



Agricultural Business Management

Choosing ACRE for the 2010 Crop

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The Average Crop Revenue Election (ACRE) program is the new, optional safety net for farmers provided by Congress in the Food, Conservation, and Energy Act of 2008 (commonly called the farm bill). The ACRE program is based on changes in crop revenue. It is an alternative to the counter-cyclical (CC) program which is based only on changes in crop prices.

The 2010 crop is the second crop year that ACRE is available. The deadline for electing for the ACRE program in 2010 is June 1, 2010.

The 2010 decision to sign up for ACRE involves more uncertainty than in 2009 because (1) the earlier due date means the marketing year for the 2010 crop has not started, (2) we do not yet know all of the marketing year prices for the 2009 year, and (3) we do not know the early growing season weather and its effects on the 2010 yield for most crops. The actual results for the 2009 crop do NOT have any impact on the likelihood of ACRE payments for the 2010 crop.

As noted above, there is a lot of uncertainty about 2010 yields and prices. My estimates of potential state payment rates for Minnesota point toward ACRE payments for corn, soybean and wheat in Minnesota. BUT this is not certain. There are many moving parts in farming and in this decision and thus whether an ACRE payment will actually occur. To predict the probability of an ACRE payment, the potential values and estimated distributions of yields and prices were combined with the ACRE programs rules in a statistical model. Based on 1,000 runs of this model, the results show potential state ACRE payment rate in Minnesota near \$50 for corn, \$30 for soybeans, and \$27 for wheat with positive payment rates estimated to occur in over 50% of the estimations. However, these are just estimates and reality may not provide these results. While the probabilities point toward payments, the probability of no payments also exists. Each farmer needs to evaluate his or her own situation and decide whether to give up 20% of direct payments for the possibility of larger payments.

The basics of ACRE are described in the next section followed by some examples of how guarantees and payments are calculated.

Basic description of ACRE

A farmer can sign up for ACRE in 2010 even if they did not sign up in 2009. However, choosing ACRE is an irrevocable election meaning a farmer cannot go back to the counter-cyclical payments even if future market conditions make the counter-cyclical payment larger than the

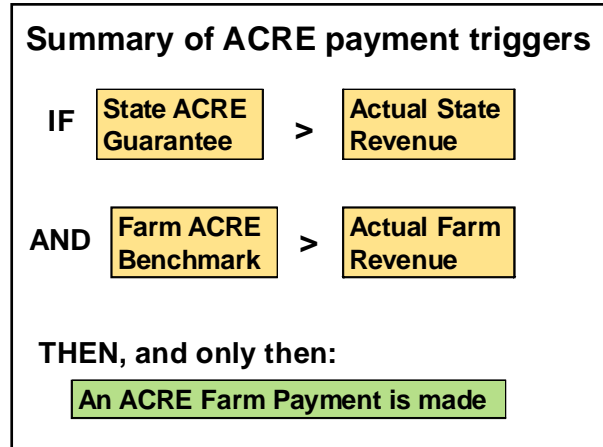
ACRE payment. So if a farmer did sign up for ACRE in 2009, that farmer cannot change the decision.

Farmers may find this safety net based on crop revenue appealing, but several restrictions must be remembered for this new program.

- Farmers who choose to elect ACRE must accept a 20% reduction in direct payments and a 30% reduction in marketing assistance loan rates for all commodities on the farm.
- Farms that elect the ACRE Program cannot receive CC payments.
- The ACRE program has payment limits based on Adjusted Gross Income (AGI).
- The choice greatly hinges on whether commodity prices will stay at or near current levels or decrease.
- The choice also depends on the variability of the individual farm's yields and that farm's State yields and the correlation between the two yields.

Before a payment to an individual farmer is made under the ACRE program, two revenue loss triggers must occur; one at the state level and one on the individual farm. National prices are used to value both the state yields and farm yields. The ACRE payment is based on national prices and state yields, not farm yields.

These complexities essentially take away any possibility to develop simple decision rules or breakeven prices for farmers to make the decision to choose between ACRE and CC. To help farmers make the choice between ACRE and CC, an Excel worksheet that estimates ACRE, CC and DP payments under different views of the future. This factsheet and the worksheet are available in the 2008 Farm Bill section at www.extension.umn.edu/agbusinessmanagement.



