

# Making the 2023 ARC/PLC Program Decision

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## The reality...

- If we see higher commodity prices through 2023/2024 as we are now:
  - PLC will not pay
  - ARC will only pay with a catastrophic county yield loss

*Do you want to use SCO? – Cannot if you are enrolled in ARC*



# 2018 Farm Bill Timeline

Election Period	Payment Received (if any)
2019 & 2020 Election	Oct. 2020 & 2021
2021 Election	Oct. 2022
2022 Election	Oct. 2023
<b>2023 Election</b>	<b>Oct. 2024</b>
New Farm Bill?	

**2023 Election** covers the **2023/2024 Marketing Year** for crops **harvested in 2023**

Corn, Sorghum, & Soybeans Marketing year:  
Sept. 1<sup>st</sup>, 2023- Aug. 31<sup>st</sup>, 2024

Wheat Marketing year:  
June 1<sup>st</sup>, 2023 – May 31<sup>st</sup>, 2024



# Chances of Payments in Oct. 2023?

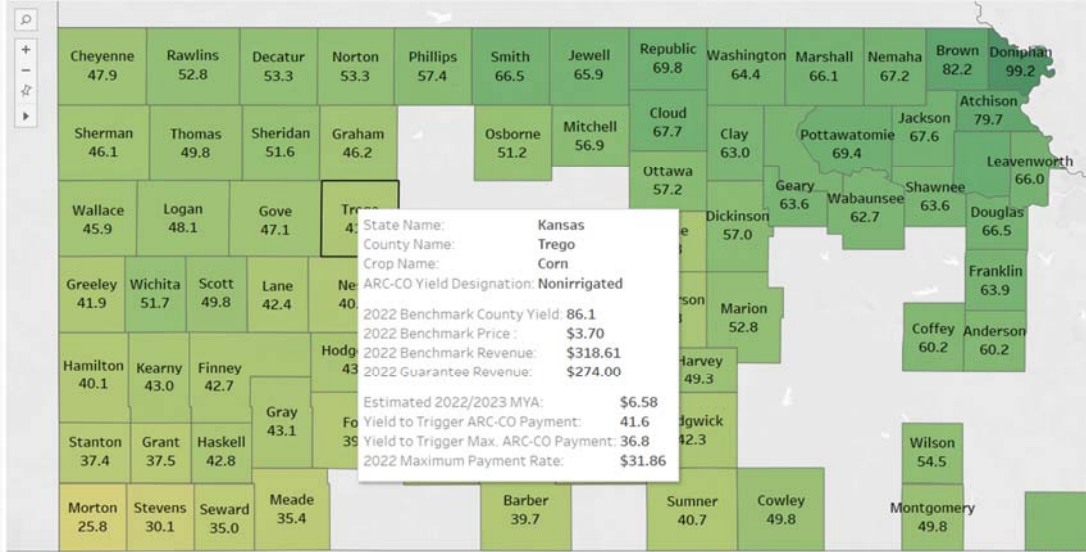
PLC	Wheat	Corn	Grain Sorghum	Soybeans
2022/2023 MYA Estimate	\$8.92	\$6.58	\$6.93	\$14.20
Effective Reference Price	\$5.50	\$3.70	\$3.95	\$8.40

ARC-CO	Wheat	Corn	Grain Sorghum	Soybeans
2022/2023 MYA Estimate	\$8.92	\$6.58	\$6.93	\$14.20
2022 ARC Benchmark	\$5.50	\$3.70	\$3.95	\$9.12
% County Yield Loss to Trigger Payment	53%	48%	49%	55%

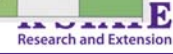
<https://www.agmanager.info/crop-insurance/risk-management-strategies/mya-price-estimates-updated-arc-and-plc-commodity-0>



