



Weekly Farm Economics: The 2025 Farm Bill What-If Tool

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On December 21, 2024, the U.S. Congress passed, and President Biden signed into law, the [American Relief Act of 2025](#). That Act extended the 2018 Farm Bill into 2025, resulting in another year of farmers facing the decision between Price Loss Coverage (PLC) and Agriculture Risk Coverage (ARC) for commodity program support.

Farmers have until April 15th to make or change decisions, a month longer than in recent years. The *farmdoc 2025 Farm Bill What-if Tool* — a Microsoft Excel spreadsheet — has been revised to analyze the 2025 decisions. Overall, ARC at the county level (ARC-CO) appears to be the program choice most likely to result in the largest payments for corn, soybean, and wheat base acres. At very low prices, however, PLC will make higher payments, particularly for corn and wheat.

2025 PLC and ARC-CO Decisions

The recent one-year extension of the 2018 Farm Bill means that farmers will once again face the decision between the PLC, county, and individual versions of ARC programs offered through the Commodity Title.

- Price Loss Coverage (PLC) is a crop-specific fixed price support program that triggers payments if the marketing year average (MYA) price falls below the commodity's effective reference price. Payments are made on 85% of historical base acres (see *farmdoc daily*, [September 24, 2019](#)).
- Agricultural Risk Coverage at the county level (ARC-CO) is a crop-specific county revenue program. ARC-CO triggers payments if actual revenue (MYA price times county yield) falls below 86% of the benchmark revenue (product of benchmark price and trend-adjusted historical benchmark yield for the county). Payments are made on 85% of historical base acres (see *farmdoc daily*, [September 17, 2019](#)).

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- Agricultural Risk Coverage at the individual level (ARC-IC) is a farm-level revenue support program. Like ARC-CO, payments are triggered if actual revenue falls below 86% of the benchmark. If an FSA farm unit is enrolled in ARC-IC, information for all commodities planted in the current year is combined together in a weighted average to determine benchmark and actual revenues. If a farmer enrolls multiple FSA farms in the same state, all farm units are combined in determining the averages for actual and benchmark revenues. Payments are made on 65% of historical base acres (see *farmdoc daily*, [October 29, 2019](#)).

Decisions are made for each Farm Service Agency (FSA) farm unit. PLC and ARC-CO are commodity-specific and can be mixed and matched on the same FSA farm or across different FSA farms (i.e., PLC for one commodity, ARC-CO for another on the same FSA farm or using different programs for the same crop on different FSA farms).

2025 Effective Reference and ARC Benchmark Prices

The effective reference price levels for 2025 are set at the higher of 1) a crop’s statutory reference price or 2) 85% of the Olympic average of prices over the five marketing years from 2019 to 2023. After eliminating the low and high prices over the five years considered, the Olympic average is computed as the simple average of the three remaining prices. If applicable, the effective reference price is capped at 115% of a crop’s statutory reference price.

The 2025 effective reference price for corn is \$4.26 per bushel (see Table 1). The five-year Olympic average is well above the \$3.70 statutory reference price and is capped at 1.15 times the effective reference price or \$4.26 per bushel. Similarly, the 2025 effective reference price for soybeans is above the \$8.40 statutory reference price and is capped by 1.15 times the statutory reference price or \$9.66 per bushel. Had the 1.15 been higher in the 2018 Farm Bill, corn and soybeans would have had higher effective prices in 2025. Wheat’s effective reference price for 2025 is \$5.56, slightly above the \$5.50 statutory reference price but below the maximum of 1.15 times the statutory reference price.

Table 1. 2025 Effective Reference Prices, ARC Benchmark Prices, and Projected Market Year Average Prices

Crop	Effective Reference Price	ARC Prices	
		ARC Benchmark Price	86% of Benchmark Price
Corn	\$4.26	\$5.03	\$4.33
Soybeans	\$9.66	\$12.17	\$10.47
Wheat	\$5.56	\$6.72	\$5.78

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ARC program benchmark prices for each commodity are based on the Olympic average of the five prices used in the benchmark calculation. Prices used are the larger of the crop’s effective reference price for the current year (2025 in this case) and the actual MYA prices over the five preceding marketing years with a single-year lag (i.e., 2019 to 2023 for the 2025 program year). Higher prices in recent marketing years, along with the use of the effective reference prices as minimums for each year used in the calculation for corn, soybeans, and wheat, result in an increase in the ARC benchmark prices for 2025 compared with 2024 and earlier years.

