

# 2019 ILLINOIS FARM ECONOMICS SUMMIT

## Reviewing the 2018 Farm Bill

### ARC/PLC Decision and Conservation

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**Gardner  
Agriculture  
Policy  
Program**

**farmdoc**

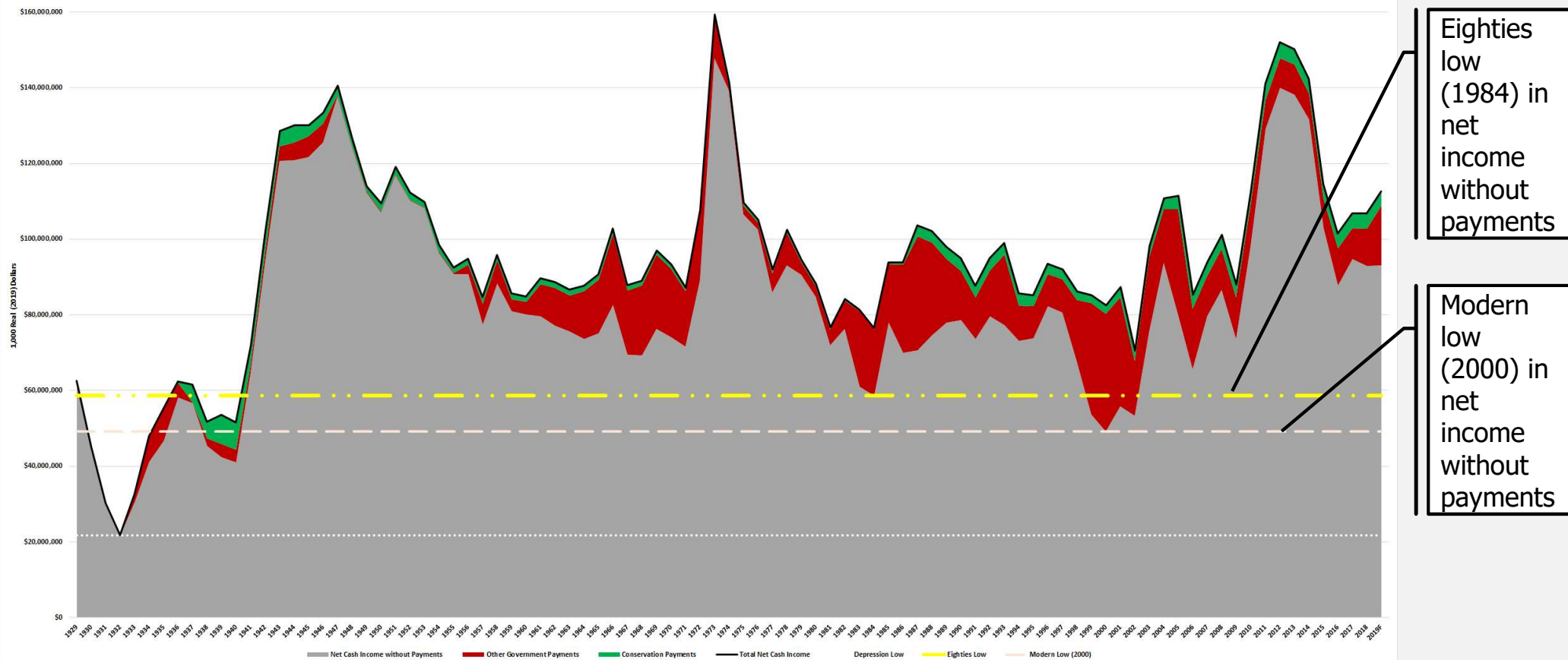
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Part 1.

# **BACKGROUND.**

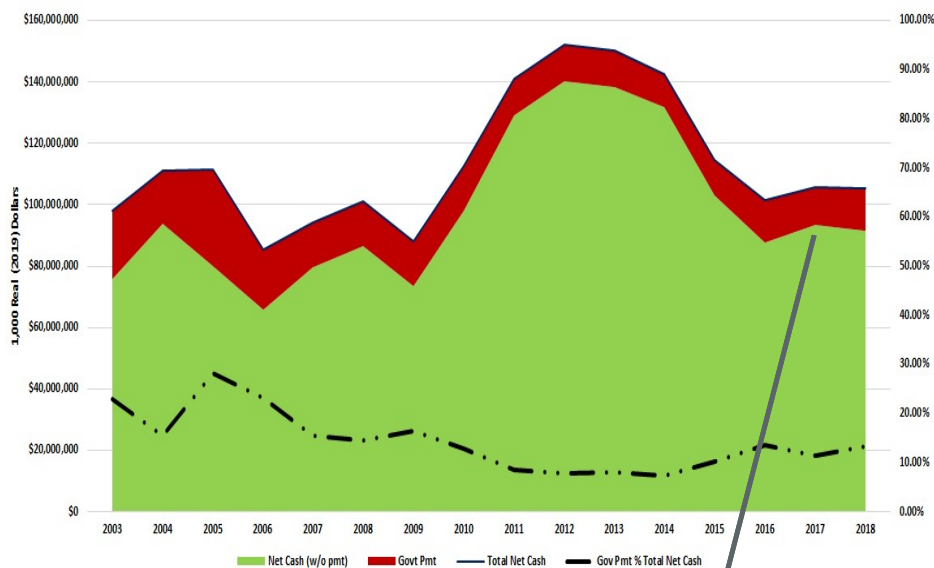
# Farm Income & Support: Historical Perspective.

Figure 1. Income Comparison, Net Income without Payments and Government Payments (ERS)



# Background: Income

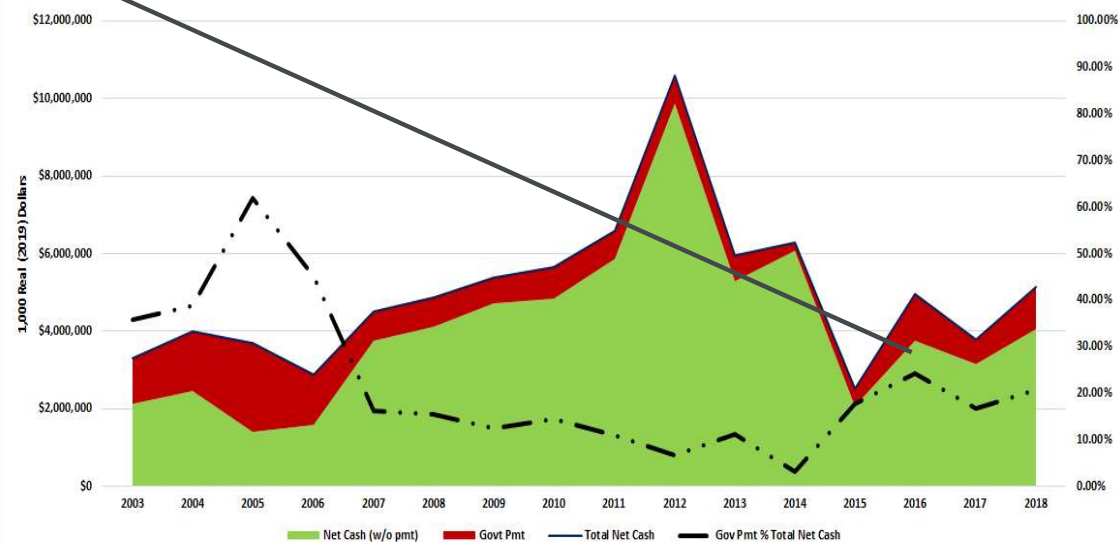
Net Cash Income from Farming and Government Payments, U.S. (ERS)



Net Cash Income averaged \$114b (2014-2018) on Gross Cash Income average of \$448b (2014-2018); \$208b of Gross Cash from crop receipts (46.5%).

Net Cash Income for Illinois averaged \$4.5b (2014-2018) on Gross Cash Income average \$19.7b; \$15b from crop receipts (76.5%).