ACRE election and enrollment

A decision to elect ACRE may be made in any of the crop years 2009-2012; however, the ACRE election is irrevocable and cannot be changed from the time of election through the 2012 crop year. Producers on farms that have elected ACRE must decide annually whether to enroll in the ACRE Program. Farmers have until June 1, 2010, to elect (sign-up) their crops for the 2010 crop year. After election, producers must enroll the farm in the ACRE Program to receive payments. All producers on a farm must elect the ACRE Program election or the farm is not enrolled in ACRE.

Payment Limitation Provisions

The 2008 Act includes maximum payment amounts. Direct payments are limited to \$40,000 per person or entity minus the 20 percent direct payment reduction, and CC or ACRE payments are limited to \$65,000 plus the 20% direct payment reduction amount. The limitation is attributed to entities and individuals, including indirect amounts received through entities.

The Act also includes payment limits based on Adjusted Gross Income (AGI). Persons or legal entities whose average nonfarm AGI exceeds \$500,000 are not eligible for direct, CC or ACRE payments. Also, persons or legal entities whose average farm AGI exceeds \$750,000 are not eligible for direct payments under the DCP and ACRE Programs.

ACRE details

ACRE provides protection from fluctuations in revenue (the product of price and yield) while CC provides protection from fluctuations in price only. Potential ACRE payments are made if and only if both state and individual farm revenues fall below targets. Any ACRE payment is based on losses at the state level, not at the farm level. ACRE payments are tied to current plantings on the farm; CC payments are tied to the farm's base acres.

Producers who elect and enroll a farm in ACRE agree to: (1) forgo counter-cyclical payments, (2) a 20-percent reduction in their direct payments, and (3) a 30-percent reduction in the marketing assistance loan rates for all commodities produced on the farm.

ACRE payments are tied to current plantings on the farm as opposed to counter-cyclical payments, which are tied to the farm's base acres.

To be eligible for ACRE payments, owners, operators, landlords, tenants, or sharecroppers must:

- have base acres on the farm;
- share in the risk of producing a crop on base acres on a farm enrolled in ACRE;
- annually report the use of the farm's cropland acreage and **submit production reports**;
- comply with conservation and wetland protection requirements on all of their land;
- comply with planting flexibility requirements;
- use the base acres for agricultural or related activities; and
- protect all base acres from erosion, including providing sufficient cover as determined necessary by the county FSA committee, and control weeds.

Commodities eligible for ACRE payments are barley; corn; grain sorghum, including dual purpose varieties that can be harvested as grain; oats; canola; crambe; flaxseed; mustard seed; rapeseed; safflower; sesame seed; sunflower seed, including oil and non-oil varieties; peanuts; long grain rice; medium grain rice (which includes short grain rice), excluding wild rice; soybeans; upland cotton; wheat; dry peas; lentils; small chickpeas (Garbanzo bean, Desi); and large chickpeas (Garbanzo bean, Kabuli).

ACRE Payment Triggers

ACRE payments are issued when two conditions are met for a commodity. The first condition is met when the **Actual State Revenue** falls below the **State ACRE Guarantee**. The second condition is met when the **Actual Farm Revenue** falls below the **Farm ACRE Guarantee**. Only when both conditions are met will an ACRE payment be issued based on the **State ACRE Payment Rate**.

The **State ACRE Guarantee** is 90% multiplied by Benchmark State Yield multiplied by ACRE Guarantee Price.

The Benchmark State Yield is the simple average of yields per planted acre for the most recent 5 crop years, excluding the high and low yields. For crop year 2010, the Benchmark State Yields are established using crop years 2005-2009.

The ACRE Guarantee Price is the 2-year simple average of the national marketing year price. For the 2010 crop, the ACRE Guarantee Price is based on the 2008/09 and 2009/10 marketing years. For each commodity, State ACRE Guarantees will be finalized after the 2009/10 marketing year prices are published. Obviously, farmers will need to make the ACRE election decision before the 2009/10 marketing year even begins.

