

Farm Bill Implementation – ARC, PLC and Crop Insurance Changes

2020 MIDDLE TENNESSEE GRAIN CONFERENCE SCHEDULE

Tuesday, February 4th – UT Space Institute - Tullahoma, TN

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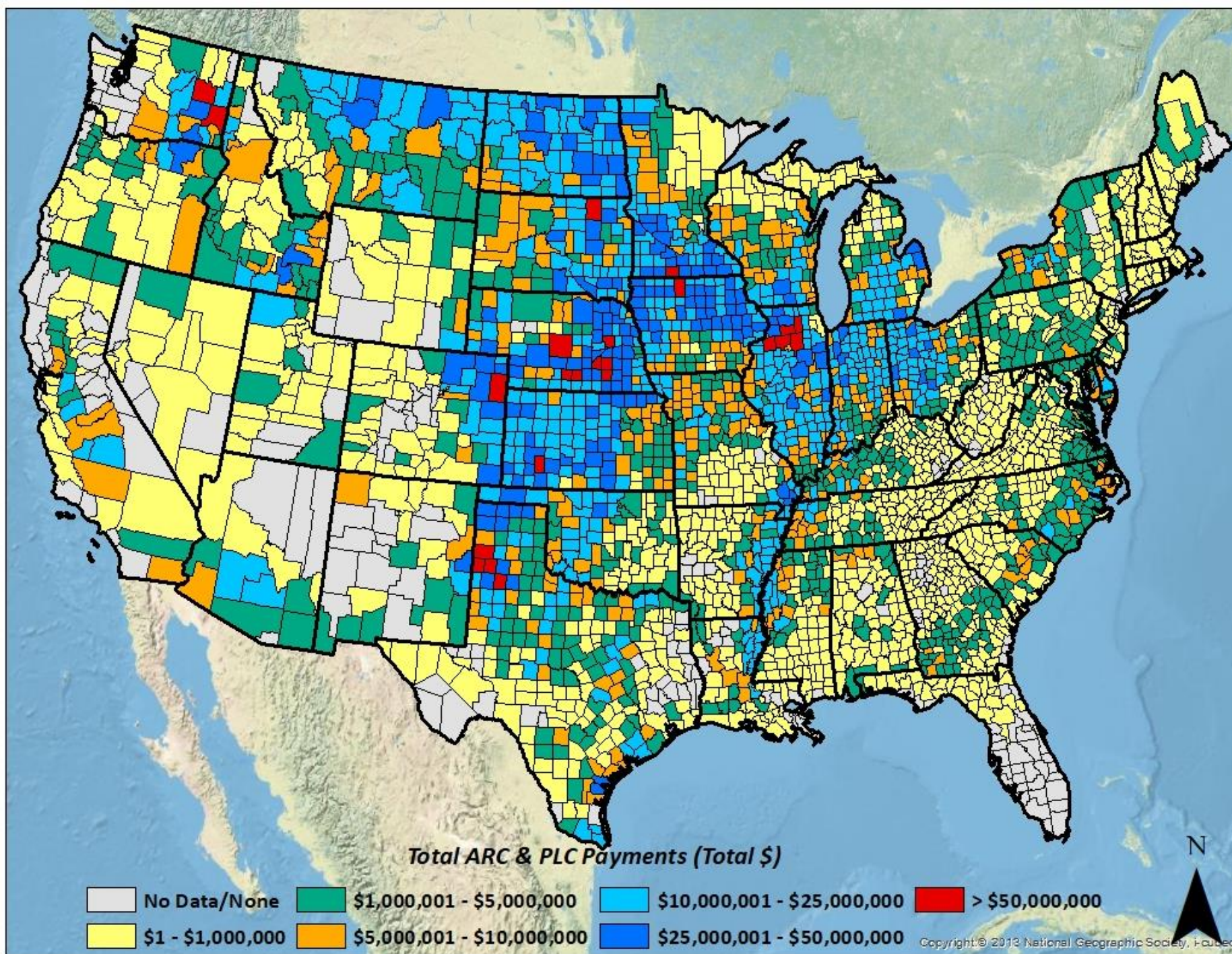


Overview

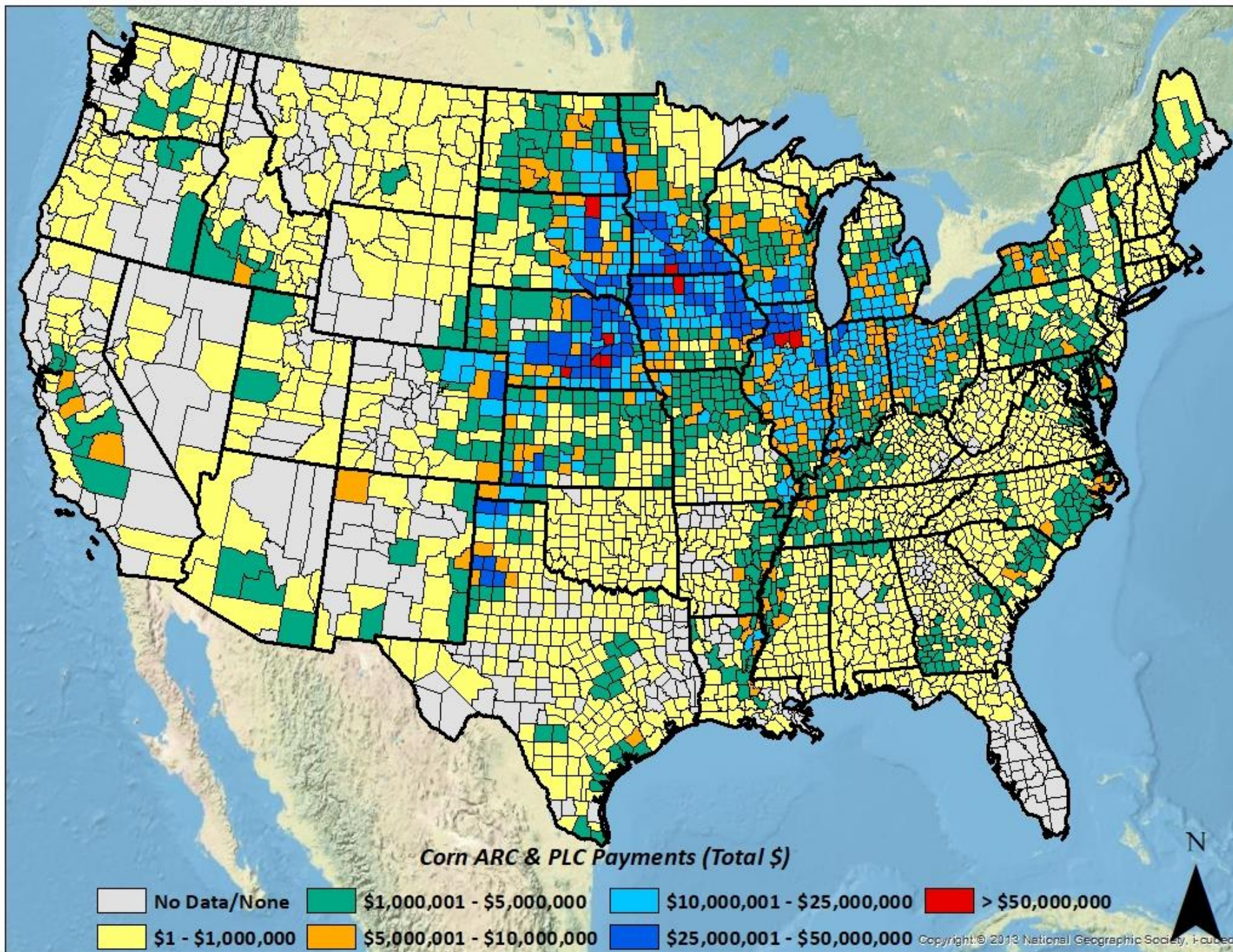
- Review 2014-18 Farm Bill
- 2018 Farm Bill
 - Price Loss Coverage (PLC)
 - Agriculture Risk Coverage (ARC)
 - Crop Insurance
- Producer Election
 - Coffee County, Tennessee
- Price Outlook



