

ARC-CO/PLC Decision Aid

Texas A&M University

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February 19, 2021

Agent Training: USDA Programs Update for Your Clientele



UNIVERSITY OF
GEORGIA

**College of Agricultural &
Environmental Sciences**

*Department of Agricultural
and Applied Economics*



Today's Topic

ARC and PLC Programs

Texas A&M ARC and PLC
Decision Aid

Deadline for ARC/PLC election
and enrollment: **March 15, 2021**



Producer Election of ARC and PLC

The 2018 Farm Bill

Initial election is for 2019-2020 crop years.

Beginning in the 2021 crop year, the farmer can change the ARC/PLC election each year until 2023.



Timeline for ARC and PLC Election and Enrollment

Although the election between ARC and PLC are optional beginning in 2021, **enrollment** of the program is required in order to be eligible for the payments.

The deadline for re-election and enrollment between ARC and PLC is **March 15, 2021**.



ARC/PLC election and enrollment for 2021
March 15, 2021

Picture source: Liu, Y., Rabinowitz, A. N. & Lai, J. H. (2019). Eligibility and Payments under the 2018 Farm Bill PLC and ARC Programs. Department of Agricultural and Applied Economics, University of Georgia. Report No. AGECON-19-12PR. November 2019.

Figure 1: Two-Year Timeline for Key Dates of ARC and PLC Payments for Cotton and Peanut Farmers. Photo Credit: Dr. John Lai. University of Florida Institute of Food and Agricultural Sciences Food and Resource Economics Department.



ARC and PLC Programs

1

ARC - Agriculture Risk Coverage

- ARC – CO (ARC – County)
- ARC – IC (ARC – Individual)

2

PLC – Price Loss Coverage



ARC – CO Program

$$\begin{aligned} \text{BENCHMARK County Revenue} &= \\ &5\text{-Yr Olympic Average Yield Per Planted Acre} \\ &\quad \times \\ &5\text{-Yr Olympic Average Market Price} \end{aligned}$$

$$\text{ARC Guarantee} = 86\% \times \text{Benchmark County Revenue}$$

$$\begin{aligned} \text{ACTUAL County Revenue} &= \\ &\text{Actual County Yield Per Planted Acre} \\ &\quad \times \\ &\text{Higher of Avg Market Price or Loan Rate} \end{aligned}$$

$$\text{ARC Payment}^* = \text{ARC Guarantee} - \text{Actual County Revenue}$$

***Or 10% of Benchmark Revenue, whichever is less**

ARC payments are made on 85% of base acres.

If the Average Market Price for any given year is lower than the Effective Reference Price, the Effective Reference Price will be used to calculate the 5-Year Olympic Average Market Price.



PLC Payment Calculation

PLC Payment Rate = Effective Reference Price - Higher of MYA¹ Price
or Loan Rate

$$\begin{aligned} \text{Total PLC Payment} &= \text{PLC Payment Rate} \\ &\quad \times \text{PLC Payment Yield} \\ &\quad \times 85\% \text{ of Base Acres}^2 \end{aligned}$$

¹MYA – Marketing Year Average

²Base Acres for a specific covered commodity



2021 Effective Reference Prices

Commodity	Reference Price	
Wheat	\$5.50	Bushel
Corn	\$3.70	Bushel
Grain Sorghum	\$3.95	Bushel
Soybeans	\$8.40	Bushel
Peanuts	\$535	Ton
Seed Cotton	\$0.367	Pound



Implications for STAX



Beginning with the 2019 crop year, those who participate in PLC/ARC for the Seed Cotton Base Acres will be ineligible for STAX.

- Scenario: plant 160 acres of cotton on a farm with 80 acres of soybean base and 80 acres of peanut base.
- One Option: producer can purchase STAX on 160 acres of cotton and enroll all 160 acres of soybean/peanut base in ARC/PLC.



ARC or PLC, Which one is Better?

- Deciding between the ARC and PLC is a farm by farm decision.
- Depends on:
 - Your farm's PLC payment yield
 - Your county's historical yield (past five years)
 - Historical marketing year average prices (past five years)
 - Current year's county yield
 - Current year's marketing year average price



ARC-CO/PLC Decision Aid

<https://www.afpc.tamu.edu/>

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@Texas A&M University



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Our mission

To provide unbiased and objective economic analysis of the impacts for policy alternatives on stakeholders.

Current Projects

[ARC-CO / PLC Decision Aid](#)

(Updated for 2021!)



