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## Weekly Farm Economics: 2023 ARC-CO and PLC Payments for Corn, Soybeans, and Wheat

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October 29, 2024

*farmdoc daily* (14): 196

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Recommended citation format: Paulson, P., G. Schnitkey, C. Zulauf, and J. Coppess. "2023 ARC-CO and PLC Payments for Corn, Soybeans, and Wheat." *farmdoc daily* (14): 196, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, October 29, 2024.

Permalink: <https://farmdocdaily.illinois.edu/2024/10/2023-arc-co-and-plc-payments-for-corn-soybeans-and-wheat.html>

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The 2023 Commodity title program will make payments this fall, and payment rates for Price Loss Coverage (PLC) and Agriculture Risk Coverage at the county level (ARC-CO) have been released. No PLC payments were triggered for corn, soybeans, or wheat as the 2023 MYA prices for these crops were all above their respective effective reference prices. ARC-CO payments for corn, soybeans, and wheat were triggered in a relatively small number of counties nationally. Notably, multiple counties in Nebraska and Kansas triggered ARC-CO payments for all three crops.

### PLC and ARC-CO

The price loss coverage (PLC) program triggers support payments when the national marketing year average (MYA) price for an eligible commodity falls below its effective reference price (see *farmdoc daily* article from [September 24, 2019](#) for more details on PLC). For 2023, the effective reference prices for corn, soybeans, and wheat were \$3.70, \$8.40, and \$5.50 per bushel, respectively. Actual 2023 MYA prices exceeded effective reference prices for all three crops (\$4.55 for corn, \$12.40 for soybeans, and \$6.96 for wheat) implying no PLC support payments.

The Agriculture Risk Coverage program at the County level (ARC-CO) triggers support payments when actual revenue in the county falls below 86% of benchmark revenue (see *farmdoc daily* article from [September 17, 2019](#) for more details on ARC-CO). Benchmark revenue is the product of a national benchmark price and a county-level benchmark yield.

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The benchmark price for each commodity is the Olympic average of the MYA prices in the 5-years preceding the current year, including a lag year (i.e. the benchmark price for 2023 is based on the Olympic average of prices over the 2017 to 2021 marketing years). Also, the prices considered in the Olympic average can be no lower than the commodity's effective reference price for that year.

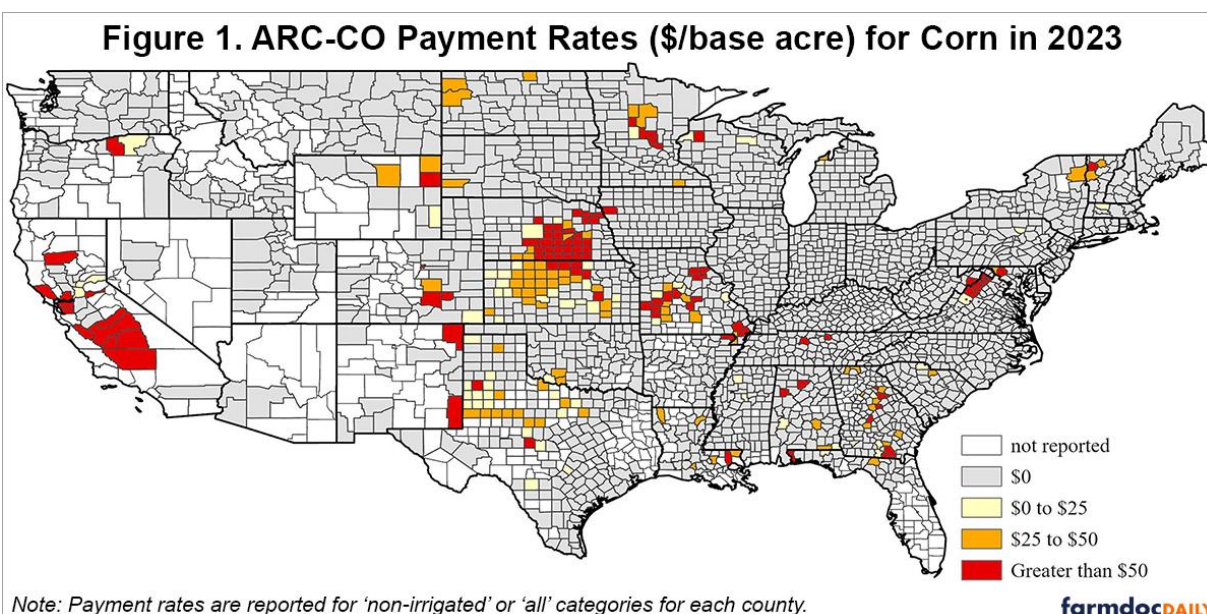
The 2023 ARC benchmark prices for corn, soybeans, and wheat were \$3.98, \$9.57, and \$5.50 per bushel, respectively. With actual MYA prices in 2023 above the ARC benchmark price for each crop, a yield loss would need to be experienced at the county level to trigger ARC-CO support. Corn's \$4.55 MYA price implies that the average corn yield for a county would need to be 24.8% below the county's benchmark yield to trigger an ARC-CO payment. The \$12.40 MYA for soybeans for 2023 implies the average soybean yield in a county would need to fall at least 33.6% below benchmark. The required yield loss for wheat, based on its \$6.96 MYA price, would need to be at least 32%.