For 2010 and subsequent crop years, the State ACRE Guarantee cannot change by more than 10 percent from the previous year's State ACRE Guarantee. Preliminary 2010 State ACRE Guarantees, based on projected ACRE Guarantee Prices and preliminary Benchmark State Yields, can be found at: <http://www.fsa.usda.gov>. FSA's current State ACRE Guarantees for corn, soybeans, and wheat for the 2010 crop year in Minnesota are shown in Table 1.

Table 1. Examples of the State ACRE Guarantee for Corn, Soybean, and Wheat in Minnesota*				
Item	Description	Corn	Soybean	Wheat
(1) ACRE Adjustment Factor	Statutory	90%	90%	90%
(2) Preliminary ACRE Guarantee Price* (\$/bu)	from FSA	\$3.83	\$9.71	\$5.84
(3) Benchmark State Yield* (bu/ac)	from FSA	166.0	42.0	49.3
(4) State ACRE Guarantee (\$/ac)*	(1) x (2) x (3)	\$572.2	\$367.04	\$267.98

*Based on USDA information on April 16, 2010.

The **Actual State Revenue** is the Actual State Yield multiplied by the ACRE Price. The Actual State Yield is the actual yield per planted acre as reported by NASS. The ACRE Price is the higher of the: (a) national loan rate, after being reduced by 30 percent, or (b) national average market year price.

The **State ACRE Payment Rate** is the State ACRE Guarantee minus the Actual State Revenue. The State ACRE Payment is capped at 25 percent of the State ACRE Guarantee. (Even though the State ACRE Payment Rate may be greater than zero, an individual farm has to suffer a revenue loss before a payment will be made.) Examples of hypothetical State ACRE Payment Rate calculations for corn, soybeans, and wheat for Minnesota are shown in Table 2.

Table 2. Examples of Hypothetical State ACRE Payment Rate for Corn, Soybean, and Wheat in Minnesota*

Item	Description	Corn	Soybean	Wheat
(1) State ACRE Guarantee (\$/ac)*	From Table 1	\$595.20	\$346.70	\$305.39
(2a) Reduced National Loan Rate	70% of Loan Rate	\$1.37	\$3.50	\$1.93
(2b) National Average Market Year Price	hypothetical	\$3.65	\$8.97	\$5.08
(2) ACRE Price (\$/bu)	Higher of (2a) or (2b)	\$3.65	\$8.97	\$5.08
(3) Actual State Yield (bu/ac)	hypothetical	156	40	49
(4) Actual State Revenue (\$/ac)	(2) x (3)	569.40	358.8	248.92
(5) State ACRE Payment Rate, before Cap (\$/ac)	Higher of 0 or (1) minus (4)	25.8	0	56.47
(6) State ACRE Payment Rate Cap	25% of (1)	148.8	86.68	76.35
(7) State ACRE Payment Rate**	Lower of (5) or (6)	25.8	0	56.47

*Based on USDA information on April 16, 2010.

**Remember this is a hypothetical estimate.

Farm ACRE Guarantee and Revenue Loss Trigger

The **Farm ACRE Guarantee** is the Benchmark Farm Yield times ACRE Guarantee Price plus Crop Insurance Premium.

The Benchmark Farm Yield is the simple average of the yields per planted acre for the most recent 5 crop years, excluding the high and low yields. For crop year 2010, the Benchmark Farm Yields are established using crop years 2005-2009. Benchmark Farm Yields will be established using production evidence including crop insurance yields.

The ACRE Guarantee Price, used to compute the State ACRE Guarantee, is also used to compute the Farm ACRE Guarantee.

The Crop Insurance Premium per acre paid by producers on the farm is included in the Farm ACRE Guarantee. For farms that are not insured or farms covered by the Non-insured Assistance Program (NAP) or by a Catastrophic (CAT) policy, this amount will be zero.

Examples of hypothetical Farm ACRE Guarantee calculations for corn, soybeans, and wheat for Minnesota are shown in Table 3. The table below shows that this hypothetical farm example meets the farm revenue shortfall condition for all three crops.

