Proposed Crop Insurance Changes

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Dr. Art Barnaby was raised on a diversified farm, located in Elk County, Kansas. Art received his B.S. degree from Fort Hays State University, M.S. from New Mexico State University and a Ph.D. in Agricultural Economics from Texas A&M University. Art joined the Agricultural Economics faculty in 1979. He currently holds the rank of Professor. Art conducts national extension education programs on market risk, government commodity programs, crop insurance and public policy. He has authored several research projects on crop insurance issues and their impacts on farmers. His research work with the private sector was the basis for the first revenue insurance contract.

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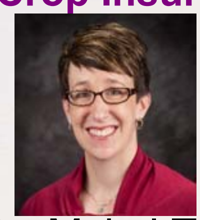

Dr. Mykel Taylor

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Mykel Taylor is an Associate Professor in the Department of Agricultural Economics at Kansas State University. Dr. Taylor's research and extension programs are focused in the area of farm management. She attended Montana State University majoring in Agribusiness Management. Her PhD in Economics is from North Carolina State University. She has worked in extension positions at both Kansas State University and Washington State University. Some of her current research areas include measuring basis risk for commodity grains, and analyzing trends in Kansas agricultural land values, rental rates and evaluation of Farm Bill commodity programs and crop insurance.

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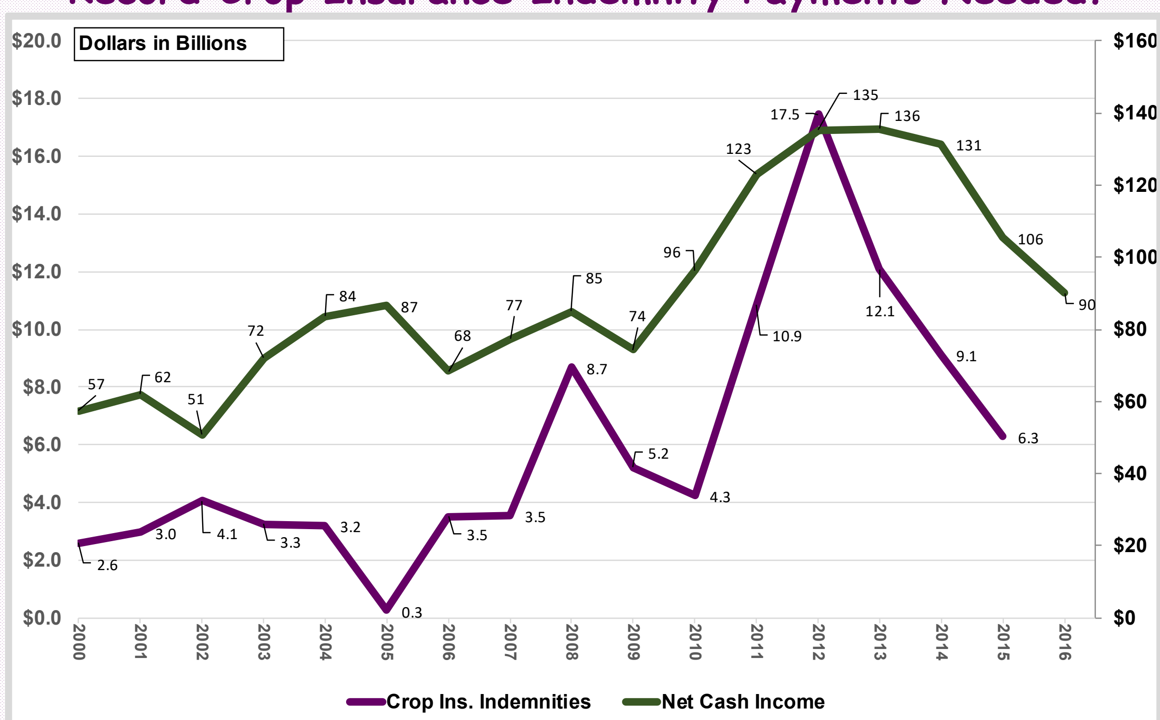
Political Rhetoric on Crop Insurance

- How is it possible to have record farm income and record crop insurance indemnity payments in the same year?
- Why are farmers paid more than the value of the crop when prices increase?
- Why are taxpayers sending money to foreign insurance companies?
- Why do “wealthy” farmers receive premium subsidies?
- Why are returns so high for crop agents and insurance companies?

With 2012 “Near Record” Net Cash Income, Why were Record Crop Insurance Indemnity Payments Needed?



Source: ERS-USDA, https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/data-files-us-and-state-level-farm-income-and-wealth-statistics.aspx

How is it possible to have record farm income and record crop insurance indemnity payments in the same year?