### 2022 Yields to Trigger ARC Payments - Corn, Nonirrigated

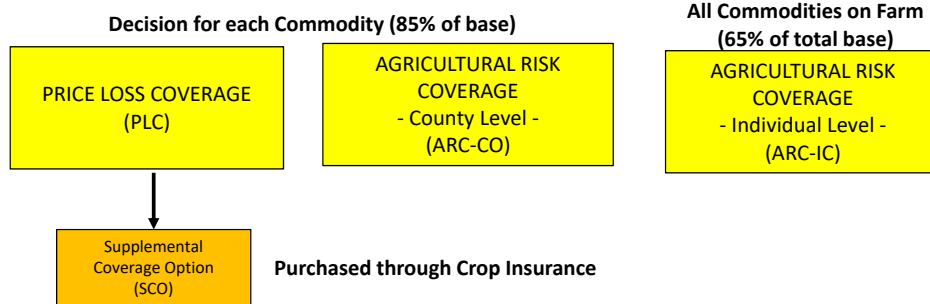


<https://www.agmanager.info/ag-policy/20222023-arc-county-payment-projections-0>



## Decisions to be made...

### Elect a Program

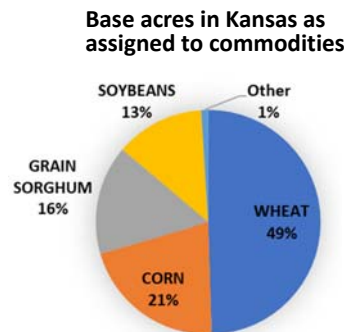
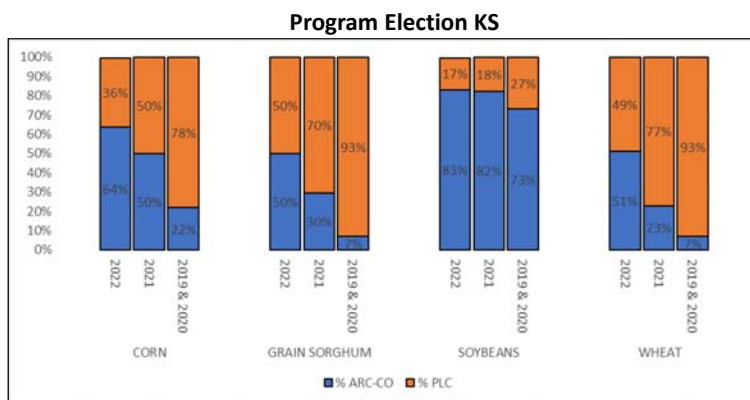


## Brief Review of ARC-CO and PLC Design

- ARC-CO – Low **revenue** program
  - Triggers when revenue is below 86% of county benchmark: set by last 5 years (with 1 lag year) of national Marketing Year Average prices and county yields
  - Payments determined on county-by-county basis, subject to a 10% payment cap
- PLC – Low **price** program
  - Triggers when national Marketing Year Average price below the reference price for the crop
  - Payments determined by a national price, and paid on farm base acres and program yields
  - Subject to a much higher cap



## What decisions have we made in the past?



<https://www.agmanager.info/ag-policy/kansas-arplc-enrollment-maps>



# Price Projections-Wheat

As of Jan. 31st, 2023

	(Final)	(Estimated)	(Projected)
Wheat	2021/2022	2022/2023	2023/2024
K-State Monthly Estimate	\$7.63	\$8.92	\$9.13
USDA WASDE Monthly Estimate	\$7.63	\$9.10	-----
FAPRI-MU (Baseline)	\$7.63	\$9.05	\$7.11
USDA ERS	\$7.63	\$8.67	-----

PLC Reference Price for Wheat is \$5.50, no payments at these levels

<http://www.agmanager.info/crop-insurance/risk-management-strategies/projections-and-sources-mya-prices-arc-and-plc-commodity>



## What program should I choose?

- PLC payments will be made if the MYA price drops below \$5.50
- **With an average yield (48 bushels), ARC-CO will not start paying until price falls to \$4.77**
- PLC payment will exceed ARC-CO payments at any yield level if price drops below \$4.80
- ARC-CO maximum payment will be \$26.64 per acre in 2023

<https://www.agmanager.info/ag-policy/2018-farm-bill/tradeoff-between-20232024-arc-and-plc>