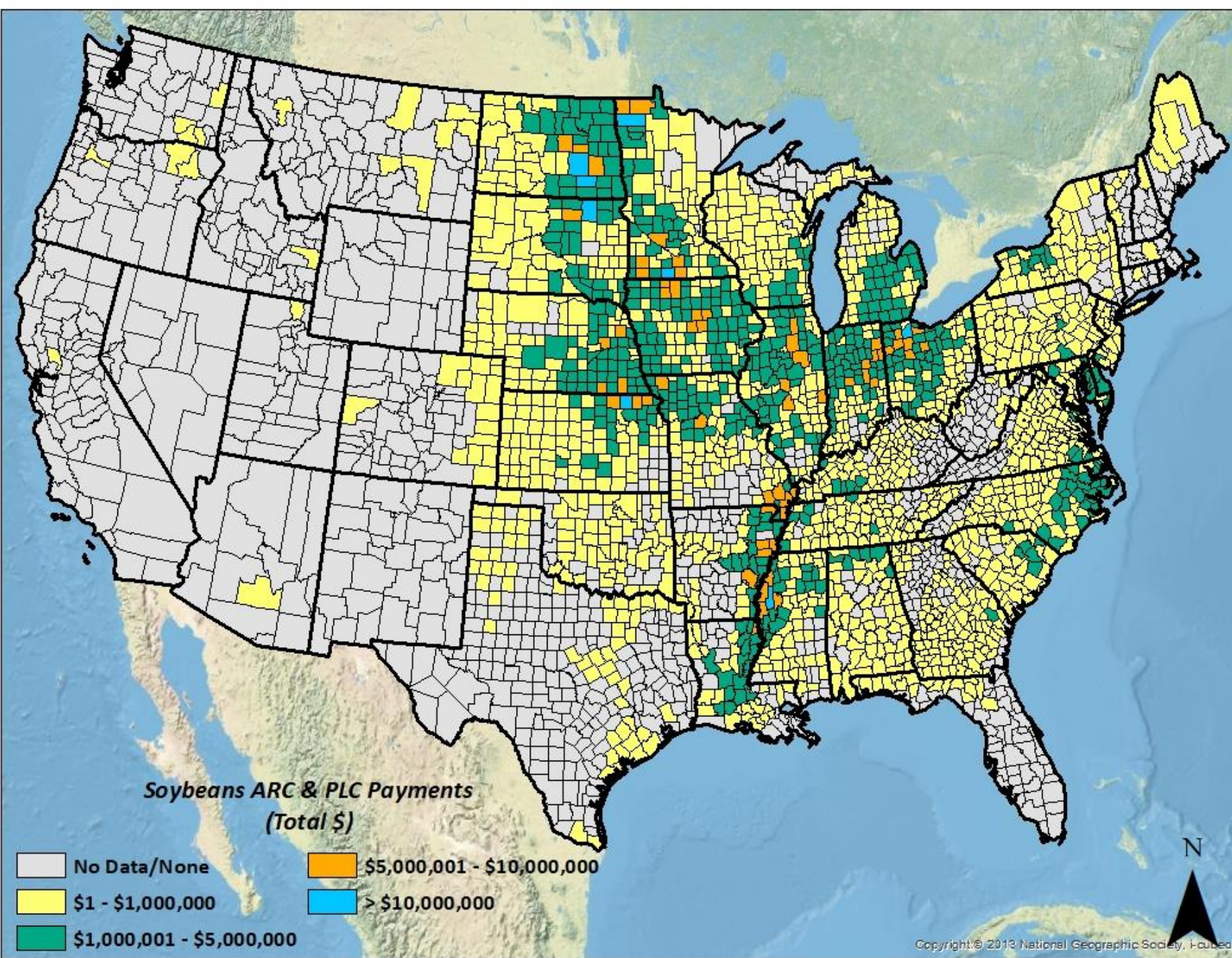
**ARC and
PLC
Payments
2014-2018
for Corn,
Cotton,
Soybean,
and Wheat
(total \$ per
county)**



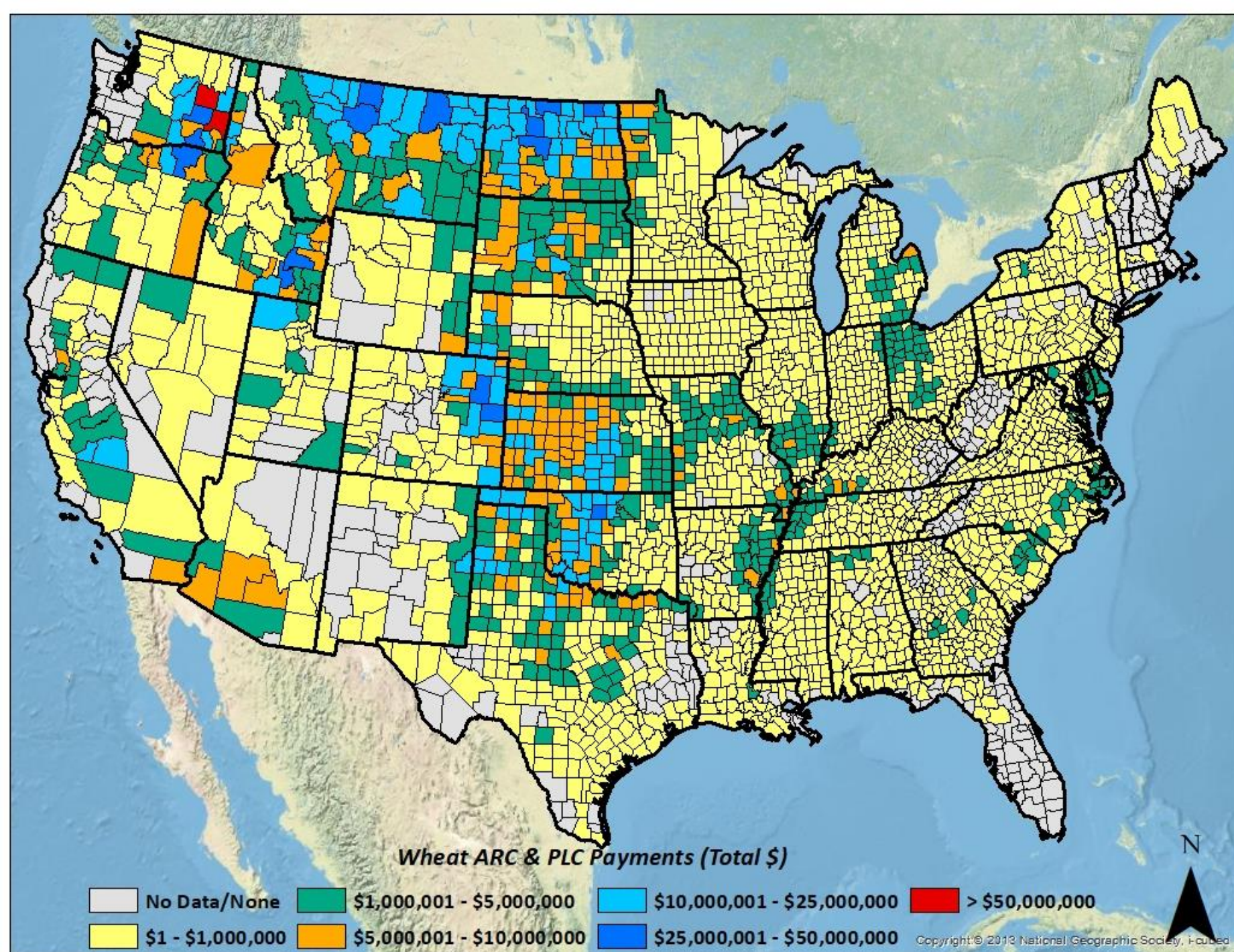
**Corn ARC
and PLC
Payments
2014-2018
(total \$ per
county)**



