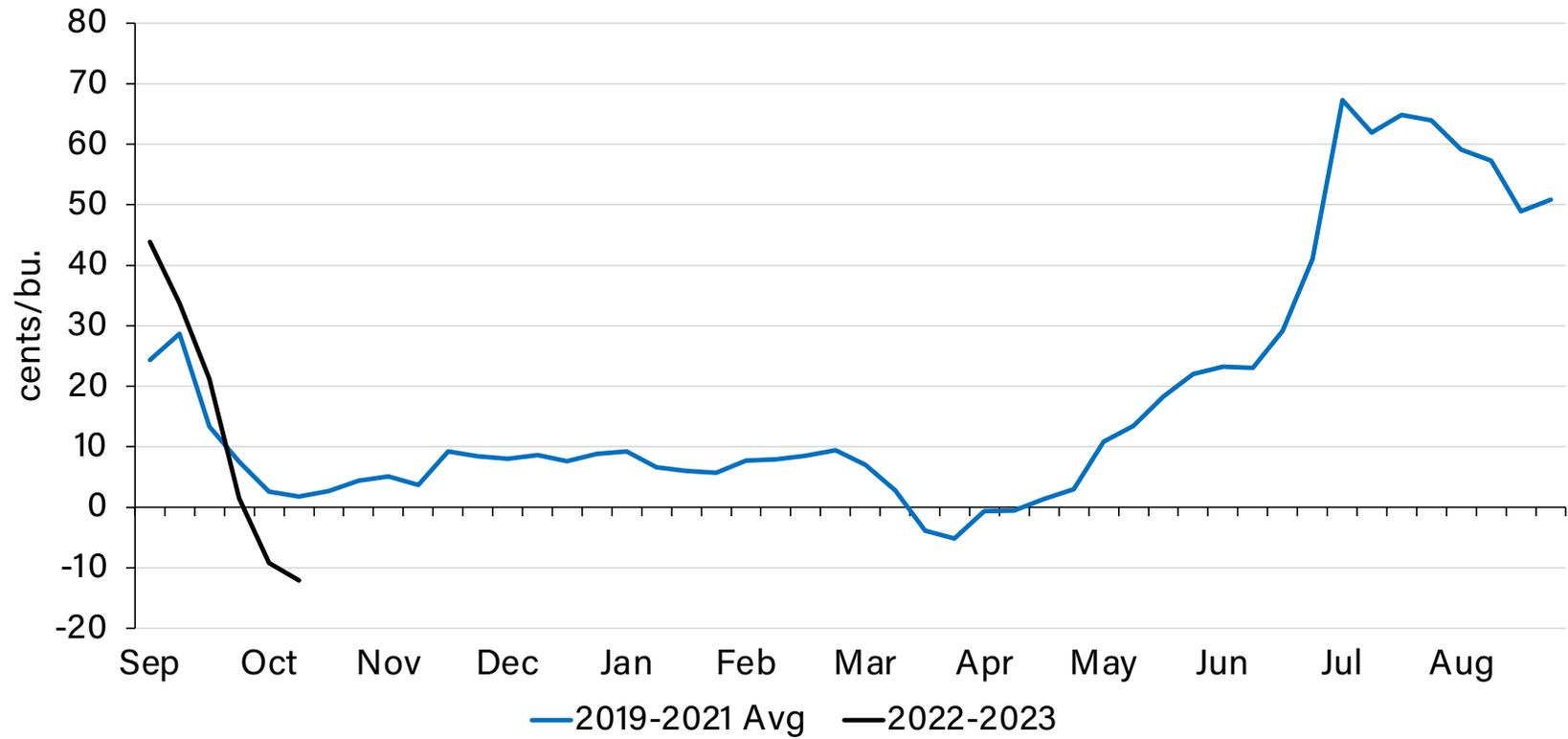


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Nearby Corn River Basis-Southern Indiana and Southern Illinois River Terminals



Nearby Indiana ethanol plant basis



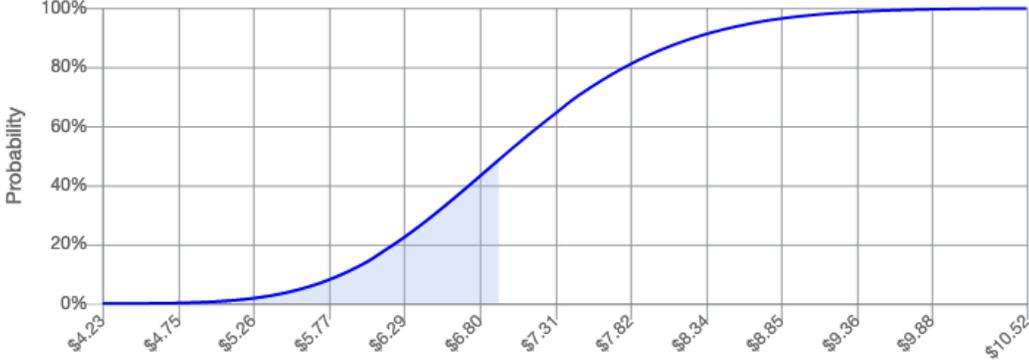
New crop corn opportunities?

CBOT Mar. '23 Corn futures	\$7.01
<u>Expected corn basis January '23 in Central IN</u>	<u>+\$0.01</u>
Expected January cash price	\$7.02/bu.

- Think in terms of risk management
- How can you protect favorable price opportunities while leaving open upside potential?

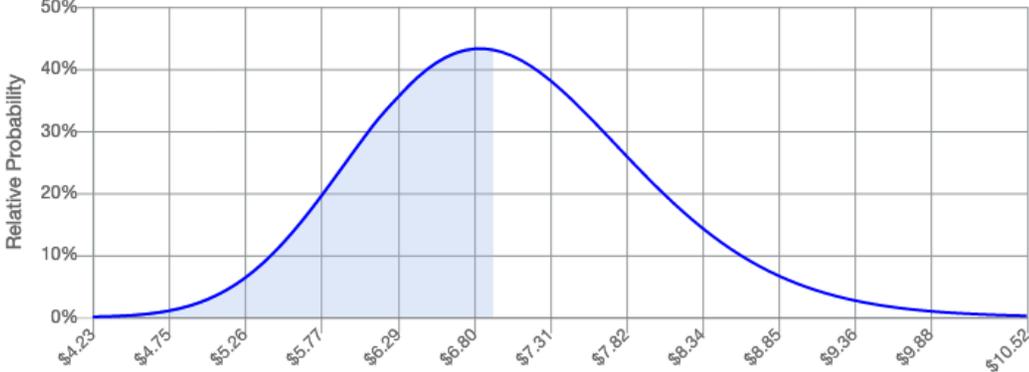
March 2023 CBOT Corn Futures

Cumulative Probability of Prices at Expiration



Price at Expiration	Probability Below
\$6.00	13.34%
\$6.25	21.04%
\$6.50	30.45%
\$6.75	40.95%
\$7.00	51.72%
\$7.25	62.01%
\$7.50	71.21%
\$7.75	78.96%
\$8.00	85.14%