The sections below show where sufficient county yield losses occurred in 2023 to trigger ARC-CO payments. For each crop, the ARC-CO payment rates provided in the maps are \$/base acre and are for non-irrigated acres in counties that distinguish between irrigated and non-irrigated or for all acres in counties that do not distinguish between irrigated and non-irrigated practices. The payment rate information is available from the Farm Service Agency in an [Excel file](#) that was last updated on September 27, 2024 (FSA, 2024).

## Corn

Figure 1 maps 2023 ARC-CO payment rates (\$/base acre) for corn base acres. ARC-CO payments for corn were triggered in roughly 10% of the counties for which FSA is reporting corn payment rates. The average payment rate across counties where a payment was triggered is just under \$42 per base acre.

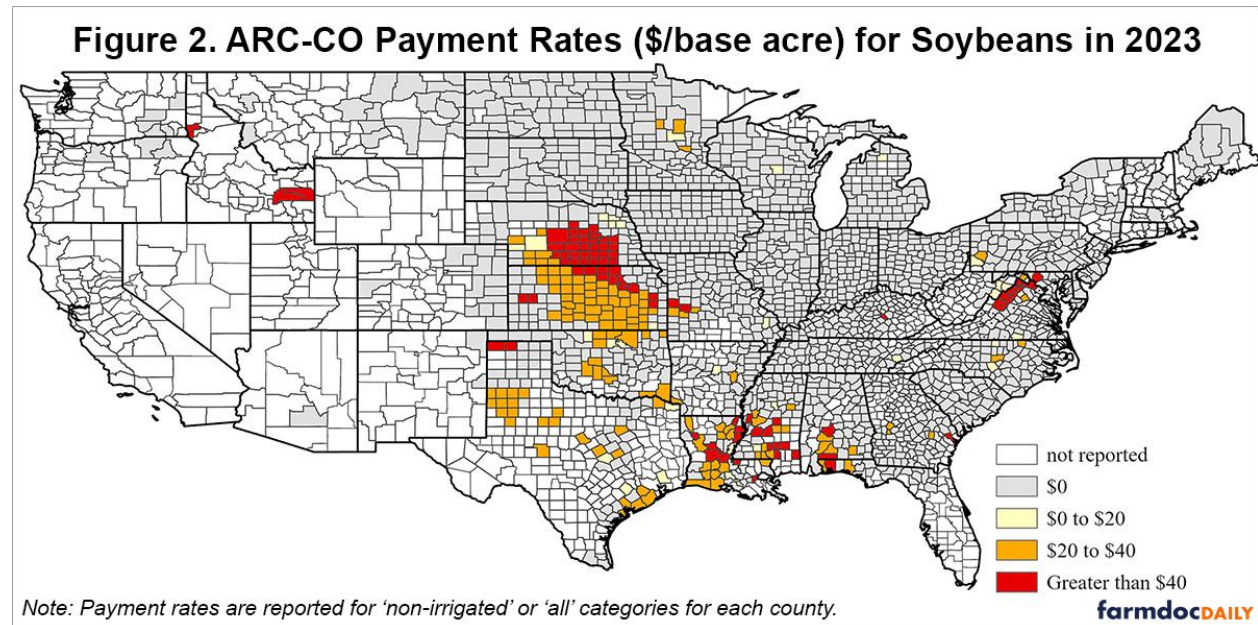
A concentration of payment counties is located in Nebraska and Kansas, along with multiple counties in Minnesota, Missouri, Texas, and other states. Only 1 Illinois county experienced a yield loss sufficient to trigger a payment (\$22.50 per base acre in Hardin county). One Iowa county triggered a payment for corn (\$70.54 for non-irrigated corn in Woodbury county), and no counties in Indiana or Ohio triggered ARC-CO payments for corn for 2023.



