A New FSA Farm Programs Based on a "Modified GRIP" Design

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What is GRP & GRIP

- GRP is a "put option" on expected county yield
- GRIP is a "put option" on county revenue
- Farmer has the basis risk, difference between county yield % change and farm yield % change

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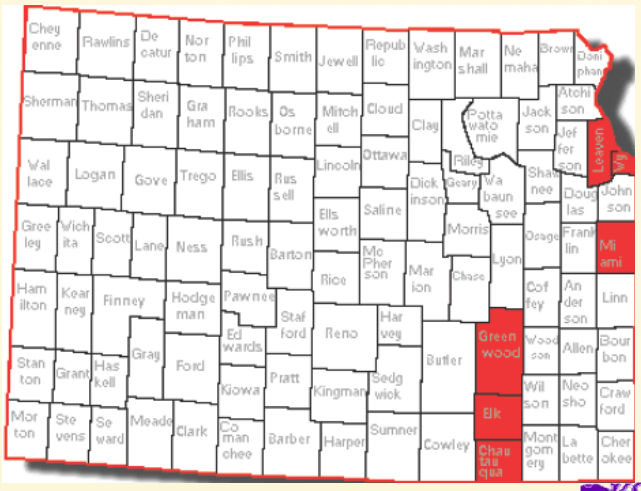
KS Counties without a Wheat GRP/GRIP Offer



Does GRP & GRIP Fit Great Plains Agriculture?

- **GRP/GRIP Does Provide "Reasonable" Protection for:**
  - **Drought**
  - **Freeze**
  - **Excess Moisture**

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Does GRP & GRIP Fit Great Plains Agriculture?

- GRP/GRIP Does NOT Provide "Reasonable" Protection for:
  - Hail
  - Flood
  - No Prevented planting
  - No Re-plant
  - No Quality Loss adjustment
  - Any "spot" Loss

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Does GRP & GRIP Fit Great Plains Agriculture?

- If APH is low caused by multiple year crop losses
- Low APH causes low guarantees and higher premium costs
- If the APH is real low then there is very little protection. GRP is based on at least a 30 year history, so coverage maybe much higher with lower premium.
- Trend yields that set expected county yield is the key.

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GRP "Math 101"

- Trend adjust county yield
- Expected county yield was 127 bu.
- 10 year average yield was 122 bu.

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GRP "Math 101"

- Trigger Yield = Expected County yield * % coverage
- 115 bu. Trigger yield= 127.8 * 90%
- Liability = GRP Price Election* Expected Yield
- $293.94 = $2.30 * 127.8 bu.
- Maximum Protection = Exp. Co. Liability * max 150%
- $441 = $293.94 * 150%
- Max = 100% or $441; Min 60% or $265

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GRP "Math 101"

- GRP payment = (Trigger yield- current year county yield/ trigger yield) * Liability (selected $ protection)
- County has a 25.3% loss from 127.8 expected bu. and farmer suffers a 51% yield loss
- GRP = (115 – 95.5) / 115 = 17% * $265 = $45.05
- MPCI = 125 * 75% bu. Guarantee – 61.2 bu. production = 32.6 bu. * $2.30 = $74.98

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GRP "Math 101"

- The increase coverage up to 150% and lower deductible can be used to manage basis risk.
- GRP = (115 – 95.8) / 115 = 17% * $294 *150% = $441 = $74.97
- MPCI = 125 * 75% bu. Guarantee – 61.2 bu. production = 32.6 bu. * $2.30 = $74.98

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GRIP "Math 101"

- **Group Risk Income Protection price based on the last 5 trading days in February for December corn but will be changed to the CRC prices in 2006.**
- **Harvest price is the November average of December corn; October average for grain sorghum**
- **Grain sorghum prices adjusted by USDA's GS/corn price ratio**
- **GRIP uses the GRP expected county yield for expected county revenue.**
- **Like GRP, farmer can suffer a total loss and receive no payment, maybe a lender concern.**

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Cheyenne Wheat

Year	NASS County Planted Yield	RMA Expected County	GRP RATE	Volatility	GRIP Rate	GRIP-HRO Rate
1997	27.4	43.2	7.50			
1998	44.2	43.8	7.50			
1999	51.9	44.4	7.50			
2000	24.8	40.6	6.50			
2001	31.5	40.9	6.50	0.20		
2002	19.6	41.3	6.50	0.18		
2003	30.9	39.1	6.50	0.22		
2004	7.8	39.4	6.50	0.19		
2005	17.6	35.5	6.83	0.19		
2006	23.7	32.0	7.95	0.18	16.23	17.83
2007		25.2	8.13	0.20	14.57	16.12
				Maximum Yield from 1997-2007	44.4	
				2007 Yield	25.2	
Percent Reduction in Expected Yield from the Maximum					43.2%	