Probability of Prices at Expiration



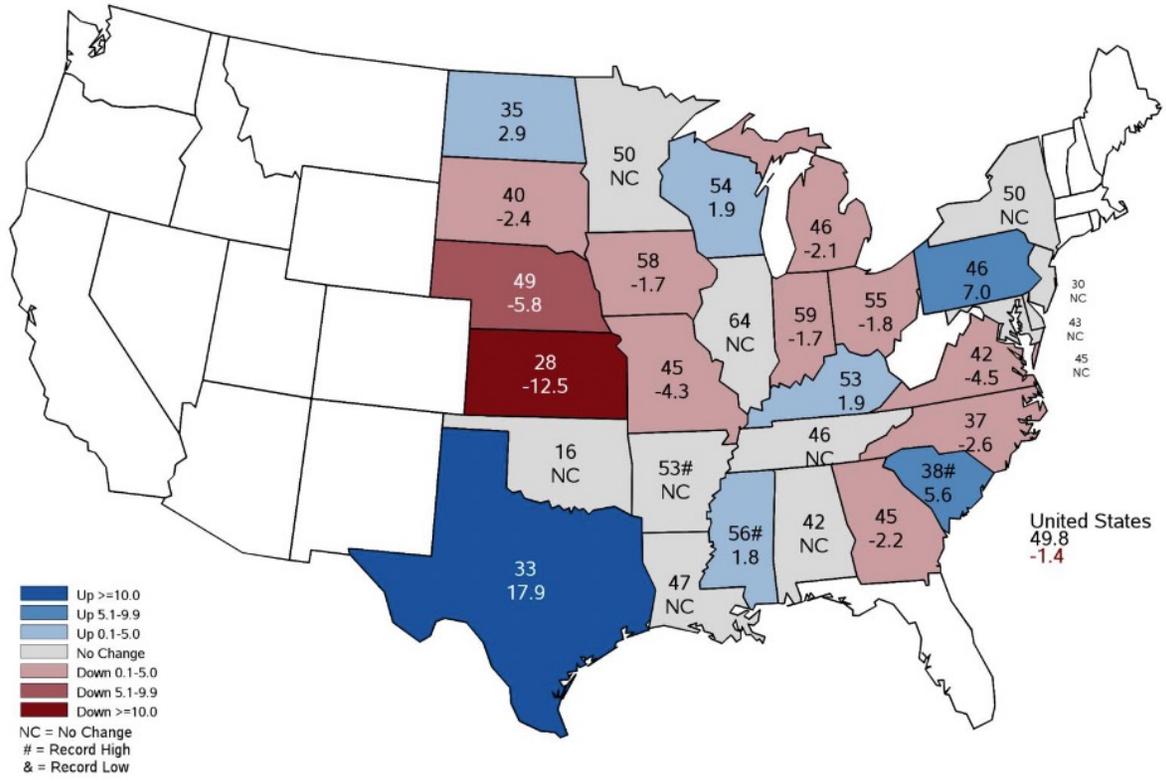
Probability Below	Price at Expiration
5%	\$5.59
15%	\$6.06
25%	\$6.36
35%	\$6.61
45%	\$6.84
50%	\$6.96
55%	\$7.08
65%	\$7.33
75%	\$7.62
85%	\$7.99
95%	\$8.67

Enter Price to Evaluate: \$

The implied distribution indicates that there is a 51.72% probability that the price will be below \$7.00 at expiration.

October 2022 Soybean Yield

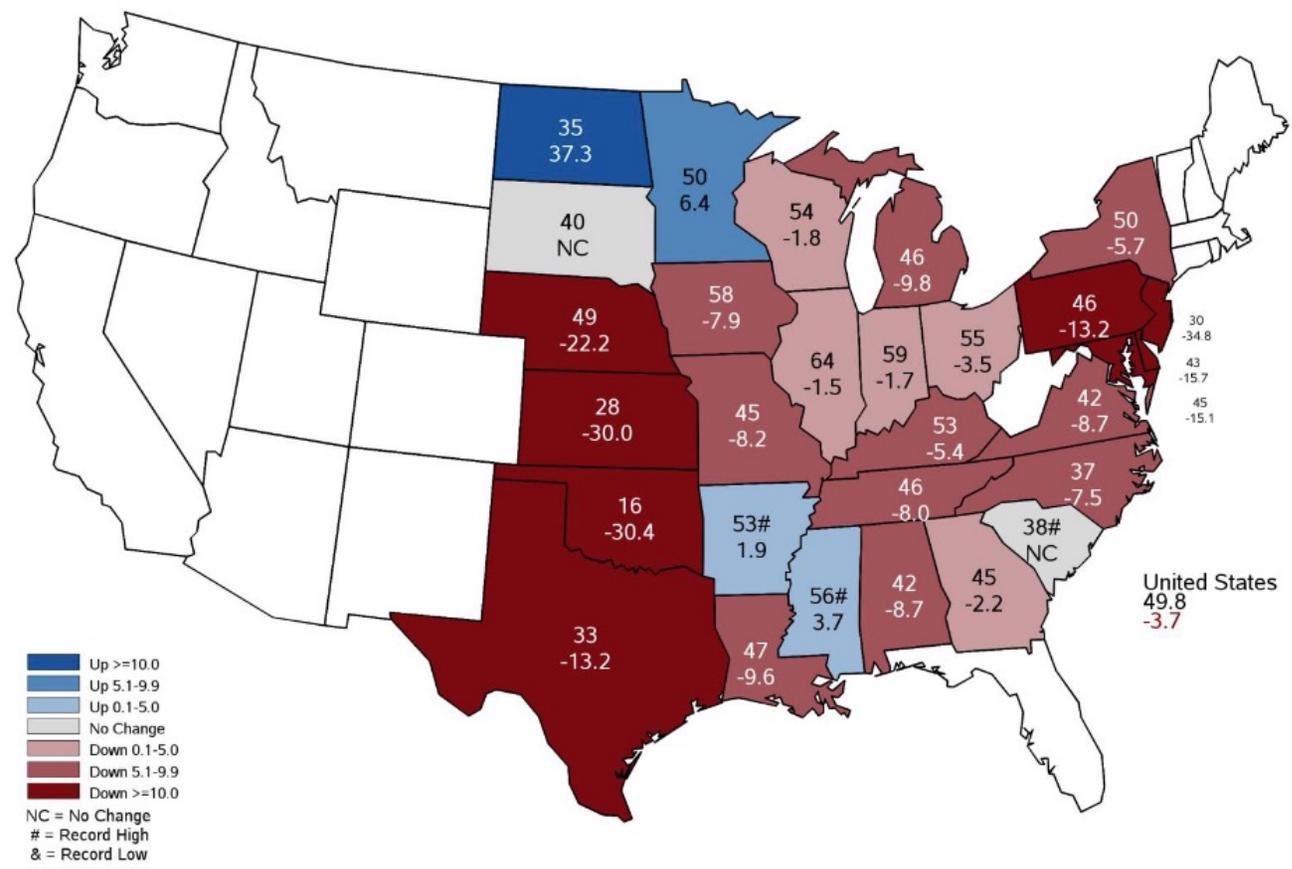
Bushels and Percent Change from Previous Month



1/14/22 |

October 2022 Soybean Yield

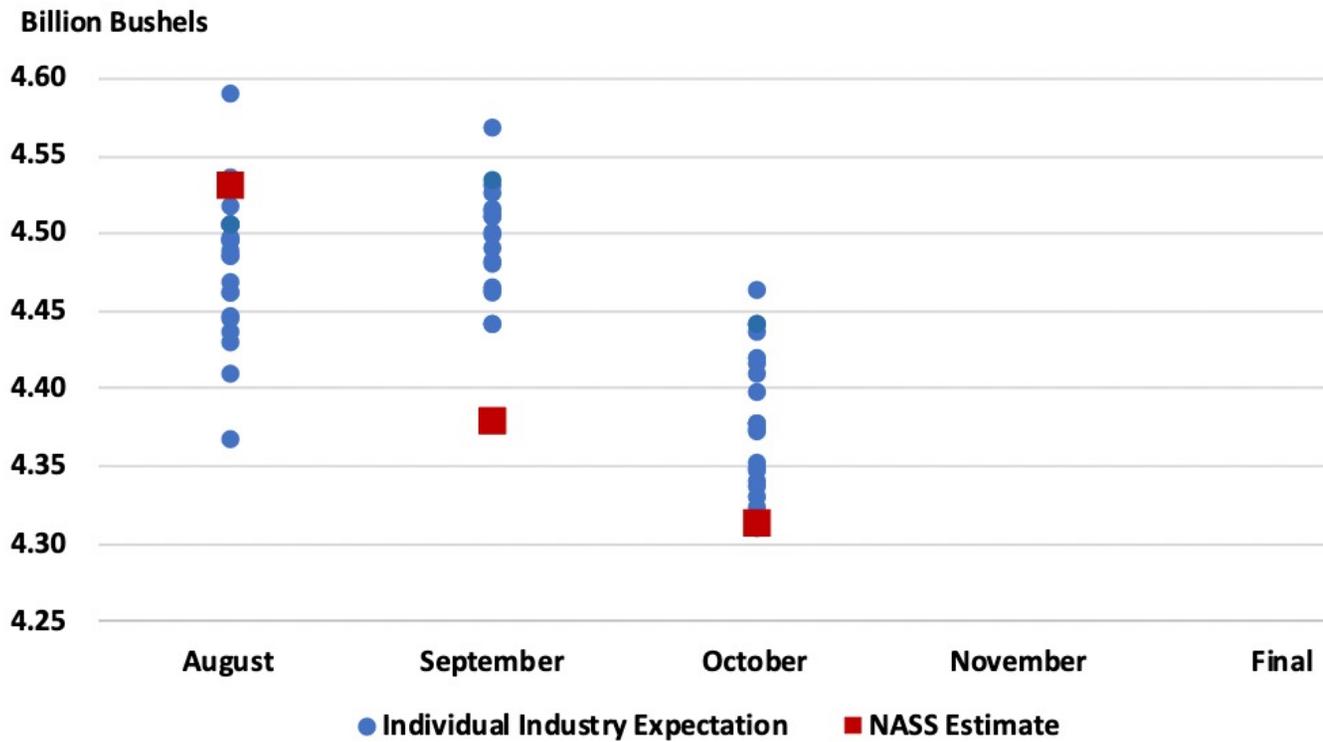
Bushels and Percent Change from Previous Year