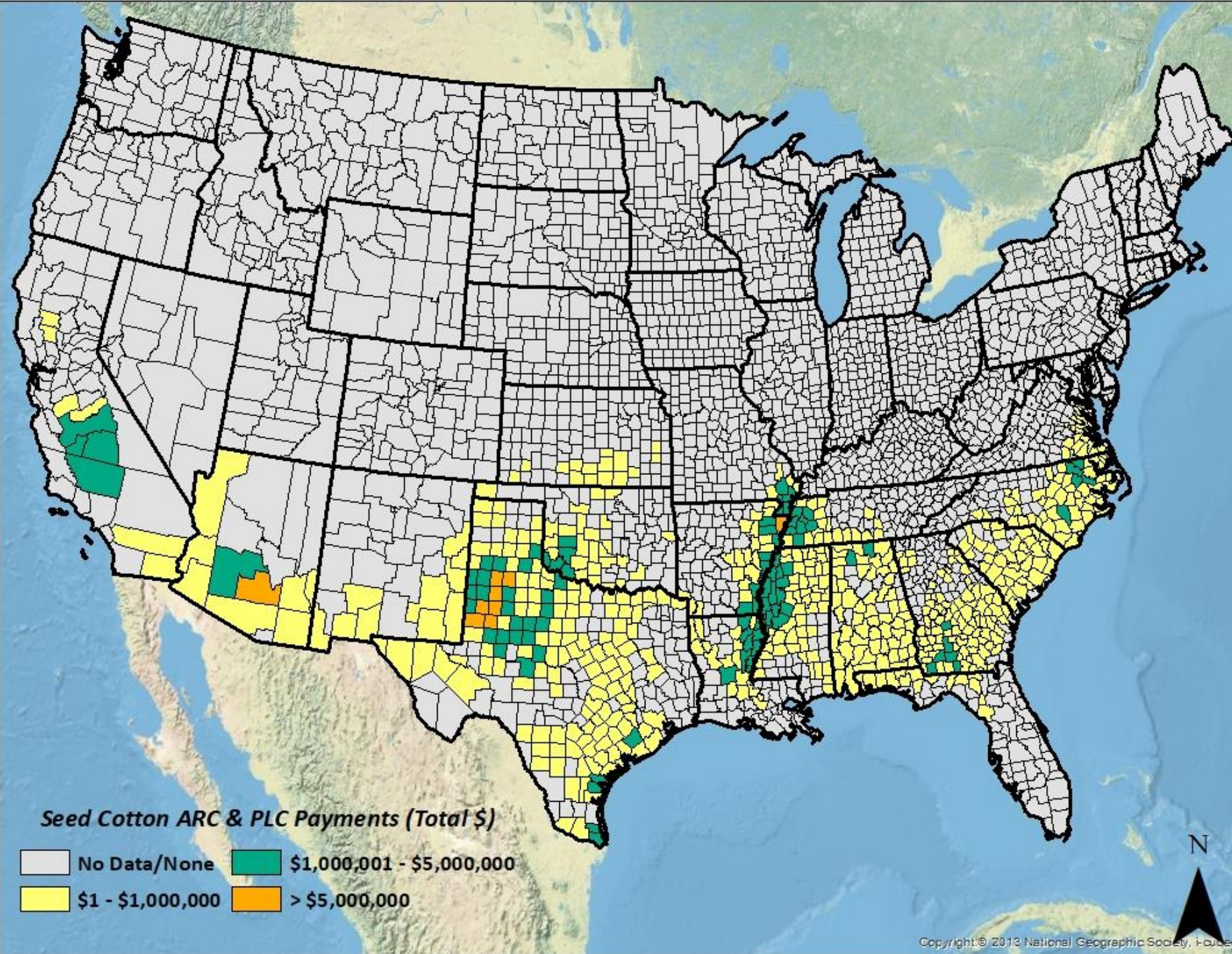
**Soybean
ARC and
PLC
Payments
2014-2018
(total \$ per
county)**