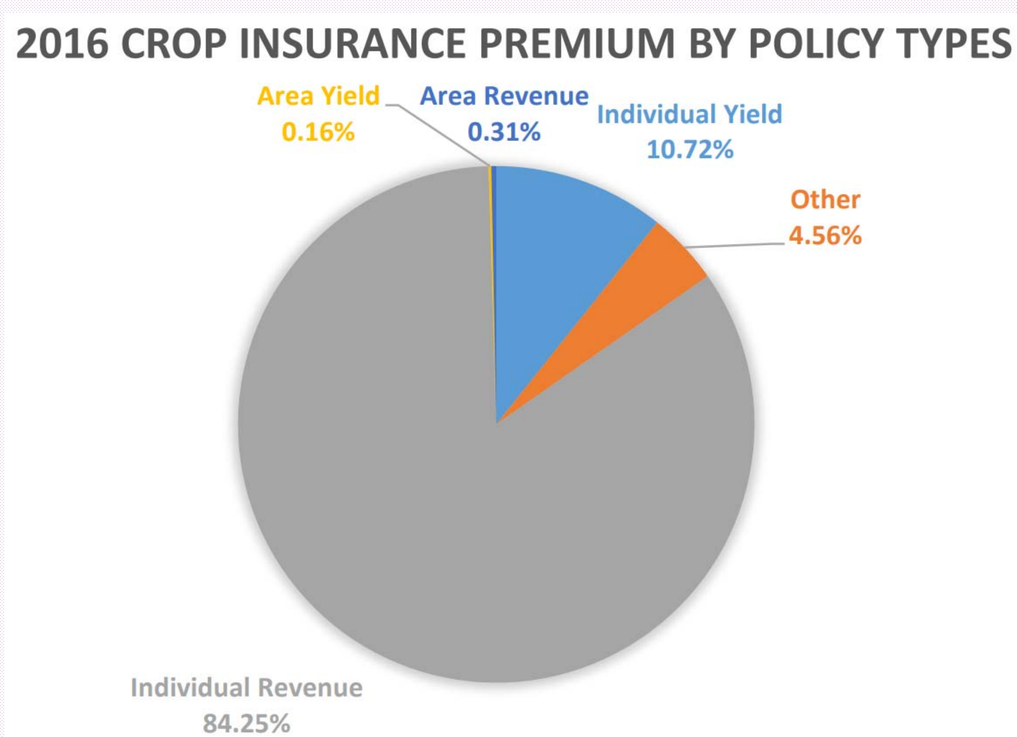
- Not all farmers had a crop failure in 2012.
- In 2012, farmers with good corn crops were able to sell some of their corn for over $7.50 per bushel and generated some very "high" profits.
- All corn farmers collecting 2012 crop insurance payments had to suffer an insurable yield loss to collect any indemnity payment, with no exceptions.

How is it possible to have record farm income and record crop insurance indemnity payments in the same year?

- For most farmers they needed a yield loss of 20% or more to collect any indemnity payments in 2012.
- Yield loss needed to exceed their deductible to cover the farmer paid premiums before they netted any indemnity payments.
- In the Great Plains that could add another 5% to the deductible because of farmer paid premiums, so farmers with 80% coverage would need a 25% yield loss to net any payment.

"The insurance products offered are approved by the Federal Crop Insurance Corporation but are sold and serviced through private insurance companies who are paid administrative an operating subsidy."

Source: Risk Management Agency, "The Risk Management Safety Net: Market Penetration and Market Potential Analysis of the Federal Crop Insurance Portfolio", September 2017
https://www.rma.usda.gov/pubs/2017/portfolio/portfolio.pdf



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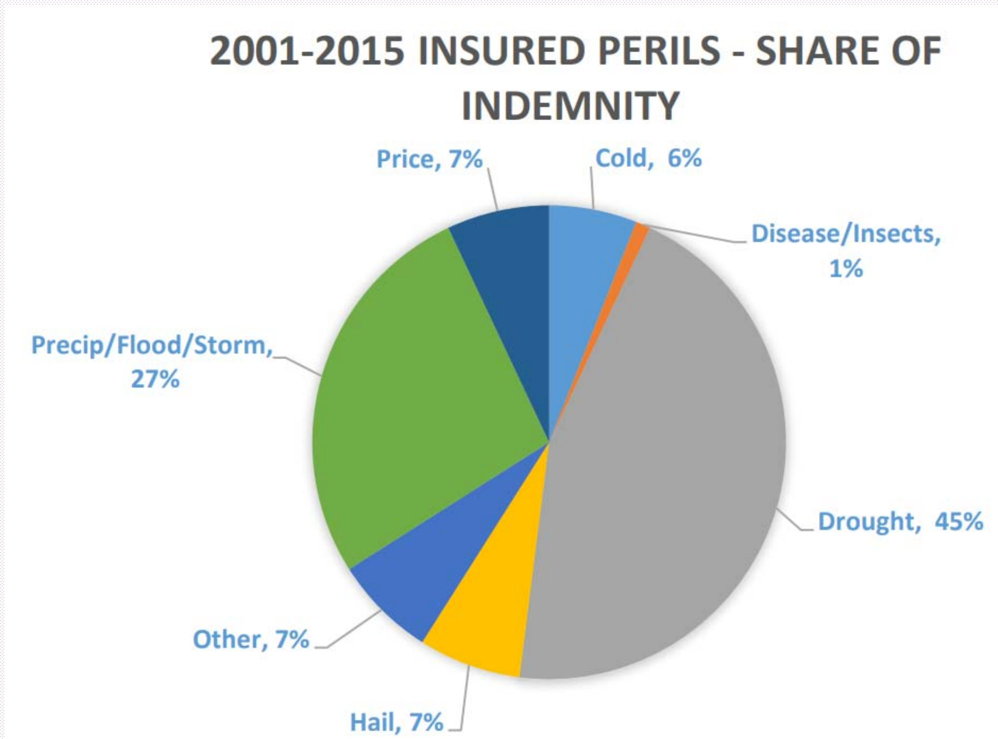

