

**2018 Farm Bill: Agriculture Risk Coverage (ARC) and Price Loss
Coverage (PLC) programs**

**2019 Agriculture Risk Coverage – County
(ARC-CO) Payments for Soybeans in
Arkansas**

Prepared by:

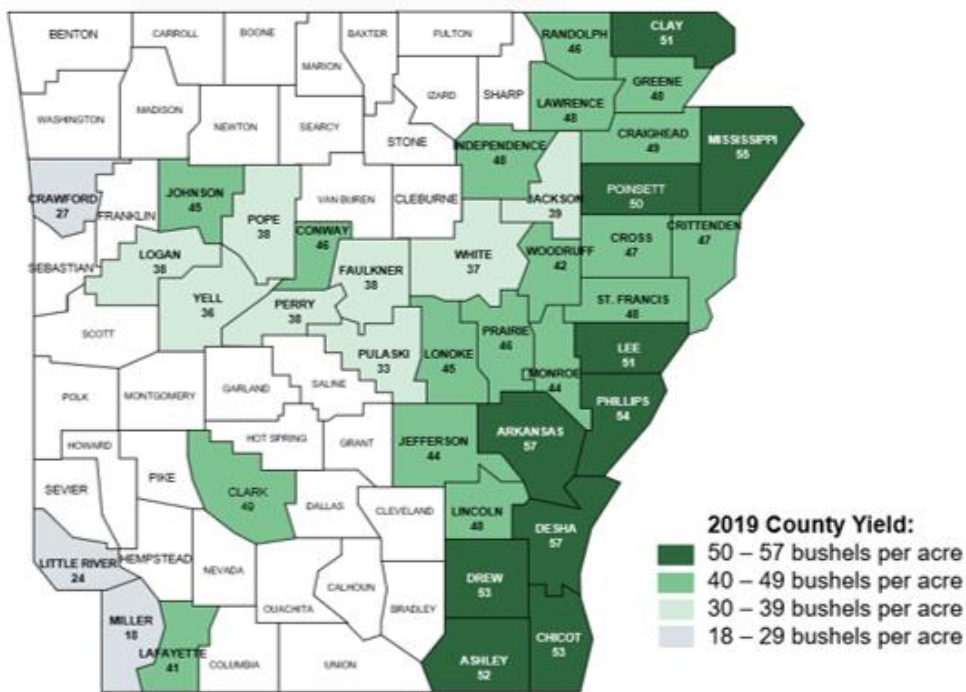
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October 20, 2020

The 2018 Farm Bill allowed Arkansas soybean producers to choose their 2019 risk management program from Price Loss Coverage (PLC), Agricultural Risk Coverage by Individual Farm (ARC-I), or Agricultural Risk Coverage by County (ARC-CO). According to Farm Service Agency data, approximately 80% of U.S. soybean base acres were enrolled in the ARC-CO program for the 2019 and 2020 crop years. Another 6% of soybean base acres were enrolled in the ARC-Individual program and the remaining 14% of base acres went in the Price Loss Coverage (PLC) program. With the 2019 marketing year average (MYA) prices for soybeans finalized as of the end of September and the Farm Service Agency (FSA) recently releasing actual county yields ¹ for the 2019 program year, ARC-CO payments can now be calculated. Since the 2019 MYA price for soybeans was above the PLC reference price of \$8.40, no PLC payments were triggered for soybeans. This article reports 2019 ARC-CO payments on soybean base acres for counties in Arkansas.

Figure 1 shows the irrigated county yields used by FSA to determine ARC-CO payments on soybean base acres. Soybean yields were the highest in eastern Arkansas counties along the Mississippi river, with FSA county yields over 50 bushels per acre in ten (10) counties. Yields were lower in areas of southwestern Arkansas and in the west central, Arkansas river valley counties. From April to July 2019 the west central and southwestern regions of Arkansas received over 16 inches of rainfall above historic averages for the four-month period ². This does not account for additional 2019 flood-related losses in the Arkansas river valley from excessive upstream rainfall events in Oklahoma.