ARC benchmark prices for 2025 are \$5.03 for corn, \$12.17 for soybeans, and \$6.72 for wheat (see Table 2). Benchmark prices for all three crops are well above effective reference prices. A key analysis price is 86% of the ARC benchmark price. Since ARC-CO's guarantee is 86% of the guarantee, ARC-CO will pay at prices below 86% when yields are at or below the benchmark yields (note that ARC-CO can pay at higher yields as well if prices are lower). Comparing 86% of the ARC benchmark price to the effective reference price provides an indication of whether PLC or ARC-CO might have a better chance of triggering payments. The further 86% of the ARC benchmark price is above the effective reference price, the higher the chance ARC-CO will be more likely to trigger greater support than PLC:

- 86% of corn's ARC benchmark price is \$4.33. This is 1.5% above corn's \$4.26 effective PLC reference price.
- 86% soybeans' ARC benchmark price is \$10.47. This is 8.3% above soybean's \$9.66 PLC effective reference price.
- 86% of wheat's ARC benchmark price is \$5.78. This is 3.9% above wheat's \$5.56 PLC effective reference price.

Corn

An updated 2025 version of the Excel-based Farm Bill What-If Tool is now available and can be downloaded directly [here](#). The calculator can compare the PLC and ARC-CO program payment scenarios for individual yield and price scenarios. It also provides a tabular comparison of PLC and ARC-CO payments across a range of MYA price and county yield levels.

Table 2 shows ARC-CO payments per base acre for non-irrigated corn in Champaign County, Illinois for different county yields and MYA prices. The county yields in the rows of the table are centered at 224 bushels per acres, which is close to the ARC-CO benchmark yield for non-irrigated corn in Champaign County of 223.7 bushels per acre for 2025. The prices across the columns are centered at \$4.10 per bushel. ARC-CO would trigger payments at a \$4.10 MYA price for Champaign county corn yields below 234 bushels per acre, and would equal \$43 per base acre with a county yield near the benchmark level of 224 bushels per acre. ARC-CO payments would reach their maximum of \$96 per acre at yields below 204 bushels per acre.

Table 2. ARC_CO Payments Per Base Acre at Different Prices and Yields, Corn in Champaign County, Illinois

Program Selection		ARC-CO		State = Illinois, County = Champaign, Crop = Corn, Year = 2025							
Price Change		\$ 0.10		ARC-CO Benchmark Yield = 223.70, Benchmark Price = \$5.03, Guarantee \$967.68							
Yield Change		5		PLC Yield = 179, Effective Reference Price = \$4.26							
-2025											
County	2025 Market Year Average Price										
Yield	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60
249	62	40	19	0	0	0	0	0	0	0	0
244	77	56	35	15	0	0	0	0	0	0	0
239	92	72	52	31	11	0	0	0	0	0	0
234	96	88	68	48	28	8	0	0	0	0	0
229	96	96	84	64	45	26	6	0	0	0	0
224	96	96	96	81	62	43	24	5	0	0	0
219	96	96	96	96	79	60	42	23	5	0	0
214	96	96	96	96	96	78	60	41	23	5	0
209	96	96	96	96	96	95	77	60	42	24	7
204	96	96	96	96	96	96	95	78	61	43	26
199	96	96	96	96	96	96	96	96	79	63	46

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PLC payments will occur if the 2025 MYA price falls below the \$4.26 effective reference price, and county yield does not matter in the calculation. Using a 179 bushel per acre PLC yield, the average for Champaign county, PLC would trigger a \$24 payment per base acre at a \$4.10 MYA price (Table 3). PLC payments increase with lower prices. At a \$3.60 MYA price, payments would reach \$100 per base acre.