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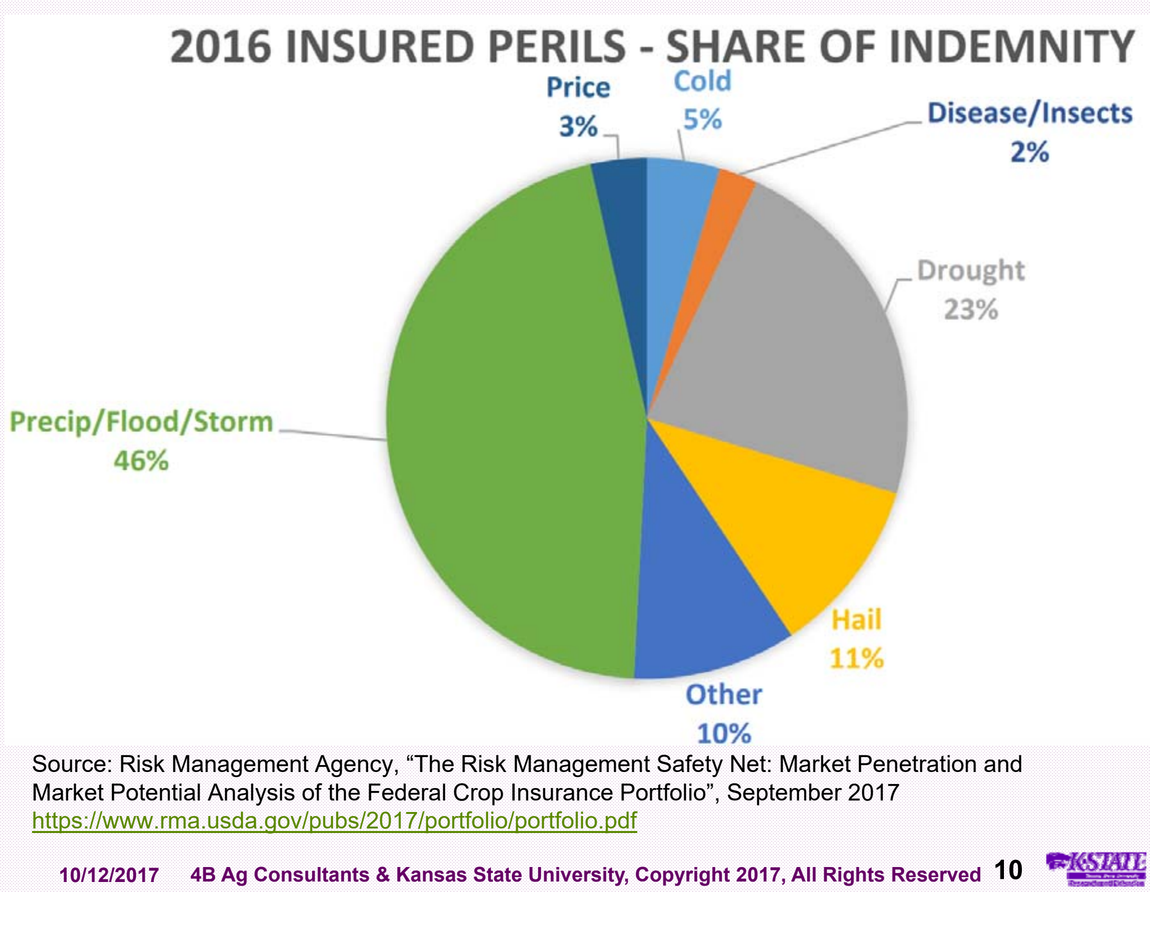

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Commodity Policies Under Consideration

- Add a fix to ARC so that guarantees are based on "expected" yield
- Add a fix to ARC for declining strike prices.
- Add Cotton to the Title 1 commodity program

Crop Insurance Policies Under Consideration

- Adjusted Gross Income limits for participation in Crop Insurance
  - $250,000 (AFFIRM Act) and 500,000 (Administration's budget) AGI limits are both on the table
- Harvest Price Option
  - Eliminate HPO option or HPO subsidy
- Capping crop insurance premium cost-shares (subsidies)
  - Limit a farm to receiving $40,000 in cost-share, all crop insurance purchases above that point are unsubsidized