Figure 1. FSA 2019 Arkansas County Irrigated Soybean Yields.

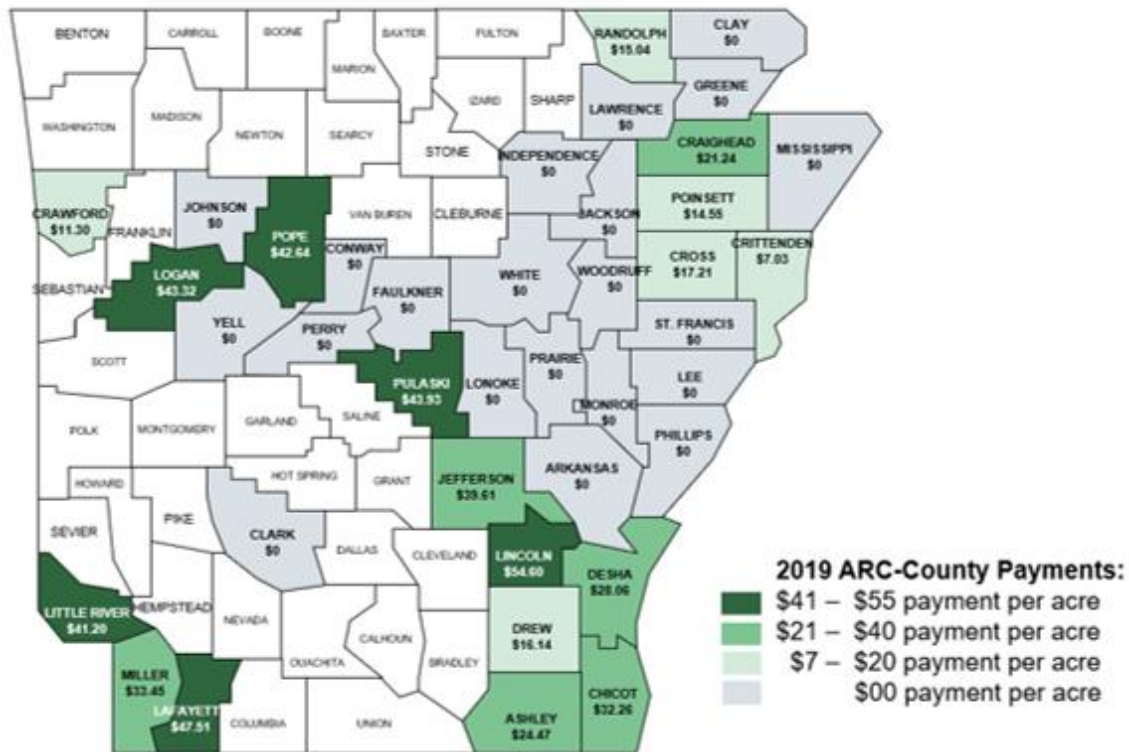


Source: USDA, Farm Service Agency.
 Note: Data for county yields is classified as "irrigated".

ARC-CO payments are determined by comparing actual revenue to a multi-year benchmark revenue value. Each county has a unique benchmark revenue due to variations in average county yields. Actual revenue in each county is equal to actual yield times the 2019 MYA price of \$8.57 per bushel. The ARC-CO payment is then equal to the difference, if positive, between 86% of benchmark revenue and actual revenue. ARC-CO payments are capped at 10% of benchmark revenue and are made on 85% of base acres. Payments are further reduced by a sequestration percentage which has generally been 6.6 to 6.8% in recent years.

Figure 2 shows 2019 ARC-CO payments for counties with “irrigated” soybean base acres. Roughly 46% of the 39 Arkansas counties with base acreage classified as “irrigated” and “non-irrigated” had average yields low enough to trigger an ARC-CO payment. Counties along the Arkansas and Red rivers tended to have the largest payments in the state, exceeding \$41 per acre. Payment size is associated with yield level. Three counties in extreme southwest Arkansas along the Red river had a combined irrigated soybean yield of 28 bushels per acre in 2019. The four counties along Arkansas river that received the highest tier of payments had a combined irrigated soybean yield of 39 bushels per acre.