State:	Kansas	County:	Hodgeman	Crop:	Wheat	Type:	Nonirrigated		
		ARC	PLC						
5 Yr. Olympic Avg. County Yield		48.44 Bushels	38.3 Bushels	Program Yield					
5 Yr. Olympic Avg. MYA Price		\$5.50	\$5.50	Eff. Reference Price					
Benchmark Revenue		\$266.42							
Guaranteed Revenue		\$229.12		PLC > ARC-CO max @		\$4.80			
		Yield							
		29	32	35	39	43	48	53	58
MYA Price	PLC Payment	ARC Payment							
\$9.33	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$8.93	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$8.55	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$8.18	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$7.83	\$0.00	\$2.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$7.49	\$0.00	\$11.91	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$7.17	\$0.00	\$21.19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$6.86	\$0.00	\$26.64	\$9.60	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$6.56	\$0.00	\$26.64	\$19.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$6.28	\$0.00	\$26.64	\$26.64	\$9.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$6.01	\$0.00	\$26.64	\$26.64	\$18.77	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$5.75	\$0.00	\$26.64	\$26.64	\$26.64	\$4.87	\$0.00	\$0.00	\$0.00	\$0.00
\$5.50	\$0.00	\$26.64	\$26.64	\$26.64	\$14.62	\$0.00	\$0.00	\$0.00	\$0.00
\$5.31	\$7.28	\$26.64	\$26.64	\$26.64	\$22.03	\$0.79	\$0.00	\$0.00	\$0.00
\$5.12	\$14.55	\$26.64	\$26.64	\$26.64	\$26.64	\$8.96	\$0.00	\$0.00	\$0.00
\$4.94	\$21.44	\$26.64	\$26.64	\$26.64	\$26.64	\$16.70	\$0.00	\$0.00	\$0.00
\$4.77	\$27.95	\$26.64	\$26.64	\$26.64	\$26.64	\$24.01	\$0.16	\$0.00	\$0.00
\$4.60	\$34.46	\$26.64	\$26.64	\$26.64	\$26.64	\$26.64	\$8.32	\$0.00	\$0.00

# Price Projections-Corn

As of Jan. 31st, 2023

	(Final)	(Estimated)	(Projected)
Corn	2021/2022	2022/2023	2023/2024
K-State Monthly Estimate	\$6.00	\$6.58	\$5.96
USDA WASDE Monthly Estimate	\$6.00	\$6.70	-----
FAPRI-MU (Baseline)	\$6.00	\$6.34	\$5.22
USDA ERS	\$6.00	\$6.39	-----

PLC Reference Price for Corn is \$3.70, no payments at these levels

<http://www.agmanager.info/crop-insurance/risk-management-strategies/projections-and-sources-mya-prices-arc-and-plc-commodity>



## What program should I choose?

- PLC payments will be made if the MYA price drops below \$3.70
- **With an average yield (96 bushels), ARC-CO will not start paying until price falls to \$3.33**
- PLC payment will exceed ARC-CO payments at any yield level if price drops below \$3.41
- ARC-CO maximum payment will be **\$38.34** per acre in 2023

<https://www.agmanager.info/ag-policy/2018-farm-bill/tradeoff-between-20232024-arc-and-plc>

State:	Kansas	County:	Thomas	Crop:	Corn	Type:	Nonirrigated			
5 Yr. Olympic Avg. County Yield	96.32	Bushels	Program Yield	133.9	Bushels					
5 Yr. Olympic Avg. MYA Price	\$3.98		Eff. Reference Price	\$3.70						
Benchmark Revenue	\$383.35									
Guaranteed Revenue	\$329.68									
			PLC > ARC-CO max @	\$3.41						
			Yield							
			56	62	69	77	86	96	106	115
MYA Price	PLC Payment	ARC Payment								
\$6.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$6.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$5.76	\$0.00	\$7.12	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$5.51	\$0.00	\$21.12	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$5.27	\$0.00	\$34.56	\$2.94	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$5.04	\$0.00	\$38.34	\$17.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.82	\$0.00	\$38.34	\$30.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.61	\$0.00	\$38.34	\$38.34	\$11.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.41	\$0.00	\$38.34	\$38.34	\$25.39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.22	\$0.00	\$38.34	\$38.34	\$38.34	\$4.74	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.04	\$0.00	\$38.34	\$38.34	\$38.34	\$18.60	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$3.87	\$0.00	\$38.34	\$38.34	\$38.34	\$31.69	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$3.70	\$0.00	\$38.34	\$38.34	\$38.34	\$38.34	\$11.48	\$0.00	\$0.00	\$0.00	\$0.00
\$3.57	\$17.40	\$38.34	\$38.34	\$38.34	\$38.34	\$22.66	\$0.00	\$0.00	\$0.00	\$0.00
\$3.45	\$33.46	\$38.34	\$38.34	\$38.34	\$38.34	\$32.98	\$0.00	\$0.00	\$0.00	\$0.00
\$3.33	\$49.53	\$38.34	\$38.34	\$38.34	\$38.34	\$38.34	\$10.00	\$0.00	\$0.00	\$0.00
\$3.21	\$65.59	\$38.34	\$38.34	\$38.34	\$38.34	\$38.34	\$21.52	\$0.00	\$0.00	\$0.00
\$3.10	\$80.32	\$38.34	\$38.34	\$38.34	\$38.34	\$38.34	\$32.08	\$1.08	\$0.00	\$0.00