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Rawlins Wheat

Year	NASS County Planted Yield	RMA Expected County	GRP RATE	Volatility	GRIP Rate	GRIP-HRO Rate
1997	35.2	36.9	8.30			
1998	47.5	37.2	8.30			
1999	47.9	37.5	8.30			
2000	28.8	35.0	7.10			
2001	40.2	35.1	7.10	0.20		
2002	28.7	35.2	7.10	0.18		
2003	40.9	36.8	7.10	0.22		
2004	5.5	37.0	7.10	0.19		
2005	30.0	36.4	7.10	0.19		
2006	18.2	33.3	7.81	0.18	9.19	11.22
2007		31.0	8.48	0.20	10.45	12.53

Maximum Yield from 1997-2007	37.5
2007 Yield	31.0
Percent Reduction in Expected Yield from the Maximum	17.3%

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Ottawa Wheat

Year	NASS County Planted Yield	RMA Expected County	GRP RATE	Volatility	GRIP Rate	GRIP-HRO Rate
1997	56.8	30.8	6.80			
1998	52.4	30.8	6.80			
1999	44.0	30.8	6.80			
2000	39.4	36.2	6.90			
2001	37.2	36.4	6.90	0.20		
2002	39.9	36.6	6.90	0.18		
2003	58.1	38.8	6.90	0.22		
2004	47.7	39.1	6.90	0.19		
2005	32.3	43.0	6.90	0.19		
2006	43.5	46.7	6.90	0.18	8.55	9.79
2007		42.4	6.62	0.20	9.75	10.72

Maximum Yield from 1997-2007	46.7
2007 Yield	42.4
Percent Reduction in Expected Yield from the Maximum	9.2%

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Compare Cheyenne, Rawlins & Ottawa

	Cheyenne	Rawlins	Ottawa
RMA Expted County Yield	25.2	31.0	42.4
Year with Largest Yield loss	2004	2004	1989
Largest Disaster Year County Yield	7.8	5.5	2.1
5 Year Average Percent of Planted Wheat Acres under Irrigation	5.1%	2.0%	<1%
NASS 20 Years Simple Average Planted Yield	33.4	33.2	34.8
NASS 20 Yr Standard Deviation of Planted Yield	11.5	10.7	12.9
NASS 20 Yr Coefficient of Variation	34.5%	32.2%	37.2%
NASS 33 Years Simple Average Planted Yield	33.5	33.3	41.9
NASS 33 Yr Standard Deviation of Planted Yield	9.9	9.8	11.0
NASS 33Yr Coefficient of Variation	29.6%	29.3%	26.1%
GRP Rate	8.1%	8.5%	6.6%
GRIP Rate	14.6%	10.5%	9.8%
GRIP-HPO Rate	16.1%	12.5%	10.7%

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Compare Cheyenne, Rawlins & Ottawa

	Cheyenne			Rawlins			Ottawa		
	GRP	GRIP	GRIP-HPO	GRP	GRIP	GRIP-HPO	GRP	GRIP	GRIP-HPO
KSU Estimated Farmer Paid Loss Ratio	0.97	0.66	0.65	1.87	1.80	1.97	1.58	1.77	1.82
KSU Estimated Frequency of Claim	12%	18%	21%	21%	38%	41%	18%	32%	32%
KSU Estimated Industry Loss Ratio	0.44	0.30	0.29	0.84	0.81	0.88	0.71	0.80	0.82
KSU Estimated Farmer Paid Loss Ratio, Assuming 2004 Disaster Yield Replaced with County Average Yield	0.35	0.38	0.35	0.88	0.86	1.08	0.91	1.29	1.30
KSU Estimated Industry Loss Ratio, Assuming 2004 Disaster Yield Replaced with County Average Yield	0.16	0.17	0.16	0.39	0.42	0.48	0.41	0.58	0.58

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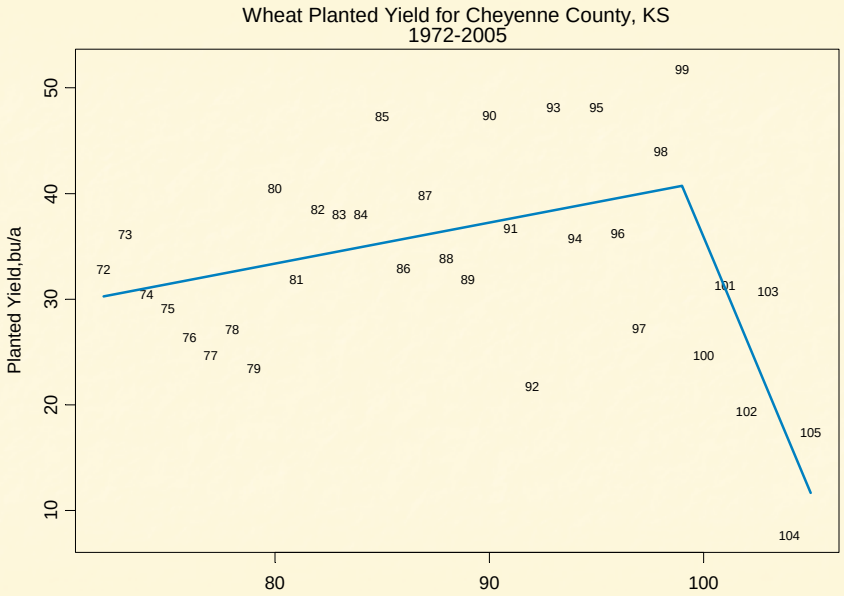
Warning: NOT a K-State Slide