## Soybeans

Figure 2 maps 2023 ARC-CO payment rates for soybean base acres. Payments for soybeans were triggered in 12% of counties for which FSA is reporting payment rates. The average ARC-CO payment for soybeans across counties where a payment was triggered is just over \$33 per base acre.

As with corn, there are a number of counties in Nebraska and Kansas with soybean yield losses large enough to trigger ARC-CO payments for 2023. Payment counties are also scattered across parts of Texas, Louisiana, Alabama, and Mississippi as well as other states. No counties in Iowa, Illinois, Indiana, or Ohio triggered ARC-CO payments for soybeans for 2023.



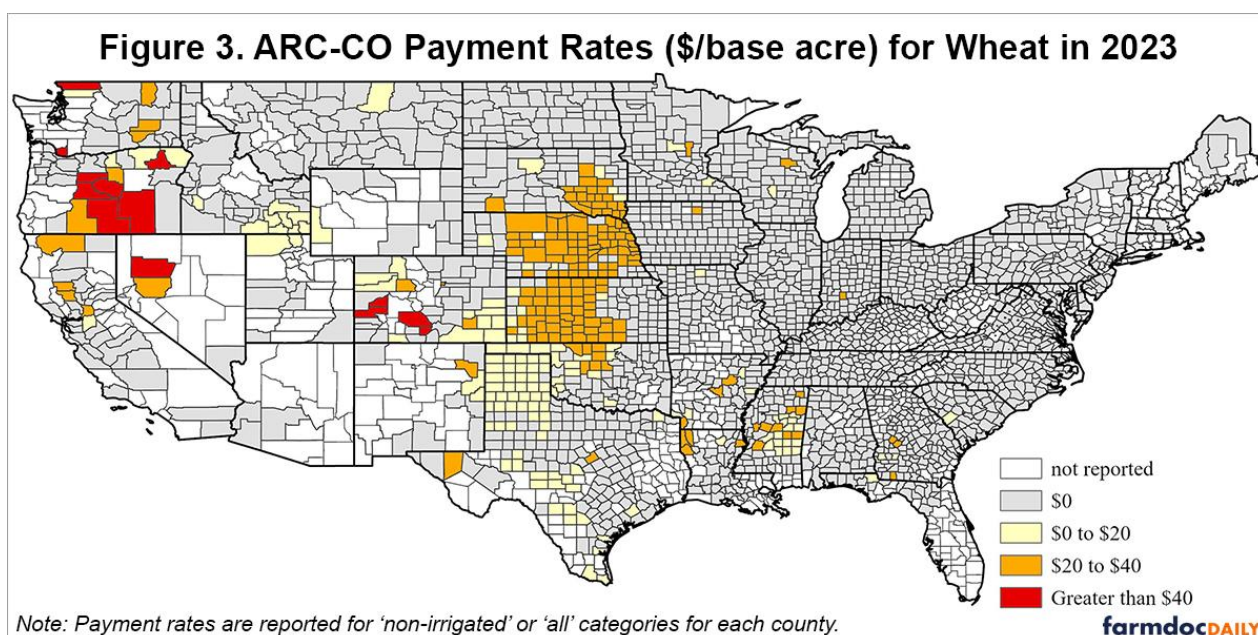
## Wheat

Figure 3 maps 2023 ARC-CO payments rates for wheat base acres. Payments for wheat were triggered in 14% of counties for which FSA reports payment rates. The average ARC-CO payment rate in counties where a payment was triggered is just under \$22 per base acre.

Similar to corn and soybeans, there is a concentration of counties in Nebraska and Kansas that triggered ARC-CO payments on wheat acres. For wheat this extends into the southeastern part of South Dakota and into the Texas panhandle. Wheat payments were also triggered in counties in the pacific northwest and in central Mississippi. Other counties with ARC-CO payments on wheat were scattered across a limited number of counties in other parts of the US.

No counties triggered wheat payments in Illinois, Ohio or Michigan. Single counties in Iowa (\$33.35 per base acre in Cerro Gordo county) and Indiana (\$39.23 per base acre in Monroe county) triggered wheat payments.





## Discussion

Payment rates for the 2023 PLC and ARC-CO programs have been released by the Farm Service Agency. With the 2023 MYA prices for corn, soybeans, and wheat being finalized at levels above the PLC effective reference prices, no PLC support will occur. For ARC-CO, relatively large yield losses at the county-level (at least 25% below benchmark for corn, 34% below benchmark for soybeans, and 32% below benchmark for wheat) would be required to trigger payments.

