Making the ARC/PLC Decision Under the 2018 Farm Bill

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Gary Schnitkey

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- Handout is available via GoToWebinar control panel
- Webinar will be archived and available on farmdoc
- Submit questions during the webinar and we will answer them at the end of the webinar

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Gardner Program Payment Calculator (ARC/PLC)

The Gardner Payment Calculator provides estimates of expected payemnts and likelihood of payments for ARC-CO and PLC. Payment estimates are provide for the program years from 2019 to 2023. Users can select the state, coutny, and crop combination that they wish to consider.

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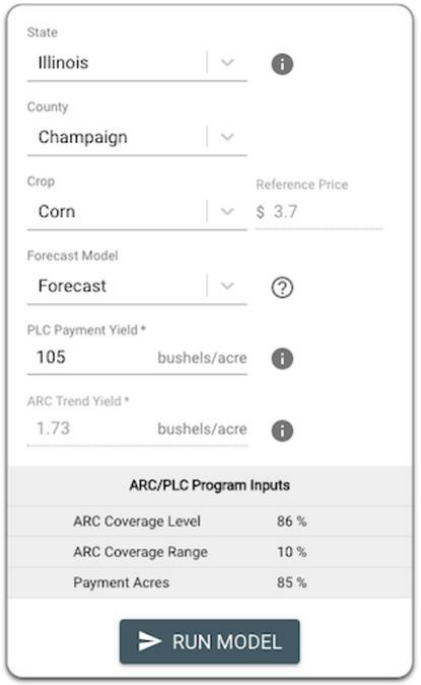

2018 Farm Bill What if Tool

This program calculates Agricultural Risk Coverage for County Coverage (ARC-CO), Price Loss Coverage (PLC) payments, and ARC at the Individual Level (ARC-IC). County yields and market year average (MYA) prices are brought in for a user-specified state-county-crop combination. Users then can change 2018 through 2020 county yields and prices to see ARC-CO and PLC payments under those yields and prices.

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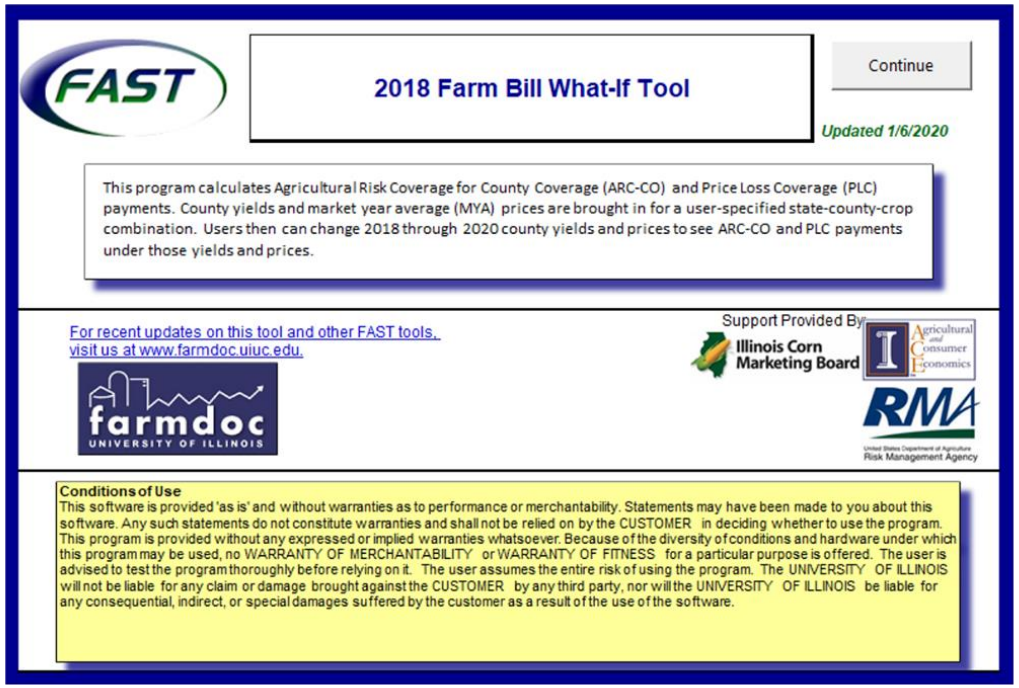

Outline

Price Loss Coverage (PLC) and Agricultural Risk Coverage at the County Level (ARC-CO) by crop:

Corn: Lean to PLC

Soybeans: Lean to ARC-CO

Wheat: Lean heavily to PLC

ARC-IC whole FSA farm

All prevent plant or low yields

Supplemental Coverage Option SCO

PLC Yield Updating

Deadlines

	Decision
March 15, 2020	1. Make the choice between ARC and PLC for 2019 & 2020 year 2. Enroll for 2019 program year
June 30, 2020	Enrolling for 2020 program year
September 30, 2020	Deadline for updating farm PLC yields for 2020 and future program years (Can do this now)
March 15, 2021	Enroll and change ARC/PLC for 2021 year
March 15, 2022	Enroll and change ARC/PLC for 2022 year
March 15, 2023	Enroll and change ARC/PLC for 2023 year

Spend most of our time today on ARC/PLC choice due March 15

ARC/PLC Choice

- On a FSA farm basis, allows a choice between:
  - Price Loss Coverage (PLC)
  - Agricultural Risk Coverage – County Level (ARC-CO)
  - ARC – Individual Coverage (ARC-IC) ← **All FSA farm, whole farm guarantee**

  On a crop basis on each FSA Farm
- Can vary decisions by FSA farm
- Choice will initially be made for 2019 and 2020 **(March 15, 2020)**
- Make a yearly choice after that: 2021, 2022, 2023
- Base acres will not change, PLC and ARC-CO will pay on base acres

PLC

PLC makes payments of

$$.85 \times \left(\text{effective reference price} - \text{higher of MYA price or loan rate} \right) \times \text{PLC yield}$$

(National loan rate: Corn: $2.20, SB: $6.20, Wheat: $3.38)

MYA (market year average) price

- This is a national, cash price
- Sept to August for corn and soybeans
- June to May for wheat

Eligible for Supplemental Coverage Option (SCO) insurance

Effective Reference Price

Higher of

- 85% of 5-year Olympic moving average
- Reference price

Reference Prices	
Corn	$3.70
Soybeans	$8.40
Wheat	$5.50

Addition of 85% of 5-year Olympic average not likely come into play

5-year Olympic average must be **above**

- $4.35 for corn
- $9.88 for soybeans
- $6.47 for wheat

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Following slides show 2019 PLC for corn

- Slides show payment for corn
- Estimated 2019 MYA prices come from WASDE, Jan 2019. We will have more updated prices in February
- Slides are from 2018 Farm Bill tool, can be downloaded from farmdoc website (see FAST section – 2018 Farm Bill What-If Tool)

Corn

Table 1. Calculation of PLC Payments

$3.85 is USDA Jan forecast of 2019 MYA price

History suggests a 13% chance that the 2019 MYA will be below $3.70

2019 Payment		2020 Payment	
Year	MYA Price $/Bu	Year	MYA Price $/Bu
2013	4.46	2014	3.70
2014	3.70	2015	3.61
2015	3.61	2016	3.36
2016	3.36	2017	3.36
2017	3.36	2018	3.61
85% of Olympic average[1]	3.02	85% of Olympic average[1]	3.00
Statutory reference price	3.70	Statutory reference price	3.70
Effective reference price[2]	3.70	Effective reference price[2]	3.70
2019 MYA price	3.85	2020 MYA price	3.85
Loan rate	2.20	Loan rate	2.20
Payment rate[3]	0.00	Payment rate[3]	0.00
2019 payment per base acre[4]	**$0**	**2020 payment per base acre[4]**	**$0**

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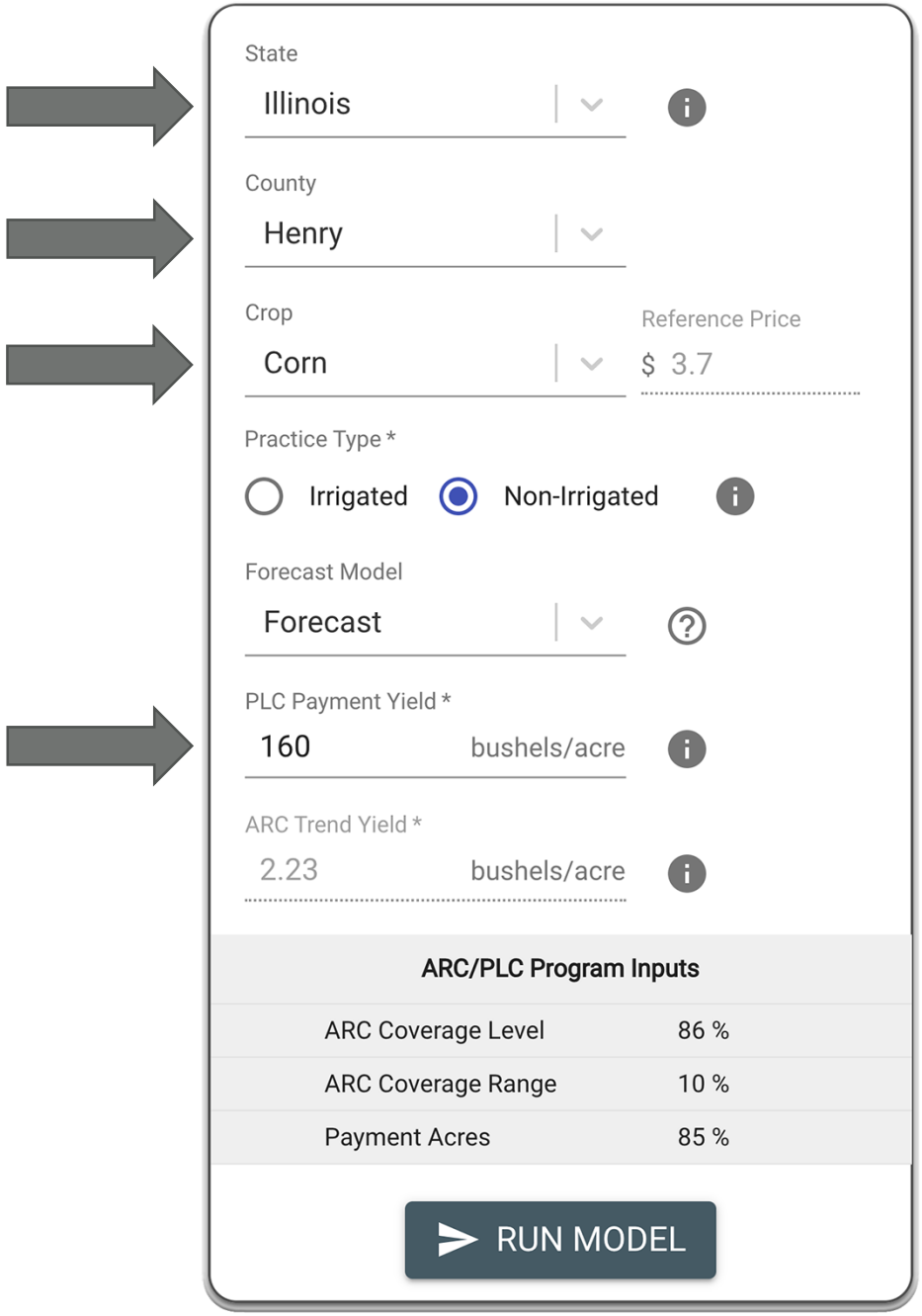
Demonstrate