Table 3. PLC Payments Per Base Acre at Different Prices and Yields, Corn in Champaign County, Illinois

Program Selection	PLC										State = Illinois, County = Champaign, Crop = Corn, Year = 2025	
Price Change	\$ 0.10										ARC-CO Benchmark Yield = 223.70, Benchmark Price = \$5.03, Guarantee \$967.68	
Yield Change	5										PLC Yield = 179, Effective Reference Price = \$4.26	
-2025												
County	2025 Market Year Average Price											
Yield	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	
249	100	84	69	54	39	24	8	0	0	0	0	
244	100	84	69	54	39	24	8	0	0	0	0	
239	100	84	69	54	39	24	8	0	0	0	0	
234	100	84	69	54	39	24	8	0	0	0	0	
229	100	84	69	54	39	24	8	0	0	0	0	
224	100	84	69	54	39	24	8	0	0	0	0	
219	100	84	69	54	39	24	8	0	0	0	0	
214	100	84	69	54	39	24	8	0	0	0	0	
209	100	84	69	54	39	24	8	0	0	0	0	
204	100	84	69	54	39	24	8	0	0	0	0	
199	100	84	69	54	39	24	8	0	0	0	0	

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Table 4 shows PLC minus ARC-CO payments. ARC-CO will trigger payments across a range of scenarios, including those with lower yields and higher prices. PLC would trigger larger payments than ARC-CO in a range of scenarios with yields above benchmark and prices below the effective reference price. PLC would also trigger larger payments when prices are sufficiently low (for example, a corn MYA of \$3.60 or lower) as ARC-CO would reach its maximum payment level.

Table 4. Comparison of 2025 PLC and ARC-CO Payments per Base Acre, Corn in Champaign County, Illinois

Program Selection	PLC minus ARC-CO										State = Illinois, County = Champaign, Crop = Corn, Year = 2025	
Price Change	\$ 0.10										ARC-CO Benchmark Yield = 223.70, Benchmark Price = \$5.03, Guarantee \$967.68	
Yield Change	5										PLC Yield = 179, Effective Reference Price = \$4.26	
-2025												
County	2025 Market Year Average Price											
Yield	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	
249	38	44	50	54	39	24	8	0	0	0	0	
244	23	28	34	39	39	24	8	0	0	0	0	
239	8	13	18	23	28	24	8	0	0	0	0	
234	4	-3	2	6	11	16	8	0	0	0	0	
229	4	-11	-15	-10	-6	-2	2	0	0	0	0	
224	4	-11	-26	-27	-23	-19	-16	-5	0	0	0	
219	4	-11	-26	-42	-40	-37	-33	-23	-5	0	0	
214	4	-11	-26	-42	-57	-54	-51	-41	-23	-5	0	
209	4	-11	-26	-42	-57	-72	-69	-60	-42	-24	-7	
204	4	-11	-26	-42	-57	-72	-87	-78	-61	-43	-26	
199	4	-11	-26	-42	-57	-72	-87	-96	-79	-63	-46	

* A positive value indicates that PLC will pay more, a negative value indicates that ARC-CO will pay more.

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ARC-CO will trigger larger payments than PLC over most likely yield and price combinations for corn. However, if one is concerned about very low MYA prices, PLC may be the appropriate choice.

Soybeans

Table 5 shows PLC minus ARC-CO payments for soybeans in Champaign County, Illinois. PLC payments are given for a 55 bushel per acre PLC yield, the average for the county. ARC-CO will tend to trigger larger payments than PLC for soybean prices above \$ 9.70 per bushel. PLC will tend to trigger higher payments at lower prices if yields are above 81 bushels per acre. ARC-CO will make the same or higher payments than PLC under what would be expected to be more likely yield-price scenarios for soybeans.

