

Agriculture Risk Coverage (ARC) Program Payment Calculation Fact Sheet

Michael A. Deliberto and Michael E. Salassi

Louisiana State University Agricultural Center

Department of Agricultural Economics & Agribusiness

- The ARC program is available to producers of covered commodities at the county (ARC-C) or individual farm-level (ARC-I). ARC is an area-wide revenue plan.
- Selection of ARC-C is on a covered commodity-by-covered commodity and farm-by-farm basis. ARC-I is a whole farm revenue program pertaining to all commodities produced on the farm.
- This informational brief will focus on the ARC-C program.
- ARC-C payment acres are 85% of the base acres of the enrolled covered commodity.
- Covered commodities enrolled in ARC are ineligible for PLC and SCO program participation.
- ARC-C payments are made when the covered commodity's actual crop revenue is less than that covered commodity's revenue guarantee for a crop year.
- The following example outlines the methodology for calculating a potential ARC-C payment for corn produced in Tensas parish for the 2014 crop year.
- Information used in these payment calculations are obtained for the previous five years of data from USDA NASS county yields for Tensas parish and national MYA corn price.
- The five-year Olympic average is used to calculate the ARC-C benchmark revenue. This mathematical operation excludes the highest and lowest values for the five-year period.
- ARC-C corn payment formula for Tensas parish can be expressed as follows.
 - o {(86% * Benchmark Revenue) (Actual County Revenue)} * base acres * 85%
- Historical MYA price and yield per planted acre data for Tensas parish is presented below.

Year	Parish Yield	MYA Price
2009	128.98	\$3.55
2010	123.92	\$5.18
2011	117.77	\$6.22
2012	174.22	\$6.89
2013	167.91	\$4.45

- The ARC program carries a provision that states that the corn reference price can replace the MYA price for any year in which the MYA price is below the commodity's reference price.
 - O Such is the case for the 2009 MYA price of \$3.55. It is replaced with the \$3.70 corn reference price that is stablished by the farm bill.
- The 2014 ARC-C benchmark revenue can be calculated by obtaining the product of the five-year Olympic average county yield and the five-year Olympic average MYA price to equal \$740.73.
 - \circ (140.29 bushels per acre * \$5.28 per bushel) = \$740.73

- Through these Olympic average calculations, the 2011 and 2012 yields are excluded; and likewise the 2009 and 2012 MYA prices are excluded from the benchmark revenue calculation.
- Suppose the following condition exists in Tensas parish for the 2014 crop year in which the average county yield per planted acre is 170 bushels and the MYA price is \$3.50 per bushel.
- Therefore, the actual revenue for the parish is \$595.00 per acre.
 - o (170 bushels per acre * \$3.50 per bushel) = \$595.00
- For the 2014 crop year, the ARC-C guarantee is 86% of the \$740.73 benchmark, or \$637.03.
- Since the actual crop revenue is less than the ARC-C guarantee, an ARC-C payment rate is made in the amount of \$42.03 (\$637.03 \$595.00).
- The ARC-C payment per base acre is obtained by applying the \$42.03 payment rate to 85% of the covered commodity's base, which is equal to \$35.73 per base acre.
- If a farm had 100 acres of corn base enrolled in the ARC-C program, the total payment would be approximately \$3.573.00.
 - o (\$42.03 payment rate * 100 acres of corn base * 85%) = \$3,572.55 ARC-C payment
- The ARC-C program payment is limited to 10% of the benchmark revenue (e.g. the maximum ARC-C payment rate for corn in Tensas parish for 2014 would be capped at \$74.07 per acre).
- Historical information used for corn ARC-C payment calculation which denotes the parish yields and MYA prices used in the benchmark revenue calculation.

Year	Parish Yield	MYA Price
2009	128.98	\$3.55 (\$3.70)
2010	123.92	\$5.18
2011	117.77	\$6.22
2012	174.22	\$6.89
2013	167.91	\$4.45

- For the ARC-C program, the only farm-specific data that is applicable to the payment calculation is the amount of base acres for the covered commodity.
 - o ARC-C is an area-wide shallow loss revenue plan administered at the county level.
- This ARC-C fact sheet is designed for the purpose of illustrating how a potential ARC-C payment would be calculated. This is intended for educational purposes only.



Michael A. Deliberto can be contacted in the Department of Agricultural Economics and Agribusiness at (225) 578-7267 or by emailing mdeliberto@agcenter.lsu.edu.