Agricultural Policy Specialist Dr. Joe Outlaw and colleagues from the Agricultural and Food Policy Center provide brief weekly updates on current agricultural policy issues. See the [recent podcasts](#) available now.

Recent Publications

[Working Paper: Representative Farms Economic Outlook for the Preliminary 2021 FAPRI/AFPC Baseline](#)

[Briefing Paper: Representative Farms Economic Outlook for the Preliminary 2021 FAPRI/AFPC Baseline](#)

[Working Paper: Representative Farms Economic Outlook for the August 2020 FAPRI/AFPC Baseline](#)



ARC-CO/PLC Decision Aid

<https://www.afpc.tamu.edu/tools/farm/farmbill/2018/>



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2018 Farm Bill Decision Aid

To retrieve your saved farms, you must first

[→ Login](#)



2018 Farm Bill Decision Aid

Disclaimer

This is an educational tool to help you understand how your choices under the 2018 Farm Bill may affect your FSA payments. The calculations are based on our understanding of the new programs as described by the USDA regulations.

By using this tool, you 1) agree that the results are for educational purposes only; 2) agree that the results are not a guarantee of your future FSA program parameters or payments, and 3) acknowledge that this tool is provided with absolutely no warranty, without even the implied warranty of fitness for a particular purpose.

I accept



2018 Farm Bill Decision Aid

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➔ Login

To create an account, just enter an email address and password. ✕

Email Address

Password

➔ Login



2018 Farm Bill Decision Aid

 Home

 Logout

To get started, let's create a farm unit.

 + New Farm



2018 Farm Bill Decision Aid

 Home

 Logout

Edit Farm Unit

FSA Farm Number

1234

State

Georgia

County

Jenkins

Crop

Seed Cotton

 Save



2018 Farm Bill Decision Aid

- [Home](#)
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Farm Unit

FSN 1234
State Georgia
County Jenkins
Crop Seed Cotton

Edit this farm unit

Create another farm unit, starting with this farm's information.


Delete this farm unit and all its data.

 Edit

 Add Another Crop

 Delete

Decision Aids

 Expected Payments Tool

This decision aid characterizes probabilities of different levels of expected FSA payments for 2021.



2018 Farm Bill Decision Aid

 Home

 Logout

Edit Farm Unit

FSA Farm Number

1234

State

Georgia

County

Jenkins

Crop

Peanuts

 Save



My Farm Units

+ New Farm

FSN

State

County

Crop

1234

Georgia

Jenkins

Seed Cotton

1234

Georgia

Jenkins

Peanuts

1234

Georgia

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Decision Aids

Expected Payments Tool

This decision aid characterizes probabilities of different levels of expected FSA payments for 2021.



2018 Farm Bill Decision Aid

Expected Payments

This decision aid characterizes probabilities of different levels of expected FSA payments. These characterizations are based on 500 possible future realizations of market prices and county yields. The expected payments are an average across these many possibilities. Values displayed in the results will not match the payments you might calculate using single specific price and yield realizations. To see the likelihoods of different levels of payments, click on an individual expected payment in the results table.

FSN 1234
State Georgia
County Jenkins
Crop Seed Cotton

⚠WARNING: Historical Yields for 2013-2017 and 2014 Farm Bill PLC Payment Yield units must be in lbs of *SEED COTTON* per acre. If using crop insurance records or other sources reflecting historical lint yields, you must convert these historical lint yields to historical seed cotton yields by multiplying the lint yield (lbs/Acre) by 2.4 to get your seed cotton yield (lbs/Acre). If you are obtaining your 2014 PLC Payment Yield from FSA forms, this figure should already reflect a seed cotton yield.

Base Acres ac

2021 PLC Payment Yield lbs/ac Historical Irrigated Percentage [?] %

Your Seed Cotton Expectations
2021 Your Expected Price \$/lb Projected Prices [?] \$/lb

Advanced Settings (Not recommended for most users)

If you have experienced exceptional circumstances in your county or would like to customize your analysis, check here to enable additional settings.

Crop	Program	2021	Total
Seed Cotton	PLC	<u>\$1,990</u>	\$1,990
Irrigated Seed Cotton		<u>\$383</u>	\$383
Non-Irrigated Seed Cotton	ARC	<u>\$229</u>	\$229

Do you have a few moments? Take our quick [Survey](#)



Using the Decision Aid

- If you need help for any reason with the Decision Aid call:

Texas A&M University Agricultural and Food
Policy Center

979-845-5913

Do You have any Questions?



Feel free to contact me:

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COTTON
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