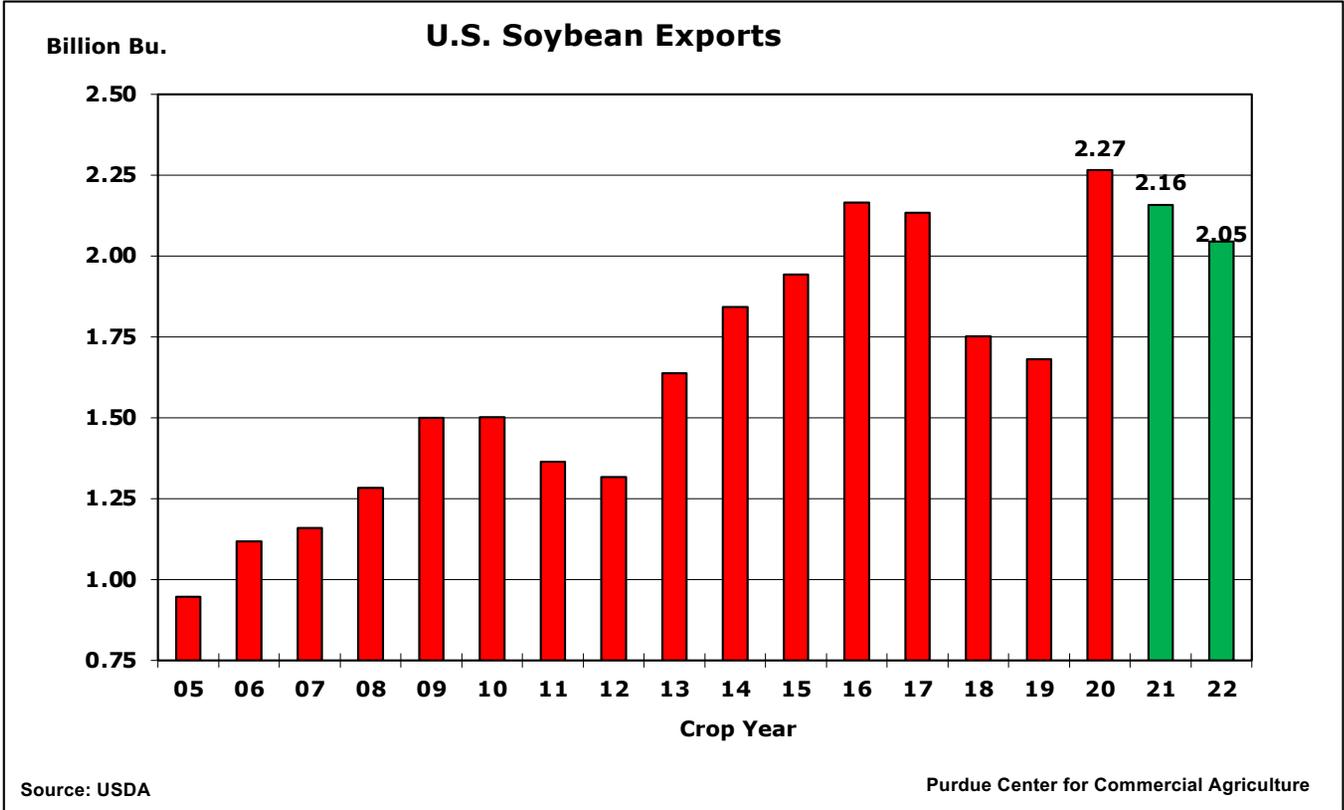


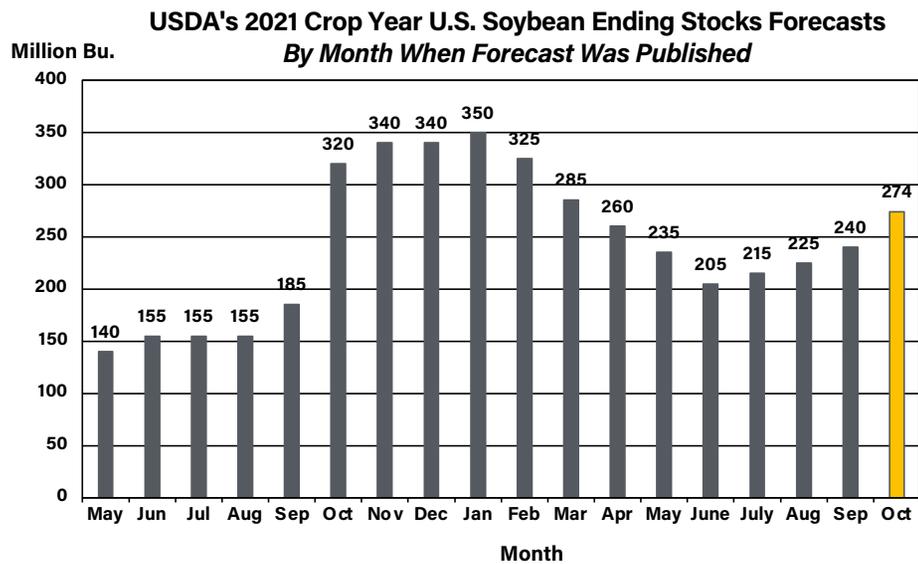


2022 U.S. Soybean Production

Industry Expectations vs NASS

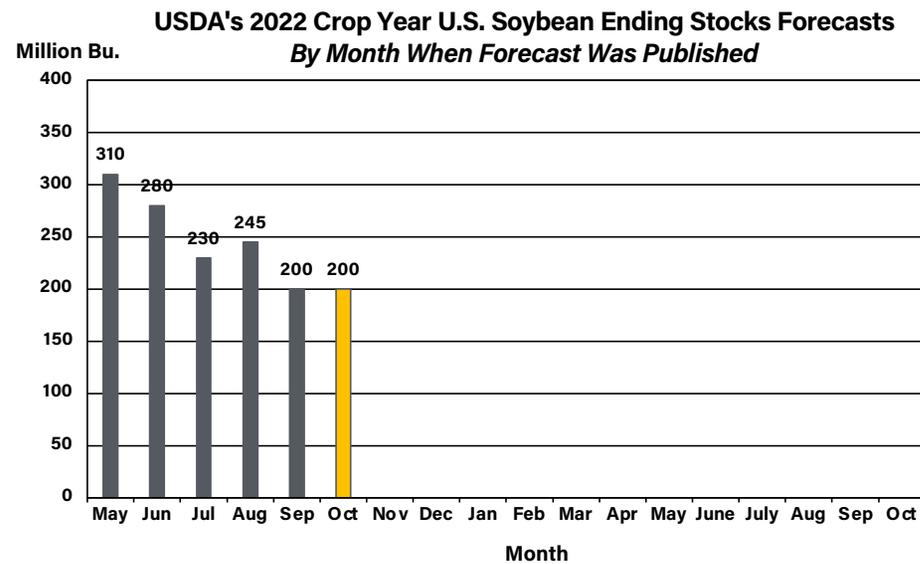






Source: USDA-WASDE

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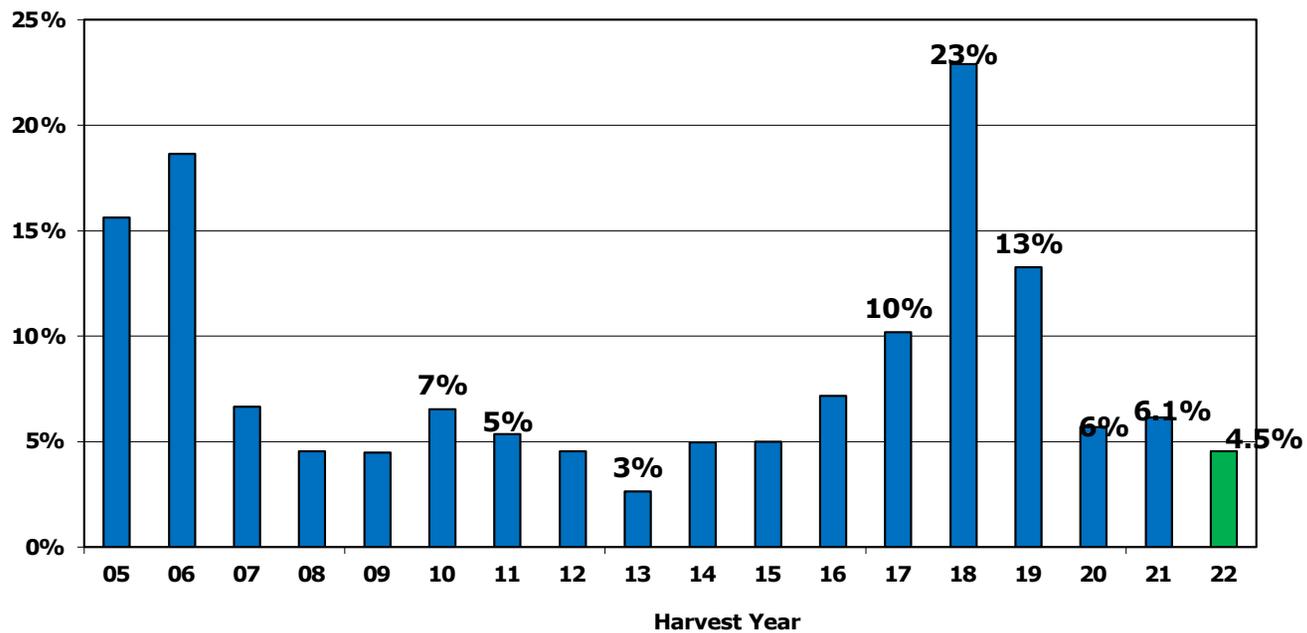
Source: USDA-WASDE

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Soybean Ending Stocks Ending Stocks as % of Total Usage