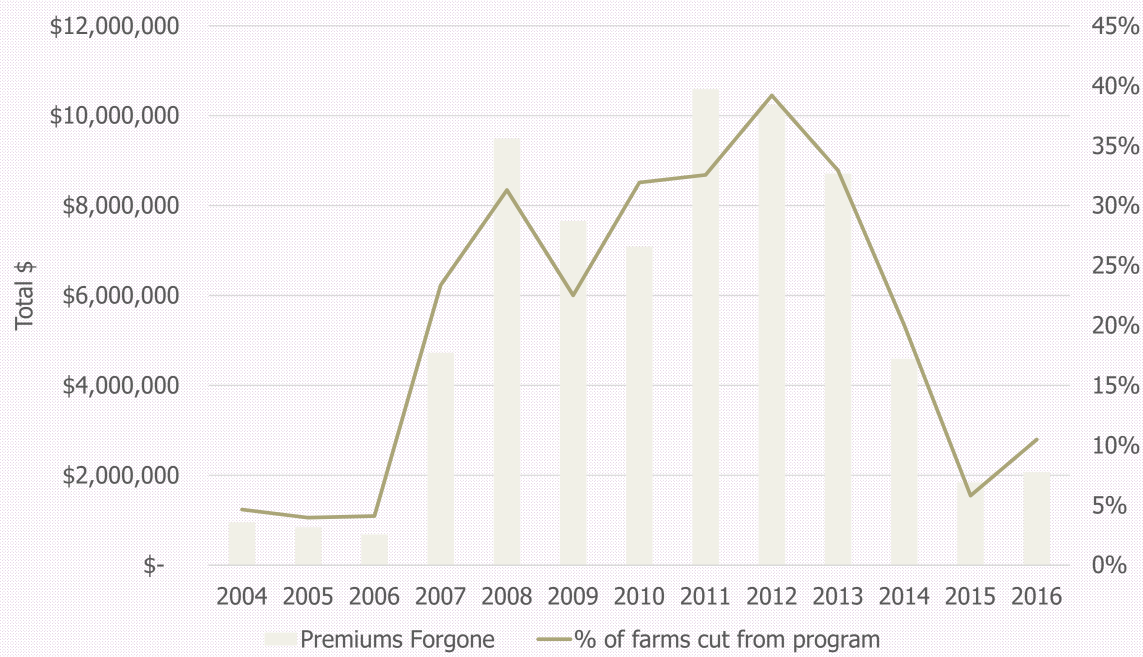
Crop Insurance Policies Under Consideration

- Administration's budget aims to cut $3 billion per year over 10 years
  - This is nearly half of the government's premium share and will require big declines in participation to achieve budget cuts estimated by the Administration.
  - Unlikely any savings would be this large because farmers will make changes to avoid the limits.
  - Savings this large would likely require a large number of farmers to drop their crop insurance coverage.

Crop Insurance Policies Under Consideration: $250K Adjusted Gross Income Cap

- Impact on Kansas farms depends on the profitability.
- In the good years, we could have as many as 30-40% of farms affected.
- In the bad years, that drops to 5-10%.
- Loss of customers will also affect crop insurance industry sales and agent commissions.