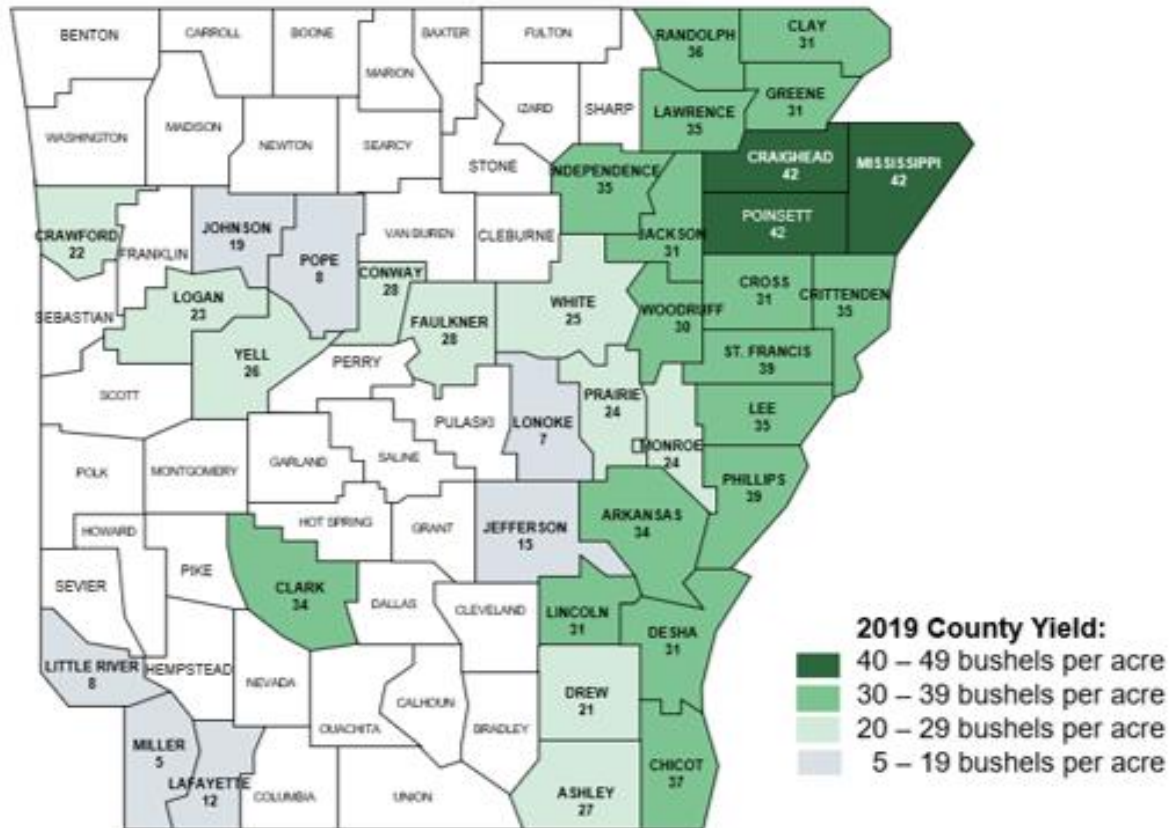
Figure 2. FSA 2019 Arkansas County Irrigated Soybean ARC-CO Payments.



Source: USDA, Farm Service Agency.
Note: Data for county yields is classified as “irrigated”.

Figure 3 shows the “non-irrigated” county yields used by FSA to determine ARC-CO payments on soybean base acres. Non-irrigated soybean yields in 2019 follow a similar regional pattern as those for irrigated. The highest county yields are in the easternmost areas of the state with lower yields mainly along the Arkansas and Red river valleys. Note some counties in these regions with average yields under 10 bushels per acre.