Research and Extension

# Price Projections-Grain Sorghum

As of Jan. 31st, 2023

	(Final)	(Estimated)	(Projected)
Grain Sorghum	2021/2022	2022/2023	2023/2024
K-State Monthly Estimate	\$5.94	\$6.93	\$6.24
USDA WASDE Monthly Estimate	\$5.94	\$6.85	-----
FAPRI-MU (Baseline)	\$5.94	\$6.40	\$5.28

PLC Reference Price for Grain Sorghum is \$3.95, no payments at these levels

<http://www.agmanager.info/crop-insurance/risk-management-strategies/projections-and-sources-mya-prices-arc-and-plc-commodity>



## What program should I choose?

- PLC payments will be made if the MYA price drops below \$3.95
- **With an average yield (108 bushels), ARC-CO will not start paying until price falls to \$3.68**
- PLC payment will exceed ARC-CO payments at any yield level if price drops below \$3.41
- ARC-CO maximum payment will be \$46.42 per acre in 2023

<https://www.agmanager.info/ag-policy/2018-farm-bill/tradeoff-between-20232024-arc-and-plc>

State:	Kansas		Crop:	Grain Sorghum		Type:	All				
County:	Clay		ARC			PLC					
5 Yr. Olympic Avg. County Yield			107.70	Bushels	Program Yield	85.2		Bushels			
5 Yr. Olympic Avg. MYA Price			\$4.31		Eff. Reference Price	\$3.95					
Benchmark Revenue			\$464.19		PLC > ARC-CO max @	\$3.41					
Guaranteed Revenue			\$399.20								
				Yield							
				63	70	78	87	97	108	119	130
MYA Price	PLC Payment	ARC Payment									
\$6.69	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$6.40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$6.12	\$0.00	\$13.64	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$5.86	\$0.00	\$30.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$5.61	\$0.00	\$45.77	\$6.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$5.37	\$0.00	\$46.42	\$23.30	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$5.14	\$0.00	\$46.42	\$39.40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.92	\$0.00	\$46.42	\$46.42	\$15.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.71	\$0.00	\$46.42	\$46.42	\$31.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.51	\$0.00	\$46.42	\$46.42	\$46.42	\$6.83	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.32	\$0.00	\$46.42	\$46.42	\$46.42	\$23.36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.13	\$0.00	\$46.42	\$46.42	\$46.42	\$39.89	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$3.95	\$0.00	\$46.42	\$46.42	\$46.42	\$46.42	\$16.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$3.81	\$11.92	\$46.42	\$46.42	\$46.42	\$46.42	\$29.63	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$3.68	\$23.00	\$46.42	\$46.42	\$46.42	\$46.42	\$42.24	\$1.76	\$0.00	\$0.00	\$0.00	\$0.00
\$3.55	\$34.07	\$46.42	\$46.42	\$46.42	\$46.42	\$46.42	\$15.80	\$0.00	\$0.00	\$0.00	\$0.00
\$3.43	\$44.29	\$46.42	\$46.42	\$46.42	\$46.42	\$46.42	\$28.76	\$0.00	\$0.00	\$0.00	\$0.00
\$3.31	\$54.51	\$46.42	\$46.42	\$46.42	\$46.42	\$46.42	\$41.72	\$5.31	\$0.00	\$0.00	\$0.00