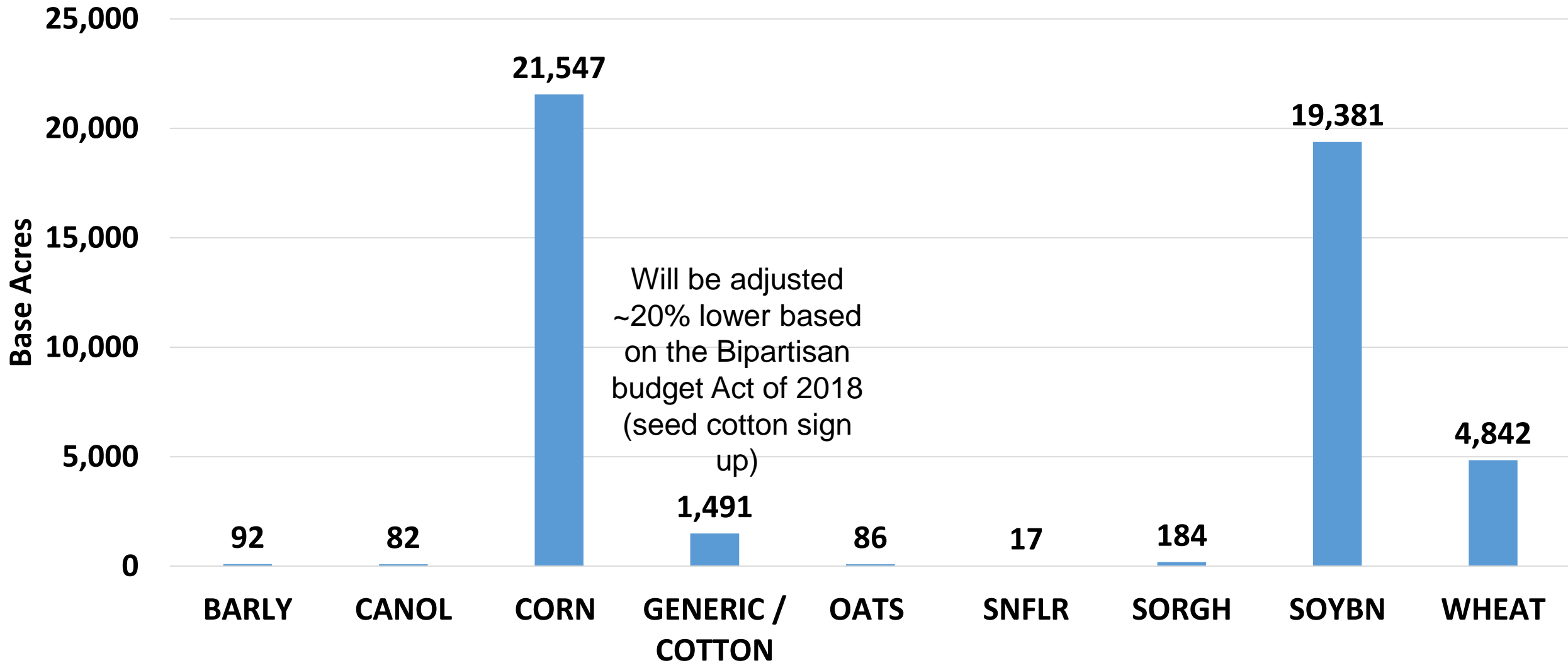
Wheat ARC and PLC Payments 2014-2018 (total \$ per county)



Cotton ARC and PLC Payments 2018 (total \$ per county)



Coffee County Base Acres, 2015



Coffee County Payment Rates – 2014 Farm Bill

Crop Name	ARC-Co Payment Rates (\$/acre)						PLC Payment Rates (\$/bu or lb)					
	2014	2015	2016	2017	2018	Total	2014	2015	2016	2017	2018	Total
Barley	0	0	0	41.1	38.4	79.5	0	0	0	0.48	0.33	0.81
Canola	67.33	57.75	50.89	49.36	35.96	261.29	\$0.03	\$0.05	\$0.04	\$0.03	0.0435	\$0.18
Corn	0	82.52	78.08	0	0	160.6	0	0.09	0.34	0.34	0.09	0.86
Grain Sorghum	0	0	26.87	25.53	32.64	85.04	0	0.64	1.16	0.73	0.69	3.22
Oats	0	22.62	23.32	20.9	18.02	84.86	0	0.28	0.34	0	0	0.62
Seed Cotton					0	0					0.0217	0.0217
Soybeans	0	23.21	62.91	0	0	86.12	0	0	0	0	0	0
Sunflower Seed	0					0	0	0.0055	0.0275	0.0295	0.0275	0.09
Wheat	0	47.57	48.91	25.49	3.29	125.26	0	0.61	1.61	0.78	0.34	3.34

What Program Maximized Payments (Coffee)?

Crop Name	PLC Yield Break	Program that maximized payments
Barley	98	PLC for Payment Yields Greater than 98 bu/acre
Canola	1424	PLC for Payment Yields Greater than 1,424 lb/acre
Corn	187	PLC for Payment Yields Greater than 187 bu/acre
Grain Sorghum	26	PLC for Payment Yields Greater than 26 bu/acre
Oats	137	PLC for Payment Yields Greater than 137 bu/acre
Seed Cotton	-	PLC
Soybeans	-	ARC-CO
Sunflower Seed	-	PLC
Wheat	38	PLC for Payment Yields Greater than 38 bu/acre

Agriculture Improvement Act of 2018

2018 FARM BILL



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Base Acres

- No update to base acres.
- Unassigned base will remain unassigned and receive no payments for 2019-2023.
- A farm on which all of the cropland was planted to grass, pasture, idled, or fallowed, from Jan 1, 2009 - Dec 31, 2017
 - Will maintain all base acres and payment yields for the covered commodities.
 - No payments shall be made on those base acres for the 2019-2023 crop years.
 - Producers are not eligible to make changes to elections.
- Acres are eligible for \$18/acre/year in a CSP Grasslands Conservation Initiative contract.

Price Loss Coverage (PLC)

- Each covered commodity has a statutory reference price.
 - If the **national marketing year average (MYA) price** falls below the effective reference price a payment is triggered (maximum is the reference price – loan rate).
- Payments are made on **a farm's PLC yields**.
- Paid on 85% of base acres for a covered commodity.

PLC Statutory Reference Prices

<u>Commodity</u>	<u>Statutory Reference Price</u>	<u>Unit</u>	<u>Commodity</u>	<u>Statutory Reference Price</u>	<u>Unit</u>
Wheat	\$5.50	bu	Sunflower Seed	\$0.2015	lb.
Barley	\$4.95	bu	Flaxseed	\$11.284	bu
Oats	\$2.40	bu	Mustard Seed	\$0.2015	lb.
Peanuts	\$0.2675	lb.	Rapeseed	\$0.2015	lb.
Corn	\$3.70	bu	Safflower	\$0.2015	lb.
Grain Sorghum	\$3.95	bu	Crambe	\$0.2015	lb.
Soybeans	\$8.40	bu	Sesame Seed	\$0.2015	lb.
Dry Peas	\$0.1100	lb.	Seed cotton	\$0.3670	lb.
Lentils	\$0.1997	lb.	Rice (long grain)	\$0.1400	lb.
Canola	\$0.2015	lb.	Rice (med/short grain)	\$0.1400	lb.
Large Chickpeas	\$0.2154	lb.	Rice (temperate japonica)	\$0.1610	lb.
Small Chickpeas	\$0.1904	lb.			

PLC Example: Corn

$$\text{Payment Rate (\$/bu)} \times \text{Payment Yield (bu/acre)} \times 85\% = \text{PLC Payment (\$/base acre)}$$

Reference Price (\$/bu)	Marketing Year Average Price (\$/bu)	PLC Payment Rate (\$/bu)	PLC Payment Yield – (\$/bu)	Base Acres Covered (%)	PLC Payment (\$/base acre)
\$3.70	\$3.70	\$0.00	135 bu	85%	\$0
\$3.70	\$3.60	\$0.10	135 bu	85%	\$11.48
\$3.70	\$3.50	\$0.20	135 bu	85%	\$22.95
\$3.70	\$3.40	\$0.30	135 bu	85%	\$34.43
\$3.70	\$3.30	\$0.40	135 bu	85%	\$45.90

If, MYA Price >\$3.70, then payment rate = \$0

If, MYA Price <\$2.20, then payment rate = \$1.50

Effective Reference Price

- The statutory reference price will now be the effective reference price “floor”.
- The effective reference price permits the reference price to increase up to 115% of the statutory reference price.
- Reference prices between the “floor” and 115% of the floor will be determined annually by a rolling 5-year Olympic average marketing year average price for the covered commodity.