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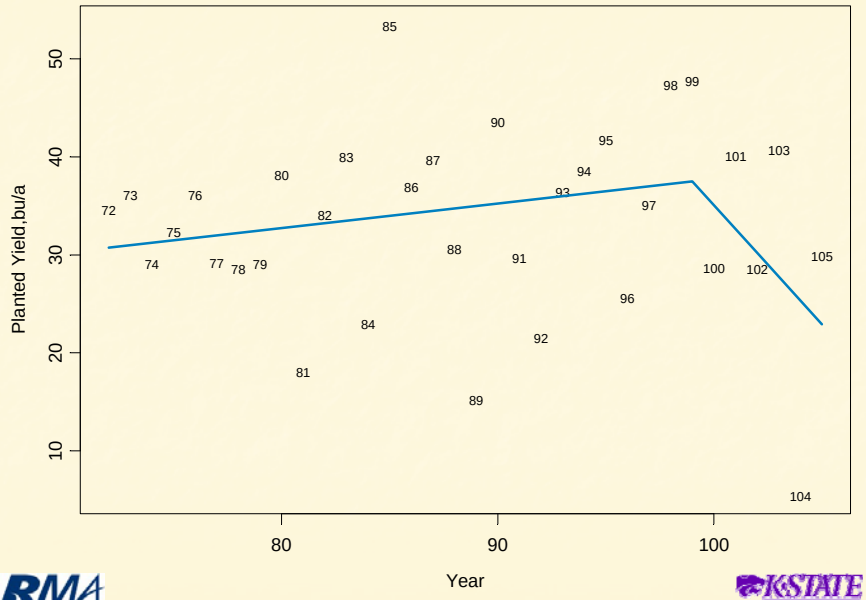

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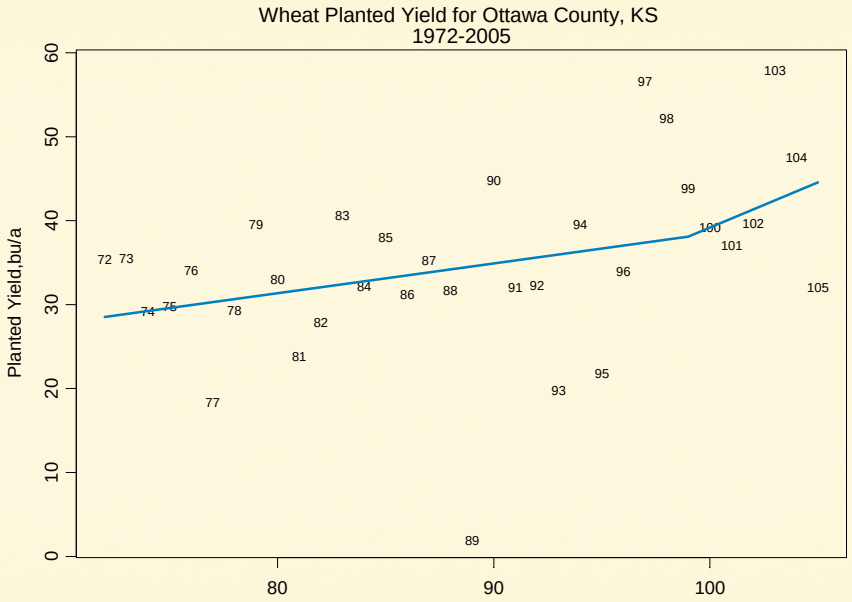

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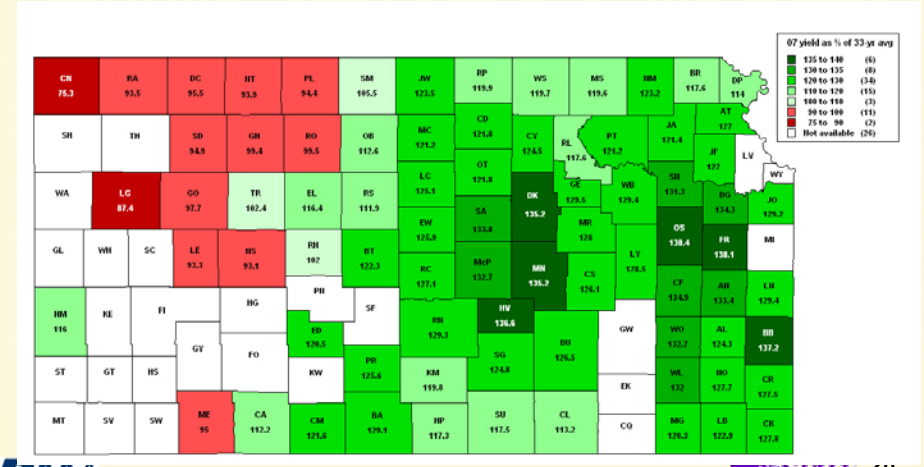
2007 exp yield as % of 33-year average yield; no practice specified



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GRP/GRIP Summary

- Little/no Protection for Hail, wind, flood or other spot losses
- No Prevented Planting or Re-plant Protection
- GRP insured growers worried about Rust may want to change to APH
- Farmer can suffer a total loss and receive no payment, maybe a lender concern.