Table 3. Examples of Hypothetical Farm ACRE Guarantee for Corn, Soybean, and Wheat in Minnesota*

Item	Description	Corn	Soybean	Wheat
(1) Benchmark Farm Yield (bu/ac)	hypothetical	178	39	48
(2) Preliminary ACRE Guarantee Price (\$/bu)*	From Table 1	\$3.83	\$9.71	\$5.84
(3) Farm ACRE Revenue (\$/ac)*	(1) x (2)	681.74	378.69	280.32
(4) Crop Insurance Premium (\$/ac)	hypothetical	15	10	12
(5) Farm ACRE Guarantee (\$/ac)*	(3) + (4)	696.74	388.69	292.32
(6) Actual Farm Yield (bu/ac)	hypothetical	161.3	38.5	43.4
(7) ACRE Price (\$/bu)	From Table 2	\$3.65	\$8.97	\$5.08
(8) Actual Farm Revenue (\$/ac)	(6) x (7)	588.75	345.35	220.47
Is Actual less than Guarantee?***	Is (8) < (5)?	yes	yes	yes

*Based on USDA information on March 16, 2009.

**Remember this is a hypothetical estimate.

Farm ACRE Payment

A **Farm ACRE payment** for a commodity is issued when both the state and farm revenues for a commodity show a revenue loss. In Table 2, hypothetical State revenue losses are shown for corn and wheat, but not for soybeans. In Table 3, hypothetical revenue losses are shown for all 3 crops.

The **Farm ACRE payment** is 83.3% (85% for crop year 2012) multiplied by Planted and Considered Planted (P&CP) Acres (not to exceed total base acres) multiplied by State ACRE Payment Rate multiplied by (the Benchmark Farm Yield divided by the Benchmark State Yield).

The ACRE Payment Acreage is 83.3% of the P&CP acres for a commodity, unless the sum of the ACRE payment acreage for the farm exceeds the total base. Under this situation, a producer must choose the number of eligible ACRE payment acres for each commodity that may receive ACRE payments, not to exceed the total base on the farm.

Examples of hypothetical Farm ACRE payment calculations for corn, soybeans, and wheat for Minnesota are shown in Table 4.

Table 4. Examples of Hypothetical Farm ACRE Payments for Corn, Soybean, and Wheat in Minnesota*

Item	Description	Corn	Soybean	Wheat	Total Farm
(1) State Payment Rate	From Table 2	25.8	0	56.47	
(2) Benchmark State Yield* (bu/ac)	From Table 1	166.0	42.0	49.3	
(3) Benchmark Farm Yield (bu/ac)	From Table 3	178	39	48	
(4) Benchmark Farm/State Yield	(3)/(2)	1.0723	0.9286	0.9736	
(5) Total Base Acres	hypothetical				800.0
(6) Planted & Considered Planted	hypothetical	400	400	200	1,000.0
(7) Eligible ACRE Payment Acres	83.3% x (6)	333.2	333.2	166.6	833.0
(8) ACRE Payment Acres**		333.2	300.2	166.6	800
Farm ACRE Payment***	(1) x (4) x (8)	\$9,218.09	0.00	\$9,159.53	\$18,377.62

*Based on USDA information on April 16, 2010.

**In this hypothetical example, the producer must reduce total farm-eligible ACRE payment acres by 33.0 acres so that the eligible payment acres for the farm equals the farm's total base (800). This hypothetical producer chose to reduce soybean-eligible ACRE payment acres by 33.0 to 300.2 acres since soybean has the lowest State Payment Rate per acre (zero in this example).

***Remember this is a hypothetical estimate.

For More Information

Further information on the ACRE and other FSA programs are available at local or State FSA offices or on FSA's Web site at: www.fsa.usda.gov. Further information for Minnesota farmers and an Excel worksheet for analyzing the choice between ACRE and CC payments is available in the 2008 Farm Bill section at www.extension.umn.edu/agbusinessmanagement.

This factsheet was prepared by Kent Olson, Professor, Applied Economics, and Extension Economist, University of Minnesota, using examples for Minnesota and basic information on ACRE from FSA. May 10, 2010.