Effective Reference Price

	(A) Statutory Reference Price	(B) 115% of (A)	<u>National MYA Price</u>					(C) 85% of OA MYA	(D) Greater of (A) or (C)	2019 Reference Price [Lessor of (B) or (D)]
			2013/14	2014/15	2015/16	2016/17	2017/18			
Corn	\$3.70	\$4.26	\$4.46	\$3.70	\$3.61	\$3.36	\$3.36	\$3.02	\$3.70	\$3.70
Soybean	\$8.40	\$9.66	\$13.00	\$10.10	\$8.95	\$9.47	\$9.33	\$8.19	\$8.40	\$8.40
Wheat	\$5.50	\$6.33	\$6.87	\$5.99	\$4.89	\$3.89	\$4.72	\$4.42	\$5.50	\$5.50

***Unlikely to be different than the statutory price for 2019 and 2020 (2021).

Payment Yields

- Land owner decision.
- One time option to update (or maintain the existing) PLC payment yield for each covered commodity.
 - 90% x average farm yield for the 2013-2017 crop years x National Yield Ratio.
- National Yield Ratio = [2008-2012 national average yield] / [2013-2017 national average yield].
 - National yield ratio can not be less than 90% or greater than 100%.

* Yield per planted acre / excludes years when zero acres were planted to the commodity.

PLC Payment Yield Update: National Yield Ratio

Commodity	Factor
Barley	0.9437
Canola	0.9634
Chickpeas (Large)	1.0000
Chickpeas (Small)	0.9760
Corn	0.9000
Crambe	1.0000
Dry Peas	0.9988
Flaxseed	1.0000
Grain Sorghum	0.9077
Lentils	1.0000
Mustard	0.9460
Oats	0.9524

Commodity	Factor
Peanuts	0.9273
Rapeseed	1.0000
Rice (LG)	0.9330
Rice (MG/SG)	0.9887
Rice (TJ)	0.9591
Safflower	1.0000
Seed Cotton	0.9000
Sesame Seed	0.9673
Soybeans	0.9000
Sunflower Seed	0.9396
Wheat	0.9545

Payment Yields

- If the yield per planted acre for a farm for 2013-2017 was less than 75 percent of the average of county yield for the year, a yield for that crop year equal to 75 percent of the average of the 2013 through 2017 county yield will be used.
- Updated payment yields will commence with the 2020 crop year.

Agricultural Risk Coverage - County (ARC-CO)

- Payments if per-acre revenues fall below 86% of county benchmark.
- Maximum payment: 10% of benchmark (covers 76-86% of revenue).
- County Benchmark:
 - 5-yr. Olympic avg. national price * 5-yr. Olympic avg. county yield for each commodity.
- Prices used to compute averages are the higher of average national price or effective reference price.
- Paid on 85% of **base acres**.

Example: 2019 County Olympic Average Yield Calculation

Commodity	2013/14	2014/15	2015/16	2016/17	2017/18	2019 OA County Yield
Corn	187	147	181	171	179	177
Soybean	52	37	42	45	50	45
Wheat	74	85	73	79	80	78

ARC Price Change

MYA Prices

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Corn	\$3.55	\$5.18	\$6.22	\$6.89	\$4.46	\$3.70	\$3.61	\$3.36	\$3.36	\$3.61	\$3.85
Soybeans	\$9.59	\$11.30	\$12.50	\$14.40	\$13.00	\$10.10	\$8.95	\$9.47	\$9.33	\$8.48	\$9.00
Wheat	\$4.87	\$5.70	\$7.24	\$7.77	\$6.87	\$5.99	\$4.89	\$3.89	\$4.72	\$5.16	\$4.55

Effective Reference Prices (Old Farm Bill)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Corn	\$4.26	\$4.26	\$4.07	\$3.70	\$3.70	\$3.70
Soybeans	\$9.66	\$9.66	\$9.66	\$9.23	\$8.40	\$8.40
Wheat	\$5.61	\$5.70	\$5.70	\$5.50	\$5.50	\$5.50

MYA Prices after Effective Reference Price Substitutions (New Farm Bill)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Corn	\$4.26	\$4.26	\$4.07	\$3.70	\$3.70	\$4.01
Soybeans	\$10.10	\$9.66	\$9.66	\$9.33	\$8.48	\$9.55
Wheat	\$5.99	\$5.70	\$5.70	\$5.50	\$5.50	\$5.63

**If the MYA price is lower than the effective reference price then the effective reference price is used in the 5-year Olympic average.

Agricultural Risk Coverage - County (ARC-C): Example

- Olympic average county soybean yield for 2014-2018 is 45 bu/acre.
- Olympic average national price for 2014-2018 is \$9.55/bu.
- Benchmark revenue is 45 bu/acre x \$9.55/bu = \$430/acre.
 - Revenue guarantee is \$430/acre x 0.86 = \$370/acre.
 - Payment rate will not exceed \$430/acre x 0.10 = \$43.00/acre.
- If actual county yield is 40 bu/acre and MYA price is \$8.55/bu:
 - Actual county revenue is 40 bu/acre x \$8.55/bu = \$342/acre.
 - Actual county revenue for soybean is less than the revenue guarantee.
 - Payment rate would be \$370/acre – \$342/acre = \$28/acre.
 - Payment amount per base acre is 85% of payment rate or 0.85 x \$28/acre = \$23.80/base acre.

ARC- CO Changes

- Requires the establishment of guarantees for irrigated and non-irrigated yields in each county.
- Prioritizes the use of **RMA data** for calculating county yields.
- For the 2018 crop year and each crop year thereafter, data will be made publicly available for the most recent crop year.
 - The sources of data used to calculate county yields by county and nationally; and
 - The number and outcome of occurrences in which Farm Service Agency reviewed, changed, or determined not to change a source of data used to calculate county yields.

ARC- CO Changes

- Beginning in 2019, ARC payments for a farm # will be based on the physical location of the farm rather than the administrative county.
- For the 2019-2023 crop years, increases the historical county yield replacement from 70% to 80% of the county transitional yield (can be used to replace low yields).
- The Secretary shall calculate and use a trend-adjusted yield factor to adjust the yields (not to exceed the factor used by RMA).
- Incorporates the Effective Reference Price into the calculation of benchmark revenue.
 - If the MYA price is lower than the effective reference price then the effective reference price is used in the 5-year Olympic average.

Payment Limitations / Other

- Payment limits are still \$125,000.
- Means Testing: Adjusted Gross Income (AGI) limits remain at \$900,000 per person or legal entity.
- Actively Engaged Rules: First cousins, nieces, and nephews are to be included in the family members eligible for payments.
- 30 days after the end of each applicable 12-month marketing year for the covered commodity, the PLC and ARC-CO payment rate will be published, unless insufficient data is available.