ARC/PLC Tool



fd-tools.ncsa.illinois.edu

State
Illinois

County
Henry

Crop
Corn

Reference Price
$ 3.7

Practice Type *
Irrigated Non-Irrigated

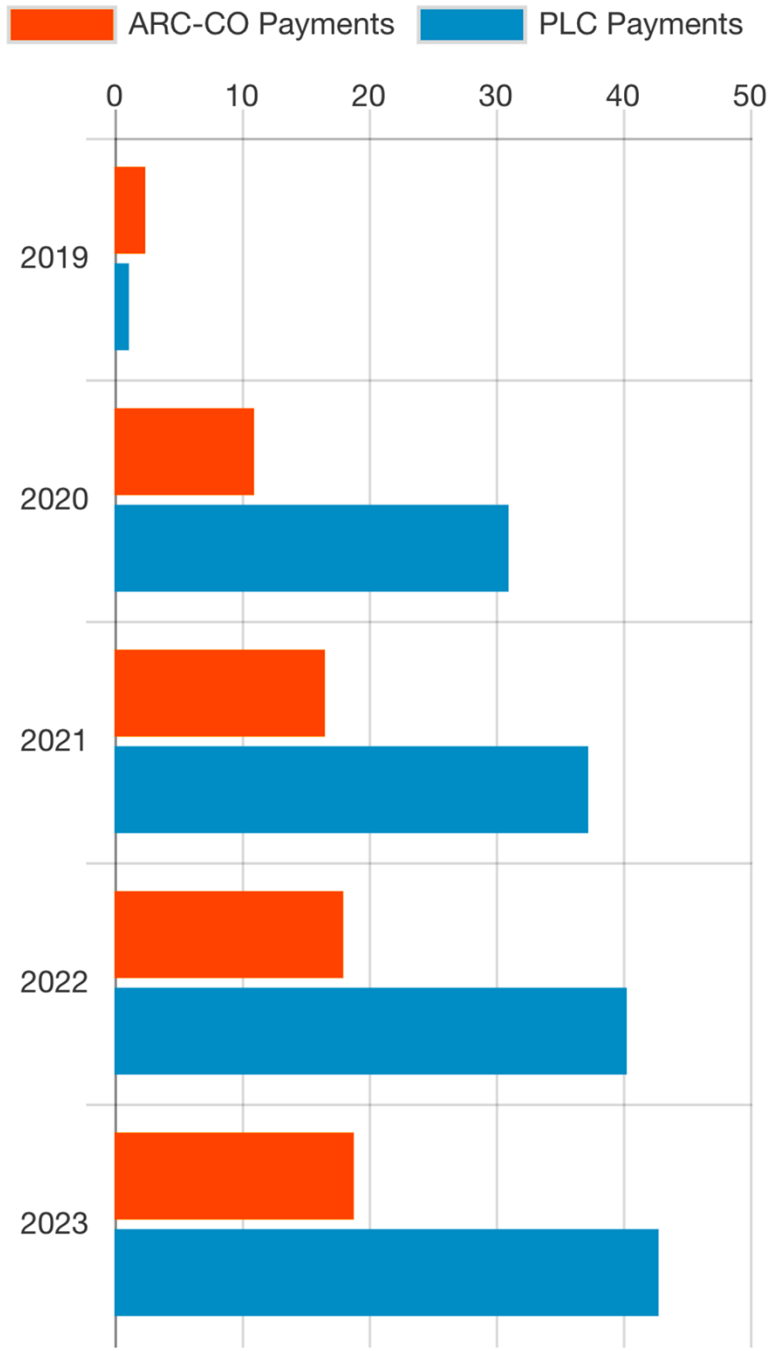
Forecast Model
Forecast

PLC Payment Yield *
160 bushels/acre

ARC Trend Yield *
2.23 bushels/acre

ARC/PLC Program Inputs	
ARC Coverage Level	86 %
ARC Coverage Range	10 %
Payment Acres	85 %

RUN MODEL



Expected Payment ($)	Likelihood of Payment (avg)	Payment Distributions	MYA Price ($)	Expected Yield (bushel/acre)
$2.42 $1.13	7% 13%		$3.85	208.8
$10.98 $31.01	27% 53%		$3.71	211.0
$16.56 $37.28	36% 56%		$3.65	213.2
$18.00 $40.31	35% 58%		$3.62	217.8
$18.83 $42.82	37% 60%		$3.60	217.7

State
Illinois

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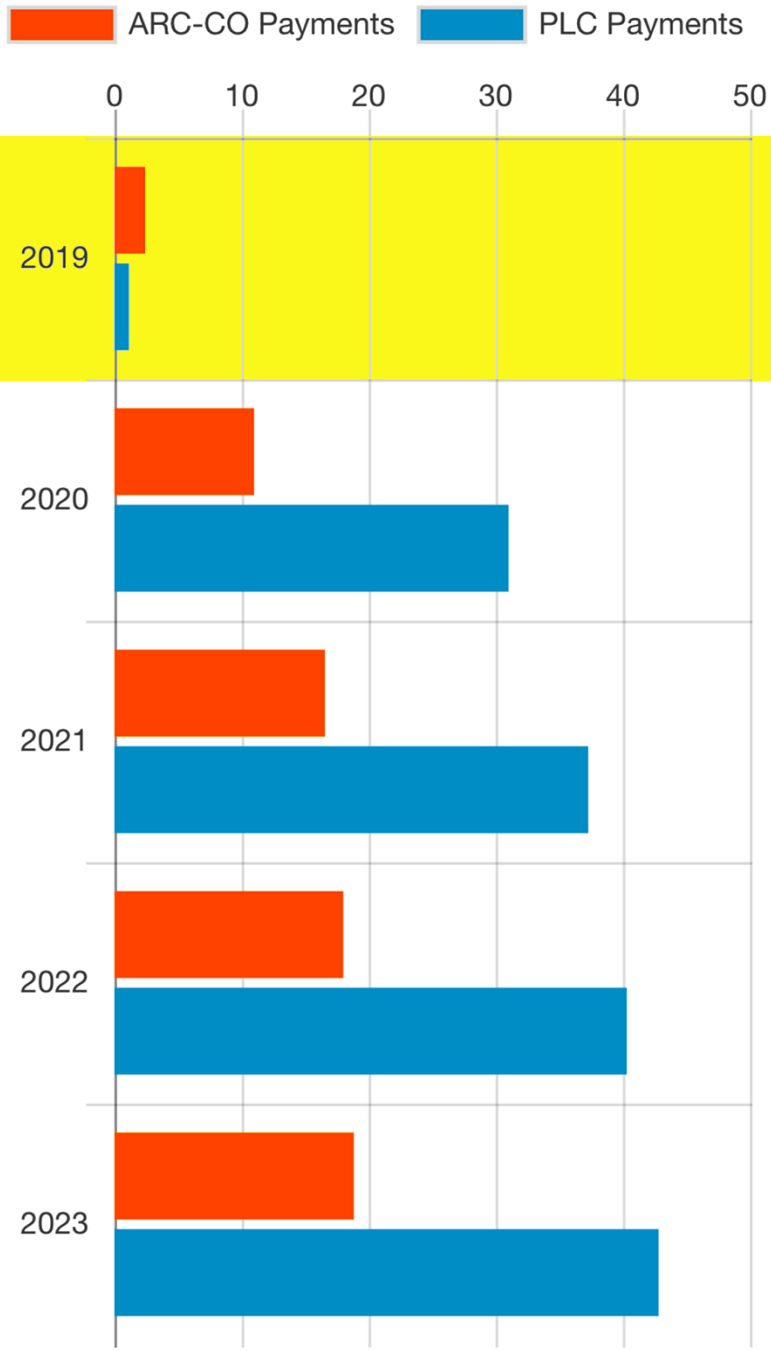

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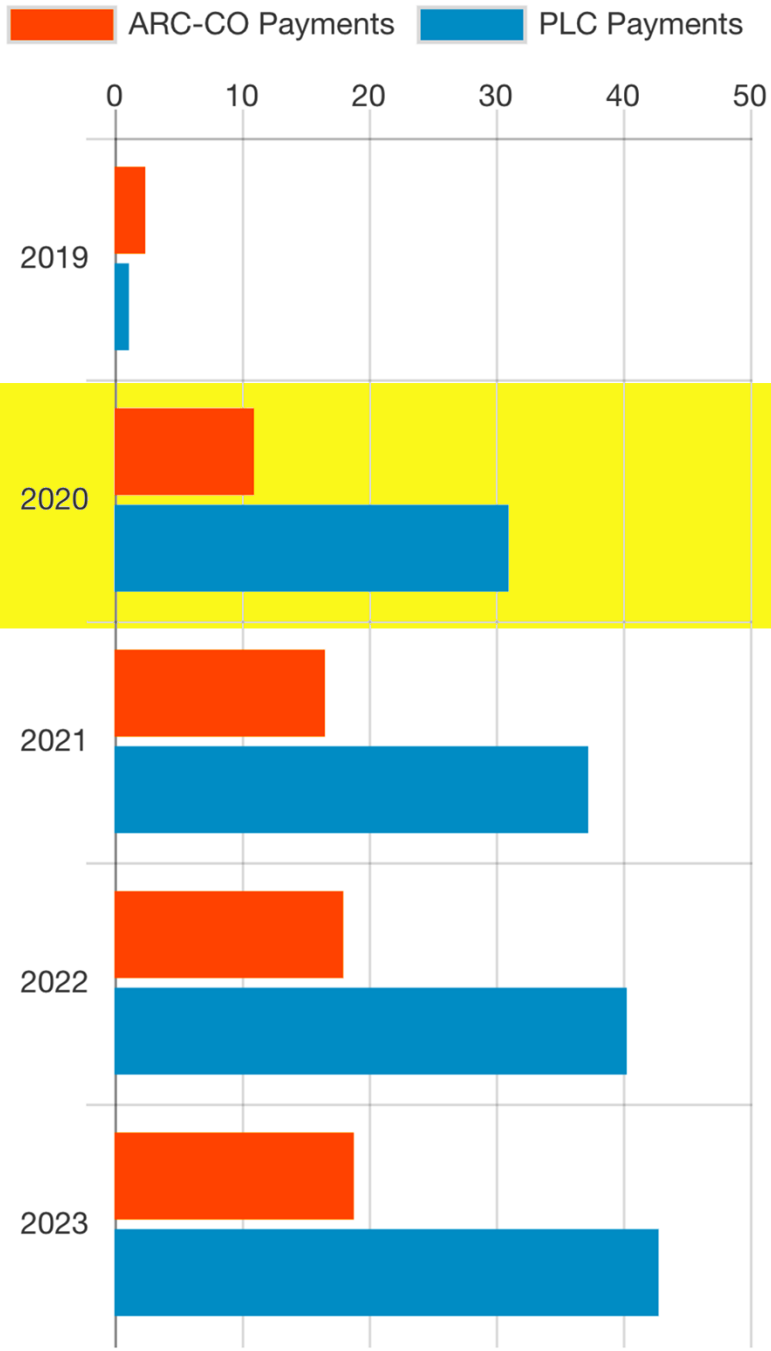

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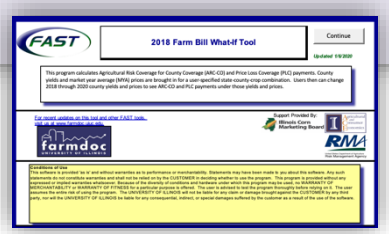
ARC-CO Payments

- ARC payments occur when county revenue is below .86 x benchmark revenue (benchmark yield x benchmark price)
- Not eligible for Supplemental Coverage Option (SCO) insurance
- Give example calculations below
- Both ARC-CO and PLC make payments on base acres in crop which will not change.