Crop Insurance Policies Under Consideration: $250K Adjusted Gross Income Cap

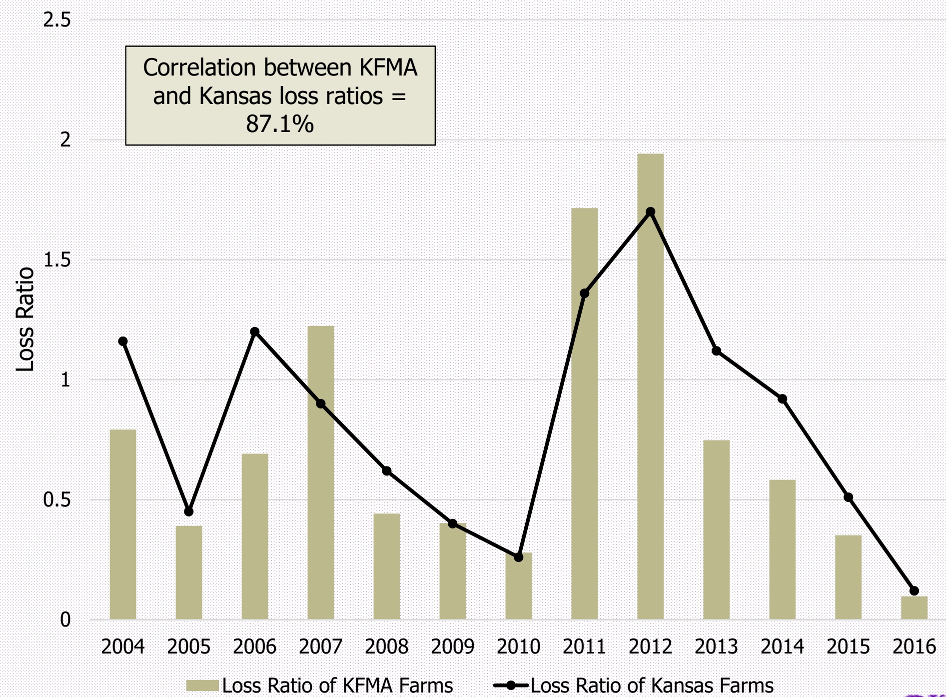


Crop Insurance Policies Under Consideration: $250K Adjusted Gross Income Cap

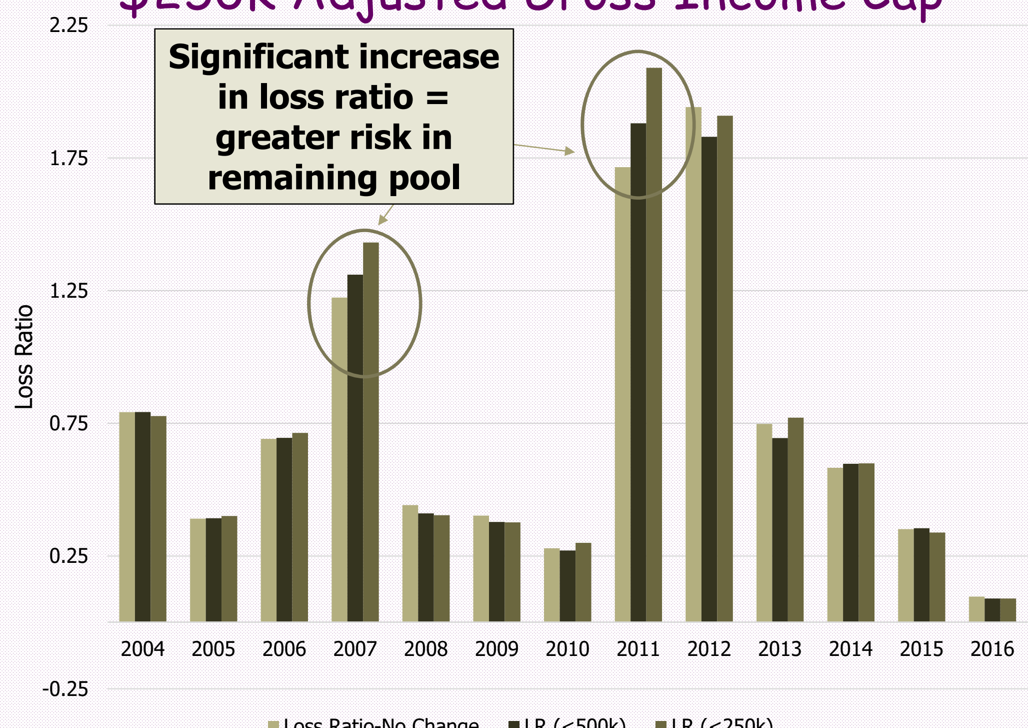
- What are the implications beyond the farm gate?
  - Consider the impacts to the insured pool caused by the loss of the 'biggest' farms

- Used KFMA data to simulate which farms would hit AGI cap and how the loss ratio is affected

Crop Insurance Policies Under Consideration: $250K Adjusted Gross Income Cap



Crop Insurance Policies Under Consideration: $250K Adjusted Gross Income Cap



Crop Insurance Policies Under Consideration: $250K Adjusted Gross Income Cap

- $500,000 versus $250,000 cap
  - Lower limit will affect more farms
- Likely to be some "work-around" that people will use including creating "paper farms" and adding spouse as an operator
- Landowners who crop share and hit cap
  - Trusts, investor entities
  - May change their lease to cash or get out completely

Crop Insurance Policies Under Consideration: Eliminate Harvest Price Option (HPO)

- Elimination of the HPO completely

  or
- Elimination of the cost-share for HPO
- Popular for Revenue Protection policies in the Corn Belt
  - Could create some savings in the RMA budget because corn and soybean producers likely to switch to Yield Protection policy or drop their coverage
  - Affects all RP insured farmers, regardless of their AGI or farm size

2012 Iowa Example

Same Loss Calculated in Dollars[1]

		YP	RP	RP-hpe
1	Average Iowa APH yield[2]	185	185	185
2	Coverage level	80%	80%	80%
3	Bushel guarantee	148	148	148
4	Deducted bushels	37	37	37
5	Projected price	$5.68	$5.68	$5.68
6	Insurance guarantee	$840.64	$840.64	$840.64
6	Bushels per acre produced	92	92	92
7	Bushels lost below Expected	93	93	93
8	Bushels Indemnified			
9	Indemnity-Harvest Price[3]	$5.68	$7.50	$7.50
10	Gross indemnity			
11	Insurance guarantee	$840.64	$1,110.00	$840.64
12	Value of production[4]	$522.56	$690.00	$690.00
13	Gross indemnity	$318.08	$420.00	$150.64
14				
15	Avg. IA Farmer Paid Premium[5]	$15.97	$20.18	$14.29
16	Net Indemnity Payment	$302.11	$399.82	$136.35
17	# Replaced Bu. Of 93 Bu. Lost	40.3	53.3	18.2