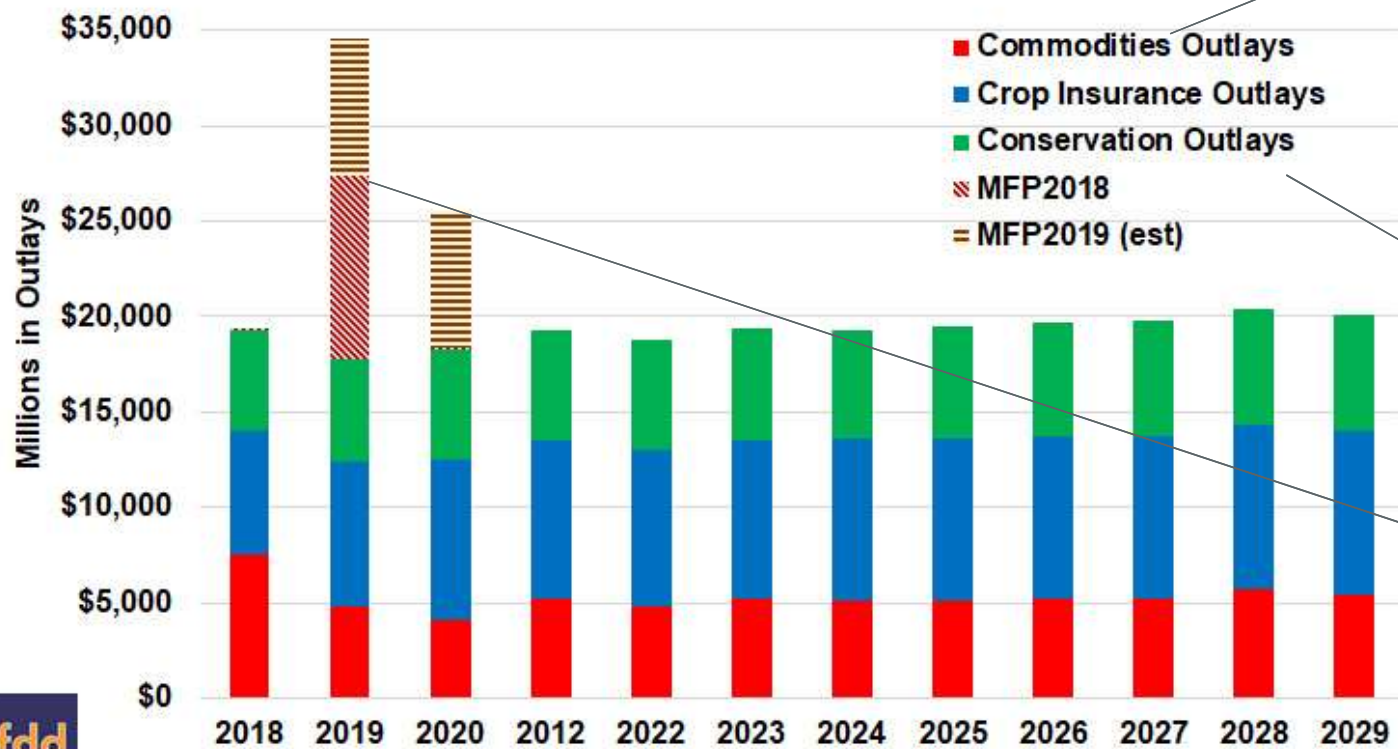
Net Cash Income from Farming and Government Payments, Illinois (ERS)



Note: IL averaged 7.2% of National Crop Receipts (2014-2018) and 5.8% of government payments.

# Overview: CBO Baseline

Figure 1. Estimated Outlays by Program Area (CBO May 2019)



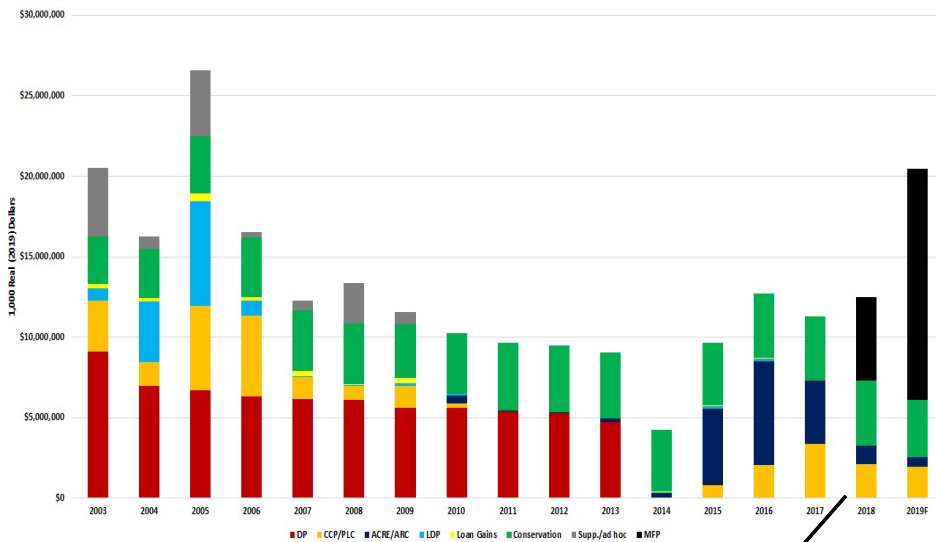
According to Congressional Budget Office (CBO): roughly \$20 billion per year spent on farmers from farm bill programs.

Roughly 1/3 split among commodities programs, conservation and crop insurance; FY2019 and 2020 lower with ARC-CO.

Market Facilitation Program (MFP) exceeds farm bill program spending; not farm bill program.

# Background: Government Payments

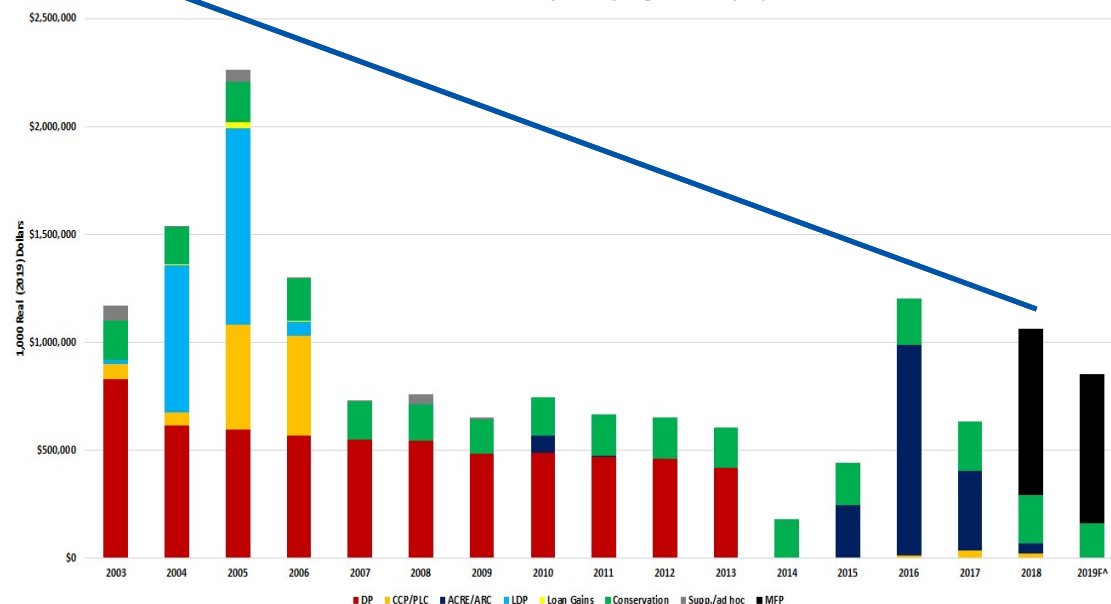
Government Payments by Program, U.S. (ERS)



All government payments averaged \$12.4b (2014-2018); with conservation payments averaging \$4b (32%).

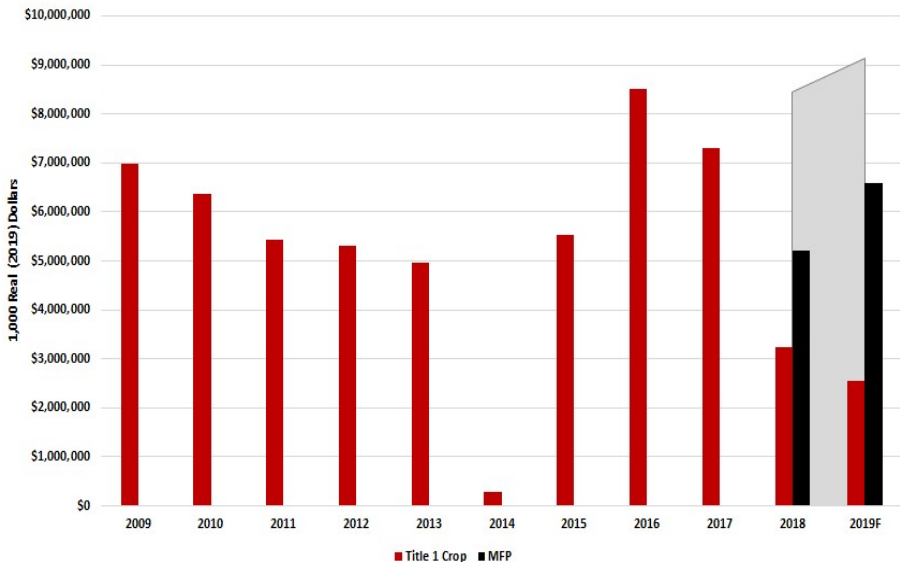
- ❖ Illinois averaged \$713 million in government payments (2014-2018); and \$210 million in conservation payments (29.5% of total Illinois payments)
- ❖ IL averages 5.8% of national payments and 5.3% of conservation payments.