2018 Farm Bill Signup

- Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC)
 - 2019/2020 crop year **election** began September 3, 2019 and ends March 15, 2020.
 - 2019 crop year **enrollment** began September 3, 2019 and ends March 15, 2020.
 - 2020 crop year **enrollment** began October 7, 2019 and ends June 30, 2020.

Producer Election

- ARC or PLC is a producer decision.
- 2020-2023 default is to remain in the program selected under the 2014 Farm Bill for each farm and commodity.
 - If you default to 2014 farm bill election then there is no payment for 2019.

Election of ARC or PLC

- Producers can choose between ARC and PLC for each covered commodity on a farm **jointly** for the 2019/2020 crop years and then **annually** beginning in crop year 2021.
- Allows producers to select annually the program that is projected to pay the most.
- Note on ARC-IC: You may want to examine this program if your farms had substantial prevented planting acres or yields below 30% of the previous 5-years.

PLC Payments in 2019 and 2020?

- Reference prices will be:
 - Corn = \$3.70
 - Soybeans = \$8.40
 - Wheat = \$5.50
- Projected prices 2019 (WASDE)
 - Corn = \$3.85
 - Soybeans = \$9.00
 - Wheat = \$4.55
- Wheat payment (\$0.95/bu), maybe?
- Corn (15 cent drop) or soybean (60 cent drop) from current estimates to start a payment.
- Considerations:
 - Where are price going?
 - Above or below reference price.
 - How low could prices go?
 - The cap on payments is much deeper for PLC than ARC.
 - What is your farms PLC payment yield?
 - Very low PLC yields may be better off in ARC-co
 - 2019 = old PLC yields
 - 2020 = new PLC yields

ARC-Co Payments in 2019 and 2020?

- 2019 ARC-Co Revenue Guarantee Franklin (Coffee)
 - Corn: \$599/acre (\$587)
 - Soybean: \$467/acre (\$467)
 - Wheat: \$423/acre (\$375)
- Considerations:
 - Where are price going?
 - Above or below reference price.
 - How low could prices go?
 - The cap on payments is much deeper for PLC than ARC.
- What are projected county yields?
 - 2019-above triggers?
 - 2020?

2019 & 2020 Sign-up Coffee County

For ARC-Co you can estimate trigger prices or trigger yields (not both)

Coffee County TN

	2019 ARC Guarantee Revenue	Current Projected MYA Price 2019	Current Trigger Yield (ARC Payment)	Estimated County Yield	Trigger Price	2019 Maximum ARC Payment Rate	PLC Reference Price	PLC Payment Rate (C-G, cannot be negative)	PLC Payment Yield	Estimated PLC Payment	Aaron's Preference
Barley	\$ 328.73	\$ 4.60	71	75	\$ 4.38	\$ 38.22	\$ 4.95	0.35	50	\$ 17.50	PLC
Canola	\$ 380.77	\$ 0.1474	2,583	2,000	\$ 0.004	\$ 44.28	\$ 0.2015	0.0541	1,450	\$ 78.45	PLC
Corn	\$ 587.72	\$ 3.85	153	160	\$ 3.67	\$ 68.34	\$ 3.70	0	135	\$ -	PLC
Grain Sorghum	\$ 281.80	\$ 3.40	83	80	\$ 3.52	\$ 32.77	\$ 3.95	0.55	85	\$ 46.75	PLC
Oats	\$ 154.95	\$ 2.95	53	55	\$ 2.82	\$ 18.02	\$ 2.40	0	40	\$ -	ARC-Co
Seed Cotton	\$ 742.33	\$ 0.3151	982	900	\$ 0.3437	\$ 86.32	\$ 0.3670	0.0519	800	\$ 41.52	PLC
Soybeans	\$ 467.34	\$ 9.00	52	45	\$ 10.39	\$ 54.34	\$ 8.40	0	40	\$ -	ARC-Co
Sunflower Seed	\$ 238.29	\$ 0.1780	1,339	1,000	\$ 0.24	\$ 27.71	\$ 0.2015	0.0235	1,100	\$ 25.85	PLC
Wheat	\$ 375.83	\$ 4.55	83	85	\$ 4.42	\$ 43.70	\$ 5.50	0.95	65	\$ 61.75	PLC

Seed cotton yield converted to lint yield (2.4 x lint yield = Seed Cotton Yield)

(I) = Irrigated

Only Change yellow numbers to refine estimates.

Red numbers are those that should guide the producer decision

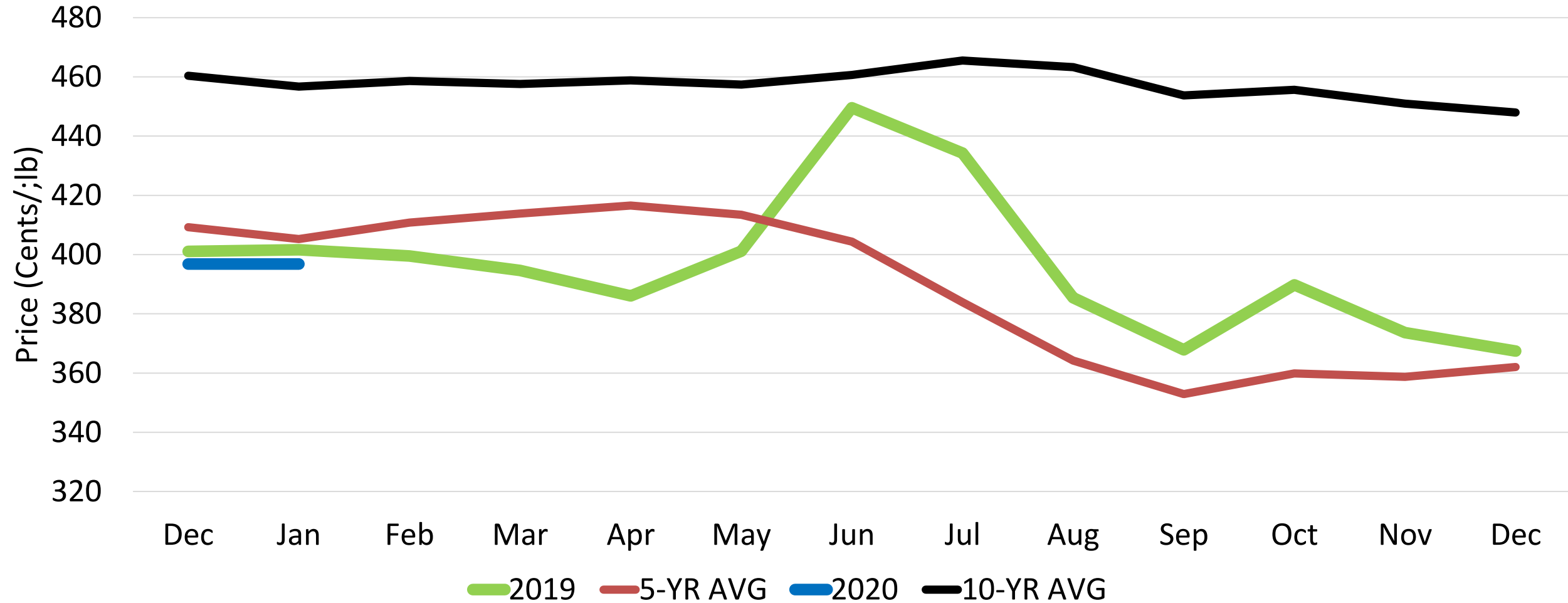
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Flat and Near Cost of Production