Figure 3. FSA 2019 Arkansas County Non-Irrigated Soybean Yields.

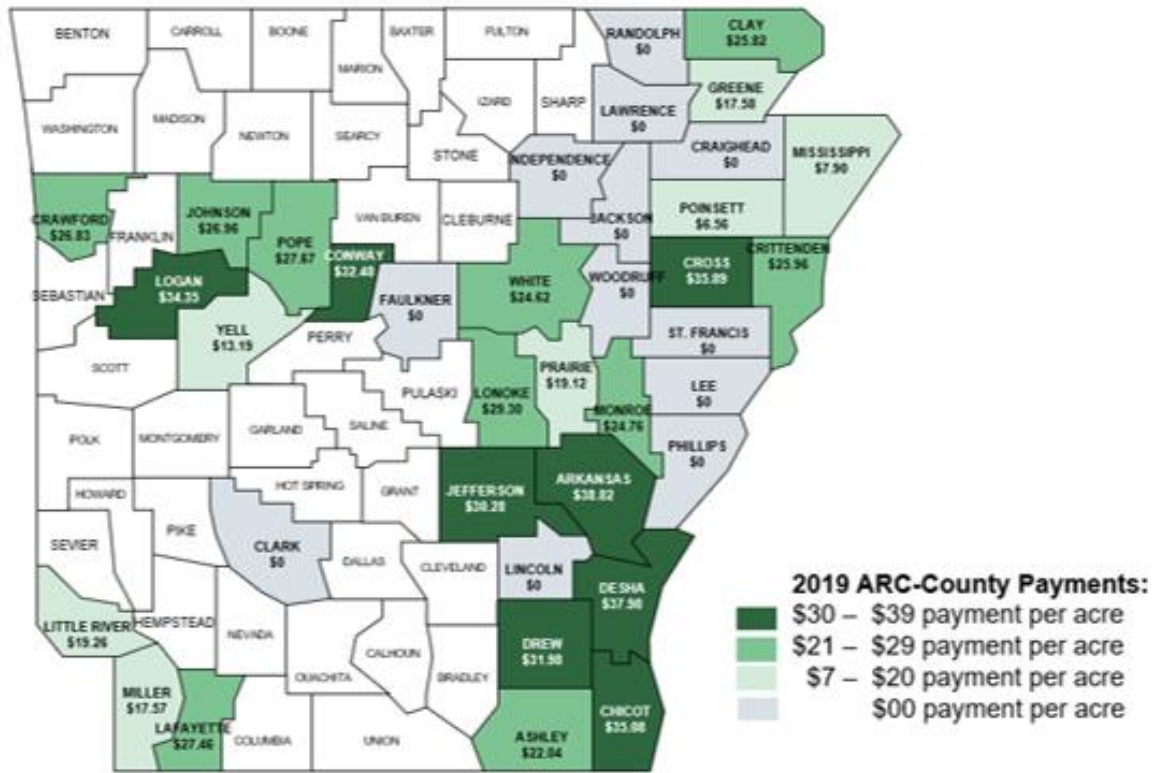


Source: USDA, Farm Service Agency.

Note: Data for county yields is classified as “non-irrigated”.

Figure 4 shows 2019 ARC-CO payments for counties with “non-irrigated” soybean base acres. Approximately 69% of the 39 Arkansas counties with base acreage classified as “non-irrigated” had average yields low enough to trigger an ARC-CO payment. Counties along the Arkansas river tended to have the largest payments in the state, exceeding \$30 per acre. Of the eight (8) counties receiving over \$30 per acre in ARC-CO payments, non-irrigated yields ranged from a low of 14.5 bushels per acre to a high of 33.9 bushels.

Figure 4. FSA 2019 Arkansas County Non-Irrigated Soybean ARC-CO Payments.



Source: USDA, Farm Service Agency.
 Note: Data for county yields is classified as "non-irrigated".