Corn in Henry County, Illinois

Table 2. Calculation of 2019 Benchmark Yield for ARC-CO

Year	County Yield[1]	80% of T-yield	Higher of Actual or 80% of T-yield[2]	Number of Years to Trend	Trend Yield Adjustment[4]	Trend Adjusted ARC-CO Yield[5]
	Bu/acre	Bu/acre	Bu/acre		Bu/acre	Bu/acre
2013	180.4	138.4	180.4	6	13.4	193.8
2014	194.9	138.4	194.9	5	11.2	206.1
2015	203.7	138.4	203.7	4	8.9	212.6
2016	220.1	138.4	220.1	3	6.7	226.8
2017	233.6	143.2	233.6	2	4.5	238.0
	Trend Adjustment[3]		2.23		**2019 Benchmark Yield[7]**	**215.2**



Corn in Henry County, Illinois

Table 4. Calculation of Benchmark Prices for ARC-CO

2019 Calculation

Year	MYA Price[1]	Effective Reference Price[2]	Used in Benchmark[3]
	$/Bu	$/Bu	$/Bu
2013	4.46	3.70	4.46
2014	3.70	3.70	3.70
2015	3.61	3.70	3.70
2016	3.36	3.70	3.70
2017	3.36	3.70	3.70
	2019 Benchmark Price		**3.70**

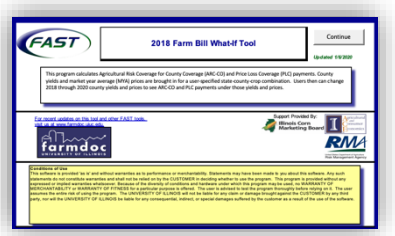
2020 Calculation

Year	MYA Price[1]	Effective Reference Price[2]	Used in Benchmark[3]
	$/Bu	$/Bu	$/Bu
2014	3.70	3.70	3.70
2015	3.61	3.70	3.70
2016	3.36	3.70	3.70
2017	3.36	3.70	3.70
2018	3.61	3.70	3.70
	2020 Benchmark Price		**3.70**

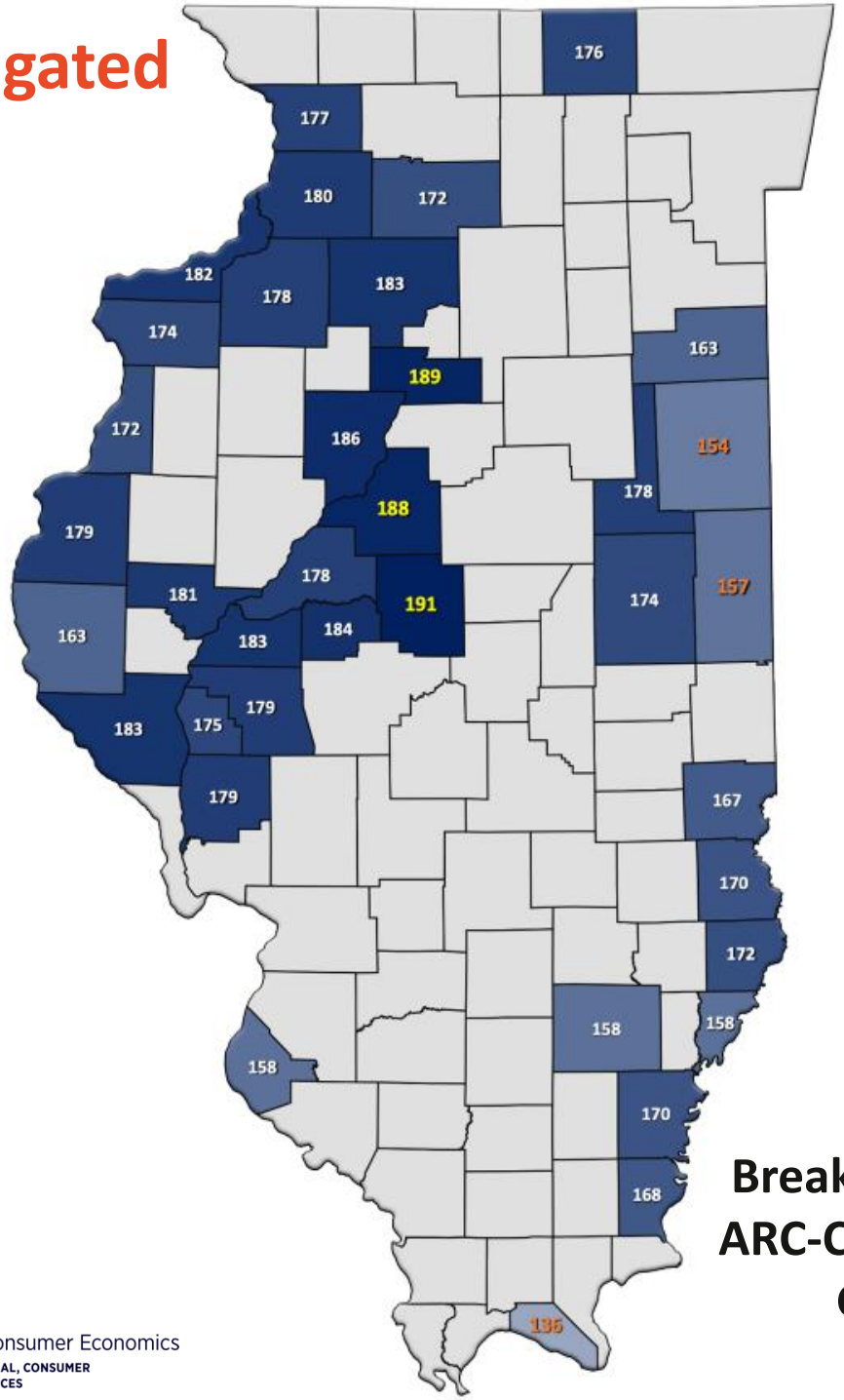
Corn in Henry County

Calculation of PLC and ARC-CO Payments

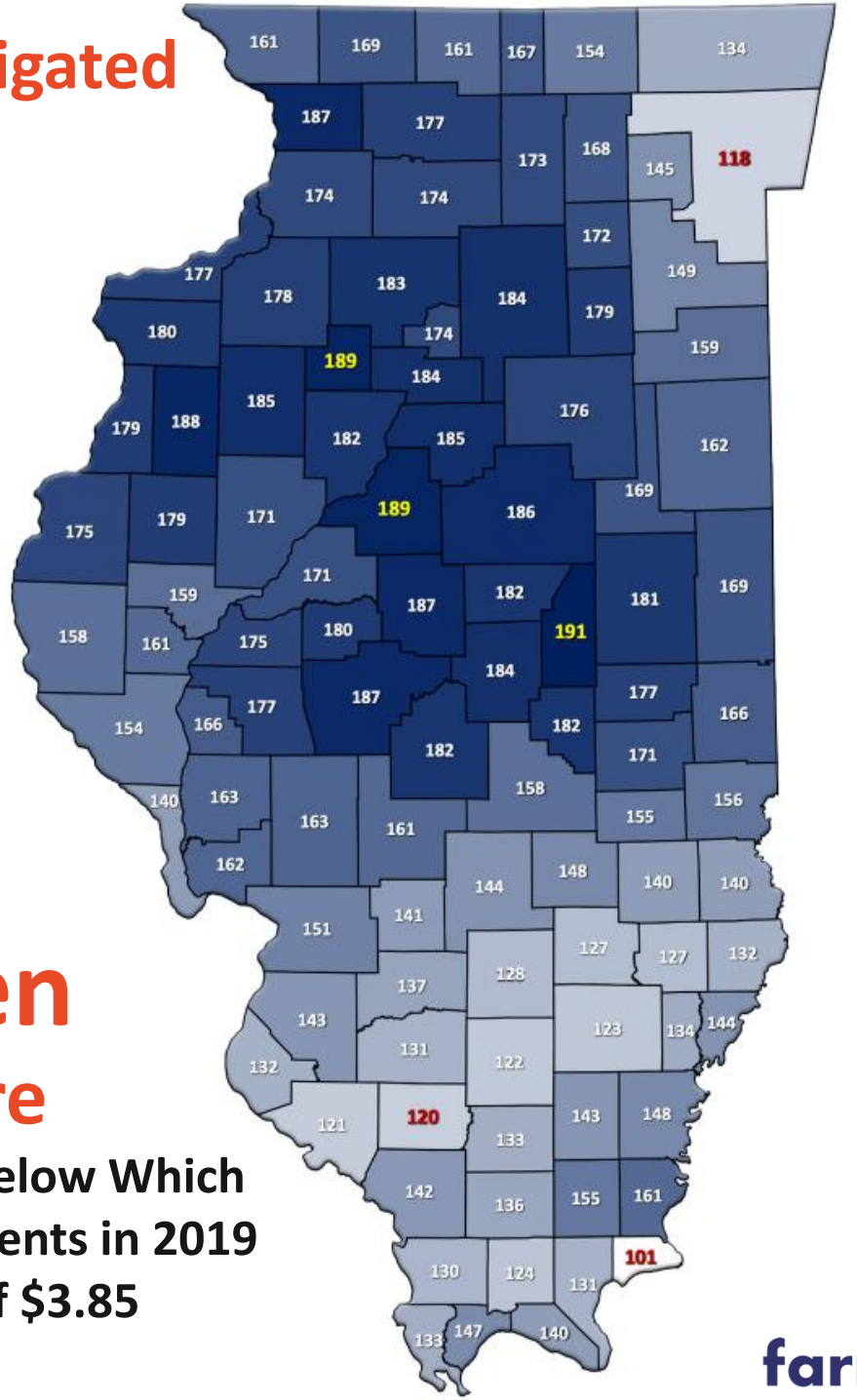
Year	County Yield[1]	MYA Price[2]	Payment[3,4] PLC	Payment[3,4] ARC-CO	ARC-CO Calculations: Benchmark Yield[5]	ARC-CO Calculations: Benchmark Price[6]	ARC-CO Calculations: Guarantee[7]	ARC-CO Calculations: County 3
	Bu	$/Bu	$/base acre		Bu	$/Bu	$ per base acre	
2018	224							
2019	177	3.85	**$0**	**$3**	215.2	3.70	684.67	681.45
2020	218	3.85	**$0**	**$0**	224.2	3.70	713.28	840.80



Irrigated



Non-Irrigated



191 Bu/Acre

100 Bu/Acre

Corn Breakeven

Bushels/acre

Break-Even Corn Yields Below Which ARC-CO Will Trigger Payments in 2019 Given a MYA Price of $3.85

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Corn: Choosing between PLC and ARC-CO

2019	2020
PLC not likely to make a payment	**PLC** 50-50 chance of being below $3.70 and trigger
ARC-CO **not** likely to make payments in most counties, know more with NASS county yield release on February 20th	**ARC-CO** would trigger with regionally specific low yields

Lean to PLC

Watch for 2019 yield release on Feb 20th and our webinar on Feb 24th (Register at **go.illinois.edu/fdWebinar**)

Soybeans

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Soybeans

Table 1. Calculation of PLC Payments

$9.00 is USDA Jan forecast of 2019 MYA price

History suggests a 4% chance that the 2019 MYA will be below $9.00

2019 Payment		2020 Payment	
Year	MYA Price	Year	MYA Price
	$/Bu		$/Bu
2013	13.00	2014	10.10
2014	10.10	2015	8.95
2015	8.95	2016	9.47
2016	9.47	2017	9.33
2017	9.33	2018	8.48
85% of Olympic average[1]	8.19	85% of Olympic average[1]	7.86
Statutory reference price	8.40	Statutory reference price	8.40
Effective reference price[2]	8.40	Effective reference price[2]	8.40
2019 MYA price	9.00	2020 MYA price	9.00
Loan rate	6.20	Loan rate	6.20
Payment rate[3]	0.00	Payment rate[3]	0.00
2019 payment per base acre[4]	**$0**	**2020 payment per base acre[4]**	**$0**

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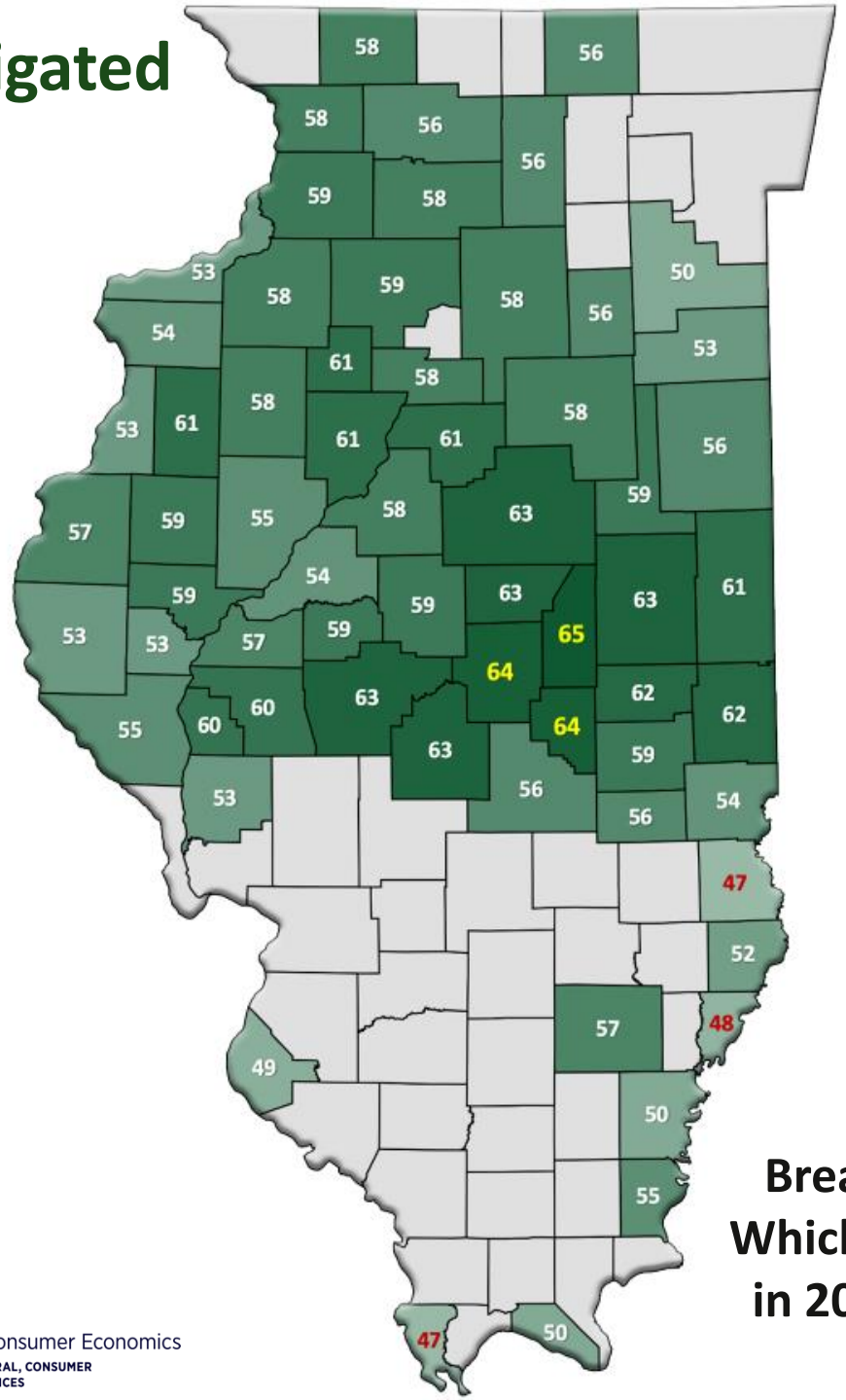
Soybeans in Henry County, Illinois