# Price Projections-Soybeans

As of Jan. 31st, 2023

	(Final)	(Estimated)	(Projected)
Soybeans	2021/2022	2022/2023	2023/2024
K-State Monthly Estimate	\$13.30	\$14.20	\$13.34
USDA WASDE Monthly Estimate	\$13.30	\$14.20	-----
FAPRI-MU (Baseline)	\$13.30	\$14.22	\$12.36
USDA ERS	\$13.30	\$14.06	-----

PLC Reference Price for Soybeans is \$8.40, no payments at these levels

<http://www.agmanager.info/crop-insurance/risk-management-strategies/projections-and-sources-mya-prices-arc-and-plc-commodity>



## What program should I choose?

- PLC payments will be made if the MYA price drops below \$8.40
- **With an average yield (44 bushels), ARC-CO will not start paying until price falls to \$8.11**
- PLC payment will exceed ARC-CO payments at any yield level if price drops below \$7.06
- ARC-CO maximum payment will be \$42.14 per acre in 2023

<https://www.agmanager.info/ag-policy/2018-farm-bill/tradeoff-between-20232024-arc-and-plc>

State:	Kansas	County:	Franklin	Crop:	Soybeans	Type:	Nonirrigated		
		ARC		PLC					
5 Yr. Olympic Avg. County Yield	44.03	Bushels	Program Yield	31.5	Bushels				
5 Yr. Olympic Avg. MYA Price	\$9.57		Eff. Reference Price	\$8.40					
Benchmark Revenue	\$421.37		PLC > ARC-CO max @		\$7.06				
Guaranteed Revenue	\$362.38								
		Yield							
		26	29	32	36	40	44	48	53
MYA Price	PLC Payment	ARC Payment							
\$14.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$13.63	\$0.00	\$8.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$13.04	\$0.00	\$23.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$12.48	\$0.00	\$37.90	\$0.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$11.94	\$0.00	\$42.14	\$16.12	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$11.43	\$0.00	\$42.14	\$30.91	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$10.94	\$0.00	\$42.14	\$42.14	\$12.30	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$10.47	\$0.00	\$42.14	\$42.14	\$27.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$10.02	\$0.00	\$42.14	\$42.14	\$41.74	\$1.66	\$0.00	\$0.00	\$0.00	\$0.00
\$9.59	\$0.00	\$42.14	\$42.14	\$42.14	\$17.14	\$0.00	\$0.00	\$0.00	\$0.00
\$9.18	\$0.00	\$42.14	\$42.14	\$42.14	\$31.90	\$0.00	\$0.00	\$0.00	\$0.00
\$8.78	\$0.00	\$42.14	\$42.14	\$42.14	\$42.14	\$11.18	\$0.00	\$0.00	\$0.00
\$8.40	\$0.00	\$42.14	\$42.14	\$42.14	\$42.14	\$26.38	\$0.00	\$0.00	\$0.00
\$8.11	\$9.12	\$42.14	\$42.14	\$42.14	\$42.14	\$37.98	\$5.54	\$0.00	\$0.00
\$7.83	\$17.93	\$42.14	\$42.14	\$42.14	\$42.14	\$42.14	\$17.86	\$0.00	\$0.00
\$7.56	\$26.43	\$42.14	\$42.14	\$42.14	\$42.14	\$42.14	\$29.74	\$0.00	\$0.00
\$7.30	\$34.61	\$42.14	\$42.14	\$42.14	\$42.14	\$42.14	\$41.18	\$11.98	\$0.00
\$7.04	\$42.79	\$42.14	\$42.14	\$42.14	\$42.14	\$42.14	\$42.14	\$24.46	\$0.00