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Policy Issues

- The Corn Belt has generated underwriting gains
- Those gains allow RMA to hit the targeted loss ratio
- If the those farmers shift from APH to GRIP, then RMA may (will ?) lose a major region with consistent underwriting gains
- Farm Bill based on a "GRIP" type program?

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Does GRP & GRIP Fit Your Farm?

- Trend yields that sets expected county yield is the key for GRP, GRIP, and proposed farm programs.
- Use county, crop reporting district, state, or national trend yields.
- Do yields trend only upward?

Disclaimer on Two Proposed Farm Programs by National Corn Growers Association – Public Policy Action Team and by Dr. Carl Zulauf, Ohio State University and American Farmland Trust

- The following analysis of the two programs are based on limited public information and off the record phone conversations.
- Both programs should be consider "works in progress" or "drafts".

Disclaimer on Two Proposed Farm Programs by National Corn Growers Association – Public Policy Action Team and by Dr. Carl Zulauf, Ohio State University and American Farmland Trust

- There will likely be changes to either program should one of these plans become law.
- This analysis represents my current understanding of the two programs and any errors are those of the Author.
- To save space, I will refer to the 2 plans as Zulauf and PPAT

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Discussion: Justification for Program Change

- PPAT claims their program provides an effective safety net within WTO limits as proposed by the U.S.
- If no change in current FSA farm programs, higher commodity prices will eliminate current payments.
- PPAT posted program details at:
- http://www.ncga.com/news/notd/pdfs/10_23_06NFSA.pdf
- Doctors Babcock and Hart, Iowa State University, argue crop insurance is a very inefficient system for transferring payments to farmers in their paper titled "Crop Insurance: A Good Deal for Taxpayers?" posted on the CARD WEB site at:
- http://www.card.iastate.edu/iowa_ag_review/summer_06/article1.aspx

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Discussion: Justification for Program Change

- **AFT/Zulauf claims his program removes systemic risk but leaves the individual risk to crop insurance and self insurance. There is also the justification that farm household incomes now equal (exceed?) non-farm household incomes, unlike the 1930's. Therefore farmers need risk protection and not income enhancement.**
- **Dr. Zulauf's testimony posted at:**
  - http://aede.osu.edu/resources/docs/pdf/6AH12DQZ-NBVI-7XW6-K94K3XWASEMTKLV.pdf
  - http://aede.osu.edu/resources/docs/pdf/VCYT4Z6P-P5OM-B7VO-70RF3XS15QY15TPK.pdf
- **American Farm Land Trust has posted details at:**
  - http://www.farmland.org/documents/AFT_Agenda2007_May06.pdf

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PPAT Proposed Farm Program based on "Modified GRIP" and Farm Level Coverage

- **PPAT program would "1) (continue) Maintenance of current calculation methods for direct payments; 2) Change the nonrecourse loan program to a recourse loan program; 3) Creation of a new program: Base Revenue Protection (BRP); and 4) Modification of current countercyclical program into a revenue countercyclical program (RCCP)."**
- **PPAT does not state this program is a crop insurance replacement.**

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PPAT Proposed Farm Program based on "Modified GRIP" and Farm Level Coverage

- PPAT is silent how BRP would be paid for if it does not replace crop insurance.
- However PPAT does state: "BRP and RCCP would have generated more payments on an irrigated and a dryland corn farm in Sheridan County, Kansas than the current set of safety net programs that include, loan deficiency payments (LDPs), countercyclical payments (CCPs), and crop insurance".

PPAT Proposed Farm Program based on "Modified GRIP" and Farm Level Coverage

- Based on FAPRI price estimates PPAT does state: "RCCP is estimated to generate 80 percent more in aggregate corn payments than LDPs and CCPs over the period 2006 to 2010".
- PPAT concedes if prices are weaker then LDPs and CCPs will be larger than RCCP.

PPAT Proposed Farm Program based on "Modified GRIP" and Farm Level Coverage

- PPAT state BRP: "net income insurance allows a higher effective coverage level than gross income insurance". KSU Agrees, if the farm does not have multiple yield loss years during the past 5 years.
- PPAT states BRP: "optional unit coverage could be made available under a supplemental crop insurance product". But would farmers pay for top end coverage with no subsidy or even if subsidies are provided?
- PPAT concedes under BRP: "A series of low farm yields will reduce the guarantee level significantly".

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PPAT Proposed RCCP based on a "Modified GRIP" Design and Farm Level Coverage

- A combined 100% county based "Modified GRIP" paid on planted acres and a 70% Farm Level Net Revenue Guarantee.
- County "Modified GRIP" RCCP coverage based on effective target price and National NASS 7 month average price.
- All farmers in the county will received the same payment per planted acre under RCCP.