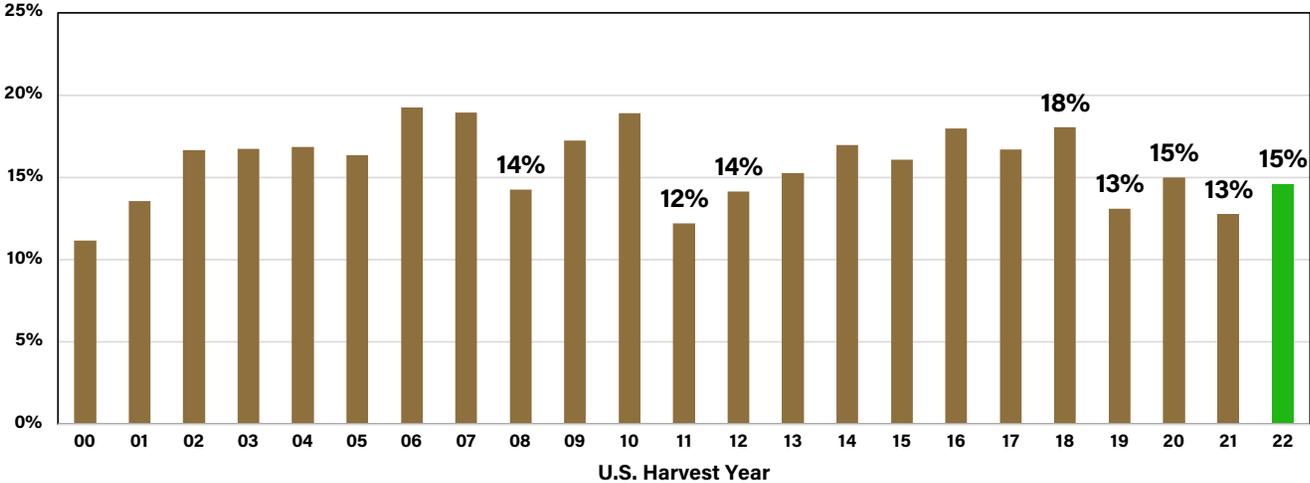
Source: USDA-WASDE

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**Competing Major Exporters Soybean Ending Stocks
(Brazil, Argentina, Paraguay)
% of World Usage, 2000-2022**



Source: USDA

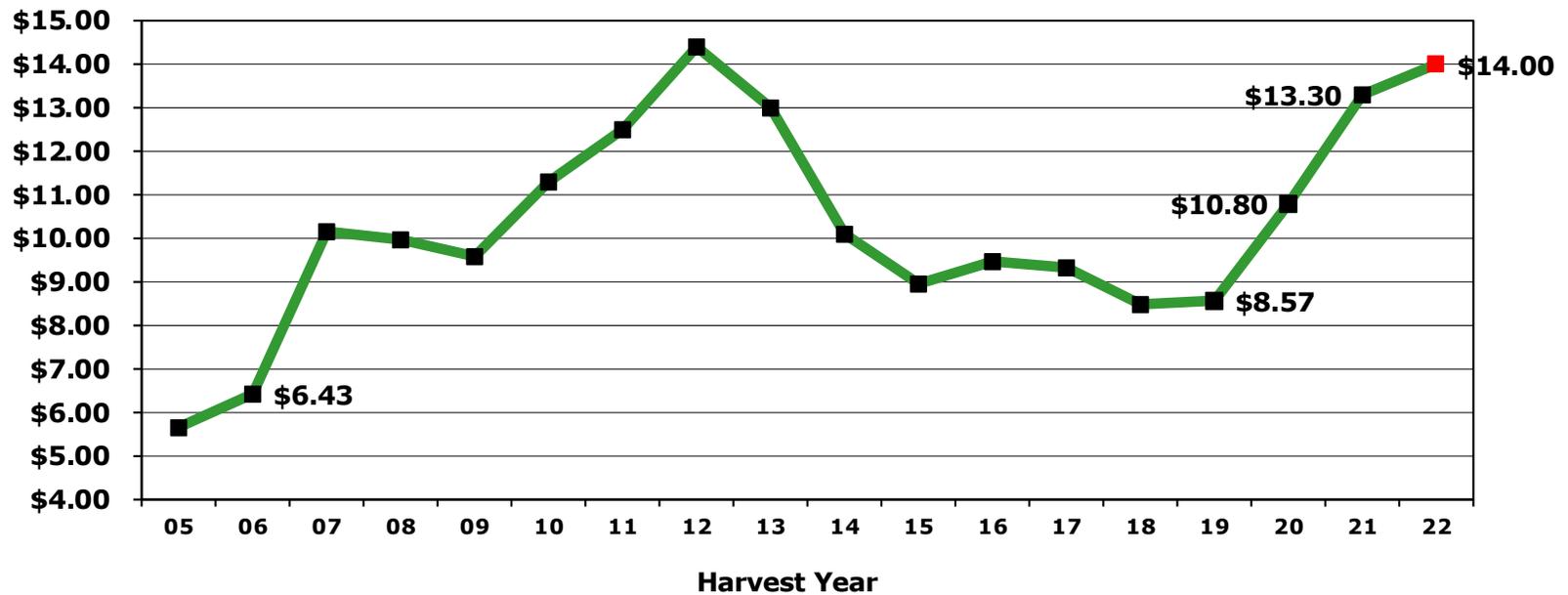
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U.S. National Average Cash Soybean Prices By Marketing Year