Government Payments by Program, Illinois (ERS)



# Background: Comparing Crop Payments

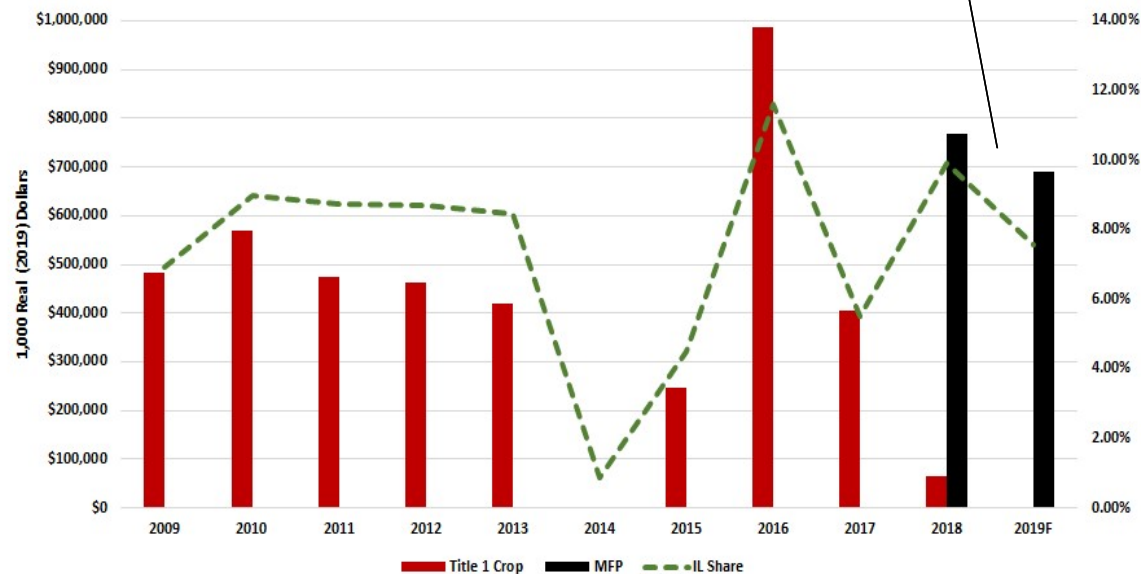
Comparing Crop Payments, U.S.



For Illinois, total crop payments with MFP were \$835 million (9.9% of national) and thus far in 2019 \$691 million (7.6% of national).

MFP pushed total crop payments to \$8.5 billion in 2018 and thus far to \$9.1 billion in 2019; 62% and 72% of the total (respectively).

Comparing Crop Payments, Illinois



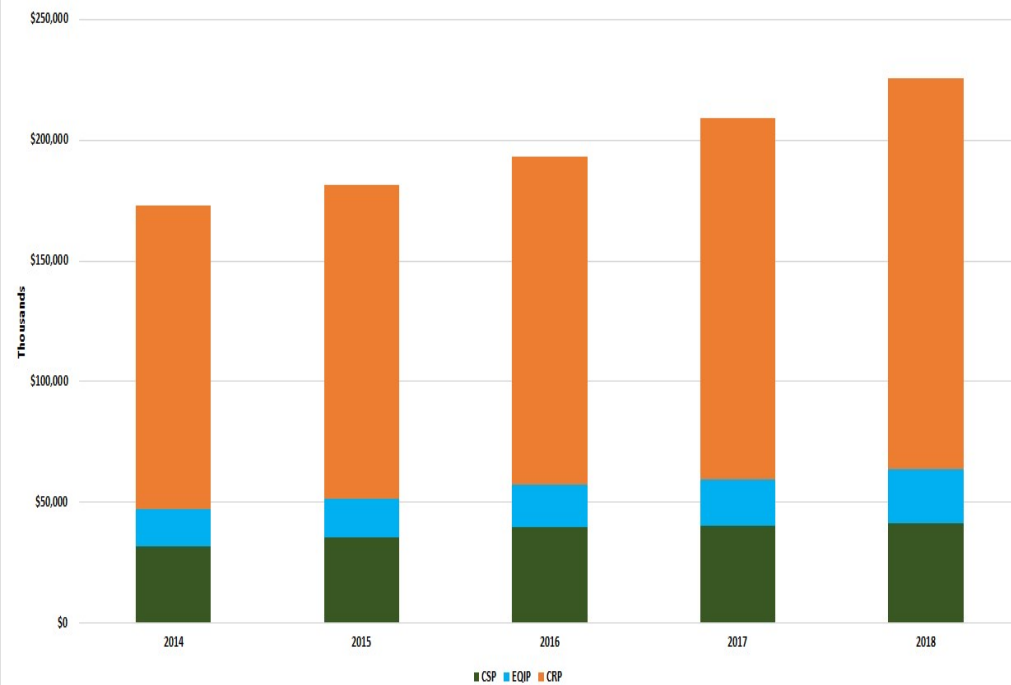
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# CONSERVATION PROGRAMS

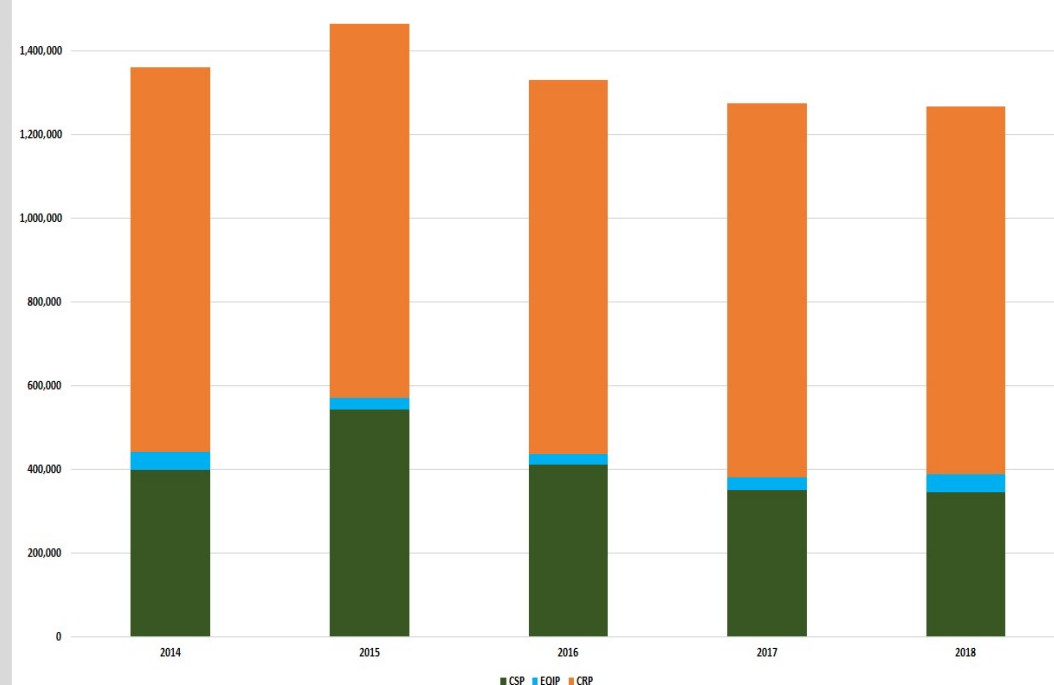


# Conservation Programs Overview, Illinois.

Conservation Program Spending, Illinois (NRCS)



Acres Enrolled in Conservation Contracts, Illinois (NRCS)



CRP remains the largest conservation program in terms of funds obligated (averages \$141 million/year) and acres under contract (averages 897k).