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Zulauf Proposed Farm Program based on "Modified GRIP" and Crop Insurance

- A combined 100% National yield based "Modified GRIP" paid on expected farm revenue and continues subsidized crop insurance.
- Replaces CC and Loan
- It is assumed farmers would continue to receive the Direct Payment and Conservation Reserve Payments.

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Zulauf Proposed IFRP based on a "Modified GRIP" Design and Farm Level Coverage

- National "Modified GRIP" coverage based on effective CRC defined futures prices and WASDE forecasted yield.
- IFRP payments would be deducted from any crop insurance payments.
- Assumes reduced crop insurance payments would be offset with higher guarantees or lower premiums.

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Draft of PPAT Proposed Farm Program Calculations

- **Base Revenue Protection (BRP) Calculations; A Marshal County, Kansas Corn Farm Example**
- **Farmers would be able to collect Counter Cyclical, Marking Loan Gains/LDP, and BRP-RCCP during a 1 year transition period if these payments are triggered.**

Draft of PPAT Proposed Farm Program Calculations

2005 Farm BRP Level Guarantee

Year	Farm Yield	MYA Price	Farm Revenue	ERS Variable Costs	Net Farm Revenue
2001	109.4	1.97	215.43	236.18	-20.75
2002	28.7	2.32	66.54	236.18	-169.64
2003	33.3	2.42	80.67	236.18	-155.51
2004	135.7	2.06	279.57	236.18	43.39
2005	114.1	1.90	216.83	236.18	-19.35

2006 Olympic Average Farm Net Revenue -$65.20

Income will also include LDP & CC in history but these payments are eliminated in the future

Draft of PPAT Proposed Farm Program Calculations

2006 Farm Level BRP Guarantee

Olympic Average Net Farm Revenue		Cover-age		((1-.70%) X $-36.58) + $-19.56		Net Farm Revenue Guarantee
-$65.20		70.0%		$-19.56	=	-$84.76

Draft of PPAT Proposed Farm Program Calculations

Revenue to Count Against the BRP Guarantee

2006 Farm Yield		Example MYA Price		ERS Variable Costs		Net Farm Revenue to Count
33.3	X	$2.42	-	$236.18	=	-$155.51

BRP uses "7 month NASS price" but it is not clear if this a simple average or weighted Average price. This analysis used the NASS MYA price.

Draft of PPAT Proposed Farm Program Calculations

2006 BRP Payment

Net Farm Revenue Guarantee		Net Farm Revenue to Count		Farm Level Payment
-$84.76	-	-$155.51	=	$70.75

Draft of PPAT Proposed Farm Program Calculations

2007 Farm Level BRP Guarantee

Year	Farm Yield	MYA Price	Farm Revenue	ERS Variable Costs	Net Farm Revenue
2002	28.7	2.32	66.54	236.18	-169.64
2003	33.3	2.42	80.67	236.18	-155.51
2004	135.7	2.06	279.57	236.18	43.39
2005	114.1	1.90	216.83	236.18	-19.35
2006	33.3	2.42	80.67	236.18	-155.51

2007 Olympic Average Farm Net Revenue -$110.12

Draft of PPAT Proposed Farm Program Calculations

2007 Farm Level BRP Guarantee

Olympic Average Net Farm Revenue		Coverage		Net Farm Revenue Guarantee
-$110.12		70.0%	=	-$143.16

Draft of PPAT Proposed Farm Program Calculations

- **Revenue Counter Cyclical Program (RCCP) Calculations, A Marshal County, Kansas Corn Example**

Draft of PPAT Proposed Farm Program Calculations

Revenue Counter Cyclical Program (RCCP)

	Expected County Yield		Effective Target Price		Coverage		County Level Guarante
	94.1	X	$2.35	X	100%	=	$221.14
Stop Loss	94.1	X	Maximum Payment $2.35	X	(1 - 70%)	=	$66.34

Draft of PPAT Proposed Farm Program Calculations

Revenue to Count Against RCCP Guarantee

	Observed County Yield		Example MYA Price		Revenue to Count
2006	33.3	X	$2.42	=	$80.67

Draft of PPAT Proposed Farm Program Calculations

RCCP Payment

"GRIP" Guarantee		County Revenue to Count		Payment
$221.14	-	$80.67	=	$140.47

RCCP Maximum Payment $66.34

RCCP Payment = Min (Calculated Pymt, Max Pymt) $66.34

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Draft of Zulauf Proposed Farm Program Calculations

- **Integrated Farm Revenue Plan (IFRP) Based on National Yield and Price Estimates by USDA, World Agricultural Supply and Demand Estimates (WASDE) ; A Marshal County, Kansas Corn Example**

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Draft of Zulauf Proposed Farm Program Calculations

IFRP National Revenue Guarantee

WASDE Fore-casted Yield		Feb Avg Dec CBOT Price		Coverage		National Expected Revenue
149.0	**X**	$2.59	**X**	100%	**=**	$385.91

Draft of Zulauf Proposed Farm Program Calculations

Revenue to Count Against IFRP Guarantee

Example Observed National Yield		Oct Avg Dec CBOT Price		Revenue to Count
147.7	**X**	$2.42	**=**	$357.37