\$ per bushel



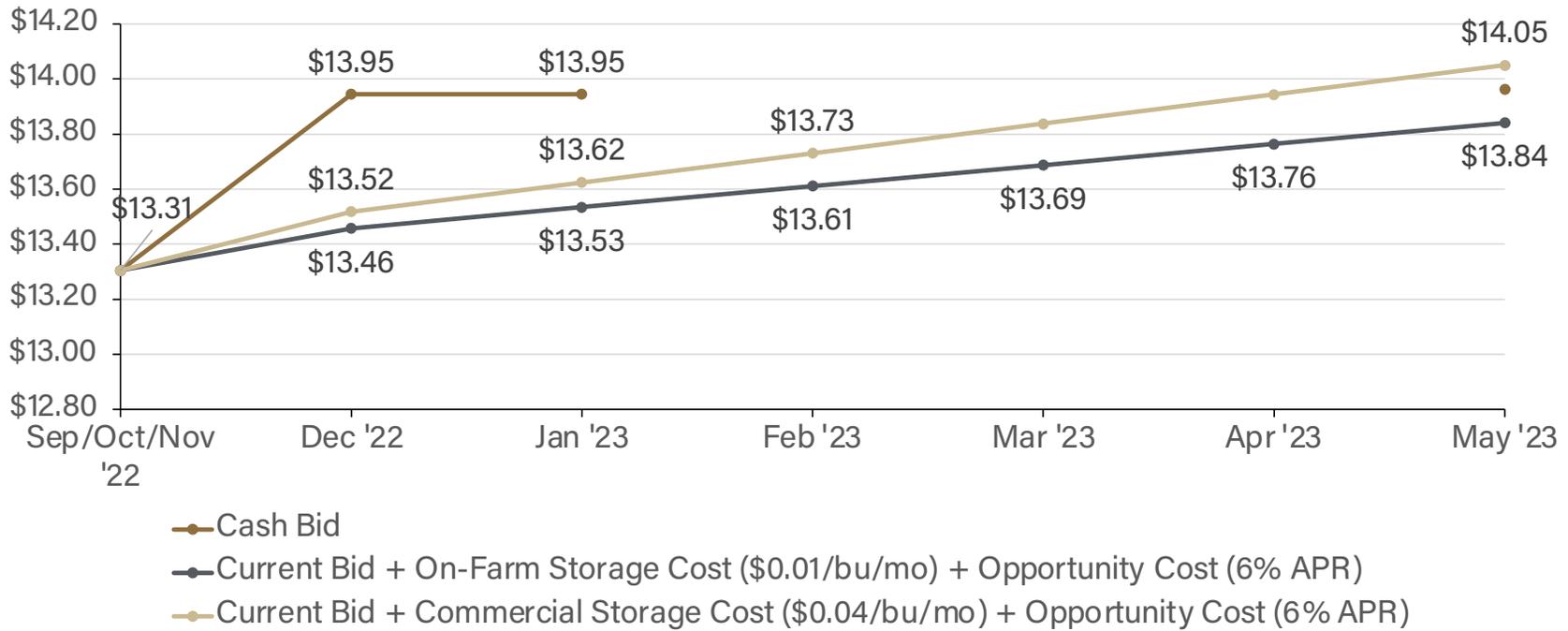
Source: USDA WASDE Report



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Storage opportunities for soybeans?

Cash Forward Contract Soybean Bids
East Central Indiana

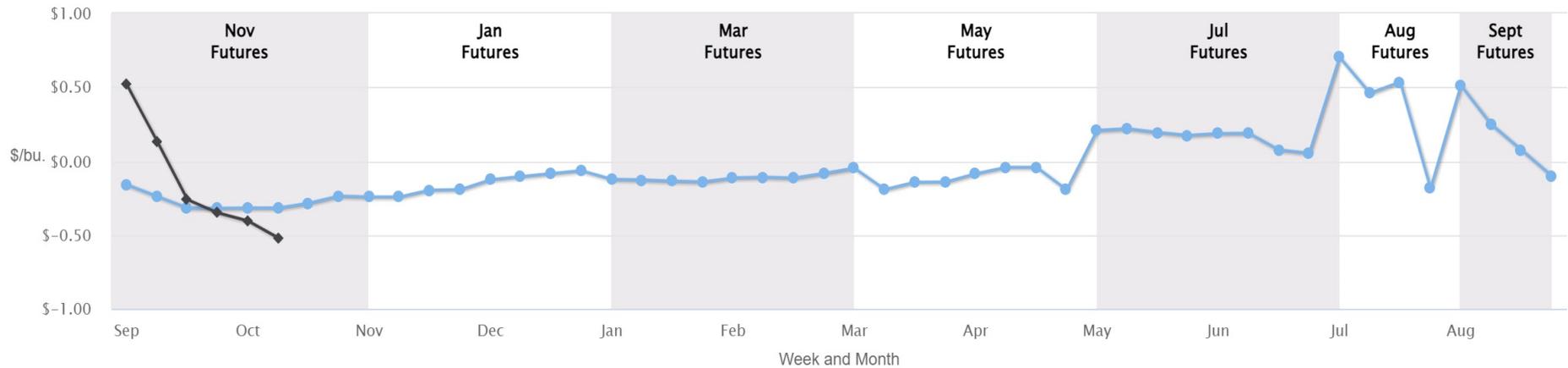


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Soybean basis - Central Indiana - 2 year average

Purdue Center for Commercial Agriculture Crop Basis Tool

Soybeans: IN CENTRAL Region, Nearby Basis, Weekly
 Avg. of Selected Historical Crop Years [2020-2021, 2021-2022]
 vs. Current Crop Year



● Historical Nearby Basis, Avg of Selected Crop Years ◆ 2022-2023 Regional Nearby Basis

<https://www.purdue.edu/commercialag>

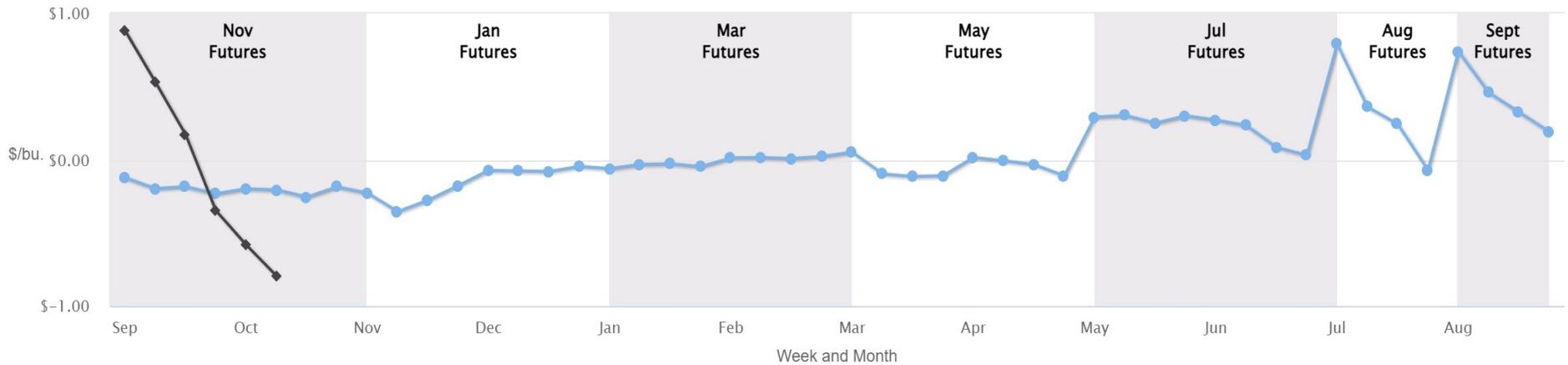


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Soybean basis - Southwest Indiana - 2 year average