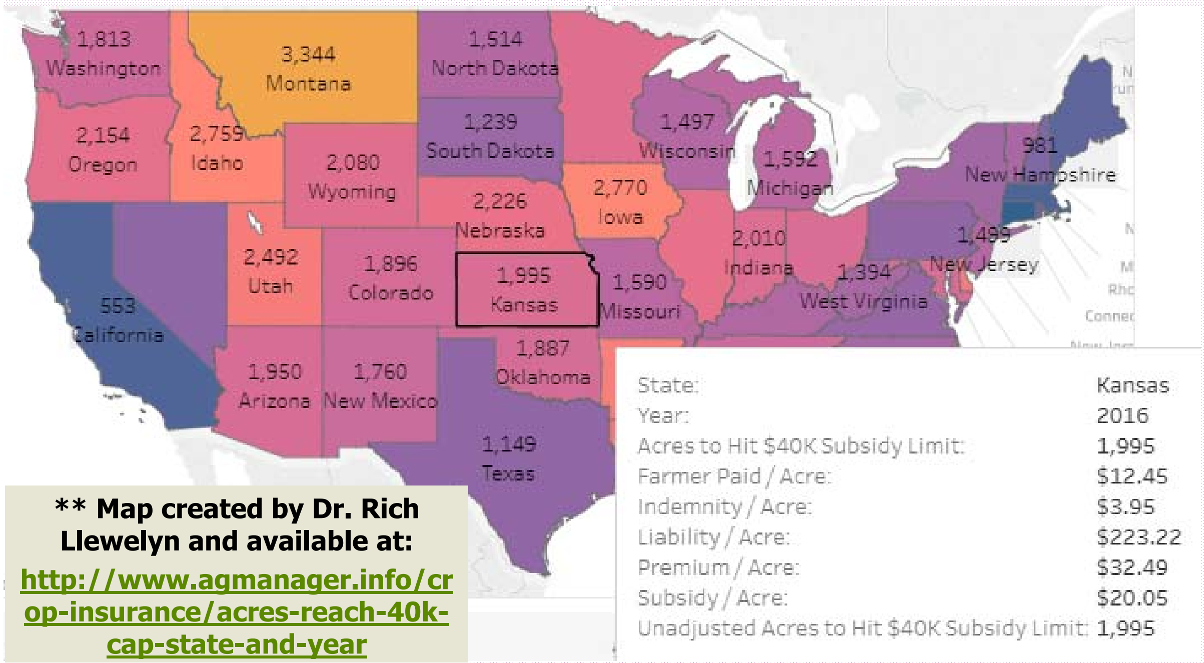
Example from Iowa in 2012

- **Corn price @ harvest=$7.50**
- **Drought cut yield in half**
- **Coverage under RP with HPO is highest**
- **Coverage under RP with HPO excluded is lowest**
- **PLC not likely to have paid**
- **ARC not likely to have paid (yield low, but price high)**

$40,000 Limit on Premium Cost-Share

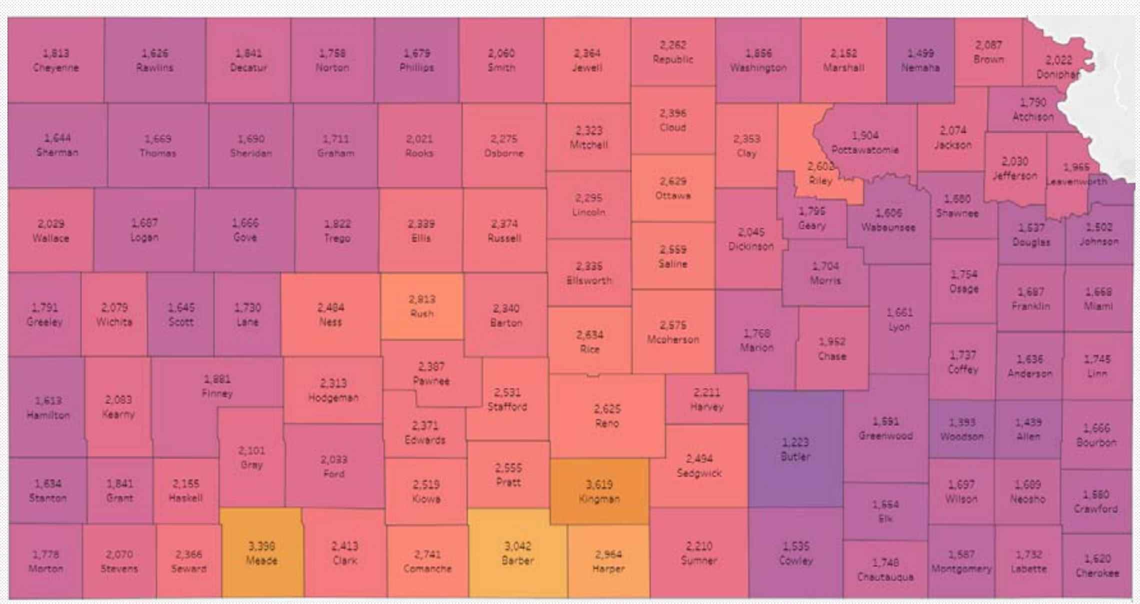
- Estimate the number of acres farmers could insure, on average, before hitting the limit
  - Function of premiums paid which vary by crop, commodity prices, and volatility
  - Results will vary by year and location

Estimated Number of Crop Acres Needed to Hit $40,000 Cost-Share Limit



**** Map created by Dr. Rich Llewelyn and available at:**
http://www.agmanager.info/crop-insurance/acres-reach-40k-cap-state-and-year