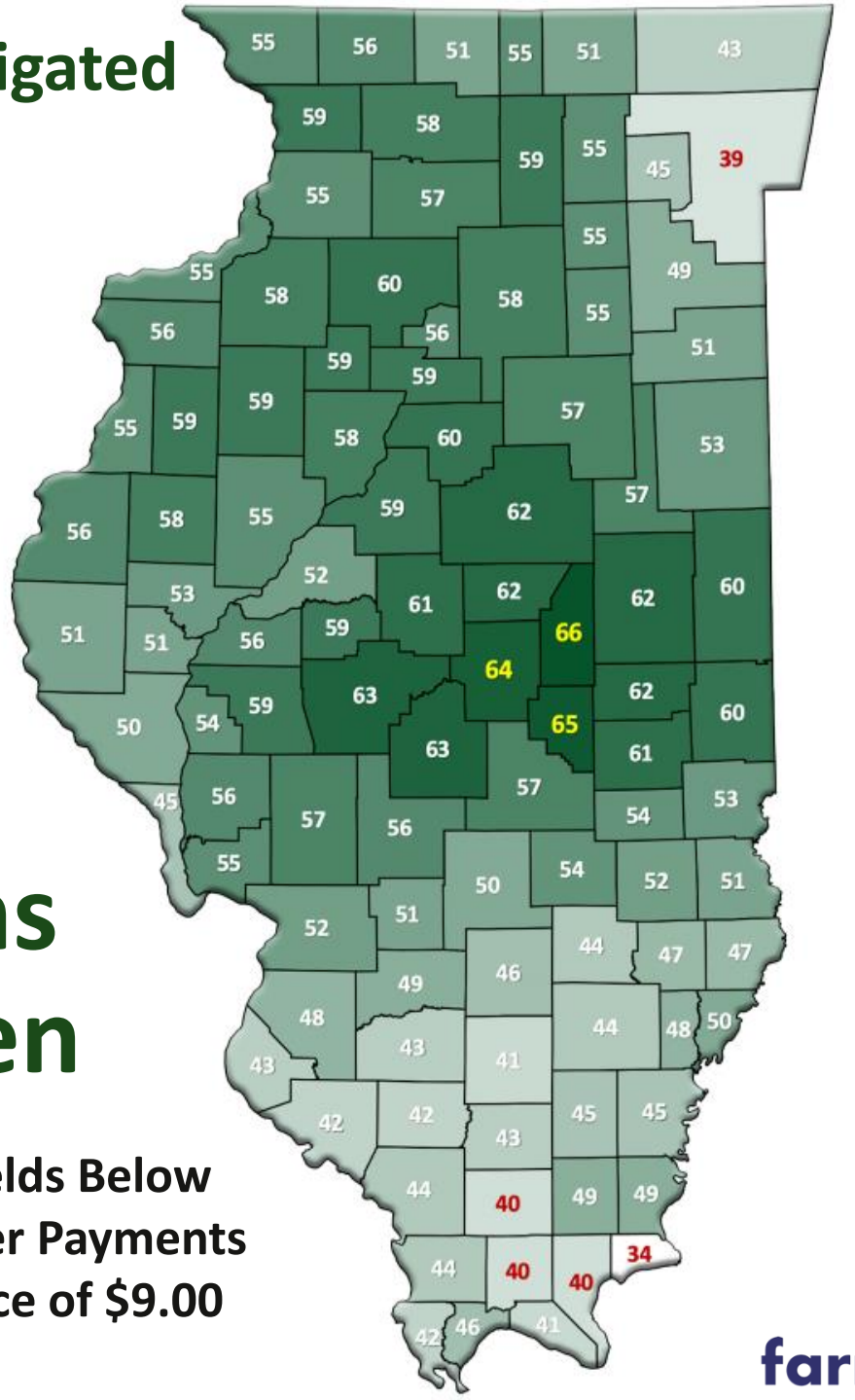
Calculation of PLC and ARC-CO Payments

Year	County Yield[1]	MYA Price[2]	Payment[3,4] PLC	Payment[3,4] ARC-CO	ARC-CO Calculations: Benchmark Yield[5]	ARC-CO Calculations: Benchmark Price[6]	ARC-CO Calculations: Guarantee[7]	ARC-CO Calculations: County Revenue[8]
			$/base acre		Bu.	$/Bu	$ per base acre	
2018	67							
2019	57	9.00	**$0**	**$4**	62.5	9.63	517.53	513.00
2020	63	9.00	**$0**	**$0**	64.2	9.25	510.63	565.83

Soybeans Breakeven

Break-Even Soybean Yields Below Which ARC-CO Will Trigger Payments in 2019 Given a MYA Price of $9.00





66 Bu/Acre

34 Bu/Acre

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State

Illinois

County

Henry

Crop

Soybean

Reference Price

$ 8.4

Practice Type *

Irrigated Non-Irrigated

Forecast Model

Forecast

PLC Payment Yield *

55 bushels/acre

ARC Trend Yield *

0.49 bushels/acre

ARC/PLC Program Inputs	
ARC Coverage Level	86 %
ARC Coverage Range	10 %
Payment Acres	85 %

RUN MODEL

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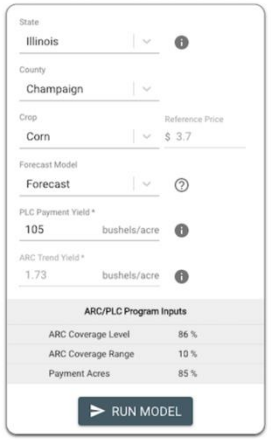

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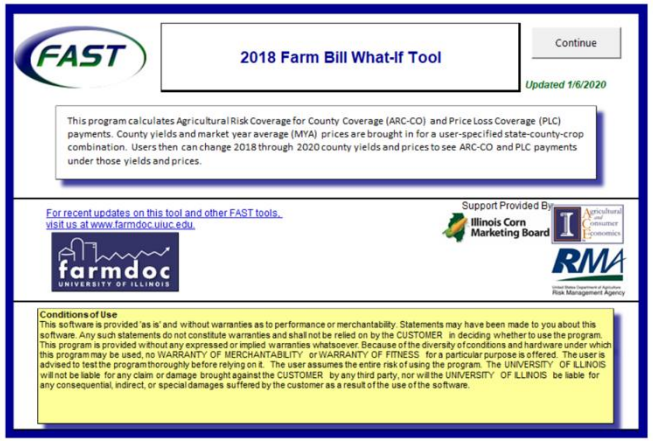

State
Illinois

County
Henry

Crop
Soybean

Reference Price
$ 8.4

Practice Type *
Irrigated | Non-Irrigated

Forecast Model
Forecast

PLC Payment Yield *
55 bushels/acre

ARC Trend Yield *
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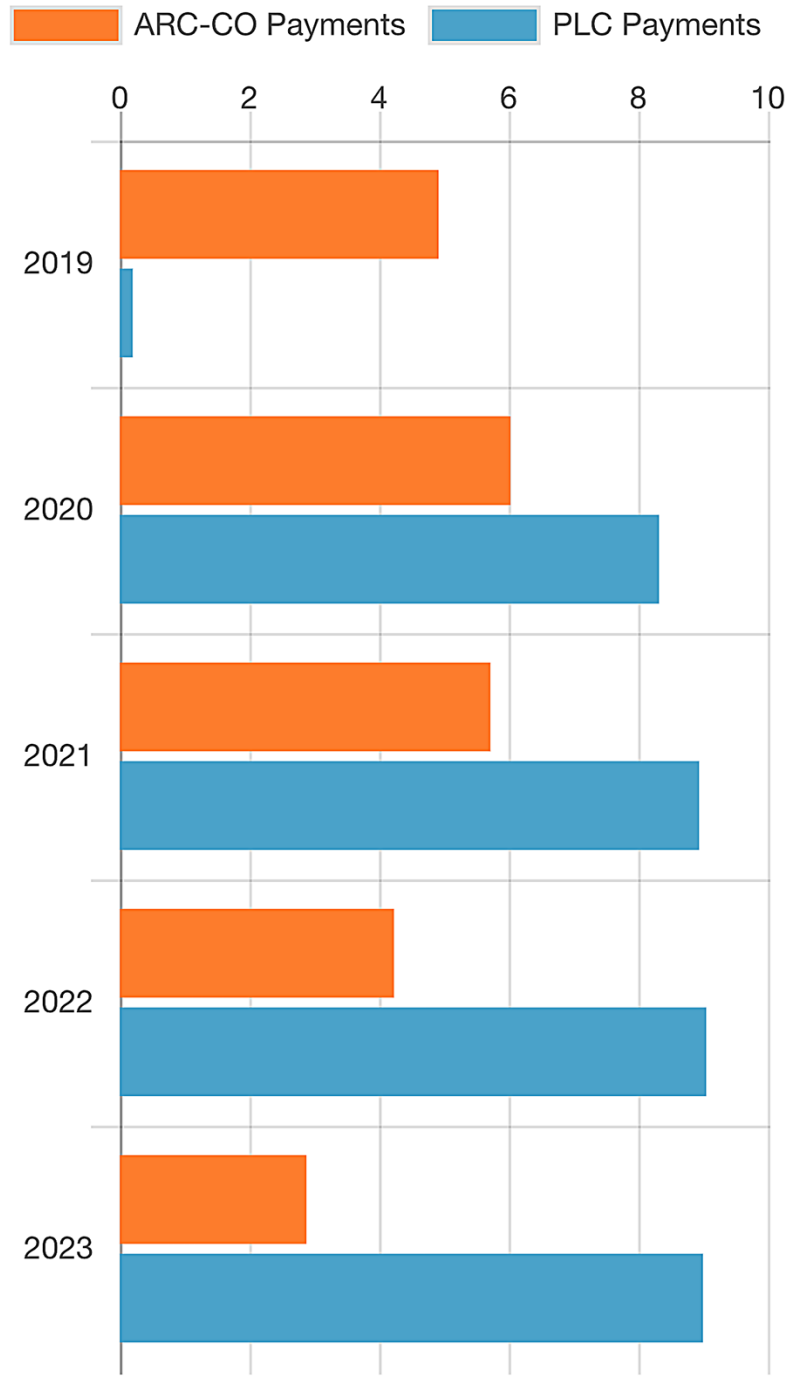

	Expected Payment ($)	Likelihood of Payment (avg)	Payment Distributions	MYA Price ($)	Expected Yield (bushel/acre)
2019	$4.92 $0.20	22% 4%		$9.00	60.3
2020	$6.03 $8.32	25% 29%		$9.00	60.8
2021	$5.72 $8.94	23% 31%		$9.00	61.3
2022	$4.23 $9.05	18% 31%		$9.00	62.2
2023	$2.88 $9.00	14% 29%		$9.00	62.2