# Conservation Program Overview, Illinois

**Illinois Share of National Obligations**

	2014	2015	2016	2017	2018
CSP	3.05%	3.26%	3.50%	3.56%	3.44%
EQIP	1.21%	1.25%	1.21%	1.14%	1.20%
CRP	7.69%	8.03%	8.42%	8.65%	9.00%

**Illinois Share of National Acres Under Contract**

	2014	2015	2016	2017	2018
CSP	4.16%	2.26%	2.36%	2.15%	2.91%
EQIP	0.38%	0.27%	0.24%	0.27%	0.30%
CRP	3.62%	3.70%	3.74%	3.82%	3.89%

CSP: National average acres (2014-2018) = 15.9 million; Illinois = 410 thousand

EQIP: National average acres (2014-2018) = 13.7 million; Illinois = 41 thousand

CRP: National average acres (2014-2018) = 23.9 million; Illinois = 897 thousand

CSP: National average obligations (2014-2018) = \$1.1 billion; Illinois = \$38 million.

EQIP: National average obligations (2014-2018) = \$1.5 billion; Illinois = \$18 million.

CRP: National average obligations (2014-2018) = \$1.7 billion; Illinois = \$141 million.

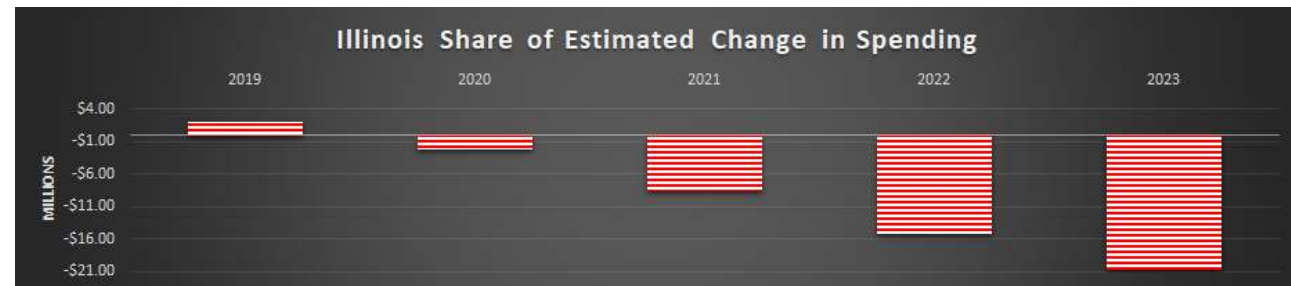
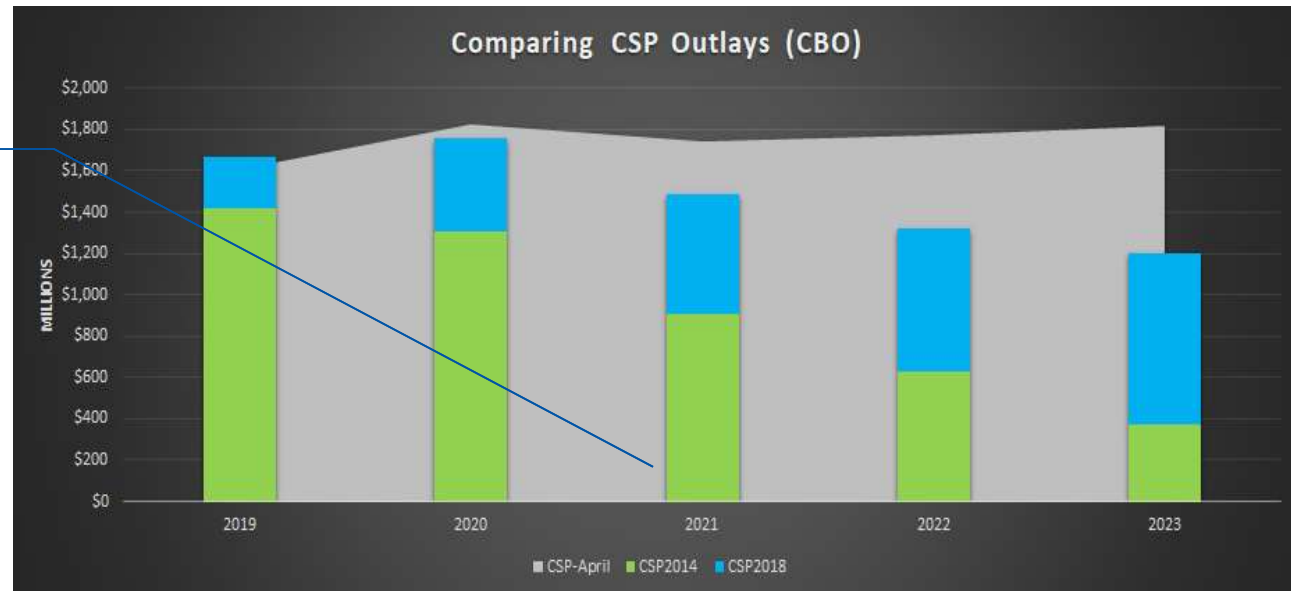
**Average Obligations per Acre Under Contract, IL**



# Conservation Stewardship Program (CSP)

## CSP:

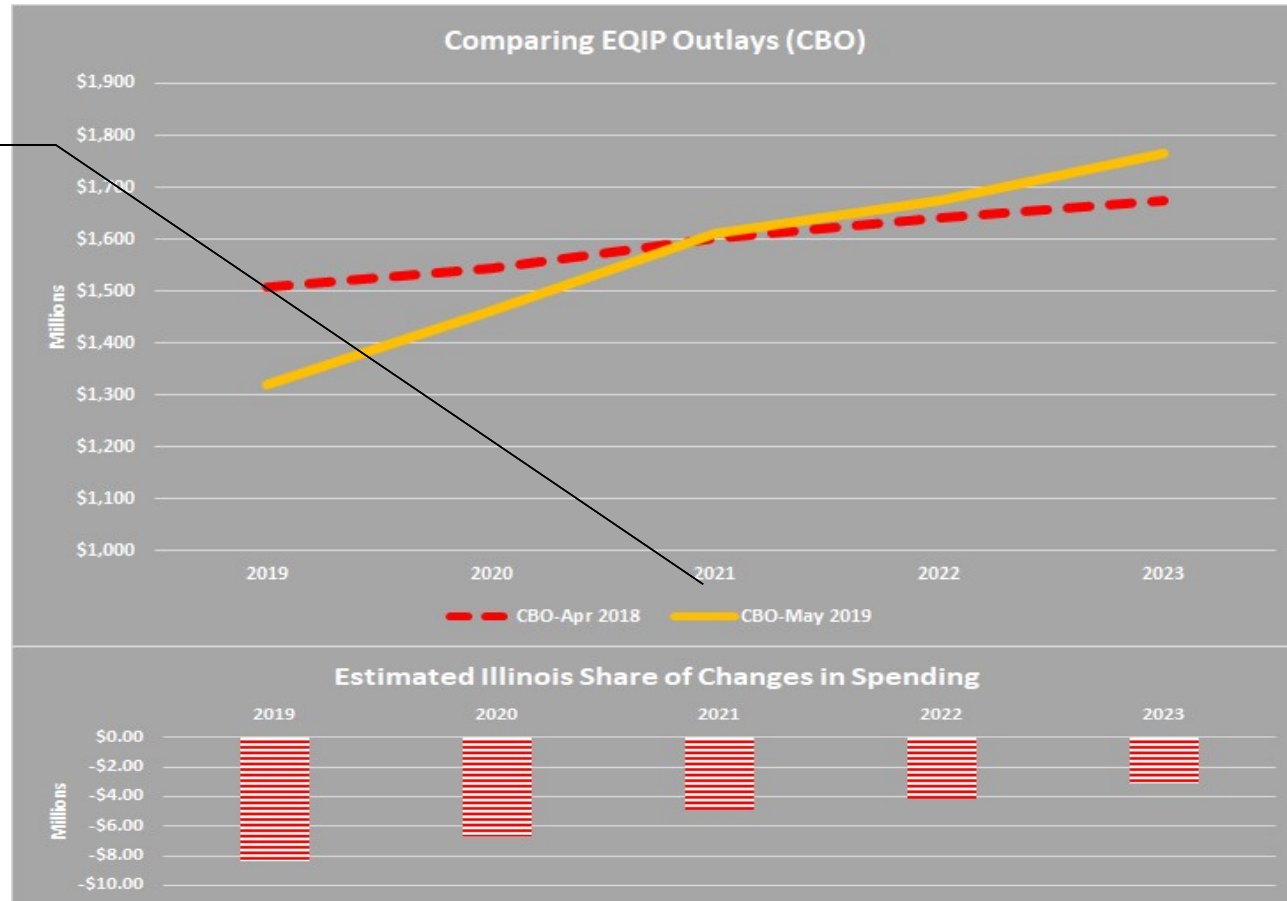
- ✓ Five-year contracts for improving conservation on entire farm; annual payments.
- ✓ 2018 Farm Bill eliminated it as a stand-alone program; combined with EQIP.
- ✓ Based on historic Illinois share of CSP obligations (2014-2018); state could lose \$45 million total (2019-2023).
- ✓ Notable changes: acreage-based program eliminated; share in funds with EQIP (\$700m to \$1b); 125% of annual payment for cover crops.