Purdue Center for Commercial Agriculture Crop Basis Tool

Soybeans: IN SW Region, Nearby Basis, Weekly
 Avg. of Selected Historical Crop Years [2020-2021, 2021-2022]
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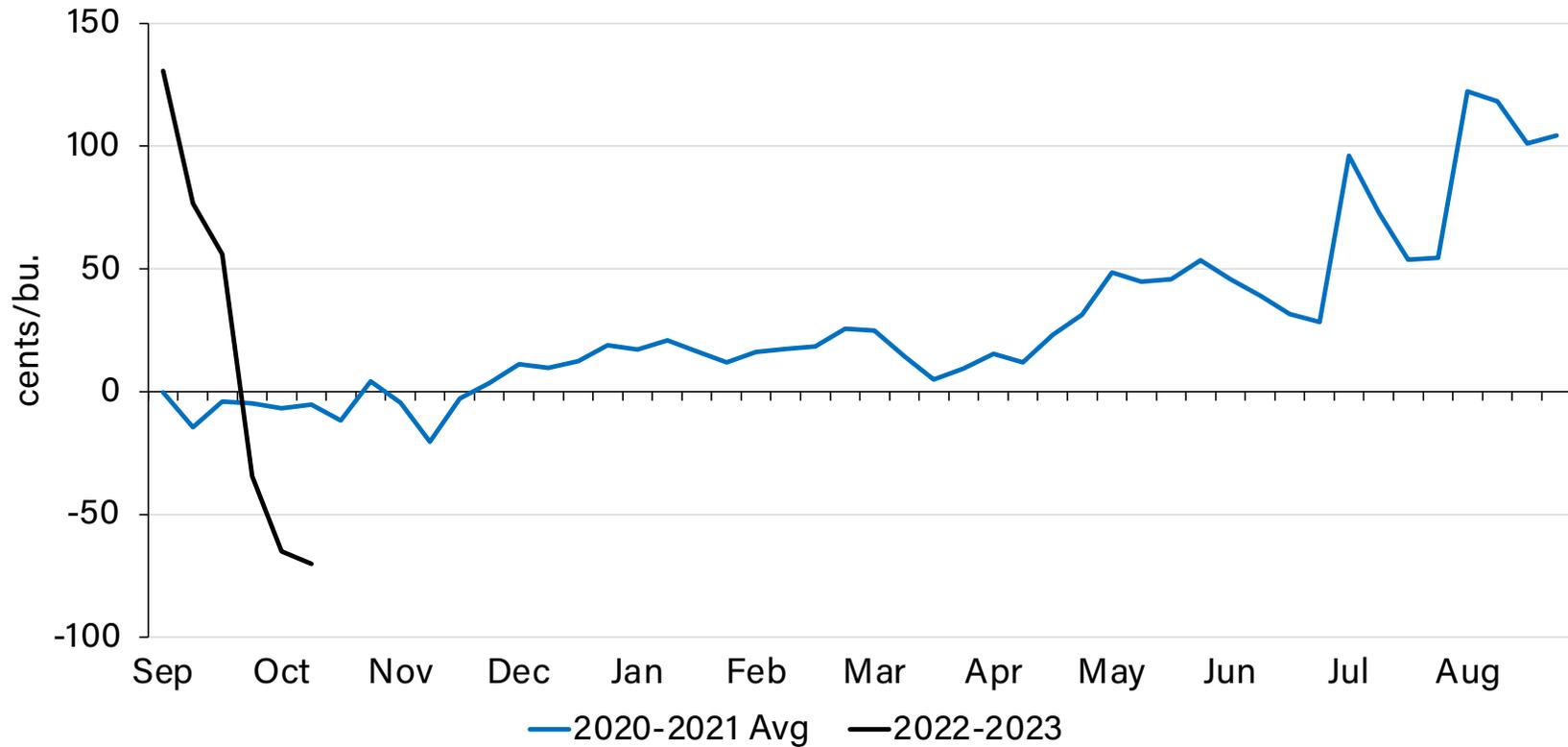


● Historical Nearby Basis, Avg of Selected Crop Years
 ◆ 2022-2023 Regional Nearby Basis
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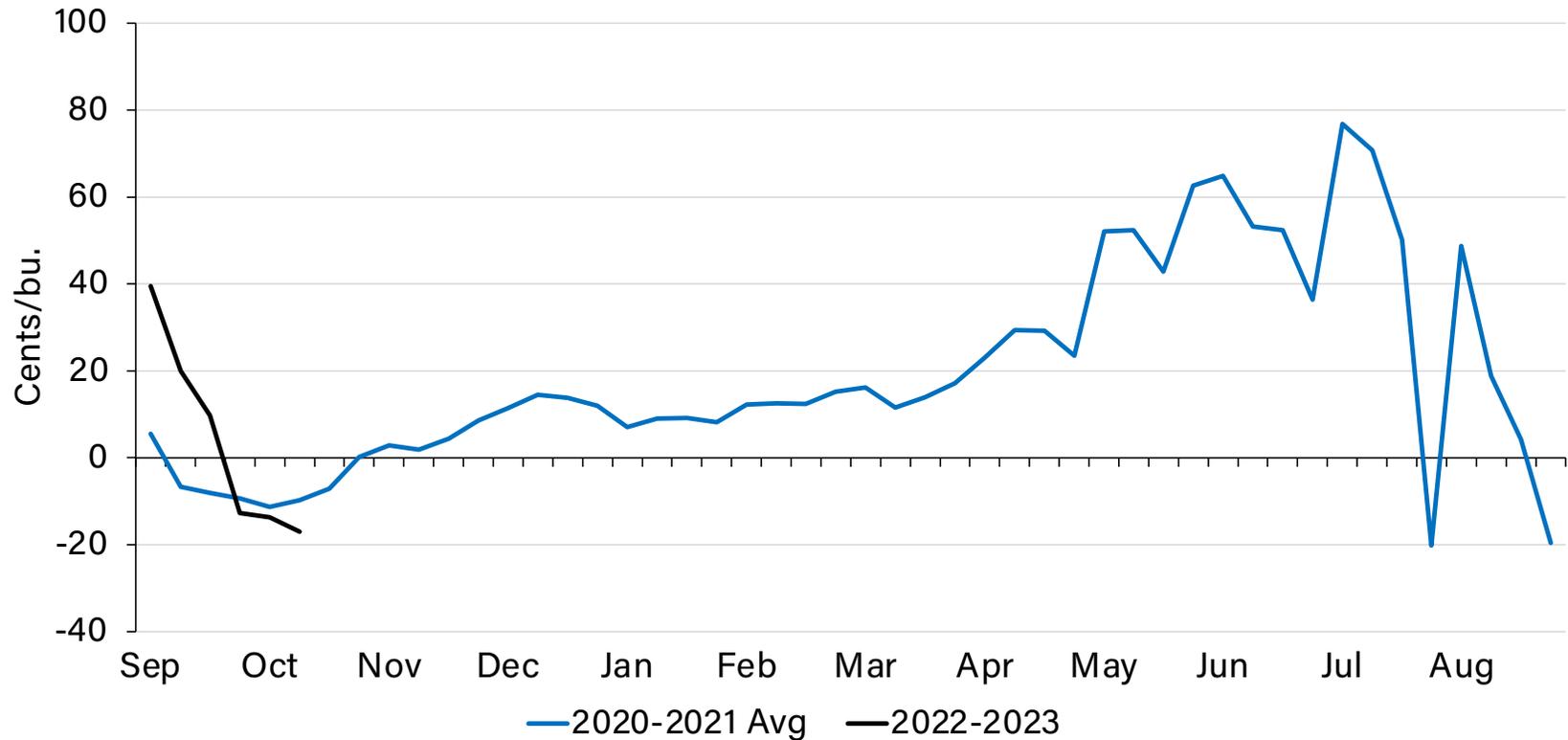


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Nearby Soybean River Basis-Southern Indiana and Southern Illinois River Terminals



Nearby Indiana soybean processor basis



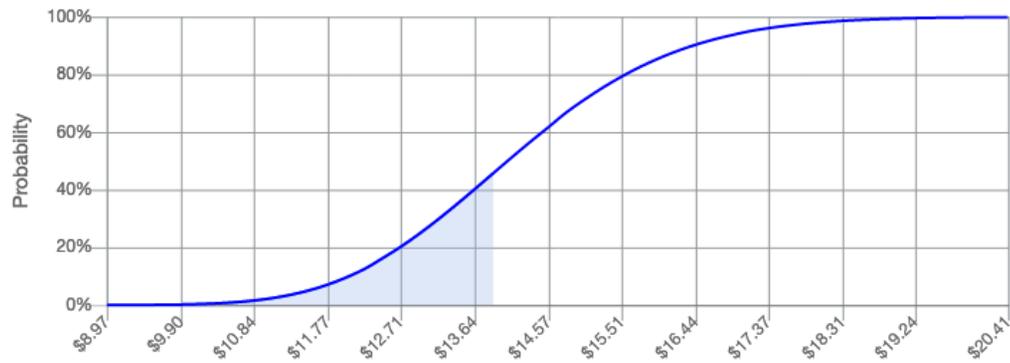
New crop soybean opportunities?