Estimated Number of Kansas Crop Acres Needed to Hit $40,000 Cost-Share Limit



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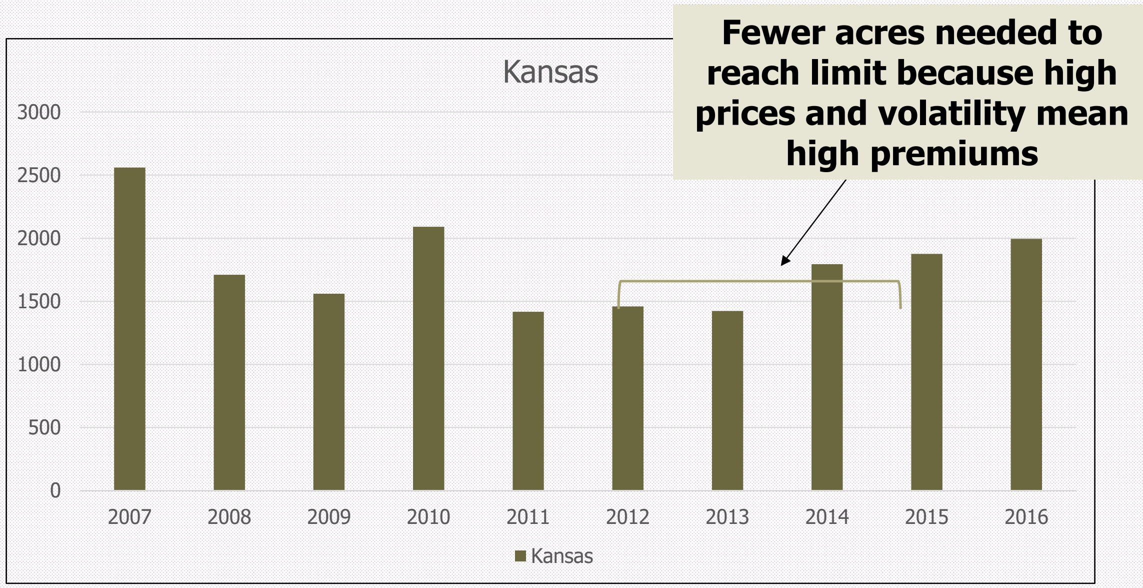
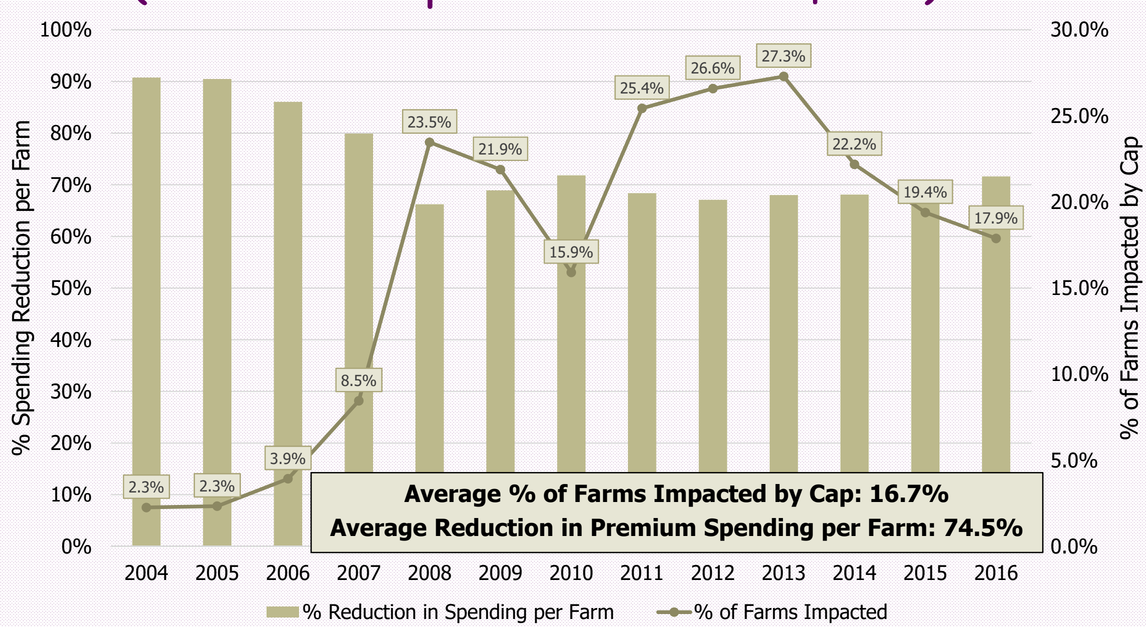


Impact on KS Farms of Cost-Share Cap (assumes no purchase above $40k)



Premium Cost-Share Cap Implications

- Farmers are likely to hit the $40,000 premium cost-share limit well before they hit the AGI limit
- Farmers will likely (try?) to create new "paper farms"
  - Will increase paper work for agents, AIPs, and RMA with no new premium.
  - Adding farms will add record keeping requirements for farmers.

Farms under AGI Cap, but Over $40,000 limit

- Will farmers spend their $40K budget limit on corn and not insure their soybeans and other crops?
- Will wheat only be insured after the higher costs crops are insured?
- If crops are selectively insured that will likely affect the actuarial results for the wheat insurance pool.

Premium Cost-Share Cap Implications

- Will farmers over the limit cut coverage levels?
- Will farmers over the limit drop their HPO?
- Would it affect actuarials if large farmers leave the insurance pool?
- Loss of large farms will affect delivery because of reduced A&O.
- Will Congress provide an ad hoc disaster program if a large number of farmers reduce their coverage?