# Environmental Quality Incentives Program (EQIP)

## EQIP:

- ✓ Cost-share assistance for specific conservation practices on the farm.
- ✓ CBO estimates a \$135 million reduction in outlays for life of 2018 Farm Bill (May 2019 Baseline compared to April 2018).
- ✓ Illinois historic share of obligations could result in total loss of \$27 million (2019-2023).
- ✓ Notable changes: conservation stewardship contracts included; livestock allocation at 50%; emphasis for irrigation practices and districts eligible.

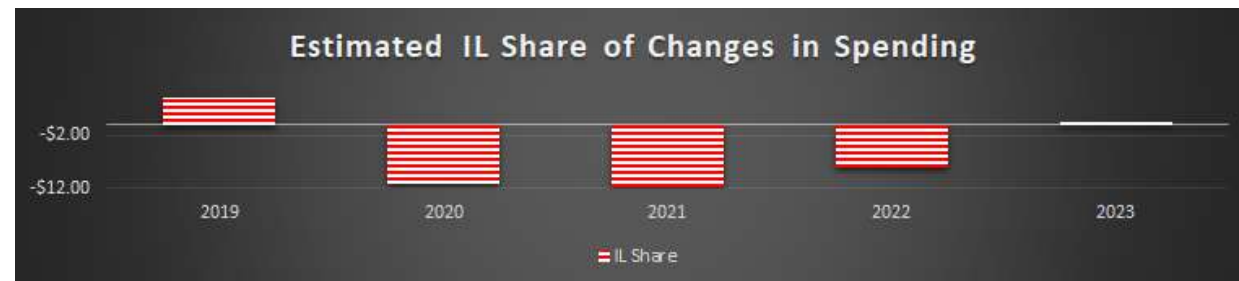
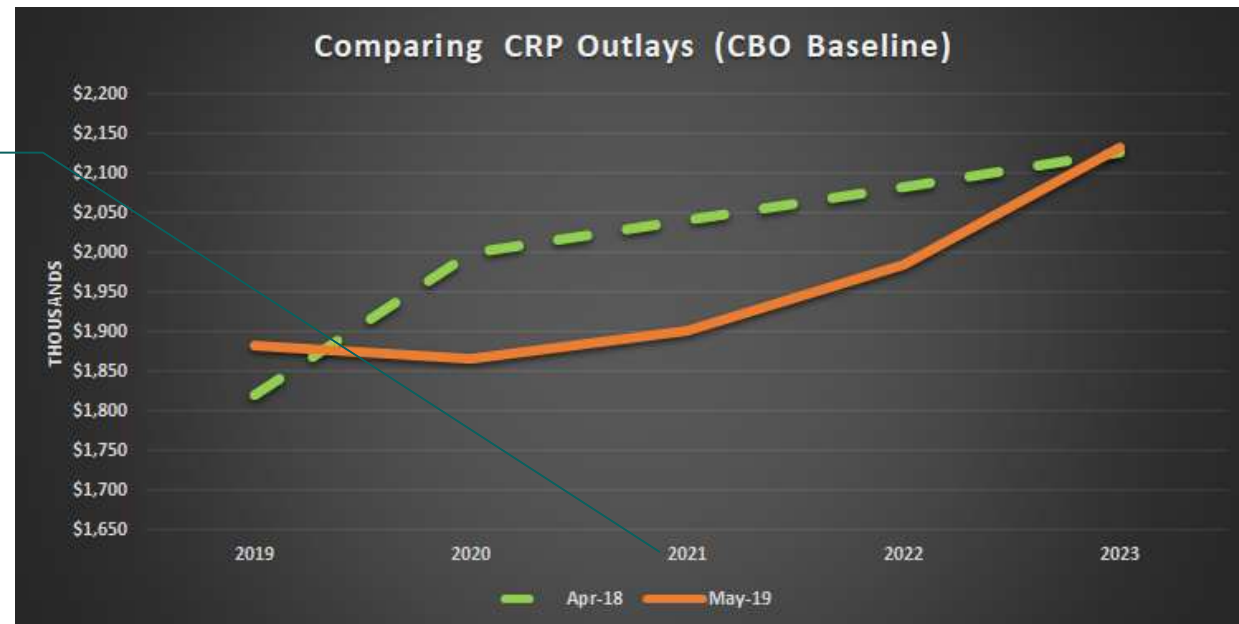


# Conservation Reserve Program (CRP)

## CRP:

- ✓ Annual rental payments to take land out of production; includes continuous practices and CREP (10-15 years).
- ✓ CBO estimates a \$302 million reduction in outlays for life of 2018 Farm Bill (May 2019 Baseline compared to April 2018).
- ✓ Illinois historic share of obligations could result in total loss of \$25 million (2019-2023).
- ✓ Notable changes: acreage cap steps up from 24m to 27m; CLEAR-30 contract pilot; Soil Health pilot; rental capped at 85% for re-enrolled acres.

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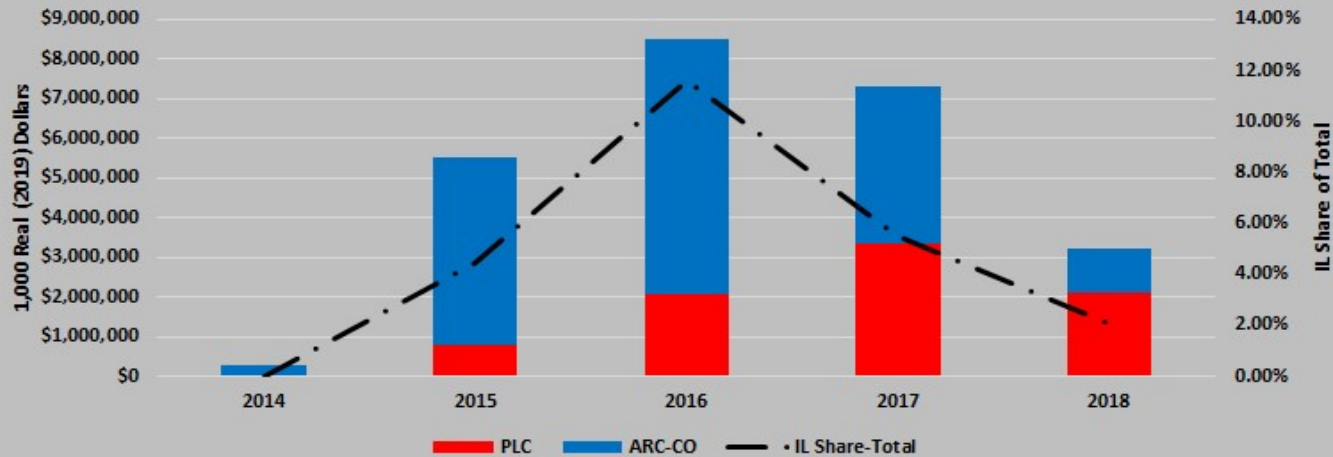
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Part 3.