Draft of Zulauf Proposed Farm Program Calculations

IFRP Percent National Revenue Loss

National Expected Revenue		National Revenue to Count		National Revenue Loss		National Expected Revenue		National Percent Revenue Loss
$385.91	-	$357.37	=	$28.54	/	$385.91	=	7.4%

Draft of Zulauf Proposed Farm Program Calculations

IFRP Farm Payment

APH		Feb Avg Dec CBOT Price		Farm Expected Revenue		National Percent Revenue Loss		IFRP Farm Payment
97.2	X	$2.59	=	$251.75	X	7.4%	=	$18.62

Draft of Zulauf Proposed Farm Program Calculations

IFRP Farm Payment + Crop Insurance Payment

APH		Feb Avg Dec CBOT Price		Farm Expected Revenue		Percent Coverage		RA Gurana-tee
97.2	**X**	$2.59	**=**	$251.75	X	70%	**=**	$176.22

Draft of Zulauf Proposed Farm Program Calculations

Revenue to Count Against RA Guarantee

Example Observed Farm Yield		Nov Avg Dec CBOT Price		Revenue to Count
33.0	**X**	$2.42	**=**	$79.86

Draft of Zulauf Proposed Farm Program Calculations

2006 Revenue Assurance Payment

RA Revenue Guarantee		Farm Revenue to Count		RA Payment
$176.22	-	$79.86	=	$96.36

Draft of Zulauf Proposed Farm Program Calculations

Less IFRP Payment Equal Net RA Payment

RA Payment		RA Farmer Paid Premium		IFRP Farm Payment		Net RA Payment
$96.36	-	$14.78	-	$18.62	=	$62.96

Carl Zulauf and American Farm Landtrust's Farm Program Based on 2006 WASDE Expected National Harvested Corn Yield of 149.0 Bushels Generating Simulated Percent Loss Below Expected National Revenue based on 33 Years of prices and Historical Yields Adjusted for Trend to a 2006 Equivalent Yield.*

		National[1]		Integrated Farm Revenue Plan (IFRP)[2] Coverage			IFRP + 70% Net RA Payment					
			Oct Trend Adj NASS Yield to			100%	Farm Yield Trend Adj to a	IL Example IFRP Corn	APH 163.2 Net RA Indemnity	KS Farm Yield Trend Adj to a	KS Example IFRP Corn	APH 99.2 Net RA Indemnity
Yr	Plant Yd	NASS Oct Yd	2006[2]	Plant Price	Havst Price[3]	IFRP Pymt Rate	2006 yield[4]	Farm Pymt	Pymt[5]	2006 yield[4]	Farm Pymt	Pymt[5]
73	78	94	154.3	1.38	2.52	0.0%	169.1	0.00	(1.69)	121.21	0.00	(5.65)
74	60	74	132.4	2.89	3.65	0.0%	138.6	0.00	(3.53)	74.29	0.00	(11.79)
75	74	86	142.8	2.72	2.69	5.2%	180.6	22.94	(3.31)	93.28	13.95	(11.08)
76	74	83	137.4	2.72	2.43	17.6%	170.5	78.22	(3.32)	85.83	47.56	(11.08)
77	77	91	143.7	2.73	2.22	21.8%	158.2	97.37	(3.34)	76.64	59.20	(11.15)
78	89	101	151.8	2.27	2.29	0.0%	170.7	0.00	(2.77)	110.89	0.00	(9.26)
79	97	106	155.7	2.59	2.68	0.0%	179.2	0.00	(3.16)	106.15	0.00	(10.56)
80	79	91	138.2	3.12	3.81	0.0%	118.1	0.00	(3.81)	57.70	0.00	(12.73)
81	97	109	154.6	3.77	2.77	23.7%	167.1	145.52	(4.59)	116.77	88.48	(15.36)
82	101	114	158.0	3.00	2.33	17.7%	176.9	86.73	(3.66)	113.05	52.73	(12.24)
83	69	83	124.9	2.88	3.49	0.0%	121.5	0.00	(3.52)	66.98	0.00	(11.76)
84	95	106	145.6	2.86	2.73	6.6%	158.3	30.78	(3.49)	85.39	18.71	(11.66)
85	106	115	153.4	2.66	2.38	7.9%	183.1	34.34	(3.25)	129.23	20.88	(10.86)
86	107	119	155.7	2.11	1.70	15.5%	170.8	53.13	(2.57)	121.75	32.30	(8.59)
87	108	119	154.0	1.69	1.83	0.0%	180.1	0.00	(2.06)	141.09	0.00	(6.89)
88	73	80	113.0	2.17	2.69	5.6%	109.1	19.93	(2.64)	93.65	12.12	(8.83)
89	104	114	145.4	2.71	2.38	14.3%	159.7	63.19	(3.31)	90.57	38.42	(11.05)
90	107	120	149.5	2.47	2.27	7.8%	159.5	31.41	(3.02)	98.12	19.10	(10.09)
91	98	109	136.2	2.59	2.44	14.1%	109.3	59.52	(3.16)	65.11	36.19	(10.56)
92	119	124	149.3	2.70	2.12	21.5%	187.6	94.84	(3.30)	137.80	57.66	(11.03)
93	87	110	134.0	2.40	2.74	0.0%	157.8	0.00	(2.93)	71.17	0.00	(9.78)
94	127	134	155.7	2.68	2.16	15.9%	177.4	69.70	(3.27)	111.39	42.38	(10.94)
95	104	117	136.7	2.57	3.28	0.0%	116.8	0.00	(3.13)	93.38	0.00	(10.48)