As should be expected, a small portion of counties experienced average yields sufficiently below their benchmark yields to trigger payments on corn, soybean, and wheat base acres for 2023. Areas of payment concentration exist in Nebraska and Kansas for all three crops. Other counties where payments were triggered were generally scattered across other parts of the US. Very few counties triggered payments in the main Corn Belt states of Iowa, Illinois, Indiana, and Ohio. The number of counties where payments were triggered was also small in the upper Midwest states of North Dakota, Minnesota, Wisconsin, and Michigan.

While not included in the maps above, ARC-CO payments were also triggered for irrigated acres in a limited number of counties for 2023. For corn, a handful of counties in western Kansas and the panhandle of Texas triggered payments for irrigated acres. For soybeans, some counties in northwestern Kansas triggered payment on irrigated production. For wheat, payments for irrigated production were triggered in some counties in Nebraska and Kansas along with a few individual counties in other western states. This further highlights the severity of the drought conditions experienced in states like Nebraska and Kansas during the 2023 crop year.

Nationally, just over 62% of total enrolled base acres were covered under ARC-CO. At the commodity level, ARC-CO covered 64.6% of corn base acres, 84.3% of soybean base acres, and 55.4% of wheat base acres (FSA, 2024). In Nebraska ARC-CO enrollment rates were 64% for corn, 72% for soybeans, and 43% for wheat – lagging the national average for each crop. In Kansas they were 73% for corn, 87% for soybeans, and 64% for wheat – exceeding the national average for each crop. With PLC not triggering payments, even in counties where ARC-CO payments were triggered actual support received will depend on the farm's program enrollment.

For counties where 2023 ARC-CO payments were triggered, those payments have likely been received or will be over the next few weeks. Any support associated with the current 2024 crop year will not be determined until the 2024 marketing year ends in 2025 (May 31 for wheat, August 31 for corn and soybeans), with payments not being received until October of 2025.

## References

FSA. 2024. [ARC/PLC Program Data, 2023 Program Year Specific Data](#). Farm Service Agency, United States Department of Agriculture.

Schnitkey, G., J. Coppess, N. Paulson, C. Zulauf and K. Swanson. "[The Agricultural Risk Coverage — County Level \(ARC-CO\) Option in the 2018 Farm Bill](#)." *farmdoc daily* (9):173, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, September 17, 2019.

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