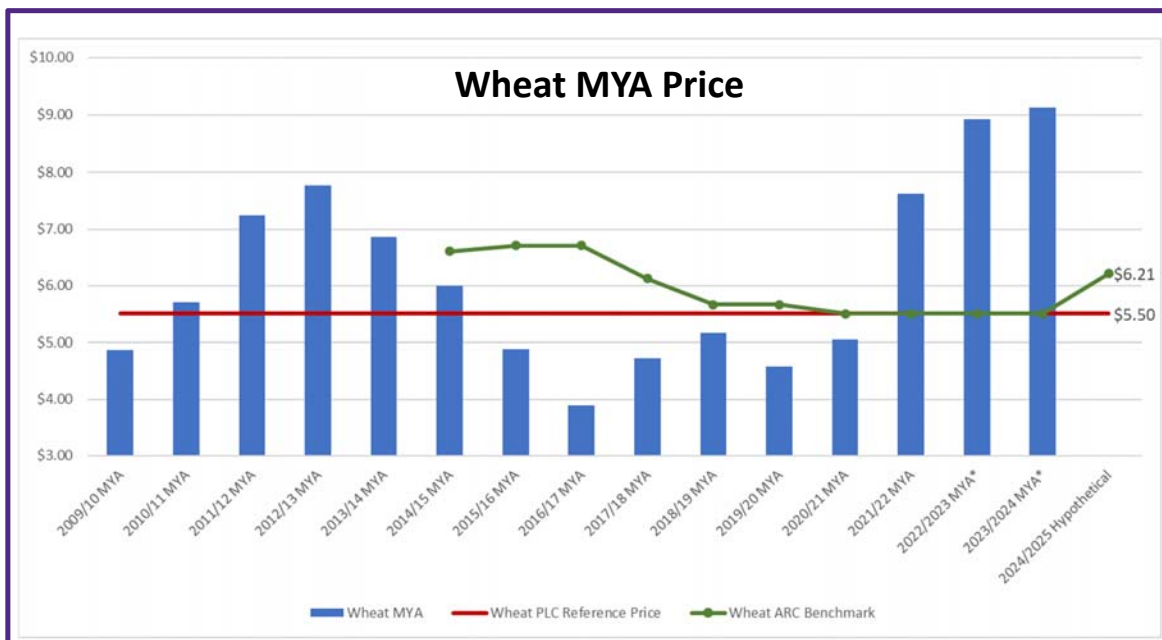
# When will the price guarantee's increase?