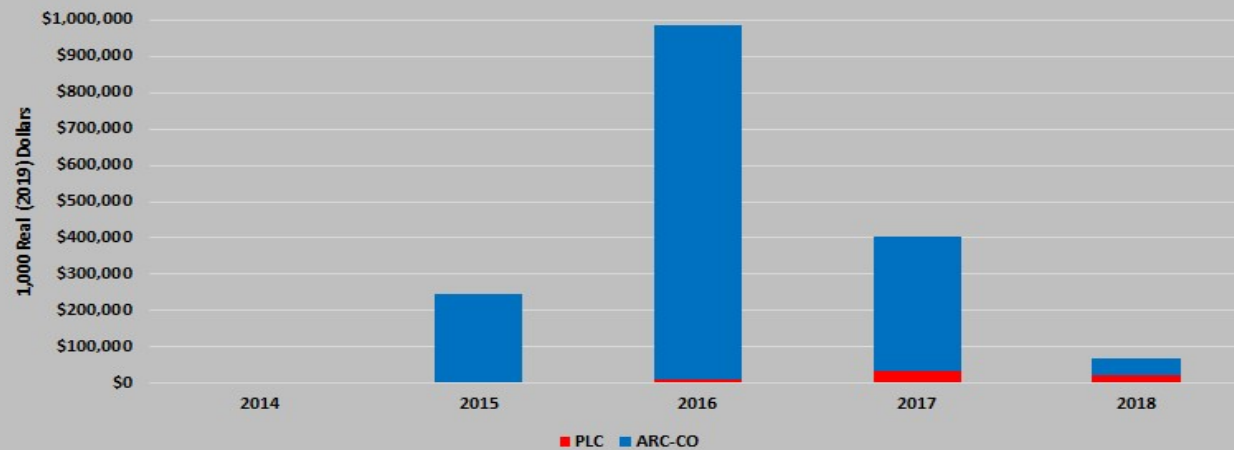
# **THE ARC/PLC DECISION.**

# Farm Programs (Title 1) Overview

Farm Program Payments, National (ERS)

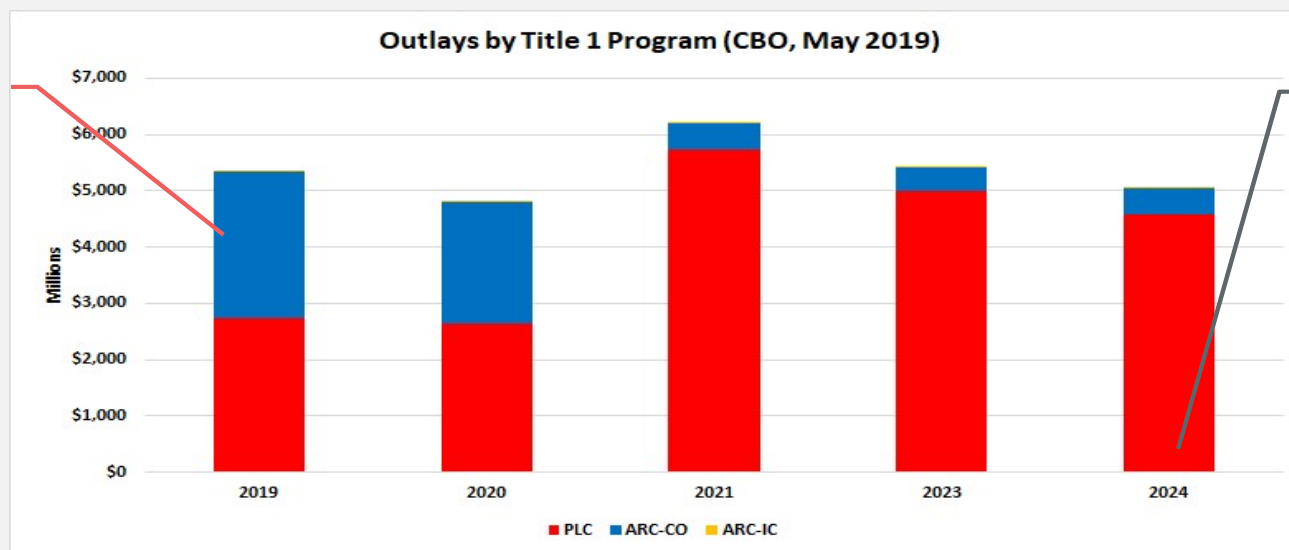


Farm Program Payments, Illinois (ERS)

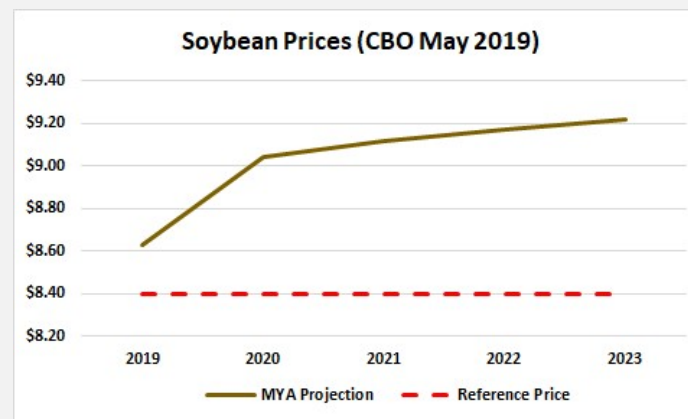
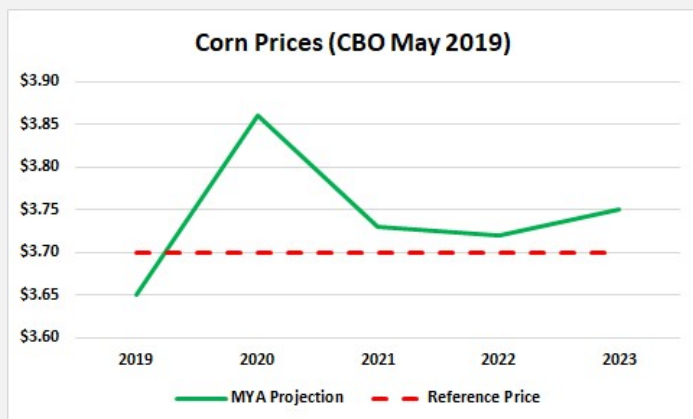


# Farm Programs Overview

From 2014 Farm Bill: 93% of corn base in ARC-CO and 97% of soybean base.



From 2018 Farm Bill: CBO projects 85% of corn base in PLC and 56% soybean base in PLC (2019-2020)





# The ARC-CO/PLC Decision: Key Issues.

**Table 1. Characteristics to Consider when Making Choice between ARC-CO and PLC**

Characteristic	ARC-CO	PLC
Expected Return (See <i>Gardner Program Payment Calculator</i> for Estimates)		
Coverage Type	<b>County Revenue Coverage:</b> Payments occur when county revenue is below a baseline	<b>National Price Coverage:</b> Payments occur when MYA price is below effective reference price
Cap on Payments	ARC-CO has a limit of 10% of its benchmark return	Effective reference price minus loan rate
Eligibility of SCO	Can not purchase SCO	Can purchase SCO

- ✓ Decision by March 15, 2020
- ✓ Decision covers 2019 and 2020 crop years only.
- ✓ By FSA farm and crop with base acres; both pay on 85% of base.

## ARC-CO

- ✓ 86% of Benchmark (5-yr. Olympic, county average yields and national average prices).
- ✓ Yields in county of location; use RMA yields; Trend Adjustment factor.

# The ARC-CO/PLC Decision: Key Issues.

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## PLC

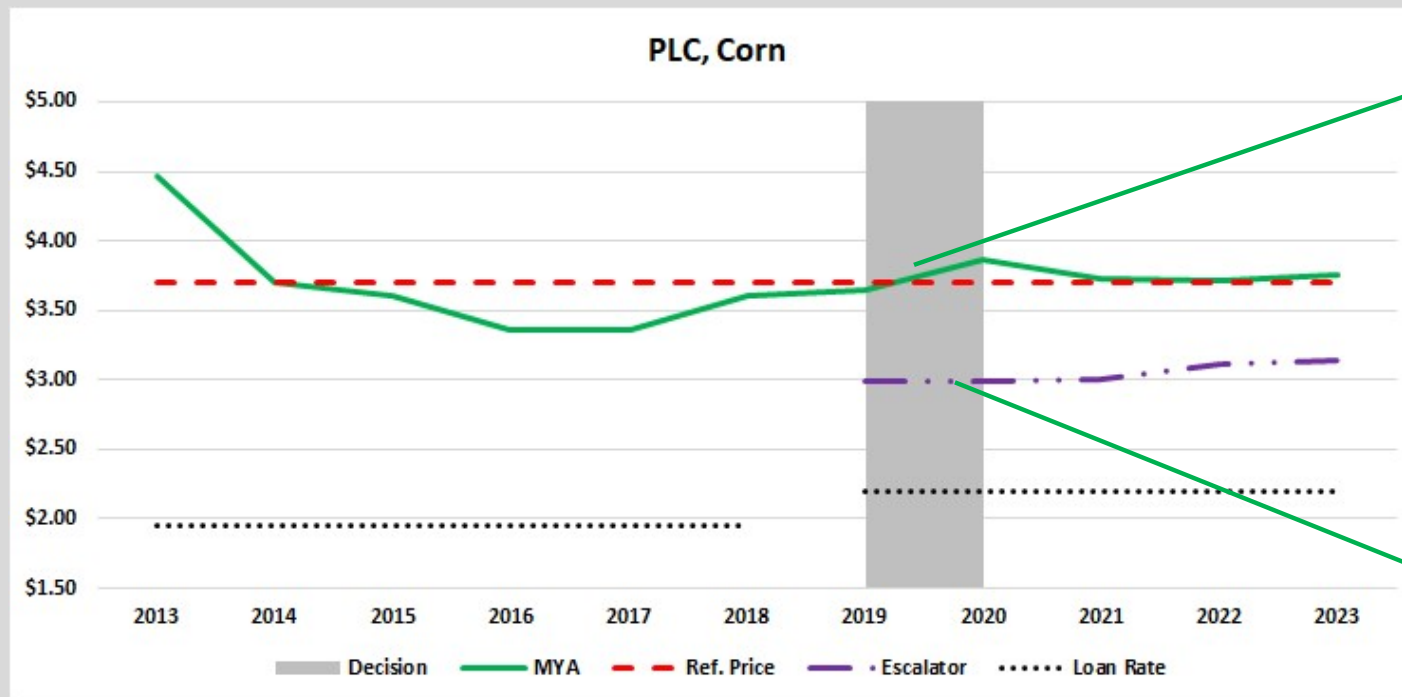
- ✓ Program yield update: 81% of 2013 to 2017 yields for corn and soybeans.
- ✓ Effective Reference Price ("booster"): 85% of the 5-yr. Olympic moving average of MYA; unlikely to matter.