State
Illinois

County
Henry

Crop
Soybean

Reference Price
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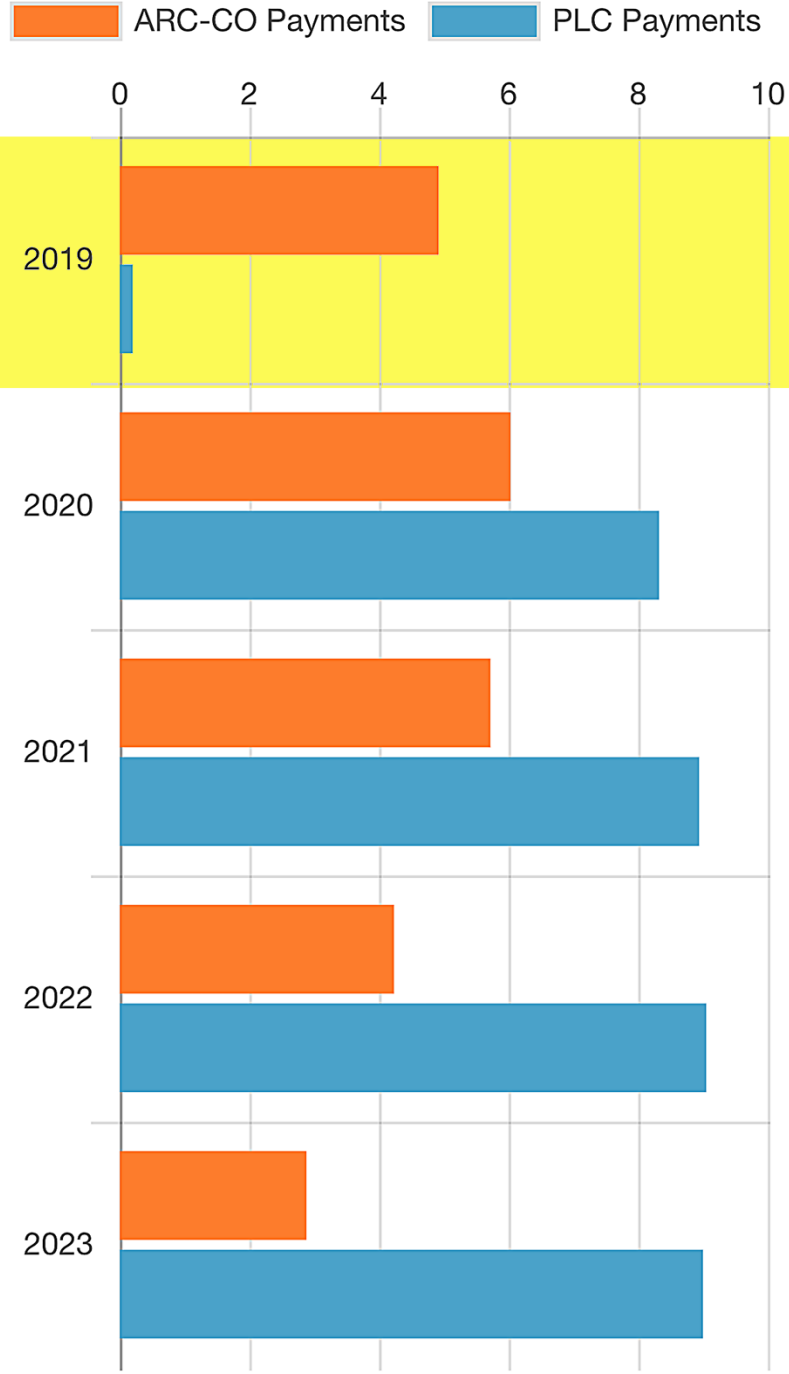

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2021	$5.72 $8.94	23% 31%		$9.00	61.3
2022	$4.23 $9.05	18% 31%		$9.00	62.2
2023	$2.88 $9.00	14% 29%		$9.00	62.2

Soybeans: Choosing between PLC and ARC-CO

2019

PLC not likely to make payments

ARC-CO could make payments, know more after the Feb 20 release of NASS yields

2020

PLC Having a 2020 MYA price below $8.40 would be a very bad year, not likely but could happen

ARC-CO Need a combination of local low yields and non-increasing prices to generate payments

Lean to ARC-CO

Watch for NASS county yield on Feb 20th and our webinar on Feb 24th (Register at **go.illinois.edu/fdWebinar**)

Wheat

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Wheat

Table 1. Calculation of PLC Payments

State	Illinois
County	Henry
Crop	Wheat
Practice	All
PLC Yield	50

$4.55 is USDA Jan forecast of 2019 MYA price

History suggests a 4% chance that the 2019 MYA will be below $9.00

2019 Payment		2020 Payment	
Year	MYA Price	Year	MYA Price
	$/Bu		$/Bu
2013	6.87	2014	5.99
2014	5.99	2015	4.89
2015	4.89	2016	3.89
2016	3.89	2017	4.72
2017	4.72	2018	5.16
85% of Olympic average[1]	4.42	85% of Olympic average[1]	4.18
Statutory reference price	5.50	Statutory reference price	5.50
Effective reference price[2]	5.50	Effective reference price[2]	5.50
2019 MYA price	4.55	2020 MYA price	4.55
Loan rate	3.38	Loan rate	3.38
Payment rate[3]	0.95	Payment rate[3]	0.95
2019 payment per base acre[4]	**$40**	**2020 payment per base acre[4]**	**$40**

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State

Illinois

County

Henry

Crop

Wheat

Reference Price

$ 5.5

Forecast Model

Forecast

PLC Payment Yield *

50 bushels/acre

ARC Trend Yield *

0.62 bushels/acre

ARC/PLC Program Inputs	
ARC Coverage Level	86 %
ARC Coverage Range	10 %
Payment Acres	85 %

RUN MODEL

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DECISION OUTREACH CENTRAL

2018 Farm Bill Toolbox

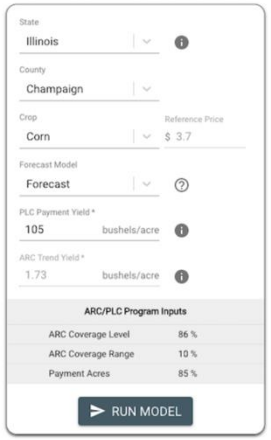
2018 Farm Bill Online and Spreadsheet Tools

Gardner Program Payment Calculator (ARC/PLC)

The Gardner Payment Calculator provides estimates of expected payemnts and likelihood of payments for ARC-CO and PLC. Payment estimates are provide for the program years from 2019 to 2023. Users can select the state, coutny, and crop combination that they wish to consider.

If you are having trouble registering please view the faq or watch the video below.

Go to Payment Calculator

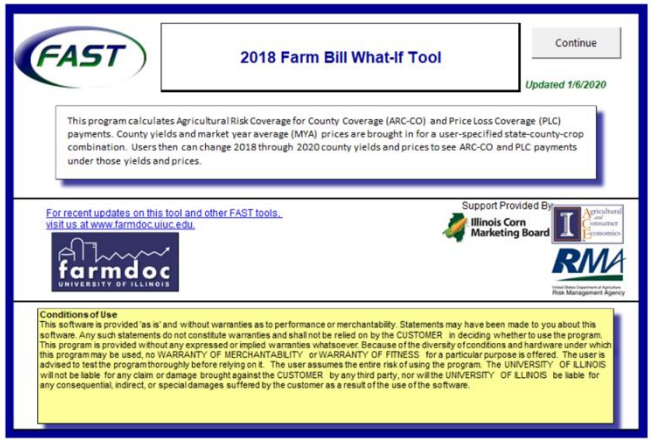


2018 Farm Bill What if Tool

This program calculates Agricultural Risk Coverage for County Coverage (ARC-CO), Price Loss Coverage (PLC) payments, and ARC at the Individual Level (ARC-IC). County yields and market year average (MYA) prices are brought in for a user-specified state-county-crop combination. Users then can change 2018 through 2020 county yields and prices to see ARC-CO and PLC payments under those yields and prices.

As an alternative to the executable tool you can download the spreadsheet here.

Download FAST Tool



State
Illinois

County
Henry

Crop
Wheat

Reference Price
$ 5.5

Forecast Model
Forecast

PLC Payment Yield *
50 bushels/acre

ARC Trend Yield *
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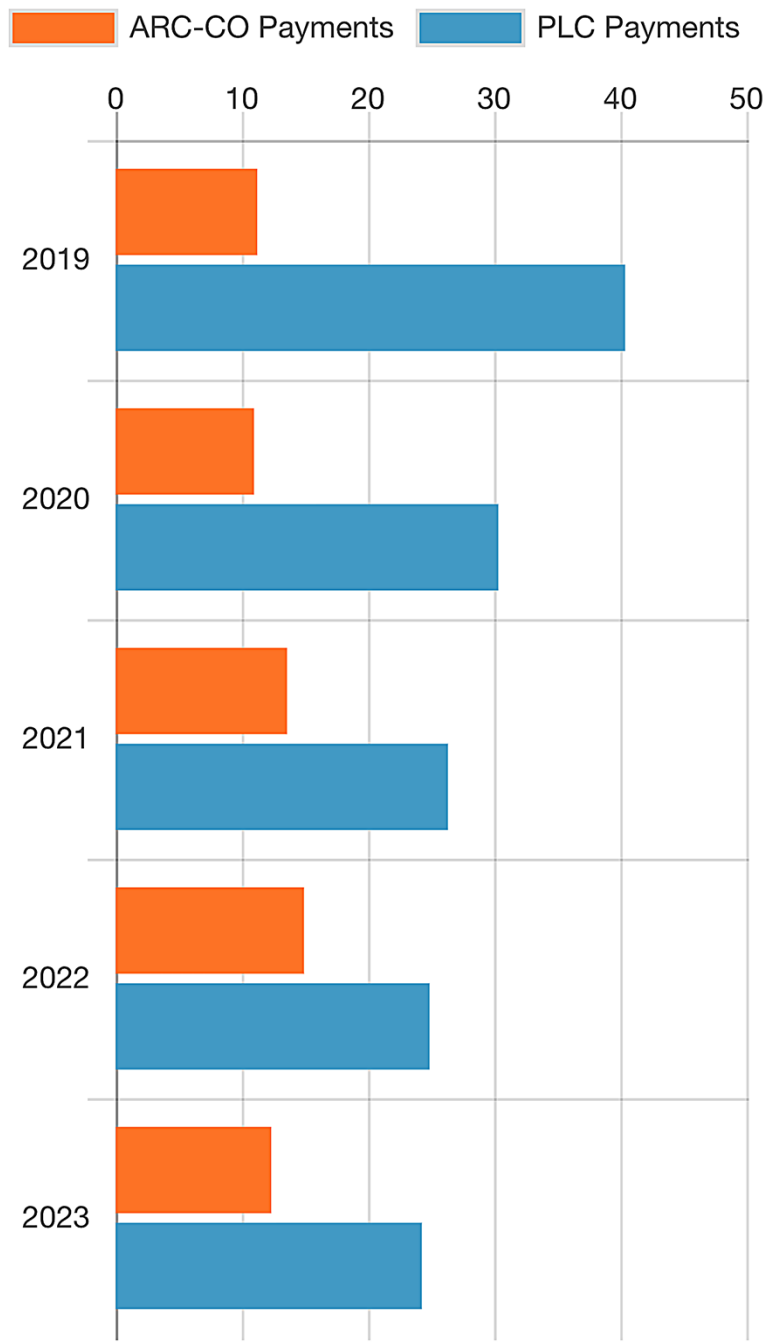
RUN MODEL



	Expected Payment ($)	Likelihood of Payment (avg)	Payment Distributions	MYA Price ($)	Expected Yield (bushel/acre)
2019	$11.23 $40.38	52% 100%		$4.55	70.3
2020	$10.96 $30.33	45% 82%		$4.87	70.9
2021	$13.58 $26.34	49% 77%		$5.00	71.5
2022	$14.93 $24.88	53% 74%		$5.05	72.1
2023	$12.34 $24.27	45% 73%		$5.08	72.7

State
Illinois

County
Henry

Crop
Wheat

Reference Price
$ 5.5

Forecast Model
Forecast

PLC Payment Yield *
50 bushels/acre

ARC Trend Yield *
0.62 bushels/acre

ARC/PLC Program Inputs	
ARC Coverage Level	86 %
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Payment Acres	85 %