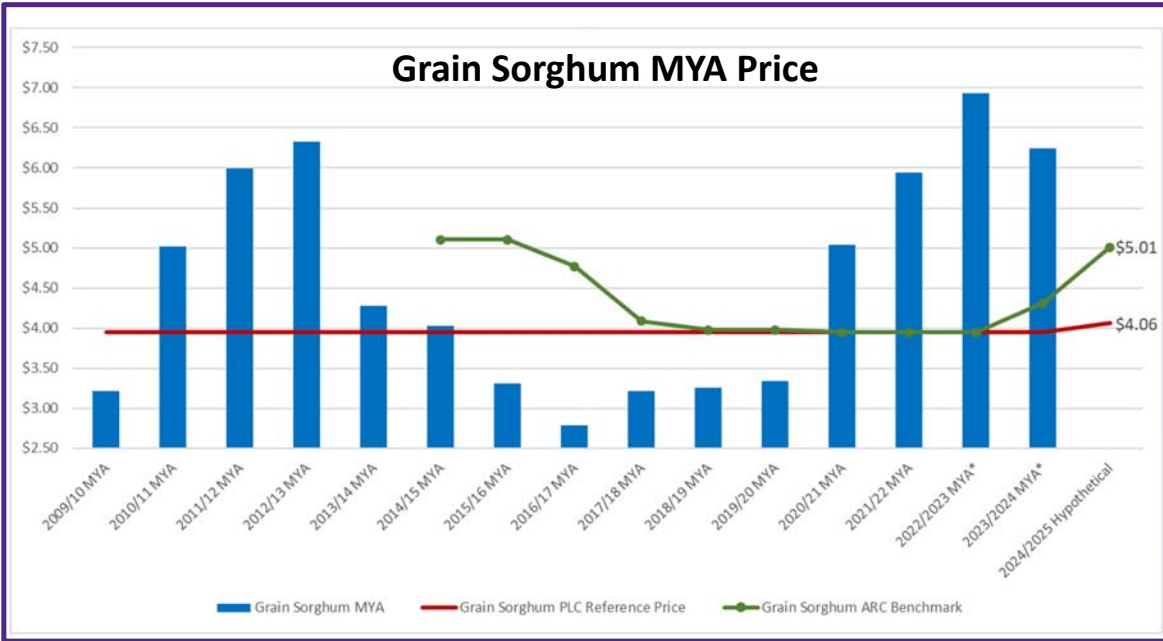
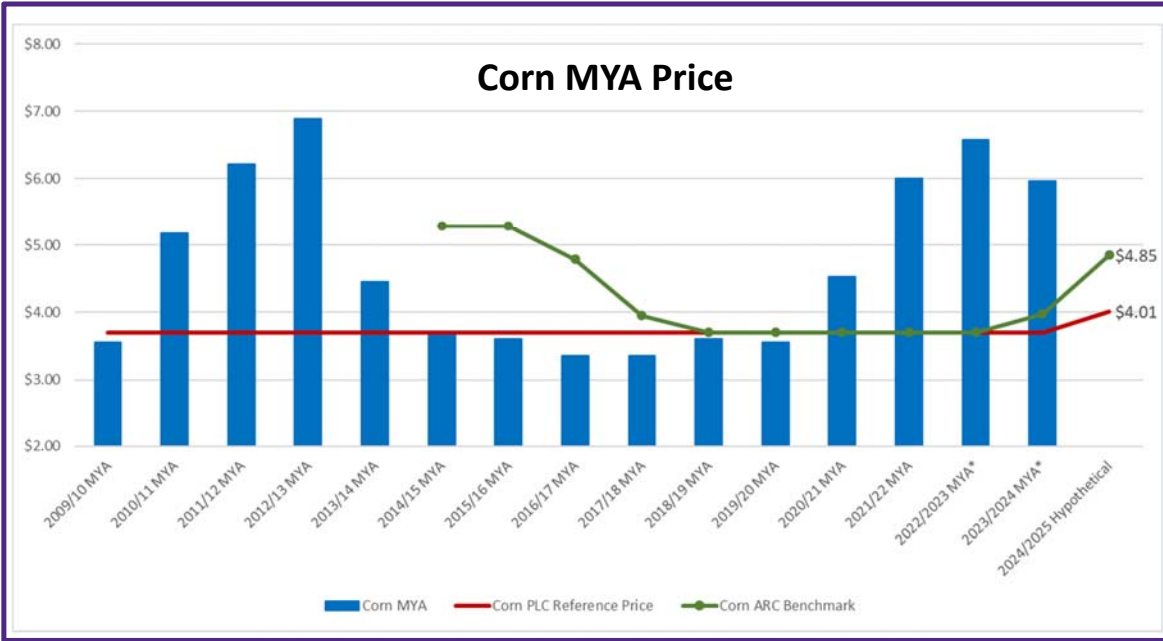
- ARC-CO (5-year Olympic Average)