Table 5. Comparison of 2025 PLC and ARC-CO Payments per Base Acre, Soybeans in Champaign County, Illinois

Program Selection	PLC minus ARC-CO		State = Illinois, County = Champaign, Crop = Soybeans, Year = 2025								
Price Change	\$	0.25	ARC-CO Benchmark Yield = 71.44, Benchmark Price = \$12.17, Guarantee \$747.71								
Yield Change		5	PLC Yield = 55, Effective Reference Price = \$9.66								
-2025 County	2025 Market Year Average Price										
Yield	\$8.95	\$9.20	\$9.45	\$9.70	\$9.95	\$10.20	\$10.45	\$10.70	\$10.95	\$11.20	\$11.45
96	33	22	10	0	0	0	0	0	0	0	0
91	33	22	10	0	0	0	0	0	0	0	0
86	33	22	10	0	0	0	0	0	0	0	0
81	17	22	10	0	0	0	0	0	0	0	0
76	-21	-16	-12	-5	0	0	0	0	0	0	0
71	-41	-52	-52	-47	-31	-16	-1	0	0	0	0
66	-41	-52	-64	-74	-74	-60	-45	-31	-17	-3	0
61	-41	-52	-64	-74	-74	-74	-74	-74	-64	-51	-38
56	-41	-52	-64	-74	-74	-74	-74	-74	-74	-74	-74
51	-41	-52	-64	-74	-74	-74	-74	-74	-74	-74	-74
46	-41	-52	-64	-74	-74	-74	-74	-74	-74	-74	-74

* A positive value indicates that PLC will pay more, a negative value indicates that ARC-CO will pay more.

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Wheat

Table 6 shows PLC minus ARC-CO payments for wheat in Champaign County, Illinois. The PLC yield is 65 bushels per acre, the county average. At prices above \$4.85, ARC-CO will make higher payments at yields below 86 to 81 bushels per acre. Under the most likely price scenarios, ARC-CO will make higher payments than PLC. Still, PLC will make higher payments for MYA prices below \$4.85, as well as with prices from \$4.85 to \$5.56 with yields sufficiently above the county benchmark.

Table 6. Comparison of 2025 PLC and ARC-CO Payments per Base Acre, Wheat in Champaign County, Illinois

Program Selection	PLC minus ARC-CO		State = Illinois, County = Champaign, Crop = Wheat, Year = 2025								
Price Change	\$	0.25	ARC-CO Benchmark Yield = 80.84, Benchmark Price = \$6.72, Guarantee \$467.19								
Yield Change		5	PLC Yield = 64, Effective Reference Price = \$5.56								
-2025 County	2025 Market Year Average Price										
Yield	\$4.35	\$4.60	\$4.85	\$5.10	\$5.35	\$5.60	\$5.85	\$6.10	\$6.35	\$6.60	\$6.85
106	60	52	39	25	11	0	0	0	0	0	0
101	42	49	39	25	11	0	0	0	0	0	0
96	23	30	37	25	11	0	0	0	0	0	0
91	20	10	16	22	11	0	0	0	0	0	0
86	20	6	-5	0	5	0	0	0	0	0	0
81	20	6	-8	-21	-18	-12	0	0	0	0	0
76	20	6	-8	-21	-35	-36	-20	-4	0	0	0
71	20	6	-8	-21	-35	-46	-45	-30	-15	0	0
66	20	6	-8	-21	-35	-46	-46	-46	-42	-28	-14
61	20	6	-8	-21	-35	-46	-46	-46	-46	-46	-43
56	20	6	-8	-21	-35	-46	-46	-46	-46	-46	-46

* A positive value indicates that PLC will pay more, a negative value indicates that ARC-CO will pay more.

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Summary

Due to lower expectations on commodity title prices, commodity title programs likely will have higher expected payments in 2025 than in recent years. Based on high ARC benchmark prices compared with PLC effective reference prices, ARC-CO seems more likely to trigger larger payments under most price-yield scenarios. However, PLC could make higher payments at very low MYA prices, particularly for corn and wheat.

The decision deadline for the 2025 farm program decision has been moved back a month, from March 15th in previous years, to April 15th. While delaying the decision until closer to the deadline has some drawbacks, such as the potential to spill into and disrupt the early part of the spring planting season and putting a strain on Farm Service Agency staff, waiting will also provide producers with more potentially useful information. This is particularly true for wheat, as the 2025 marketing year is already underway and more information about wheat production in other major production regions of the world will be available.

We will continue to provide information and analysis to aid producers in their 2025 farm program decisions with future *farmdoc daily* articles and other resources prior to the enrollment deadline.

References

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