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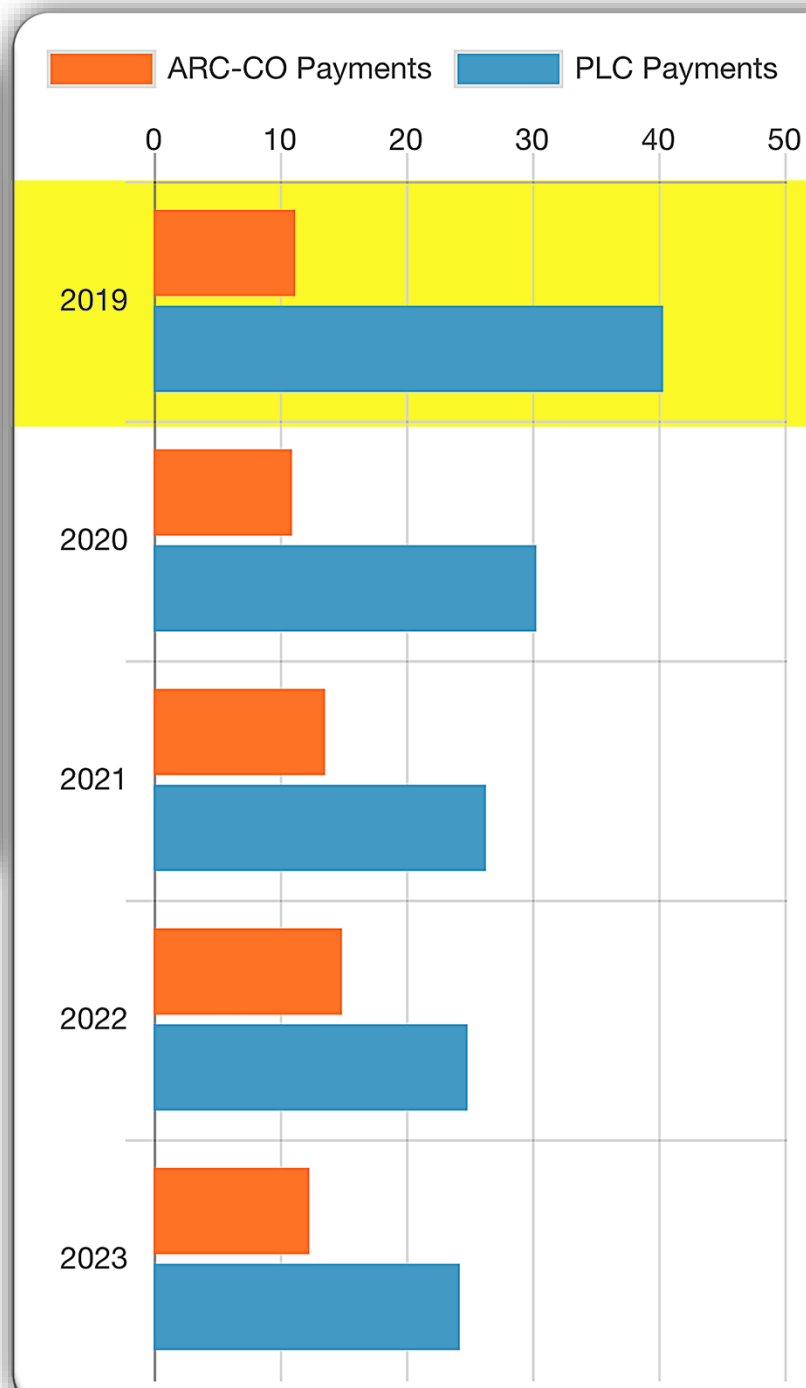

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2022	$14.93 $24.88	53% 74%		$5.05	72.1
2023	$12.34 $24.27	45% 73%		$5.08	72.7

Wheat in Henry County

Calculation of PLC and ARC-CO Payments

State	Illinois
County	Henry
Crop	Wheat
Practice	All
PLC Yield	50

Year	County Yield[1]	MYA Price[2]	Payment[3,4] PLC	Payment[3,4] ARC-CO	ARC-CO Calculations: Benchmark Yield[5]	Benchmark Price[6]	Guarantee[7]	County Revenue[8]
			$/base acre		Bu.	$/Bu	$ per base acre	
2018	61							
2019	60	4.55	**$40**	**$32**	67.1	5.66	326.62	273.00
2020	60	4.55	**$40**	**$31**	67.4	5.50	318.57	273.77

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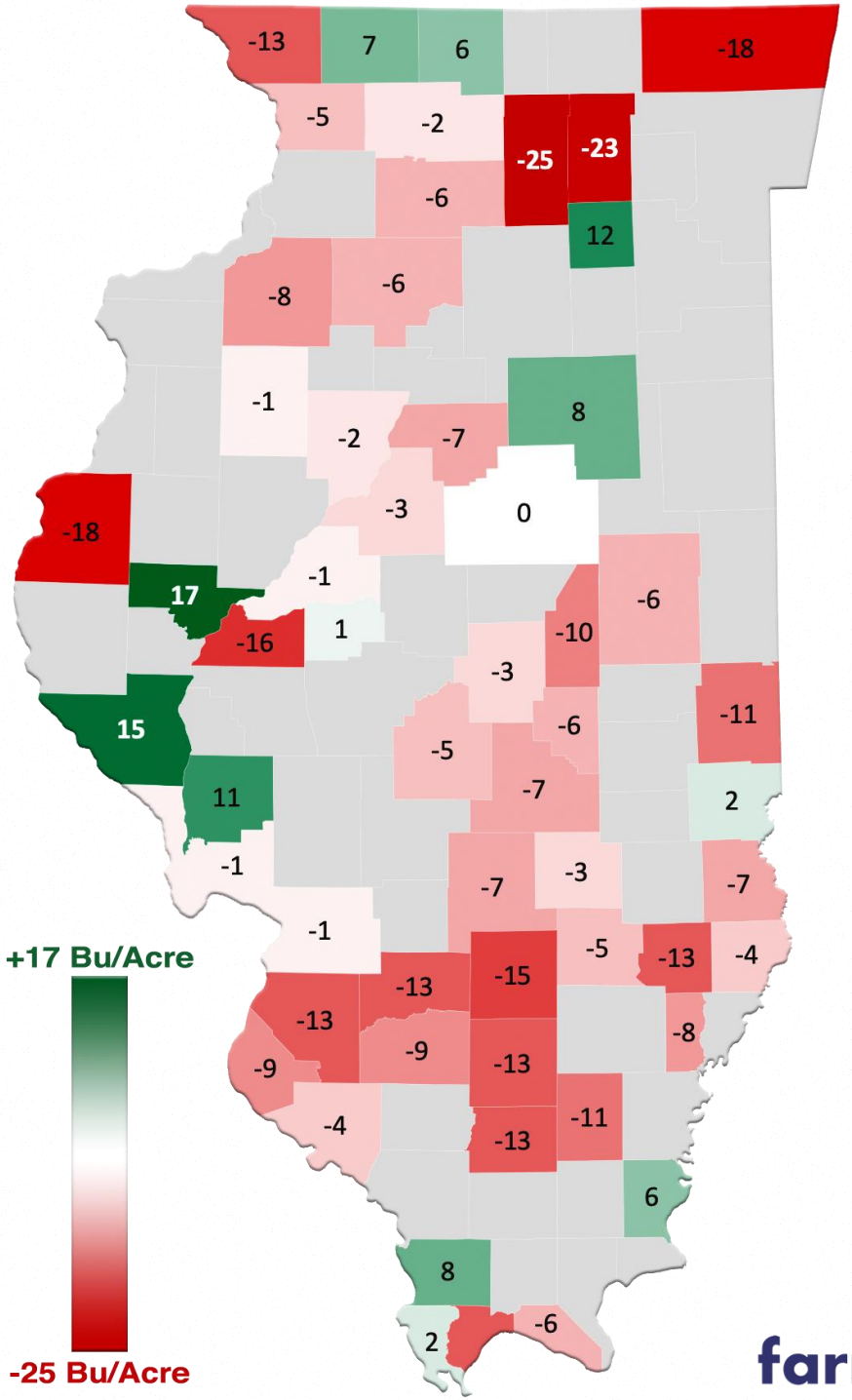
Wheat

	Break even	NASS Yield	Difference
Schuyler	**48**	**65**	**17**
Pike	**67**	**82**	**15**
Kendall	66	78	12
Greene	64	75	11
Union	61	69	8
Cass	70	54	-16
Hancock	65	47	-18
Lake	65	47	-18
Kane	**80**	**57**	**-23**
DeKalb	**82**	**57**	**-25**



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Wheat: Choosing between PLC and ARC-CO

2019	2020
PLC will make large payments, depend on PLC yield	**PLC** Has a very good chance of payments
ARC-CO will make payments in many counties, but likely **less than PLC** given "normal" PLC yields for FSA farms.	**ARC-CO** SO does ARC-CO but likely pay **less than PLC**

Lean to PLC

Watch for NASS county yield on Feb 20th and our webinar on Feb 24th (Register at **go.illinois.edu/fdWebinar**)

ARC-CO

FAST

2018 Farm Bill What-If Tool

Continue

Updated 1/6/2020

This program calculates Agricultural Risk Coverage for County Coverage (ARC-CO) and Price Loss Coverage (PLC) payments. County yields and market year average (MYA) prices are brought in for a user-specified state-county-crop combination. Users then can change 2018 through 2020 county yields and prices to see ARC-CO and PLC payments under those yields and prices.

For recent updates on this tool and other FAST tools, visit us at www.farmdoc.uiuc.edu.

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Support Provided By:

Illinois Corn Marketing Board

Agricultural and Consumer Economics

RMA United States Department of Agriculture Risk Management Agency

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farmdoc.illinois.edu/2018-farm-bill

2019 and 2020 ARC-CO PLC WHAT-IF COMPARISON

Input

State	Illinois
County	Henry
Crop	Wheat
Practice	All
PLC Yield	50

Use Defaults

Help

Print

Menu

FAST

View 2014 Farm Bill Payments

Calculation of PLC and ARC-CO Payments

Year	County Yield[1]	MYA Price[2]	Payment[3,4] PLC	Payment[3,4] ARC-CO	ARC-CO Calculations: Benchmark Yield[5]	Benchmark Price[6]	Guarantee[7]	County Revenue[8]
			$/base acre		Bu.	$/Bu	$ per base acre	
2018	61							
2019	60	4.55	$40	$32	67.1	5.66	326.62	273.00
2020	60	4.55	$40	$31	67.4	5.50	318.57	273.77

1 County yields impact ARC-CO payments. 2018 yields enter into 2020 ARC-CO benchmark calculations. The 2018 yield is an estimate.

2 Market year average (MYA) prices impact both PLC and ARC-CO payments.

3 PLC payments equal PLC yield x (effective reference price - higher of MYA price or loan rate) x .85. PLC payment calculations are shown in Table 1 below.

4 Equals .85 x minimum of (ARC guarantee - county revenue) or (10% of benchmark yield x benchmark price), when county revenue is less than ARC guarantee, zero otherwise. Guarantee and revenue calculations are shown in the green ARC-CO Calculations box.

5 Benchmark yield calculations are shown in Table 2 and 3 below.

6 Benchmark price calculations are shown in Table 4 below.

7 Guarantee equals .86 x benchmark yield x benchmark price.

8 County revenue equals county yield x MYA price.

For estimates of expected values of ARC-CO and PLC payments see the Gardner Program Payment Calculator at:
https://fd-tools.ncsa.illinois.edu

Support provided by: Gardner Agricultural Policy Program; USDA Office of the Chief Economist, United States Department of Agriculture

Table 1. Calculation of PLC Payments

2019 Payment: Year	MYA Price ($/Bu)	2020 Payment: Year	MYA Price ($/Bu)
2013	6.87	2014	5.99
2014	5.99	2015	4.89
2015	4.89	2016	3.89
2016	3.89	2017	4.72
2017	4.72	2018	5.16
85% of Olympic average[1]	4.42	85% of Olympic average[1]	4.18
Statutory reference price	5.50	Statutory reference price	5.50
Effective reference price[2]	5.50	Effective reference price[2]	5.50
2019 MYA price	4.55	2020 MYA price	4.55
Loan rate	3.38	Loan rate	3.38
Payment rate[3]	0.95	Payment rate[3]	0.95
2019 payment per base acre[4]	**$40**	**2020 payment per base acre[4]**	**$40**

1 Olympic average eliminates the high and low prices and averages the remaining three historical prices. Olympic average calculations are lagged by one year (e.g., the 2019 average does not include the 2018 price, but prices from 2013 to 2017).