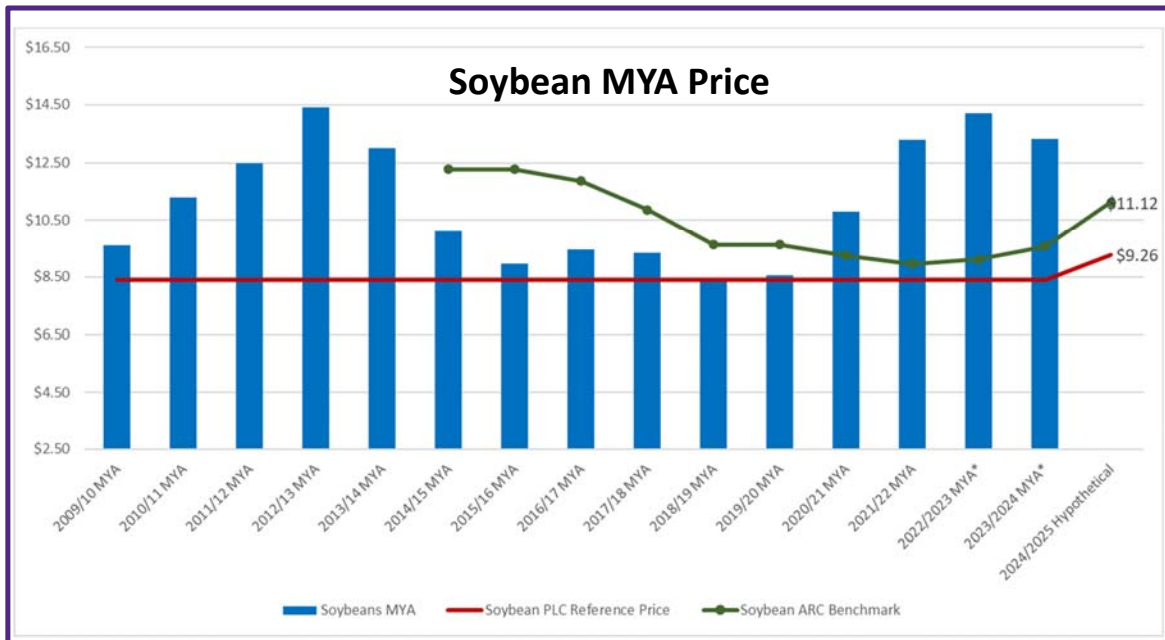
	Final 2017/18 MYA or ERP	Final 2018/19 MYA or ERP	Final 2019/20 MYA or ERP	Final 2020/21 MYA or ERP	Final 2021/22 MYA or ERP	2023 ARC-CO Benchmark Price
Wheat	<del>\$5.50</del>	\$5.50	\$5.50	\$5.50	<del>\$7.63</del>	\$5.50
Corn	<del>\$3.70</del>	\$3.70	\$3.70	\$4.53	<del>\$6.00</del>	\$3.98
Grain Sorghum	<del>\$3.95</del>	\$3.95	\$3.95	\$5.04	<del>\$5.94</del>	\$4.31
Soybeans	\$9.33	<del>\$8.48</del>	\$8.57	\$10.80	<del>\$13.30</del>	\$9.57

- PLC Effective Reference Price

Commodity	2017/18 MYA Price	2018/19 MYA Price	2019/20 MYA Price	2020/21 MYA Price	2021/22 MYA Price	85% of 5-year avg, dropping high and low prices	2023 Reference Price	115% of 2023 Reference Price
Wheat	\$4.72	\$5.16	<b>\$4.58</b>	\$5.05	<b>\$7.63</b>	\$4.23	\$5.50	\$6.33
Corn	<b>\$3.36</b>	\$3.61	\$3.56	\$4.53	<b>\$6.00</b>	\$3.32	\$3.70	\$4.26
Grain Sorghum	<b>\$3.22</b>	\$3.26	\$3.34	\$5.04	<b>\$5.94</b>	\$3.30	\$3.95	\$4.54
Soybeans	\$9.33	<b>\$8.48</b>	\$8.57	\$10.80	<b>\$13.30</b>	\$8.13	\$8.40	\$9.66







## Conclusions and Implications

- If we see higher commodity prices through 2023/2024 as we are now:
  - PLC will not pay
  - ARC will only pay with a catastrophic county yield loss
  - *Do you want to use SCO? – Cannot if you are enrolled in ARC*
  
- If ARC/PLC is continued as-is in the next Farm Bill (or an extension of the current Farm Bill), support prices will start to increase
  - ARC price guarantees will start increasing back to 2014 Farm Bill levels
  - PLC effective reference price will increase, but only modestly
    - Any significant increases in PLC price supports will have to come through new legislation

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### Crop Basis Maps

Basis Levels for Soybeans, Corn, Wheat, and Grain Sorghum

View Maps



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September 13, 2016 - Bannaly - RISK MANAGEMENT STUDIES

Cattle Feeding Returns  
September 12, 2016 - Tansar - CATTLE FEEDING RETURNS

Weekly Grain Market Outlook - Dan O'Brien  
September 9, 2016 - O'Brien - KSN RADIO INTERVIEWS

Interactive Crop Basis Tool  
September 8, 2016 - COULMARTING

Kansas Days Suitable for Fieldwork

#### Upcoming Events

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Ag Lenders Conferences  
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