Other issues

- Farmers & other shorts can't deliver on a futures contract and arbitrage the futures contract. Farmers don't have the leverage of delivery.
- Only few multi-national grain companies can deliver on futures, but must provide storage to the long taking delivery.
- Shortage of storage caused non-convergence in futures markets causing a reduction in indemnity payments for price loss, because futures don't fall to meet cash.
- Indemnity payments for yield loss are over the market with non-convergence.

Other issues

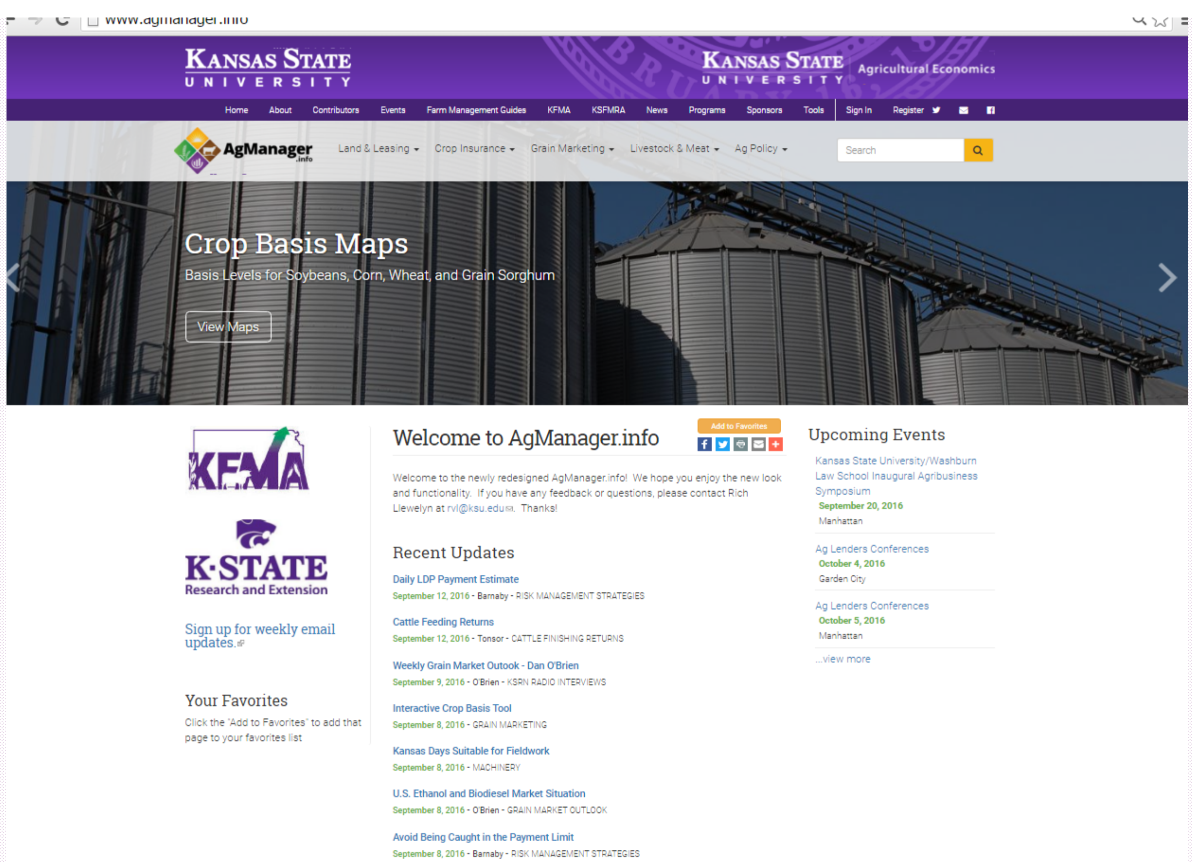
- CME changed to a VSR and a shipping certificate.
- VSR may not cause convergence at harvest time, but as the storage rate is increased it is expected to cause convergence in a deferred month, but farmers would need to own the grain to benefit.
- Crop insurance rating assumes an efficient market.

Commodity Program Education

- Produce maps that will show the difference between estimated 2016/17 ARC payments and final payments.
- Popup window will show the FSA, NASS, & RMA county yield, estimated ARC payments, and final ARC payments.
- FSA county yield equals total bushels harvested divided by harvested acres plus RMA failed acres.

Commodity Program Education

- By March 1, estimated PLC payments were near final payments. PLC is final when NASS announces MYA Price (6/29/17 wheat). FSA county yields for ARC are only released when payments are announced in October.
- FSA reports gross payment rate. ARC payment = Gross payment rate X base acres X 85% X crop share X (1-6.8% sequestration cut)
- FSA reports gross payment rate. PLC payment = Reference Price - MYA price X farm's FSA program yield X base acres X 85% X crop share X (1-6.8% sequestration cut)



Other issues

- Non-convergence in futures markets will reduce indemnity payments for price loss, because futures don't fall to meet cash.
- Farmers can't deliver grain on a futures contract and arbitrage the futures-cash price.
- The reason farmers can't deliver on a futures contract is because the market is not trading wheat, it is trading the value of warehouse receipt/shipping certificate. (doesn't apply to livestock)