Carl Zulauf and American Farm Landtrust's Farm Program Based on 2006 WASDE Expected National Harvested Corn Yield of 149.0 Bushels Generating Simulated Percent Loss Below Expected National Revenue based on 33 Years of prices and Historical Yields Adjusted for Trend to a 2006 Equivalent Yield.*

		National[1]		Integrated Farm Revenue Plan (IFRP)[2] Coverage			IFRP + 70% Net RA Payment					
			Oct Trend Adj NASS Yield to			100%	Farm Yield Trend Adj to a	IL Example IFRP Corn	APH 163.2 Net RA Indemnity	KS Farm Yield Trend Adj to a	KS Example IFRP Corn	APH 99.2 Net RA Indemnity
Yr	Plant Yd	NASS Oct Yd	2006[2]	Plant Price	Havst Price[3]	IFRP Pymt Rate	2006 yield[4]	Farm Pymt	Pymt[5]	2006 yield[4]	Farm Pymt	Pymt[5]
96	117	123	141.2	3.08	2.68	17.6%	160.8	88.45	(3.76)	121.23	53.78	(12.58)
97	116	126	142.2	2.73	2.76	3.4%	151.9	15.33	(3.33)	113.58	9.32	(11.13)
98	122	132	146.6	2.84	2.19	24.1%	150.9	111.62	(3.46)	127.44	67.87	(11.58)
99	122	134	146.3	2.40	1.96	20.0%	175.4	78.27	(2.93)	98.83	47.59	(9.79)
00	125	140	150.5	2.51	2.11	15.2%	152.6	62.25	(3.06)	110.00	37.85	(10.24)
01	126	136	145.4	2.46	2.05	18.7%	159.3	75.09	(3.00)	109.36	45.66	(10.03)
02	114	127	134.5	2.32	2.43	5.5%	146.0	20.65	(2.83)	28.68	12.55	69.43
03	128	142	147.7	2.42	2.37	2.9%	188.4	11.60	(2.95)	33.33	7.05	72.17
04	146	158	162.0	2.83	1.99	23.5%	182.2	108.64	(3.45)	135.72	66.06	(11.54)
05	136	146	147.9	2.32	1.93	17.4%	164.6	65.92	(2.83)	114.12	40.08	(9.46)
06[5]												
WASDE 2006 May Corn Yd Est./ APH						149.0		163.2			99.2	
Frequency of Claim						73%		73%			73%	
Average of Claim and Non-Claim Yrs						10.41%		46.23			28.11	
Average Severity of Claim						14.31%		63.56			38.65	
Standard Deviation of Claim						6.93%		35.17			21.39	
Maximum Payment						24.10%		145.52			88.48	
Minimum Payment						2.94%		11.60			7.05	

Carl Zulauf and American Farm Landtrust's Farm Program Based on 2006 WASDE Expected National Harvested Corn Yield of 149.0 Bushels Generating Simulated Percent Loss Below Expected National Revenue based on 33 Years of prices and Historical Yields Adjusted for Trend to a 2006 Equivalent Yield.*

*Prepared by G.A. (Art) Barnaby, Jr., Professor, Department of Agricultural Economics, K-State Research and Extension, Kansas State University, Manhattan, KS 66506, October 12, 2006, Phone 785-532-1515, e-mail - barnaby@ksu.edu

[1]Estimated farm program payments are based on a Farm Bill plan proposed by Dr. Carl Zulauf, Ohio State University and American Farmland Trust. The design is similar to Group Risk Income Protection (GRIP) based on national yield rather than county yield. Percent revenue loss below the expected national revenue is multiplied by expected farm revenue to generate farm level cash payments. Losses are trigger only by national losses and individual farm level losses are not considered but farmers could continue purchasing farm level subsidized crop insurance to cover their individual farm level risk.

[2]The observed national yields adjusted for trend were deducted from the WASDE 2006 May estimated national yield combined with the Crop Revenue Coverage (CRC) prices to calculate historical percent revenue loss.

[3]The Zulauf 's plan settles on the NASS October estimated national corn yield and the October average closing prices of the nearby CBOT December corn futures prices. This will allow all payments to occur at harvest time rather than the following April as is the current procedure or GRIP.

[4]The observed annual farm yields were adjusted for trend to a 2006 equivalent yield for comparison with 2006 guarantees.

[5]Net indemnity payments are adjusted for farmer paid premium and farmer received IFPR payments.

