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## Estimated Payments Under the 2014 County Agricultural Risk Coverage Program in Maryland

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Recently released USDA data and projections allow us to make some fairly good guesses about the per acre payments which farmers will be eligible for in fall of 2015 under the County Agricultural Risk Coverage program (ARC-CO for short).

You will recall that earlier in 2015, farmers submitted their decisions to the USDA's Farm Service Agency (FSA) about whether they wanted to participate in the Price Loss Coverage (PLC) program, the ARC-CO program, or the individual Agricultural Risk Coverage (ARC-IN) program.

The ARC-CO program makes a payment to farmers who chose to enroll in that program when the average county revenue per acre for a crop falls below a trigger level of revenue per acre based on historical yields in the county and national prices for the crop.

For crops harvested in 2014, the size of the payments is calculated as follows. The "benchmark" revenue is calculated as "yield times price" where yield is the average crop yield for the county and price is the average price for the country. The county revenue guarantee is 86% of the benchmark revenue for the crop in the county.

FSA publishes the data for calculating benchmark revenue for each crop in each county on their website at <a href="http://www.fsa.usda.gov/programs-and-services/arcplc\_program/arcplc-program-data/index">http://www.fsa.usda.gov/programs-and-services/arcplc\_program/arcplc-program-data/index</a> . These include:

- Crop yields for the previous 5 years (2009-13) for the county. The "Olympic average" drops the high and low and averages the remaining three.
- "Marketing year average" (MYA) prices (national prices) for the five years following the 2009-13 harvests. Here too the Olympic average is used.

The data for calculating current year (2014) county revenue is not precisely available, but can be estimated with a high degree of certainty:

- National Agricultural Statistics Service (NASS) has published crop yields for the 2014 crop by crop and by county. However, 2014 yields are not available for every county as of June 2015. Furthermore, the published yields are "harvest yields" output divided by acres harvested and aggregate all production methods (irrigated and nonirrigated). Actual yields used to calculate ARC payments may differ from the published NASS yields.
- The marketing year prices for most 2014 crops extend through the summer of 2015; therefore the "2014" prices are not known precisely. However, the prices can be estimated or "projected" with a high degree of certainty, and FSA has published those projected prices at the FSA website previously listed.

The tables below show the estimated ARC-CO payments for 2014, based on the data described above, for barley, corn, soybeans, and wheat. Although ARC-CO payments may be made on other crops, data for estimating those are not available.

As the following tables show, for the most part, ARC-CO program will not be making payments in Maryland for 2014:

- For corn, 5 of the 21 counties with data show positive estimated payments; the other 16 counties show a zero payment.
- For wheat, none of the counties shows a positive payment.
- For barley, 1 of the 7 counties estimated shows a positive payment.
- For soybeans, 4 of the 24 counties estimated show a positive payment.

For the Price Loss Coverage (PLC) program, the projected payments are zero for wheat, barley, and soybeans, and 5 cents per bushel for corn. To get a "per acre" number for corn PLC comparable to the ARC-CO figures in the tables below, multiply the program yield for corn base acres on your farm by .05 (five cents). So if the program yield on your farm for corn base acres is 120 bushels per acre, the PLC payment per acre for your corn base acres would be  $120 \times .05 = $6$  per acre.