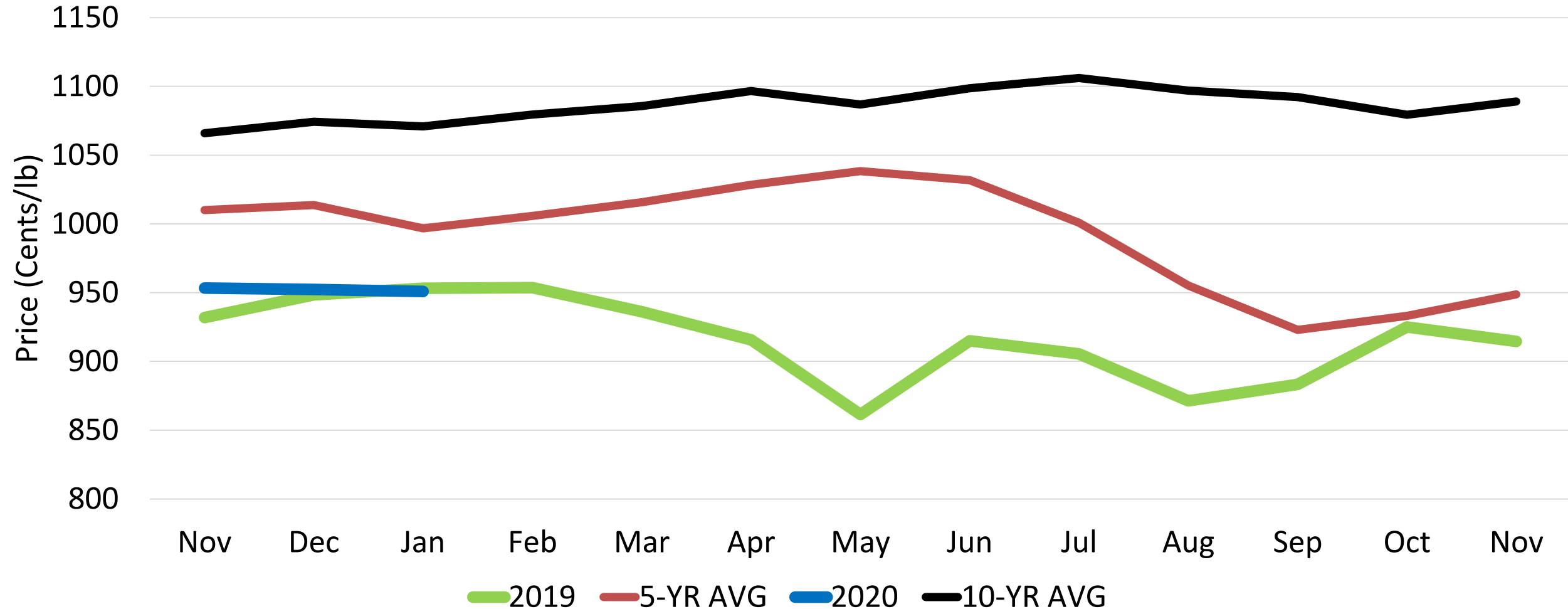
PRICE OUTLOOK

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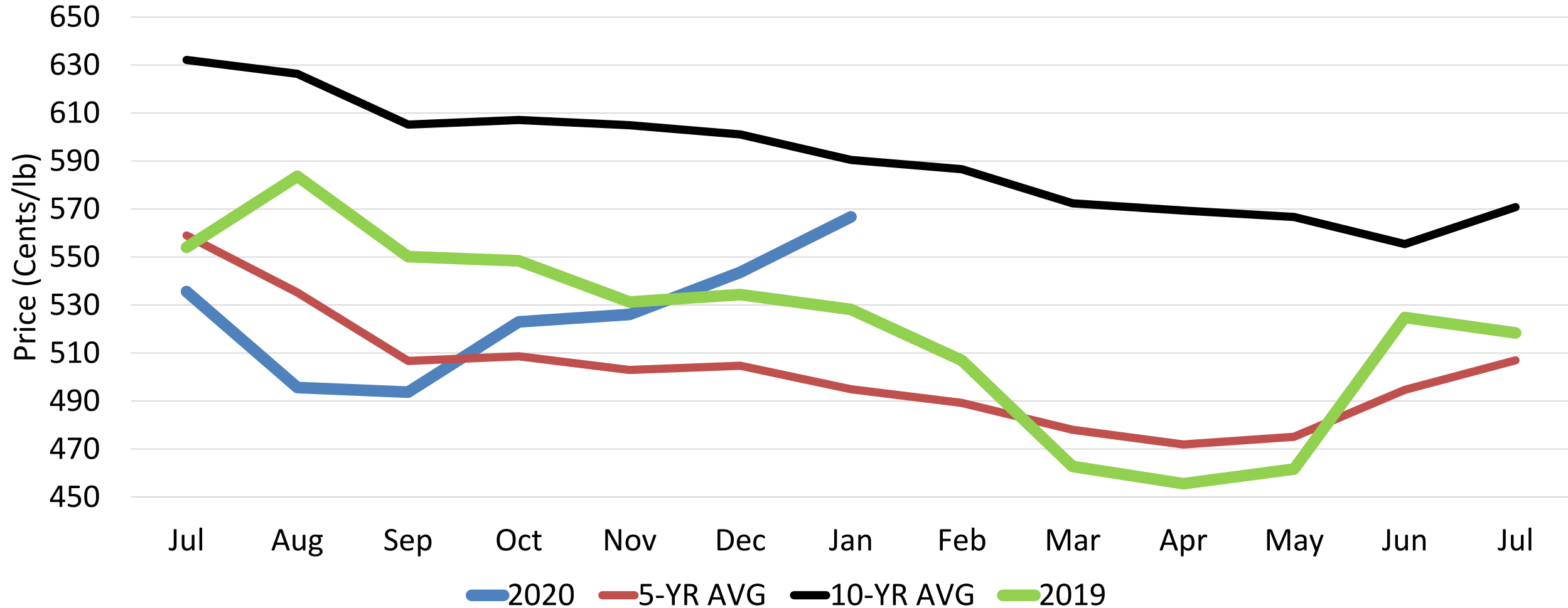
Corn: Average Monthly December Futures Contract Price, 5-YR, 10-YR, 2019 and 2020