ARC-CO payments were more common on non-irrigated base acres than on irrigated base acres in 2019. Non-irrigated acreage in 27 counties triggered payments ranging from \$6.56 to \$38.82 per acres. In contrast, ARC-CO payments on irrigated base acres occurred in 18 counties with payments ranging from \$7.03 to \$54.60 per acre. There were general consistencies among ARC-CO payments on irrigated and non-irrigated base acres with respect to geographic region. Counties along the flood prone river valleys of the state tended to have county yields low enough to trigger ARC-CO payments in 2019.

Summary

With the 2019 MYA prices and county yields now finalized, ARC-CO payments have now been calculated. In Arkansas, the highest ARC-CO payments were generally triggered in counties along the Arkansas and Red river valleys—areas that faced significant planting delays in 2019. Given a U.S. marketing year average price of \$8.57 per bushel for the 2019 crop, the PLC program provided no payments on soybean base acres. In contrast, many counties received significant ARC-CO payments on soybean base acres. ARC-CO payments

on irrigated base acres ranged from \$7.03 to \$54.60 per acre with an average payment of \$22.79 per acre. ARC-CO payments on non-irrigated base acres ranged from \$6.56 up to \$38.82 per acre with an average payment of \$19.43 per acre. The majority of soybean base acres were enrolled in the ARC-CO program for the first two years of the 2018 Farm Bill. Given the weather challenges and resulting planting delays seen in 2019, the ARC-CO program proved a valuable tool in some counties in offsetting yield and revenue variability.

A table of ARC-CO payments for all Arkansas counties is provided below in Table 1.

County	ARC-County Soybean Payment (\$/acre)		
	All Practices	Irrigated	Non-Irrigated
Benton	\$0.00		
Cleburne	\$0.00		
Franklin	\$0.00		
Hempstead	\$6.27		
Pike	\$34.99		
Sebastian	\$20.67		
Sevier	\$28.30		
Sharp	\$0.00		
Stone	\$22.46		
Arkansas		\$0.00	\$38.82
Ashley		\$24.47	\$22.04
Chicot		\$32.26	\$35.08
Clark		\$0.00	\$0.00
Clay		\$0.00	\$25.82
Conway		\$0.00	\$32.48
Craighead		\$21.24	\$0.00
Crawford		\$11.30	\$26.83
Crittenden		\$7.03	\$25.96
Cross		\$17.21	\$35.89
Desha		\$28.06	\$37.98
Drew		\$16.14	\$31.98
Faulkner		\$0.00	\$0.00
Greene		\$0.00	\$17.58
Independence		\$0.00	\$0.00
Jackson		\$0.00	\$0.00
Jefferson		\$39.61	\$30.28
Johnson		\$0.00	\$26.96
Lafayette		\$47.51	\$27.46

Lawrence		\$0.00	\$0.00
Lee		\$0.00	\$0.00
Lincoln		\$54.60	\$0.00
Little River		\$41.20	\$19.26
Logan		\$43.32	\$34.35
Lonoke		\$0.00	\$29.30
Miller		\$33.45	\$17.57
Mississippi		\$0.00	\$7.90
Monroe		\$0.00	\$24.76
Perry		\$0.00	\$0.00
Phillips		\$0.00	\$6.56
Poinsett		\$14.55	\$27.67
Pope		\$42.64	\$19.12
Prairie		\$0.00	\$0.00
Pulaski		\$43.93	\$0.00
Randolph		\$15.04	\$24.62
St. Francis		\$0.00	\$0.00
White		\$0.00	\$13.19
Woodruff		\$0.00	\$38.82
Yell		\$0.00	\$22.04
Source: USDA, Farm Service Agency.			

References:

1/ Farm Service Agency, United States Department of Agriculture. ARC/PLC Program Data. https://www.fsa.usda.gov/programs-and-services/arcplc_program/arcplc-program-data/index

2/ National Agricultural Statistics Service, United States Department of Agriculture. *Crop Progress & Condition*. <https://www.nass.usda.gov/Statistics by State/Arkansas/Publications/Crop Progress & Condition/2019/>

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