2 The higher of 85% of the Olympic average or the statutory reference price, capped at 1.15 times the statutory reference price.

3 Effective reference price minus the higher of the MYA price or loan rate when MYA price is below the effective reference price.

4 Equals .85 x PLC yield x payment rate.

For additional information on PLC see the following article on farmdocDaily
farmdocDaily, September 24, 2019

Table 2. Calculation of 2019 Benchmark Yield for ARC-CO

Year	County Yield[1]	80% of T-yield	Higher of Actual or 80% of T-yield[2]	Number of Years to Trend	Trend Yield Adjustment[4]	Trend Adjusted ARC-CO Yield[5]
	Bu/acre	Bu/acre	Bu/acre		Bu/acre	Bu/acre
2013	59.1	56.0	59.1	6	3.7	62.8
2014	17.3	56.0	56.0	5	3.1	59.1
2015	46.9	56.0	56.0	4	2.5	58.5
2016	83.6	56.0	83.6	3	1.9	85.5
2017	78.1	56.0	78.1	2	1.2	79.4
	Trend Adjustment[3]		0.62		**2019 Benchmark Yield[7]**	**67.1**

1 Crop yields are from data provided by Risk Management Agency

2 The higher of county yield or 80% of T-yield

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ARC-IC

- Is a FSA farm by farm choice
- ARC-IC farm equals the sum of a producer's share in all FSA farms enrolled in ARC-IC in a state
- Combines all program crops
- Based on farm yields
- Pays on 65% of base acres rather than 85%
- Will pay maximum payment (10% of benchmark) if all acres on FSA farm are prevent plant
- ARC-IC calculator for one farm in 2018 Farm Bill Tool

Corn Benchmark Calculation

Yield Calculation

Year	Planted	Farm Yield	80% of T-Yield	County Yield	Used Yield[1]
		Bushel/acre			
2013	Yes	230.0	140.8	221.0	230.0
2014	Yes	210.0	140.8	219.6	210.0
2015	Yes	200.0	140.8	190.6	200.0
2016	Yes	245.0	140.8	230.3	245.0
2017	Yes	225.0	150.4	228.9	225.0

Price Calculation

MYA Price	Effective Price	Used Price[2]
$ per Bu		
4.46	3.70	4.46
3.70	3.70	3.70
3.61	3.70	3.70
3.36	3.70	3.70
3.36	3.70	3.70

Benchmark Revenue Calculation

Year	Used Yield[1]	Used Price[2]	Revenue
2013	230.0	4.46	1025.80
2014	210.0	3.70	777.00
2015	200.0	3.70	740.00
2016	245.0	3.70	906.50
2017	225.0	3.70	832.50
			$ per acre
		Benchmark Revenue[4]	**838.67**

Effective Reference Price Calculation

	Year	MYA Price
	2013	4.46
	2014	3.70
	2015	3.61
	2016	3.36
	2017	3.36
	85% of Olympic Average	3.02
	Statutory Reference Price	3.70
	Effective Reference Price[3]	3.70

[1] If the crop is planted, the higher of farm yield or 80% of T-yield. If not planted, the county yield is used. **In the near future, T-yields will be updated.**

[2] The higher of the MYA price or effective reference price.

[3] Higher of 85% of Olympic average or statutory reference price, capped at 1.15 time reference price

[4] Olympic average of five previous revenues.

Soybeans Benchmark Calculation

Yield Calculation

Year	Planted	Farm Yield	80% of T-Yield	County Yield	Used Yield[1]
		Bushel/acre			
2013	Yes	62.0	38.4	59.9	62.0
2014	Yes	70.0	38.4	62.5	70.0
2015	Yes	65.0	38.4	59.3	65.0
2016	Yes	72.0	38.4	64.1	72.0
2017	Yes	65.0	38.4	61.0	65.0

Price Calculation

MYA Price	Effective Price	Used Price[2]
$ per Bu		
13.00	8.40	13.00
10.10	8.40	10.10
8.95	8.40	8.95
9.47	8.40	9.47
9.33	8.40	9.33

Benchmark Revenue Calculation

Year	Used Yield[1]	Used Price[2]	Revenue
2013	62.0	13.00	806.00
2014	70.0	10.10	707.00
2015	65.0	8.95	581.75
2016	72.0	9.47	681.84
2017	65.0	9.33	606.45
			$ per acre
		Benchmark Revenue[4]	**665.10**

Effective Reference Price Calculation

Year	MYA Price
2013	13.00
2014	10.10
2015	8.95
2016	9.47
2017	9.33
85% of Olympic Average	8.19
Statutory Reference Price	8.40
Effective Reference Price[3]	8.40

[1] If the crop is planted, the higher of farm yield or 80% of T-yield. If not planted, the county yield is used. **In the near future, T-yields will be updated.**

[2] The higher of the MYA price or effective reference price.

[3] Higher of 85% of Olympic average or statutory reference price, capped at 1.15 time reference price

[4] Olympic average of five previous revenues.

2019 ARC-IC Payment (all prevent plant)

Payment Assumes One FSA Farm Enrolled in ARC

Crop	2019 Acres Planted	2019 Acres Prevent Plant	2019 Farm Yield	2019 MYA Price	Loan Rate	Revenue[1]	Benchmark Revenue
	acres	acres					
Corn		80			2.20	0.00	838.67
Soybeans		20			6.20	0.00	665.10
Total	0	100					

Benchmark Revenue[2]	803.96	($ per base acre)
Guarantee[3]	691.41	($ per base acre)
Farm Revenue[4]	0.00	($ per base acre)
ARC-IC Payment[5]	**52.26**	($ per base acre)

2019 ARC-IC Payment (low yields)

Payment Assumes One FSA Farm Enrolled in ARC

Crop	2019 Acres Planted	2019 Acres Prevent Plant	2019 Farm Yield	2019 MYA Price	Loan Rate	Revenue[1]	Benchmark Revenue
	acres	acres					
Corn	80		190	3.85	2.20	731.50	838.67
Soybeans	20		55	9.00	6.20	495.00	665.10
Total	100	0					

Benchmark Revenue[2]	803.96	($ per base acre)
Guarantee[3]	691.41	($ per base acre)
Farm Revenue[4]	684.20	($ per base acre)
ARC-IC Payment[5]	**4.69**	($ per base acre)

ARC-IC general rule

- Consider taking in 2019 if there is a FSA farm with
  - Very low yields
  - All prevent plant
- Remember all FSA farms in a state in ARC-IC are combined. Does not seem wise to have all FSA farms in ARC-IC
- Somewhat doubtful if it fits in other situation because only pays on 65% of payment rather than 85% for PLC and ARC-CO

Summary

- **Be aware of deadlines**

- Advice:
  - ARC-IC for FSA farms with all prevent plant acres or low yields
  - Corn: PLC or ARC-CO will not make payments in 2019, except for some counties with low yields, think PLC because of $3.70 reference price
  - Soybeans: More counties with ARC-CO payemnts, the $8.40 reference price is low, lean to ARC-CO
  - Wheat: Both will likely make payments, PLC larger in most cases, lean to PLC

- Feb 20th NASS will release county yields, More closely know counties were ARC-CO will make payments. Look for our webinar on Feb 24th

2018 Farm Bill Resources

- **FSA Website**
  https://www.fsa.usda.gov/programs-and-services/arcplc_program/

- **Farm Bill Toolbox (Including 2018 Farm Bill What if Tool)**
  https://farmdoc.illinois.edu/2018-farm-bill

- **Gardner ARC/PLC tool**
  https://fd-tools.ncsa.illinois.edu/

- **FarmdocDaily**
  - PLC Description, farmdocDaily, September 24, 2019
  - ARC-CO Description, farmdocDaily , September 17, 2019
  - Choosing Between ARC-CO and PLC, farmdocDaily, October 1, 2019
  - ARC-IC, farmdocDaily, October 29, 2019

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Supplemental Coverage Option (SCO)

Supplemental Coverage Option (SCO)

New crop insurance tool authorized in 2014 & 2018 Farm Bills

- Tied to ARC/PLC election, but administered by RMA, not FSA
- Purchase from crop insurance agents

Coverage

Between 86% and crop insurance coverage level selected

Triggered

Only if **county** losses **exceed 14%**

Supplemental Coverage Option (SCO)

Is **county based** coverage (no multiplier)

- Will operate similarly to Ag Risk Protection Insurance (ARPI)
- Different band of coverage

Available in all Illinois Counties:

- Corn
- Soybeans
- Wheat

Supplemental Coverage Option (SCO) will use Area Risk Protection Insurance (ARPI)

Same “Expected County Yield”

Same base and harvest prices

SCO: Endorsement to Underlying Crop Insurance Policy

Matches underlying crop insurance coverage

(Yield or Revenue Protection must be purchased)

	If you purchase		
	Yield Protection (YP)	Revenue Protection (RP)	Revenue Protection with Harvest Price Exclusion (RP-HPE)
SCO Provides County Based	**Yield Coverage**	**Revenue Coverage**	**Revenue protection that only uses the crop insurance base price**

SCO: Band of Coverage

SCO Coverage level established at 86%

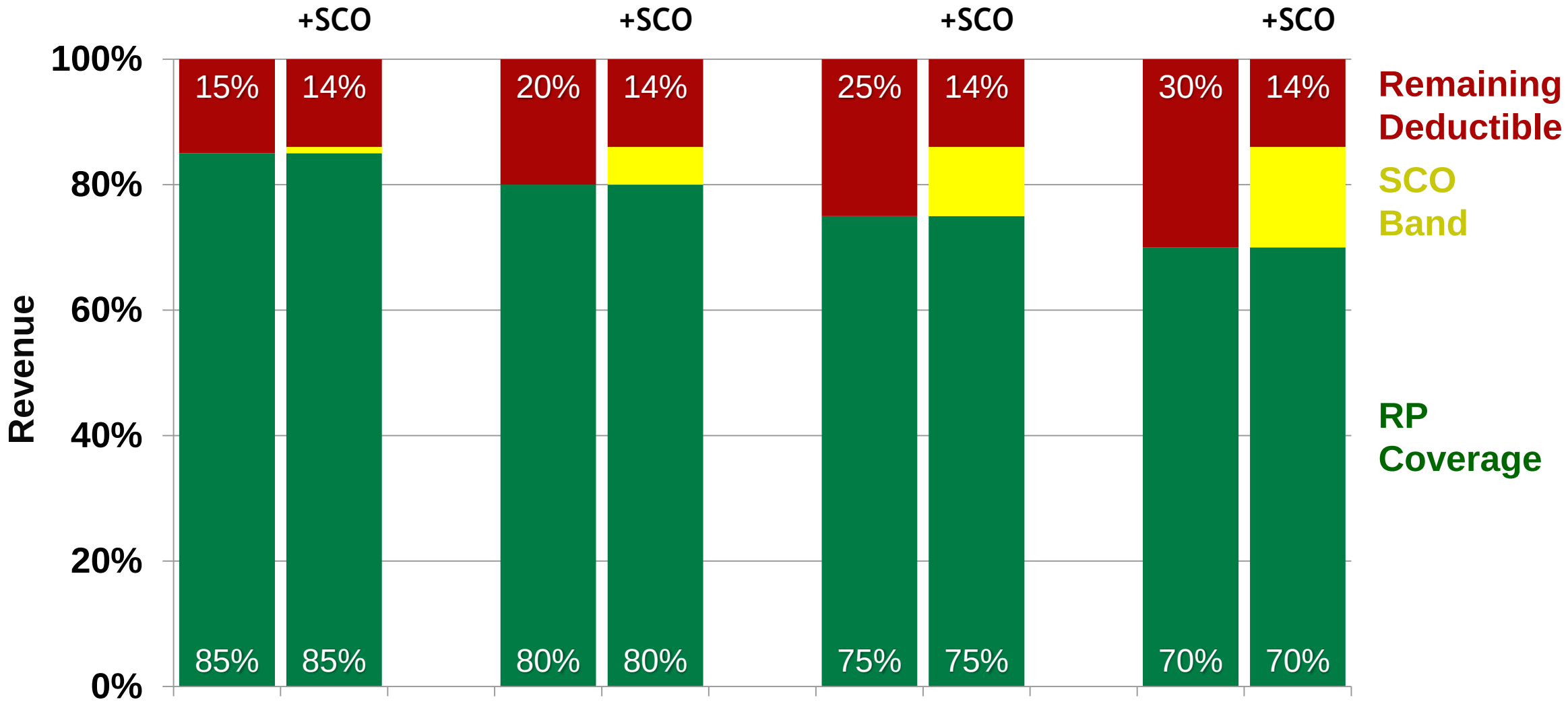
- Indemnities triggered when county revenues/yields fall below 86% of guarantee