Table 1. Estimated County ARC Payments for Corn, 2014

County	Olympic	Bench-	Revenue	NASS	Actual 2014	Revenue	10% of	ARC-CO
·	Average	mark	Guarantee	County	Revenue	Shortfall	Bench	Payment
	Yield 2009-	Revenue		Yield	Estimate		mark	(estimate)
	13			2014				
	b/ac	\$/ac	\$/ac	b/ac	\$/ac	\$/ac	\$/ac	\$/ac
Allegany	118	622	535	125	456	79	62	62
Anne Arundel	119	631	543	166	604	0	63	0
Baltimore	143	758	652	183	666	0	76	0
Calvert	79	418	359	121	442	0	42	0
Caroline (irr)	189	999	859	NA				
Caroline (nonirr)	98	516	444	NA				
Carroll	138	731	629	166	606	23	73	23
Cecil	134	707	608	182	666	0	71	0
Charles	89	472	406	112	410	0	47	0
Dorchester (irr)	194	1026	882	NA				
Dorchester (non)	125	661	568	NA				
Frederick	118	624	536	167	608	0	62	0
Garrett	131	691	594	157	572	22	69	22
Harford	147	779	670	177	647	23	78	23
Howard	142	749	644	175	637	7	75	7
Kent	126	666	573	195	712	0	67	0
Montgomery	130	686	590	138	503	87	69	69
Prince George's	90	476	409	119	435	0	48	0
Queen Anne's	124	657	565	197	718	0	66	0
Somerset	121	641	552	186	679	0	64	0
St. Mary's	95	504	433	140	511	0	50	0
Talbot	117	620	533	173	630	0	62	0
Washington	117	617	530	165	601	0	62	0
Wicomico	102	539	464	173	631	0	54	0
Worcester	133	703	605	167	610	0	70	0

Benchmark revenue is Olympic average yield for the county times \$5.29 – the Olympic average of marketing year prices for 2009-13.

Actual 2014 revenue estimate is NASS county yield for 2014 times \$3.70 – the USDA estimated price for marketing year 2014-15.

Revenue guarantee is 86% of benchmark.

The ARC-CO payment is the lower of (a) actual revenue minus revenue guarantee or (b) 10% of benchmark.

The historical yields for Caroline and Allegany counties are reported separately for irrigated and non-irrigated.

However, separate estimates for 2014 irrigated and non-irrigated yields are not yet available.

NA= not available? Applicable?

Table 2. Estimated County ARC Payments for Wheat, 2014

County	Olympic	Bench-	Revenue	NASS	Actual 2014	Revenue	10% of	ARC-CO
	Average	mark	Guarantee	County	Revenue	Shortfall	Bench	Payment
	Yield 2009-	Revenue		Yield	Estimate		mark	(estimate)
	13			2014				
	b/ac	\$/ac	\$/ac	b/ac	\$/ac	\$/ac	\$/ac	\$/ac
Caroline	68.5	58.7	387.4	333.2	411.0	0	38.7	0
Carroll	75.7	70.0	462.2	397.5	454.2	0	46.2	0
Dorchester	76.4	65.7	433.6	372.9	458.4	0	43.4	0
Frederick	63.4	63.3	418.2	359.7	380.4	0	41.8	0
Kent	73.0	69.3	457.8	393.7	438.0	0	45.8	0
Montgomery	65.8	62.0	409.4	352.1	394.8	0	40.9	0
Queen Anne's	69.9	64.3	424.8	365.3	419.4	0	42.5	0
Somerset	80.2	72.7	479.8	412.7	481.2	0	48.0	0
Washington	70.2	61.3	405.0	348.3	421.2	0	40.5	0

Benchmark revenue is Olympic average yield for the county times \$6.60 – the Olympic average of marketing year prices for 2009-13.

Actual 2014 revenue estimate is NASS county yield for 2014 times \$6.00 – the USDA estimated price for marketing year 2014-15.

Revenue guarantee is 86% of benchmark.

The ARC-CO payment is the lower of (a) actual revenue minus revenue guarantee or (b) 10% of benchmark.