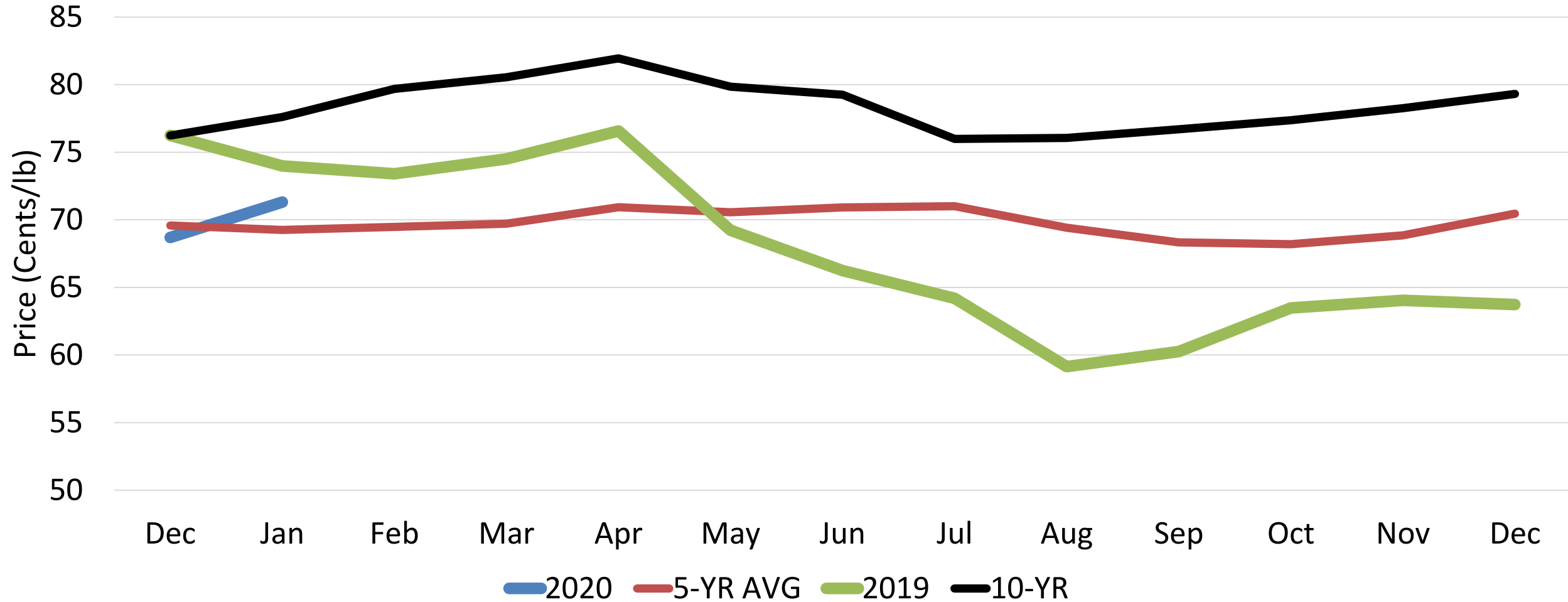
Soybean: Average Monthly November Futures Contract Price, 2014-2018 Avg and 2019



Wheat: Average Monthly July Futures Contract Price, 2010-2019, 2015-2019 Avg and 2020



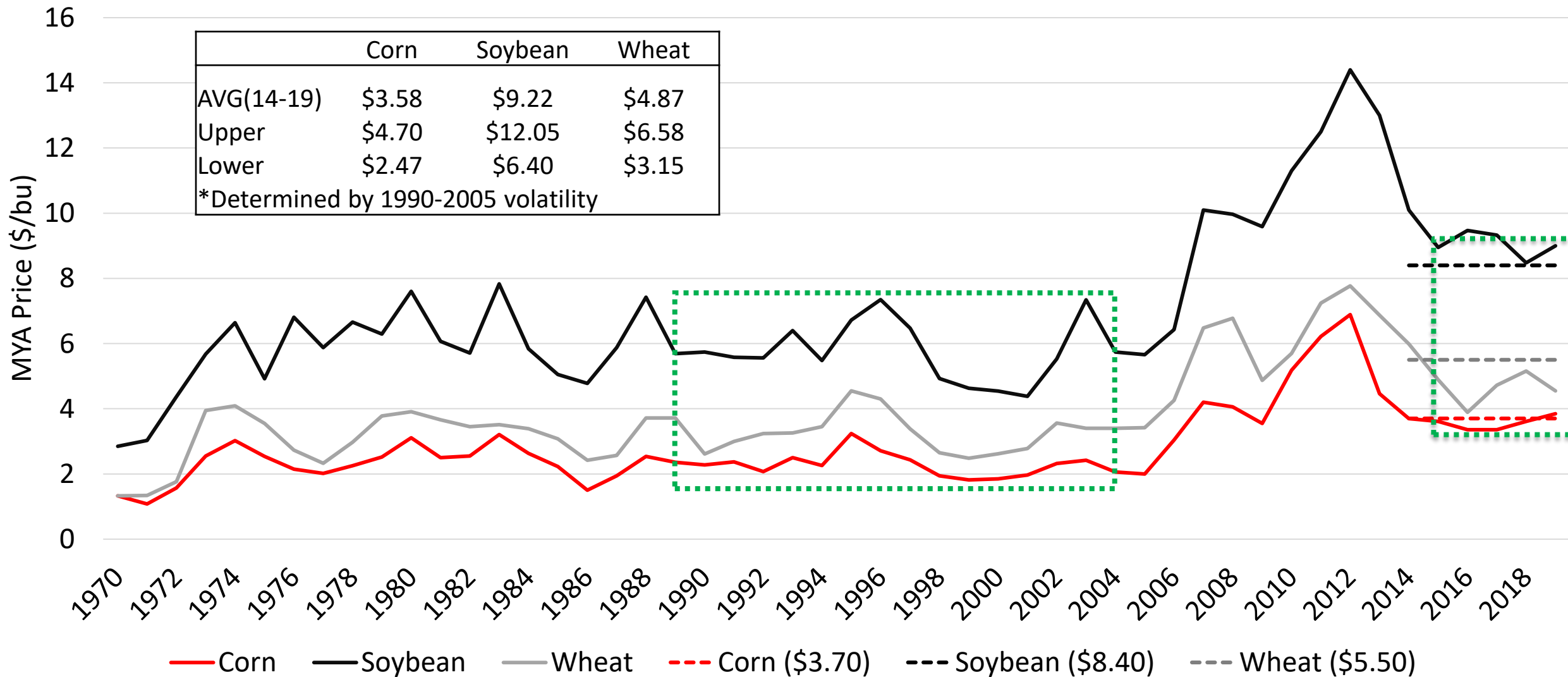
Cotton: Average Monthly December Futures Contract Price, 5-YR, 10-YR, 2019, and 2020



More like the 90's than the 80's

- There have been two major plateaus since World War II, the first from 1955 to 1972 and the second from 1989 to 2003. During those periods, crop prices hovered in a narrow range near the average cost of production.
- What is the new plateau? That's the question.
- What's the price of corn going to be?
 - I'd say probably \$4, plus or minus a 40 cents.
- Flat prices mean flat incomes. This works against ARC-Co effectiveness as a safety net.
- Government payments become a more important part of farm incomes during plateaus, much like the Market Facilitation Program over the past two years.

U.S. Corn, Soybean, and Wheat Marketing Year Average Price, 1970-2019*



Closing Thoughts

- Need to do payment yield update.
- Do not get defaulted in 2019 (no payment!).
- Each county will be slightly different! So don't extrapolate to other counties.
- Signup now to avoid March rush.... but reevaluate close to March 15 when additional information is available.
- Annual signup required.

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