

# When would ARC pay more than PLC for 2025 corn and soybeans?

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# **Executive Summary**

- The Effective Price Loss Coverage (PLC) Reference price for 2025 corn and soybeans is \$4.26 and \$9.66, respectively. This increase is because of higher commodity prices. Similarly, the Olympic Average price used in the Agriculture Risk Coverage (ARC) revenue guarantee increased to \$5.03 and \$12.17 for 2025 corn and soybeans.
- A combination of lower prices and yields would trigger ARC payments that exceed any PLC payments. However, farmers should expect payments close to zero or zero without significantly lower prices and yields.
- The enrollment deadline for ARC or PLC is April 15, 2025, at your FSA office.

Farmers must decide whether to enroll in Agriculture Risk Coverage (ARC) or Price Loss Coverage (PLC) for each FSA farm before the April 15 deadline. This decision has been uninteresting the last two years as the projected U.S. marketing year average (MYA) prices for corn and soybeans were well above the prices that would trigger a payment for either program. The decision for 2025 is more interesting due to higher ARC and PLC guarantees.

The 2018 farm bill provided the potential for the PLC Reference Price to increase above the statutory reference price levels of \$3.70 for corn and \$8.40 for soybeans by as much as 15% during a multi-year period of higher commodity prices. With corn MYA prices of \$4.53, \$6.00, \$6.54, and \$4.55 per bushel for 2020, 2021, 2022, and 2023, the effective PLC reference price has increased from \$3.70 to \$4.26 per bushel for 2025 (Table 1). Similarly, the soybean MYA prices of \$10.80, 13.30, \$14.20, and \$12.40 per bushel have raised the effective reference price to \$9.66 per bushel for 2025 (Table 1). The higher MYA prices also increase the Olympic Average Price (OAP) used in calculating the ARC Benchmark Revenue. The higher marketing year average prices also increased the ARC-County revenue guarantee. The OAP 2025 corn and soybeans are \$5.03 and \$12.17 per bushel, respectively (Table 1).

The decision on which program has the greater potential to trigger payments depends on your expectation of the U.S. MYA price. The U.S. Department of Agriculture (USDA) has not provided any supply and demand estimates for the 2025 crops, with the first glimpse into price potential released as part of USDA's February *Agricultural Outlook Conference* held February 27-28. The

only price projection provided to date is from USDA's *Preliminary Baseline Projections* released last November as part of the federal budgeting process and not based on farmer surveys.

Table 1 includes November 2024's U.S. *Preliminary Baseline* MYA price projections of \$3.90 for corn and \$10.00 for soybeans. The fundamentals for 2025 corn and soybeans have changed since last November, so farmers should seek the best information available when comparing the potential payments for corn and soybeans. Recall that PLC payments are triggered when the MYA price is less than \$4.26 and \$9.66 for corn and soybeans. Similarly, ARC payments are triggered, assuming no change in OA yield, when the MYA price is less than \$4.32 and \$10.47 for corn and soybeans. Table 1 suggests that ARC and PLC payments are more likely to be triggered in 2025 than in the last few years; however, the likelihood of receiving a payment is still tiny if county yields are greater than the county's Olympic average yield (OAY) used in calculating the guaranteed revenue or if the MYA price is higher than \$4.26 a bushel.

Table 1. PLC Effective Reference Price, ARC Olympic Average Price, and Projected Marketing Year Average Price for 2025 Corn and Soybeans.

	2025 PLC Effective Reference Price	2025 ARC Olympic Average Price	2025 Projected Marketing Year Average Price 1/	
Corn	\$4.26	\$5.03	\$3.90	
Soybeans	\$9.66	\$12.17	\$10.00	

<sup>&</sup>lt;sup>1/</sup> Projected Marketing Year Average Price from USDA's Preliminary Baselines Projections, November 2024.

### 2025 ARC vs. PLC Corn Example

Table 2 shows potential ARC payments minus any PLC payment for varying U.S. MYA corn prices and county corn yields. The negative numbers, displayed in red, are price and yield combinations where PLC payments are larger than the ARC payments. The positive numbers are price and yield combinations where ARC payments exceed PLC payments.

Table 2 highlights the 190-bushel county yield and the \$3.90 MYA price with dashed lines representing the OA yield and marketing year average price, respectively, that determine the ARC revenue guarantee. Rows above the dashed line represent larger OA yields, and rows below represent smaller yields.

Table 2. Example Difference in Corn ARC-CO and PLC Payments (\$/Base Acre) for 2025.

	2025 U.S. Marketing Year Average Price									
<b>County Yield</b>	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	
200	-\$27	-\$13	-\$10	-\$13	-\$16	-\$19	-\$21	-\$9	+\$0	
195	-\$27	-\$13	+\$1	+\$3	+\$1	-\$2	-\$4	-\$6	+\$0	
190	-\$27	-\$13	+\$1	+\$16	+\$17	+\$15	+\$14	+\$12	+\$4	
185	-\$27	-\$13	+\$1	+\$16	+\$30	+\$32	+\$31	+\$30	+\$22	
180	-\$27	-\$13	+\$1	+\$16	+\$30	+\$44	+\$48	+\$47	+\$41	
175	-\$27	-\$13	+\$1	+\$16	+\$30	+\$44	+\$58	+\$65	+\$59	
170	-\$27	-\$13	+\$1	+\$16	+\$30	+\$44	+\$58	+\$73	+\$77	
165	-\$27	-\$13	+\$1	+\$16	+\$30	+\$44	+\$58	+\$73	+\$81	
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	PLC Assumptions								
Payment Rate	\$0.76	\$0.66	\$0.56	\$0.46	\$0.36	\$0.26	\$0.16	\$0.06	\$0.00
Payment Yield	168.0	168.0	168.0	168.0	168.0	168.0	168.0	168.0	168.0
Payment	\$127.68	\$110.88	\$94.08	\$77.28	\$60.48	\$43.68	\$26.88	\$10.08	\$0.00