SCO coverage ends at the coverage level selected by the producer for underlying crop insurance

Band of coverage = 86% down to the coverage level chosen on crop insurance

SCO & RP at Various Coverage Levels

**SCO coverage is area (county) based coverage*



RP & SCO Example

Assumptions for RP coverage:

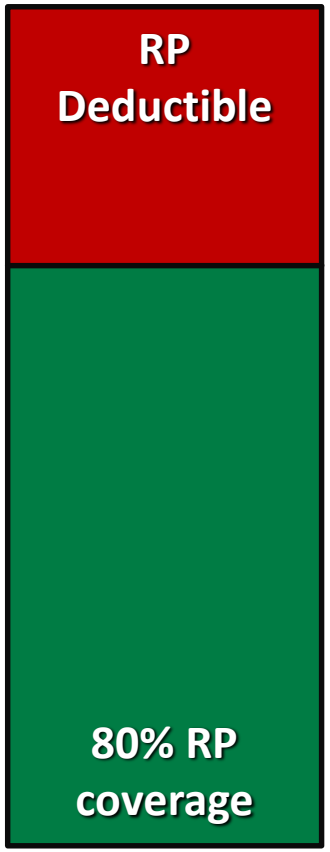
- TA-APH of 190 bpa and Base price of $4.00
- Expected Revenue = $760 (190 bpa x $4.00)
- Coverage level chosen = 80%
- RP Guarantee of $608 (190 bpa x $4.00 x .80)

Assumptions for SCO coverage:

- Expected County Yield = 180 bpa
- Base price of $4.00
- Expected County Revenue = $720 (180 bpa x $4.00)
- SCO trigger of $619 (180 bpa x $4.00 x .86)

Example: RP 80% and SCO

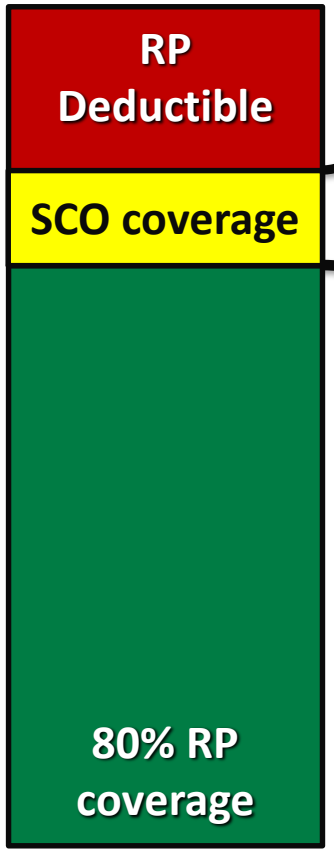
Expected Farm Revenue **$760** (190 bpa x $4.00)



RP 80% Only

RP deductible = $152
($760 - $608)

RP guarantee = $608
(190 bpa x $4.00 x .80)



RP 80%
with SCO

SCO trigger = $619
(180 bpa x $4.00 x .86)

SCO lower coverage band = $576
(180 bpa x $4.00 x .80)

SCO coverage range = $43/acre
($619 - $576)

Max SCO payment: $45.60
(190 bpa x $4.00 x 6%)

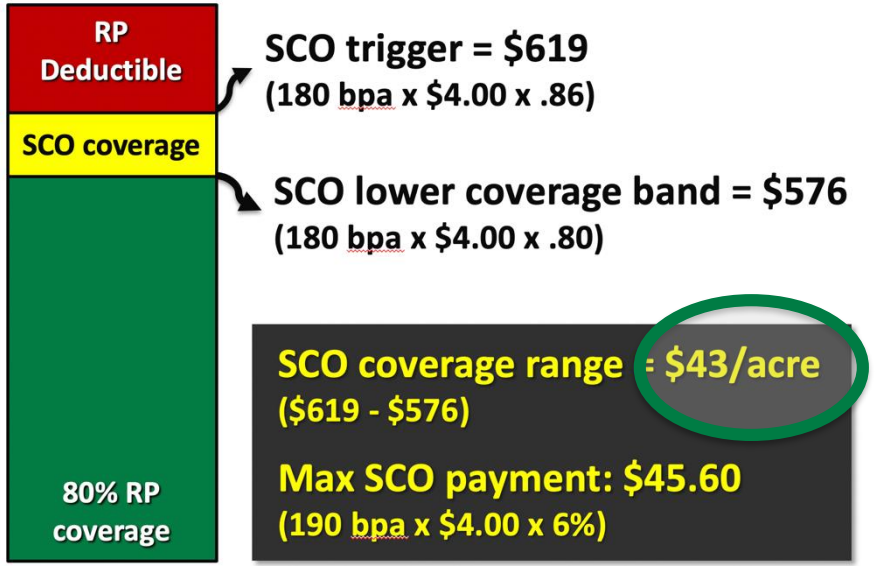
Example: SCO Claim calculation

Actual Revenue Calculation:

Harvest price = $3.00

Final county yield = 200 bpa

Final county revenue = $600 ($3 x 200 bpa)



Claim Calculation:

$619 SCO trigger - $600 final = $19 shortfall

$19 = 44% of max coverage range ($19/**$43**)

Claim: $46 max payment x 44% shortfall = $20 claim

Considerations for SCO

65% subsidy level

Provides protection on planted acres as opposed to base (PLC & ARC)

Not subject to payment limits

Not subject to AGI eligibility test

Eliminates ARC as an option

Starting in 2020
if SCO is purchased on a farm that chose ARC;

- SCO will be cancelled
- Customer will still owe 60% of SCO premium (USDA rule)

Considerations for SCO

County based coverage, not popular in Illinois crop insurance usage

Illinois farmers use high coverage levels, limiting impact of SCO

Since it's county based, SCO won't offer:

- Replant provisions
- Prevent Plant provisions
- Quality loss adjustments (aflatoxin)

SCO has premium cost, ARC does not

Your agent can quote it along with your underlying crop policy

Yield Update for PLC

- Update yields on a crop and farm basis
- Request FSA 156 EZ to get current PLC yields
- Higher of:
  - Current PLC yield, or
  - 2013 to 2017 average x factor

Factor:

Corn	.8100
Soybeans	.8100
Wheat	.8591

Update if that yield is higher

(***My advice: Use crop insurance yields***)

IOWA
CHICKASAW
Form: FSA-156EZ
See Page 2 for non-discriminatory Statements.

USDA United States Department of Agriculture
Farm Service Agency

Abbreviated 156 Farm Record

FARM : 4764
Prepared : Jun 23, 2017
Crop Year : 2017

Operator Name :
Farms Associated with Operator : [illegible]
CRP Contract Number(s) : None

Farm Land Data

Farmland	Cropland	DCP Cropland	WBP	WRP	CRP	GRP	Sugarcane	Farm Status	Number Of Tracts
73.26	62.95	62.95	0.00	0.00	0.00	0.00	0.00	Active	1

State Conservation	Other Conservation	Effective DCP Cropland	Double Cropped	MPL	Acre Election	EWP	DCP Ag. Related Activity
0.00	0.00	62.95	0.00	0.00	No	0.00	0.00

Crop Election Choice

ARC Individual	ARC County	Price Loss Coverage
None	CORN, SOYBN	None

DCP Crop Data

Crop Name	Base Acres	CCC-505 CRP Reduction Acres	CTAP Yield	PLC Yield	HIP
Corn	26.60	0.00	0	130	
Soybeans	23.80	0.00	0	45	
TOTAL	**50.40**	**0.00**			

NOTES

Tract Number : **161**

Description : [illegible]
BIA Unit Range Number :
HEL Status : HEL determinations not completed for all fields on the tract
Wetland Status : Tract does not contain a wetland
WL Violations : None
Owners :
Other Producers :

Tract Land Data

Farm Land	Cropland	DCP Cropland	WBP	WRP	CRP	GRP	Sugarcane
73.26	62.95	62.95	0.00	0.00	0.00	0.00	0.00

State Conservation	Other Conservation	Effective DCP Cropland	Double Cropped	MPL	EWP	DCP Ag. Related Activity
0.00	0.00	62.95	0.00	0.00	0.00	0.00

DCP Crop Data

Notation	Example FSA Farm
State	Illinois
County	Woodford
Crop	Corn
National Yield Factor[1]	0.9000
Substitute Yield[2]	162.3

Menu

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Current PLC Yield

Current yield[3]	120
Break-even yield[4]	148.15

PLC yield. The average of the farm yields must exceed the break-even yield before updating results in a higher PLC yield.

Update PLC Yield

Year	Farm Yield[5]	Substitute Yield[2]	Used Yield[6]
2013	186	162.3	186.00
2014		162.3	
2015	178	162.3	178.00
2016		162.3	
2017	210	162.3	210.00

Reset Yields

2013-2017 Average[7]	191.33
National Yield Factor[1]	0.9000
Update Yield[8]	**154.98**

Result

Updating will result in a higher PLC yield.

Upcoming Webinar

Monday February 24th at 11am CT

Impact of Updated Yield and Price Information on ARC/PLC Decisions

NASS will release 2019 county yields for corn and soybeans on Feb 20th. These county yields, along with more up-to-date price information, will be used to refine ARC/PLC decisions for 2019 and 2020. Those counties that likely will make county yields will be identified. Farmers in some counties may wish to revise ARC/PLC choices based on this information.

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Impact of Updated Yield and Price Information on ARC/PLC Decisions

Mon, Feb 24, 2020 11:00 AM - 12:00 PM CST

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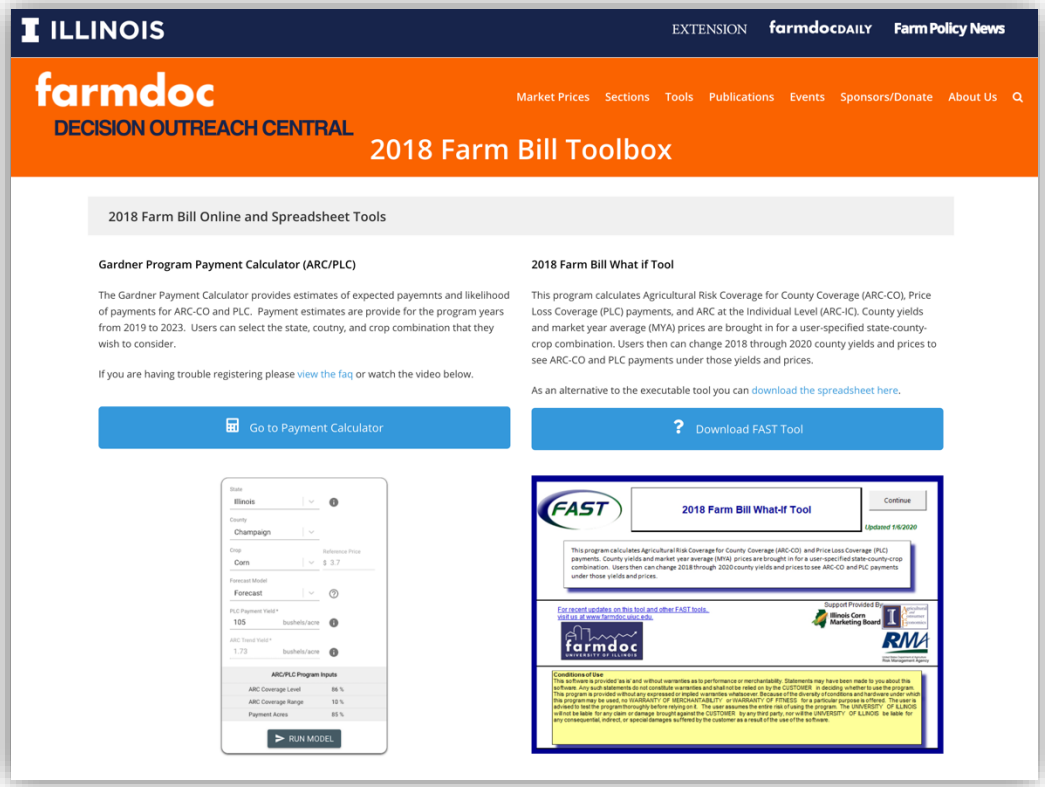

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