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### Corn, 2019

Corn, 2019	Trend Adjusted ARC-CO Yield <sup>5</sup>
Used in benchmark <sup>3</sup>	Bu/acre
	193.7
	236.3
\$/bu	211.8
\$4.46	229.0
\$3.70	217.6
\$3.70	<b>219.5</b>
\$3.70	
\$3.70	
<b>\$3.70</b>	
	ber of trend
verage price.	minates the high
verage	
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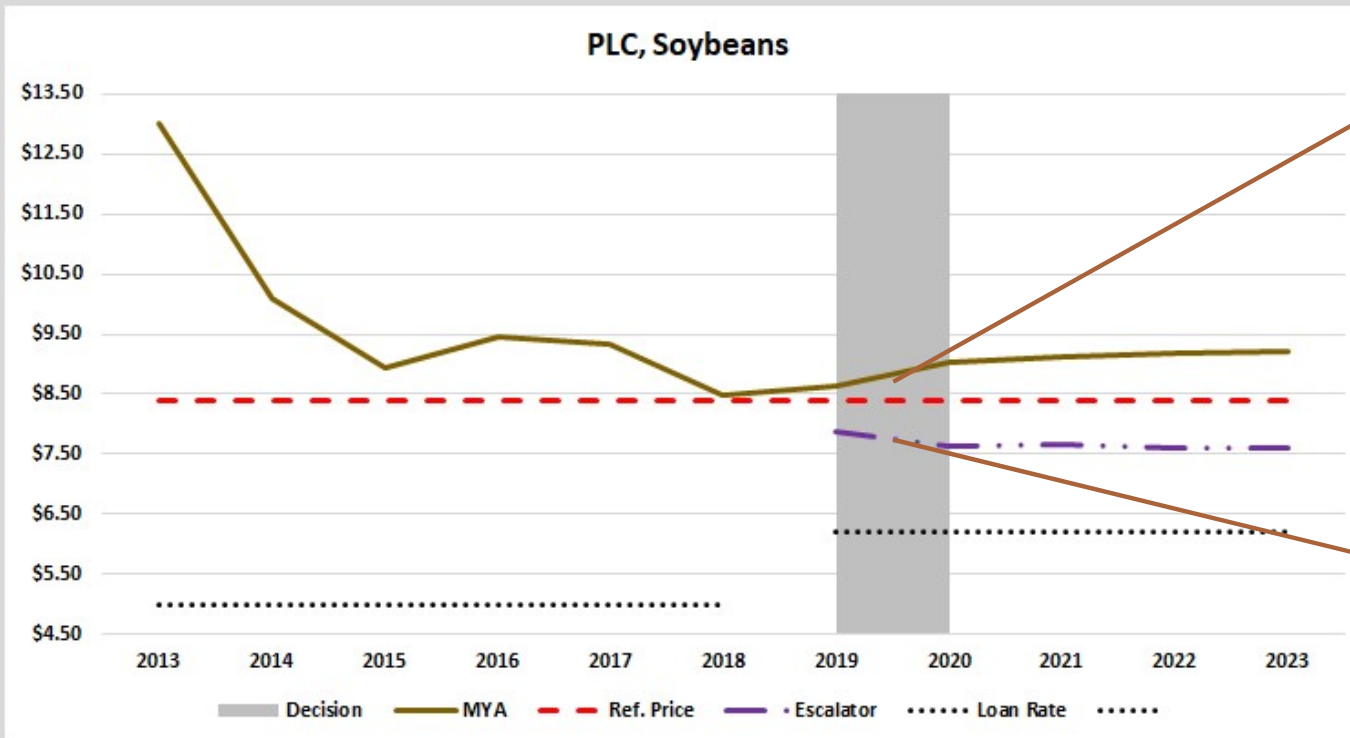
# Price Loss Coverage (PLC): Corn Base.



- ✓ Decision for 2019 and 2020 crops.
- ✓ MYA forecasts are close to Reference Price, below it in 2019 (\$3.65) triggering payment.

Note: Escalator (85% of 5-yr. Olympic) not expected to change reference price.

# Price Loss Coverage (PLC): Soybean Base.

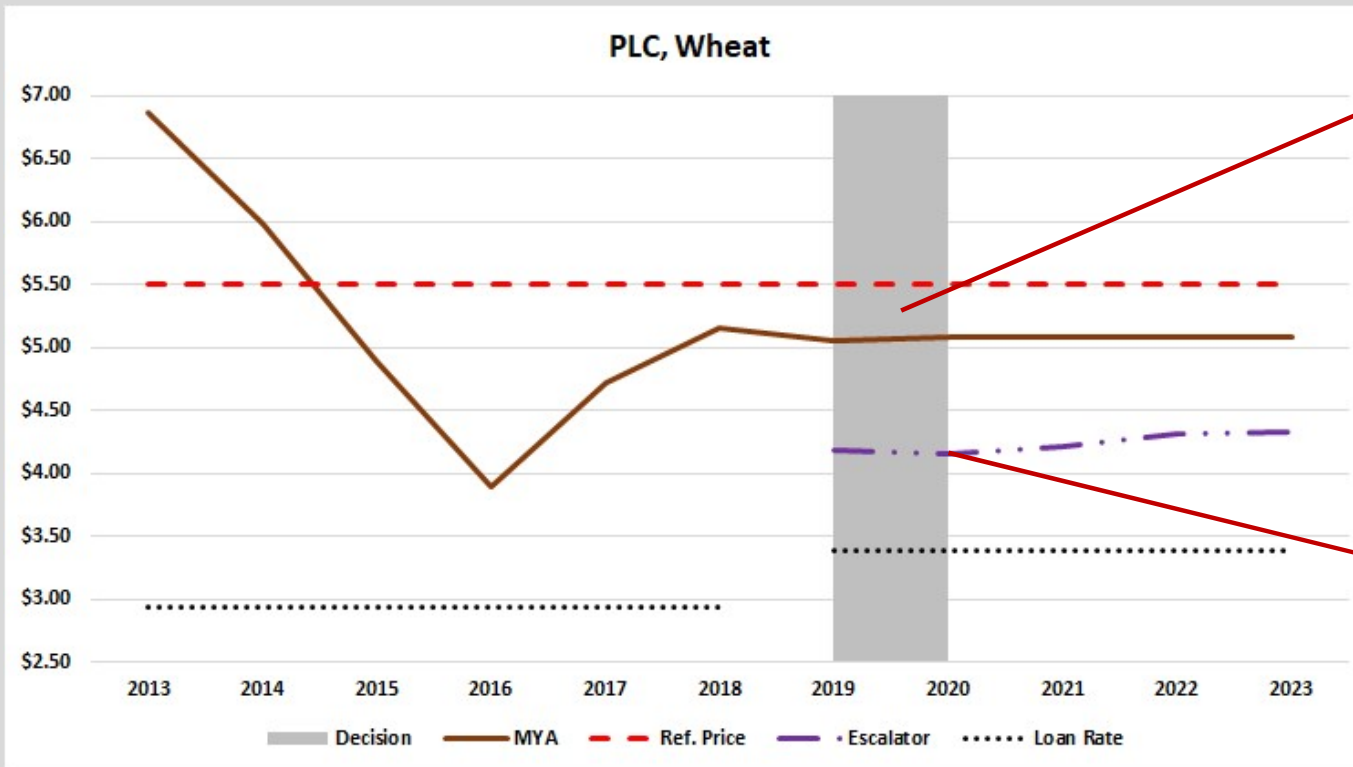


✓ Decision for 2019 and 2020 crops.