1/ The ARC-CO revenue guarantee is assumed to be \$821.90 based on 86% of the Olympic Average price of \$5.03 multiplied by the Olympic Average corn yield of 190 bushels/acre. Payments are scaled by 85% to adjust base acres to planted acres.

The lower part of Table 2 shows the PLC payments for the different potential MYA prices for a payment yield of 168 bushels per acre. Remember that PLC payments are triggered only at MYA prices below \$ 4.26 per bushel, so PLC payments would exceed ARC when MYA prices are less than \$4.26 and county yields are 200-bushel or larger (Table 2). ARC payments exceed PLC for lower prices and lower yields. However, Table 2 also indicates that no payments for either program are likely for 2025 for a marketing year price of \$4.33 or higher and county yields at 200-bushel or larger. Table 2 also shows that PLC is preferred, regardless of county yield, if the MYA price is less than \$3.70 (Table 2).

#### 2025 ARC vs. PLC Soybean Example

Table 3 reports the difference between ARC and PLC payments for varying soybean MYA prices and county yields. The formatting is the same as in Table 2, as the dashed lines highlight the Olympic Average yield and expected marketing year average price of 58 and \$10, respectively (Table 3).

Like the example for corn in Table 2, potential PLC payments would exceed ARC payments when prices decline below \$9.60 per bushel, AND county yields are above 68 bushels (17% above the OA yield of 58 bushels) (Table 3). The other price yield combinations show that ARC payments exceed PLC payments. ARC payments are triggered without a yield loss when the MYA price is less than \$10.47 per bushel. Also, notice that no ARC or PLC payment is likely for soybeans in 2025 when the MYA price exceeds \$9.66 a bushel and the county yield is above 62 bushels.

<sup>2/</sup> The prices and yields illustrate potential payments and do not imply that these yields or prices are forecasts.

Table 3. Example Difference in Soybean ARC-CO and PLC Payments (\$/Base Acre) for 2025.

	2025 U.S. Marketing Year Average Price								
County Yield	\$8.40	\$8.60	\$8.80	\$9.00	\$9.20	\$9.40	\$9.60	\$9.80	\$10.00
73	-\$57	-\$48	-\$39	-\$30	-\$21	-\$12	-\$3	+\$0	+\$0
68	-\$26	-\$29	-\$31	-\$30	-\$21	-\$12	-\$3	+\$0	+\$0
63	+\$3	+\$8	+\$6	+\$4	+\$3	+\$1	-\$1	+\$0	+\$0
58	+\$3	+\$12	+\$21	+\$30	+\$39	+\$41	+\$40	+\$33	+\$23
53	+\$3	+\$12	+\$21	+\$30	+\$39	+\$48	+\$57	+\$60	+\$60
48	+\$3	+\$12	+\$21	+\$30	+\$39	+\$48	+\$57	+\$60	+\$60

PLC Assumptions									
Payment Rate	\$1.26	\$1.06	\$0.86	\$0.66	\$0.46	\$0.26	\$0.06	\$0.00	\$0.00
Payment Yield	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
Payment	\$66.78	\$56.18	\$45.58	\$34.98	\$24.38	\$13.78	\$3.18	\$0.00	\$0.00

<sup>1/</sup> The ARC-CO revenue guarantee is assumed to be \$607.04 based on 86% of the Olympic Average price of \$12.17 multiplied by the Olympic Average soybean yield of 58 bushels. Payments are scaled by 85% to adjust base acres to planted acres.

# **Takeaway Message for Farmers**

Farmers preparing to make their decision to enroll in ARC or PLC for 2025 should consider the following.

- 1. If only worried about lower prices, then PLC would be preferred because it only provides price protection.
- 2. The ARC revenue program has greater potential to trigger a payment from a combination of lower prices and yields. Yields above the county yield Olympic average may reduce or eliminate any potential payment.
- 3. ARC payments tend to be larger than PLC payments when county yields are smaller than the OA yield.
- 4. While large payments are theoretically possible, farmers should expect payments to be zero or modest without experiencing significantly lower prices and yields. A decision spreadsheet developed by Extension Economists at the University of Illinois is available here. Download the 2025 Farm Bill What-If Tool. The spreadsheet generates tables like Table 2 and Table 3 for your county, with your county's OA and PLC payment yields included as default variables. The table calculates the PLC payment less than the ARC payment, so a negative number indicates that the ARC payment is larger than the PLC payment.
- 5. Farmers should continue developing their revenue risk management plan incorporating ARC or PLC, crop insurance, and price risk management tools like hedging and forward contracts.

Farmers have until April 15 to enroll and make any election changes in ARC and PLC for their 2025 corn and soybean crops.

<sup>2/</sup> The prices and yields illustrate potential payments and do not imply that these yields or prices are forecasts.