CBOT Mar. '23 Soybean futures	\$14.15
<u>Expected soybean basis January '22 in Central IN</u>	<u>-\$0.13</u>
Expected January cash price	\$14.02/bu.

- Think in terms of risk management
- How can you protect favorable price opportunities while leaving open upside potential?

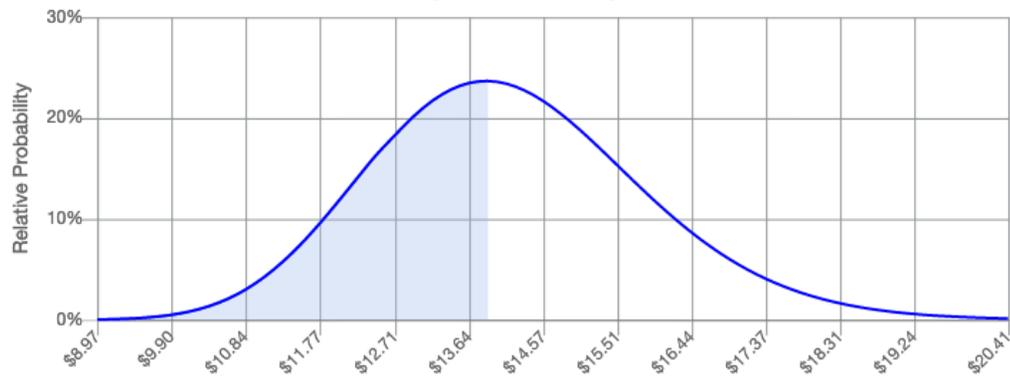
March 2023 CBOT Soybean Futures

Cumulative Probability of Prices at Expiration



Price at Expiration	Probability Below
\$13.00	25.93%
\$13.25	31.28%
\$13.50	36.96%
\$13.75	42.82%
\$14.00	48.73%
\$14.25	54.57%
\$14.50	60.21%
\$14.75	65.56%
\$15.00	70.53%

Probability of Prices at Expiration



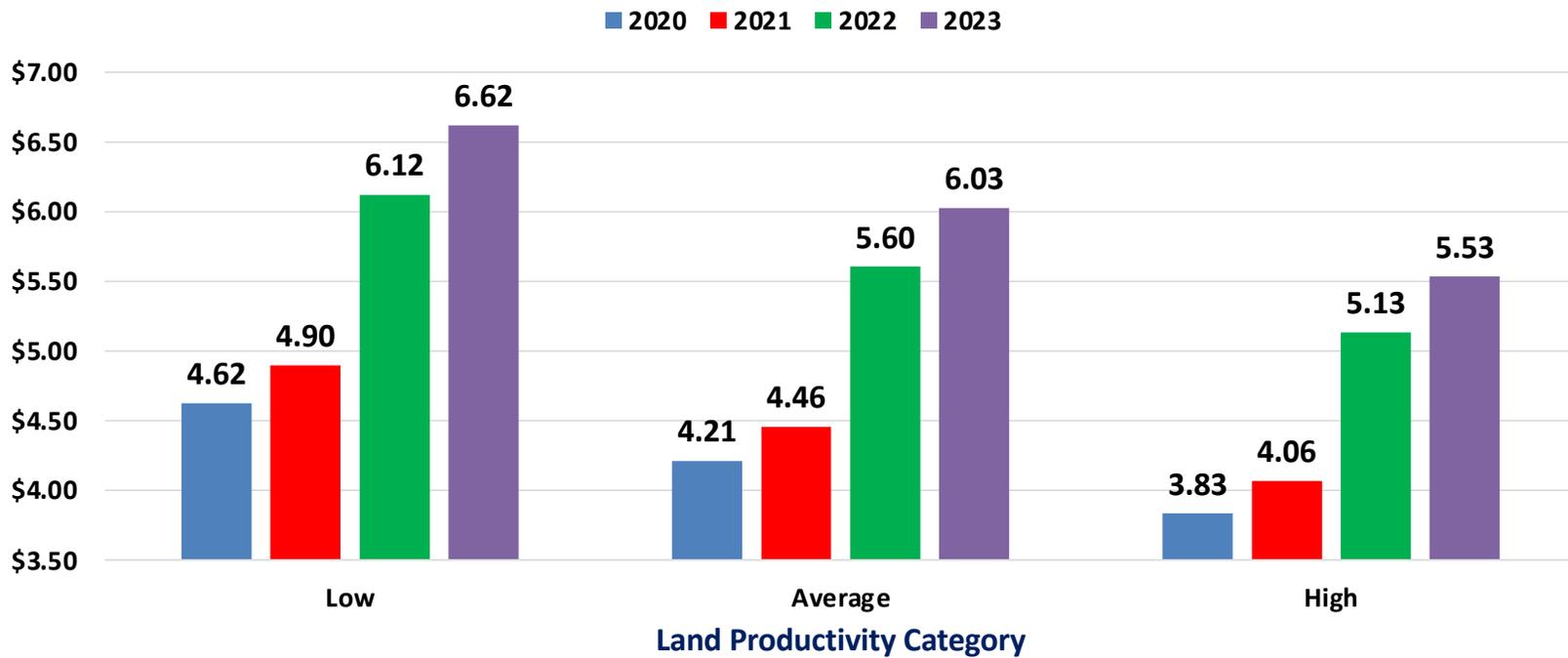
Probability Below	Price at Expiration
5%	\$11.52
15%	\$12.40
25%	\$12.95
35%	\$13.41
45%	\$13.84
50%	\$14.05
55%	\$14.27
65%	\$14.72
75%	\$15.25
85%	\$15.93
95%	\$17.14

Enter Price to Evaluate: \$ 14.06

The implied distribution indicates that there is a 50.15% probability that the price will be below \$14.06 at expiration.