Table 3. Estimated County ARC Payments for Barley, 2014

County	Olympic Average	Bench- mark	Revenue Guarantee	NASS County	Actual 2014 Revenue	Revenue Shortfall	10% of Bench	ARC-CO Payment
	Yield 2009- 13	Revenue		Yield 2014	Estimate		mark	(estimate)
	b/ac	\$/ac	\$/ac	b/ac	\$/ac	\$/ac	\$/ac	\$/ac
Caroline	77.67	416.03	357.79	76.70	406.51	0	41.60	0
Carroll	80.67	432.10	371.61	81.10	429.83	0	43.21	0
Frederick	75.67	405.32	348.58	66.70	353.51	0	40.53	0
Harford	75.33	403.54	347.04	64.90	343.97	3.07	40.35	3.07
Kent	81.33	435.68	374.68	85.50	453.15	0	43.57	0
Talbot	88.67	474.96	408.46	77.90	412.87	0	47.50	0
Wicomico	65.67	351.75	302.51	64.30	340.79	0	35.18	0

Benchmark revenue is Olympic average yield for the county times \$5.36 – the Olympic average of marketing year prices for 2009-13.

Actual 2014 revenue estimate is NASS county yield for 2014 times \$5.30 – the USDA estimated price for marketing year 2014-15.

Revenue guarantee is 86% of benchmark.

The ARC-CO payment is the lower of (a) actual revenue minus revenue guarantee or (b) 10% of benchmark.

Table 4. Estimated County ARC Payments for Soybeans, 2014

County	Olympic	Bench-	Revenue	NASS	Actual 2014	Revenue	10% of	ARC-CO
•	Average	mark	Guarantee	County	Revenue	Shortfall	Bench	Payment
	Yield 2009-	Revenue		Yield	Estimate		mark	(estimate)
	13			2014				
	b/ac	\$/ac	\$/ac	b/ac	\$/ac	\$/ac	\$/ac	\$/ac
Allegany	39.67	486.58	418.46	44.50	447.23	0	48.66	0
Anne Arundel	37.33	457.96	393.84	40.40	406.02	0	45.80	0
Baltimore	42.00	515.20	443.07	47.40	476.37	0	51.52	0
Baltimore	40.33	494.76	425.49	47.40	476.37	0	49.48	0
Calvert	33.33	408.89	351.64	30.30	304.52	47.13	40.89	40.89
Caroline	38.67	474.31	407.91	39.30	394.97	12.94	47.43	12.94
Carroll	40.33	494.76	425.49	49.00	492.45	0	49.48	0
Cecil	46.00	564.27	485.27	51.40	516.57	0	56.43	0
Charles	28.00	343.47	295.38	33.10	332.66	0	34.35	0
Dorchester	36.67	449.78	386.81	41.50	417.08	0	44.98	0
Frederick	37.33	457.96	393.84	52.60	528.63	0	45.80	0
Garrett	39.67	486.58	418.46	44.50	447.23	0	48.66	0
Harford	47.67	584.71	502.85	49.60	498.48	4.37	58.47	4.37
Howard	43.67	535.64	460.65	44.60	448.23	12.42	53.56	12.42
Kent	43.33	531.56	457.14	50.10	503.51	0	53.16	0
Montgomery	37.67	462.04	397.36	44.70	449.24	0	46.20	0
Prince George's	34.33	421.16	362.19	37.70	378.89	0	42.12	0
Queen Anne's	41.00	502.93	432.52	50.50	507.53	0	50.29	0
Somerset	41.33	507.02	436.04	45.70	459.29	0	50.70	0
St. Mary's	34.33	421.16	362.19	37.00	371.85	0	42.12	0
Talbot	40.67	498.84	429.01	46.10	463.31	0	49.88	0
Washington	38.33	470.22	404.39	52.00	522.60	0	47.02	0
Wicomico	34.00	417.07	358.68	44.00	442.20	0	41.71	0
Worcester	39.67	486.58	418.46	45.00	452.25	0	48.66	0

Benchmark revenue is Olympic average yield for the county times \$12.27 – the Olympic average of marketing year prices for 2009-13.

Actual 2014 revenue estimate is NASS county yield for 2014 times \$10.10 – the USDA estimated price for marketing year 2014-15.

Revenue guarantee is 86% of benchmark.

The ARC-CO payment is the lower of (a) actual revenue minus revenue guarantee or (b) 10% of benchmark.