✓ MYA forecasts are close to Reference Price, but not expected to trigger payments.

Note: Escalator (85% of 5-yr. Olympic) not expected to change reference price.

# Price Loss Coverage (PLC): Wheat Base.



- ✓ Decision for 2019 and 2020 crops.
- ✓ MYA forecasts are substantially below the Reference Price, triggering payments.

Note: Escalator (85% of 5-yr. Olympic) not expected to change reference price.



# PLC: Yield Update Option

**Table 1. National Yield Factors Under 2018 Farm Bill**

Program Crop	National Yield Factor
Corn	0.9000
Soybeans	0.9000
Grain Sorghum	0.9077
Peanuts	0.9273
Rice, Long Grain	0.9330
Barley	0.9437
Mustard Seed	0.9460
Oats	0.9524
Wheat	0.9545
Sunflower Seed	0.9545
Rice, Medium and Short Grain	0.9591
Rice, Temperate Japonica	0.9591
Canola	0.9634
Seed Cotton	0.9673
Sesame Seed	0.9673
Chickpeas, small	0.9760
Dry Peas	0.9988
Chickpeas, large	1.0000
Crambe	1.0000
Flaxseed	1.0000
Lentils	1.0000
Rapeseed	1.0000
Safflower	1.0000

Source: Farm Service Agency



**Figure 1. Example of PLC Yield Updating Tool** fdd

Notation	Example FSA Farm		
State	Illinois		
County	LaSalle		
Crop	Corn		
National Yield Factor <sup>1</sup>	0.9000		
Substitute Yield <sup>2</sup>	157.85		
Menu Print			
<b>Current PLC Yield</b>			
Current yield <sup>3</sup>	120		
Break-even yield <sup>4</sup>	148.15		
Each FSA farm has a current PLC yield. The average of the farm yields must exceed the break-even yield before updating			
<b>Update PLC Yield</b>			
	Farm Yield <sup>5</sup>	Substitute Yield <sup>2</sup>	Used Yield <sup>6</sup>
Year			
2013	186	157.85	186.00
2014		157.85	
2015	178	157.85	178.00
2016		157.85	
2017	210	157.85	210.00
2013-2017 Average <sup>7</sup>			191.33
National Yield Factor <sup>1</sup>			0.9000
<b>Update Yield<sup>8</sup></b>			<b>154.98</b>
Reset Yields			
<b>Result</b>			
Updating will result in a higher PLC yield.			

<sup>1</sup> Each crop has a national factor that equals average 2018-2012 US yields divided by 2013-2017 average US yields.

<sup>2</sup> The substitute yield will be used if the actual farm yield is lower than the substitute yield.

<sup>3</sup> Each Farm Service Agency (FSA) farm will have a Price Loss Coverage (PLC) yield for crops with base acres. Consider updating the PLC yield if the update yield is higher than the current PLC yield.

<sup>4</sup> The 2013 to 2017 average yields must exceed this break-even yield before updating will result in a higher yield.

<sup>5</sup> Enter farm yields for the years from 2013 to 2017. Leave blank if no crop was planted.

<sup>6</sup> Higher of farm yield or substitute yield.

<sup>7</sup> Simple average of yields.

<sup>8</sup> Equals the 2013-2017 average times the national yield ratio times .9.



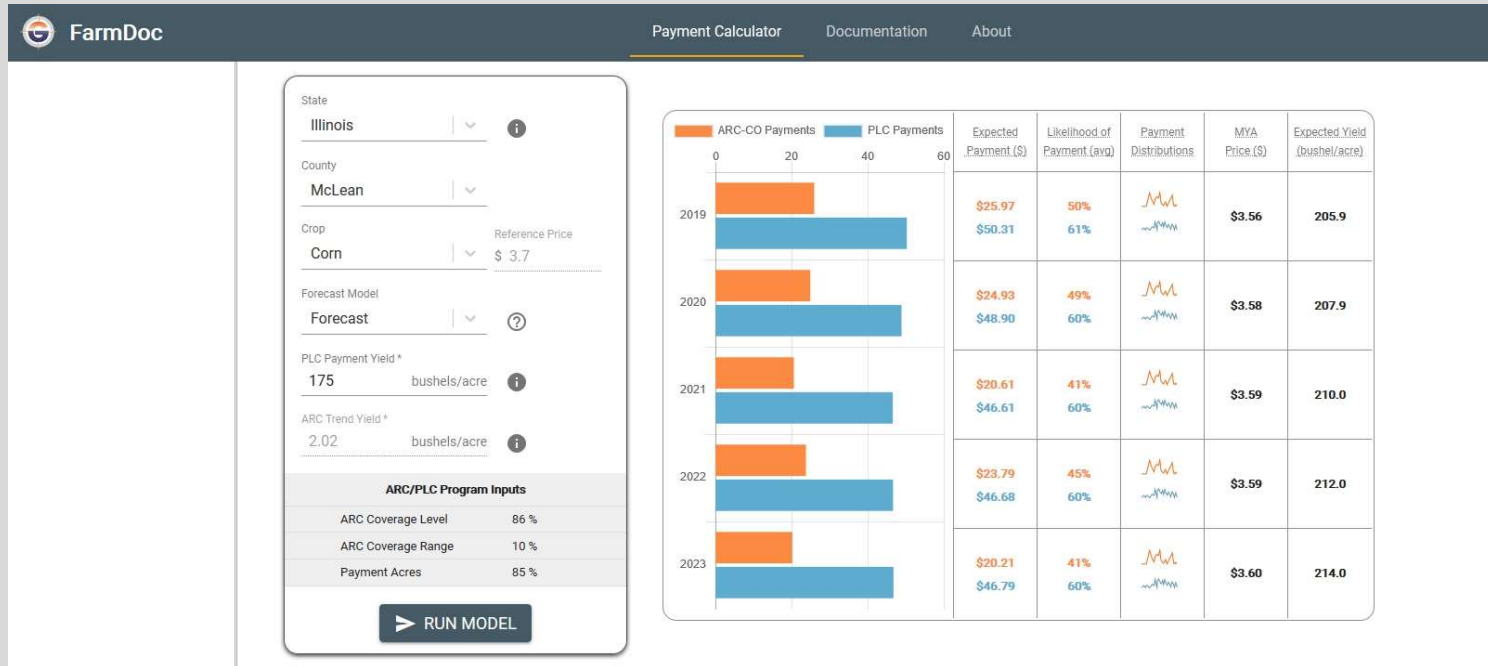
# ARC/PLC Payments and Farm Income (GFIPS)

## University of Illinois Gardner Farm Income & Policy Simulator

<i>Central High 2</i>	Base Year 2018	2019	2020	2021	2022	2023
Corn Price/Yield (bu/acre)	\$3.60 / 237	\$4.50 / 185	\$3.90 / 211	\$3.85 / 213	\$3.86 / 215	\$3.87 / 217
Soybean Price/Yield (bu/acre)	\$8.90 / 74	\$9.00 / 55	\$9.00 / 63	\$9.11 / 64	\$9.07 / 64	\$9.29 / 65
Net Farm Income	\$166,900	\$113,797	\$12,547	\$5,355	\$2,017	\$10,019
Net Worth (Millions)	\$3.85	\$3.97	\$3.89	\$3.83	\$3.75	\$3.69
Current Ratio	1.60	1.97	1.73	1.54	1.37	1.23
Debt/Asset Ratio	26.6%	24.7%	27.3%	29.7%	32.1%	34.3%
Debt Coverage Ratio	193.6%	222.1%	81.6%	74.6%	71.5%	75.8%
MFP Payment	\$52,900	\$139,400	\$0	\$0	\$0	\$0
PLC Payment	\$36,369	\$0	\$0	\$0	\$0	\$0
ARC-CO Payment	\$1,962	\$3,786	\$0	\$0	\$0	\$0



# ARC/PLC Decision: Gardner Payment Calculator



<https://fd-tools.ncsa.illinois.edu/>

# THANK YOU.

Jonathan Coppess

Nick Paulson

Krista Swanson