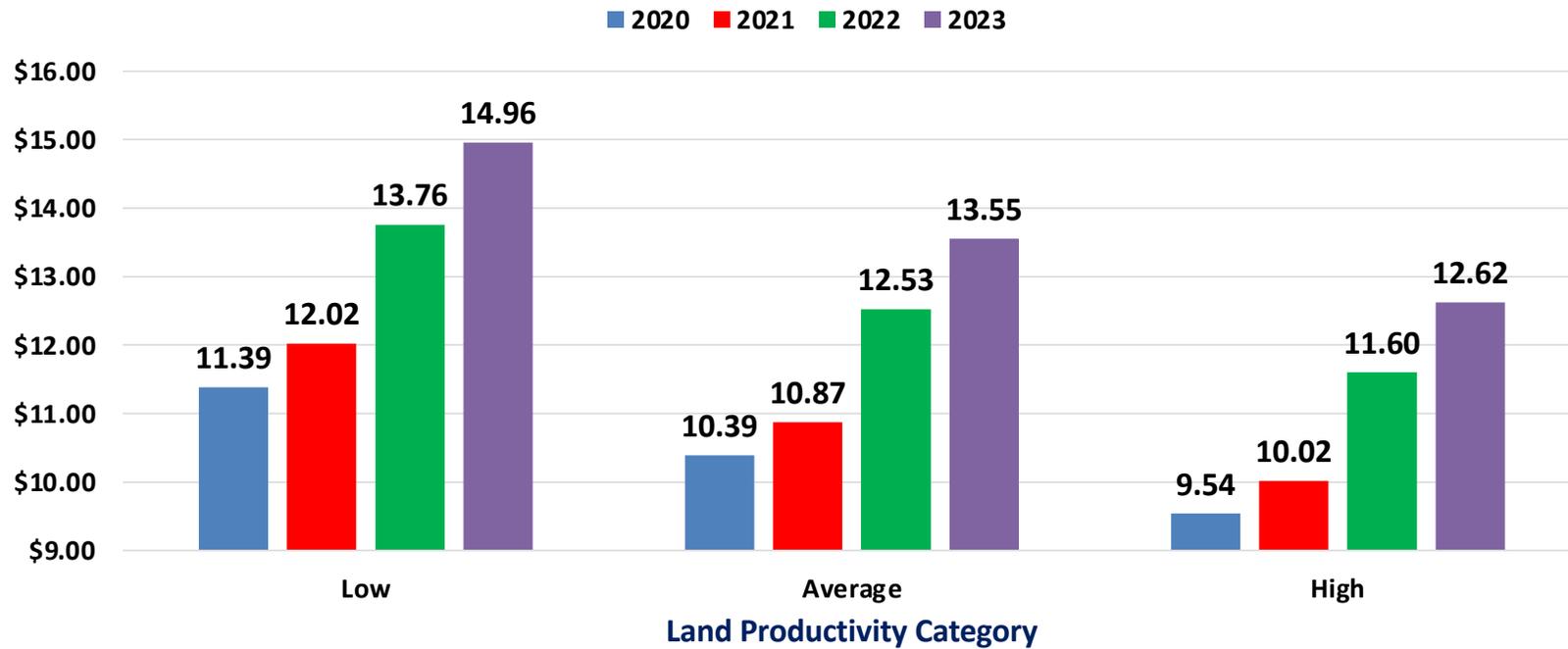
Change in Breakeven Prices for Corn since 2020

Breakeven Prices for Rotation Corn in Indiana



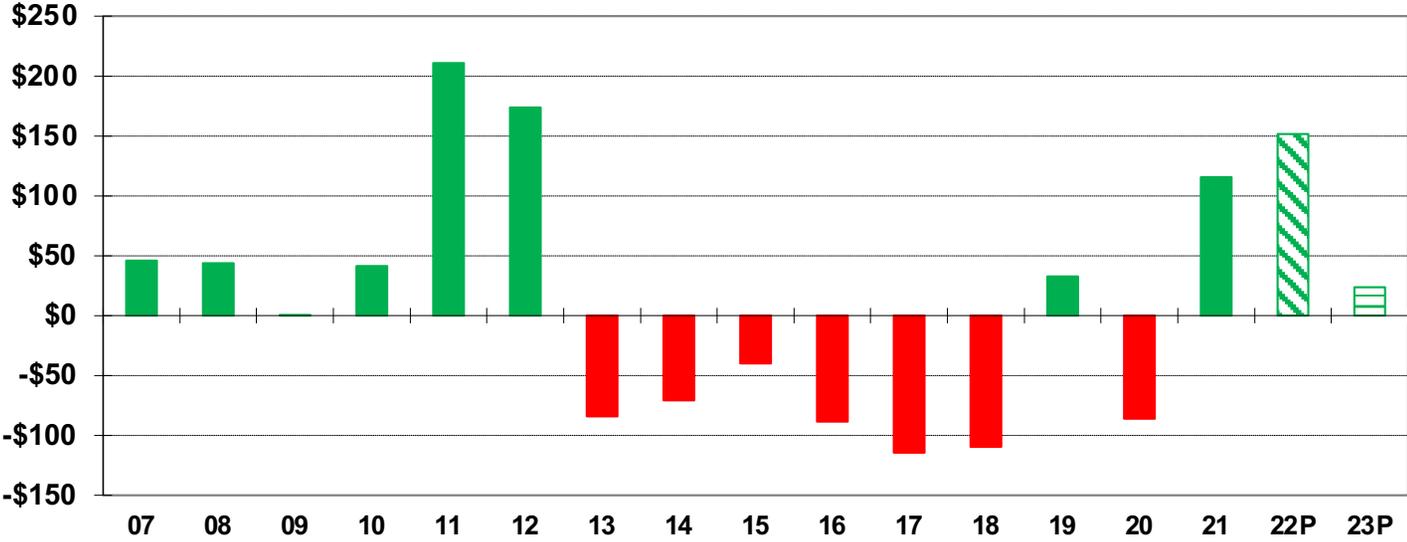
Change in Breakeven Prices for Soybeans since 2020

Breakeven Prices for Rotation Soybeans in Indiana



Profit Prospects for Corn have Improved

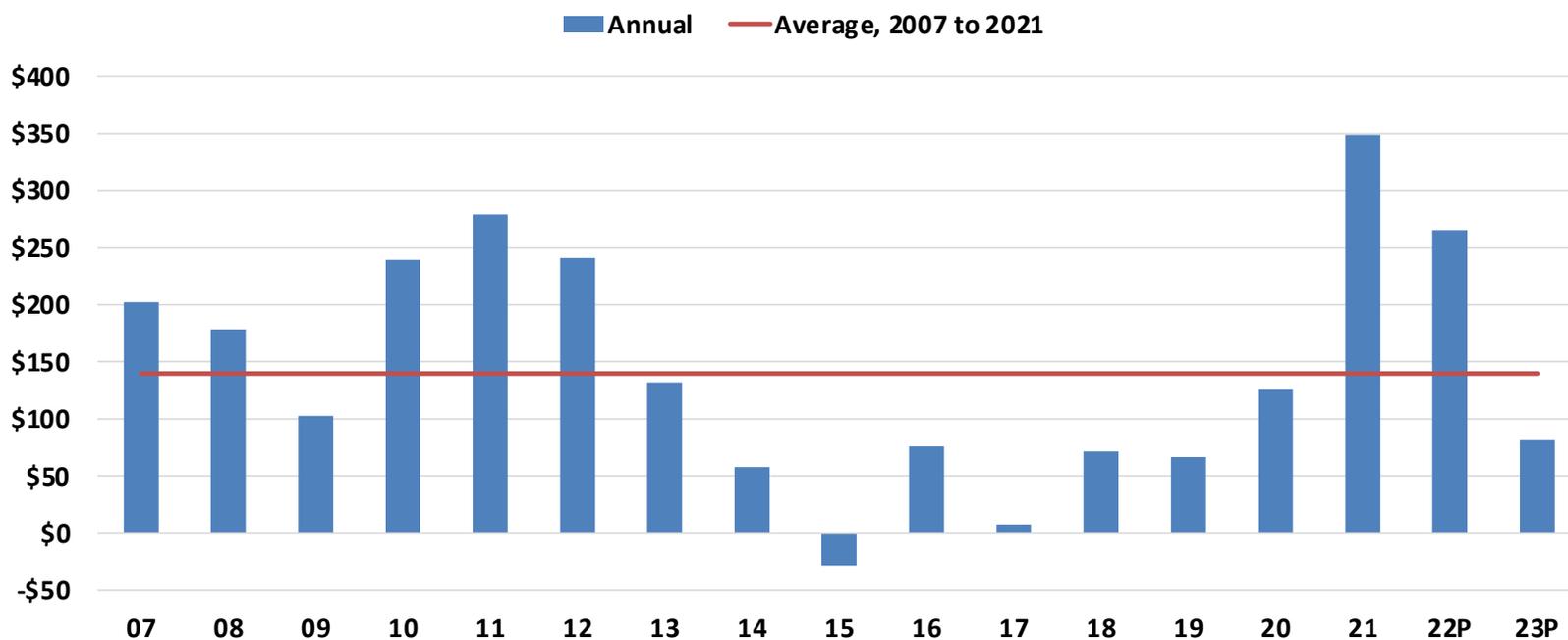
Difference in Earnings per Acre West Central Indiana (Corn Minus Soybeans)



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Net Farm Income Prospects for 2023 are Considerably Lower than NFI in 2021 and 2022

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





MONTHLY OUTLOOK

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