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DRAFT; NCGA-Public Policy Action Team's Farm Program Based on 2006 RMA Expected Champaign County, IL Corn Yield of 164.0 Bushels Generating Simulated Revenue Payment per Acre based on 33 Years of prices and Historical Yields Adjusted for Trend to a 2006 Equivalent Yield.*

			Revenue Counter Cyclical Program (RCCP)				Protection (BRP)		
			Trend Adj Plant Co.	Stop Loss Coverage		70% 100% RCCP			
Yr	Harvt Yd	County Plant Yd	Yield to 2006[1]	Tar-get Price	MYA Havst Price	Pymt $ Paid Per Ac[2]	Farm Yield Trend Adj to a 2006 yield[1]	BRP Farm Level Pymt[2]	Total For PPAT Pymt Plan
73	123	122	169.1	2.35	2.55	0.00	169.1	0.00	0.00
74	94	93	138.6	2.35	3.02	0.00	138.6	0.00	0.00
75	137	136	180.6	2.35	2.54	0.00	180.6	0.00	0.00
76	128	128	170.5	2.35	2.15	18.74	170.5	0.00	18.74
77	118	117	158.2	2.35	2.02	65.78	158.2	0.00	65.78
78	132	131	170.7	2.35	2.25	1.38	170.7	0.00	1.38
79	143	141	179.2	2.35	2.52	0.00	179.2	0.00	0.00
80	82	81	118.1	2.35	3.11	18.26	118.1	0.00	18.26
81	133	131	167.1	2.35	2.50	0.00	167.1	0.00	0.00
82	144	143	176.9	2.35	2.55	0.00	176.9	0.00	0.00
83	89	89	121.5	2.35	3.21	0.00	121.5	0.00	0.00
84	128	127	158.3	2.35	2.63	0.00	158.3	0.00	0.00
85	154	153	183.1	2.35	2.23	0.00	183.1	0.00	0.00
86	144	142	170.8	2.35	1.50	115.62	170.8	39.50	155.12
87	154	153	180.1	2.35	1.94	36.00	180.1	0.00	36.00
88	85	83	109.1	2.35	2.54	108.34	109.1	18.59	126.93
89	136	135	159.7	2.35	2.36	8.43	159.7	0.00	8.43
90	138	137	159.5	2.35	2.28	21.71	159.5	0.00	21.71
91	88	88	109.3	2.35	2.37	115.62	109.3	36.64	152.26
92	169	168	187.6	2.35	2.07	0.00	187.6	0.00	0.00
93	141	139	157.8	2.35	2.50	0.00	157.8	0.00	0.00
94	161	160	177.4	2.35	2.26	0.00	177.4	0.00	0.00
95	102	101	116.8	2.35	3.24	7.07	116.8	0.00	7.07

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DRAFT; NCGA-Public Policy Action Team's Farm Program Based on 2006 RMA Expected Champaign County, IL Corn Yield of 164.0 Bushels Generating Simulated Revenue Payment per Acre based on 33 Years of prices and Historical Yields Adjusted for Trend to a 2006 Equivalent Yield.*

			Revenue Counter Cyclical Program (RCCP)				Protection (BRP)		
Yr	Harvt Yd	County Plant Yd	Trend Adj Plant Co. Yield to 2006[1]	Tar-get Price	MYA Havst Price	Stop Loss Coverage 70% 100% RCCP Pymt $ Paid Per Ac[2]	Farm Yield Trend Adj to a 2006 yield[1]	BRP Farm Level Pymt[2]	Total For PPAT Pymt Plan
96	147	146	160.8	2.35	2.71	0.00	160.8	0.00	0.00
97	140	139	151.9	2.35	2.43	16.40	151.9	0.00	16.40
98	140	139	150.9	2.35	1.94	92.63	150.9	2.88	95.51
99	166	165	175.4	2.35	1.82	66.18	175.4	0.00	66.18
00	145	144	152.6	2.35	1.85	103.12	152.6	13.37	116.49
01	153	152	159.3	2.35	1.97	71.67	159.3	0.00	71.67
02	142	140	146.0	2.35	2.32	46.65	146.0	0.00	46.65
03	185	184	188.4	2.35	2.42	0.00	188.4	0.00	0.00
04	181	179	182.2	2.35	2.06	10.06	182.2	0.00	10.06
05	164	163	164.6	2.35	1.90	72.58	164.6	0.00	72.58
06[5]									
			RMA 2006 Corn Yield Est./ APH			164.0		109.57	
			Frequency of Claim			58%		15%	58%
			Average of Claim and Non-Claim Yrs			30.19		3.36	33.55
			Average Severity of Claim			52.43		22.19	58.28
			Standard Deviation of Claim			40.61		15.59	50.42
			Maximum Payment			115.62		39.50	155.12
			Minimum Payment			1.38		2.88	1.38
			Net Payments			996		111	1,107
			Frequency of 70% Stop Loss Coverage			6% 13.64			

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DRAFT; NCGA-Public Policy Action Team's Farm Program Based on 2006 RMA Expected Champaign County, IL Corn Yield of 164.0 Bushels Generating Simulated Revenue Payment per Acre based on 33 Years of prices and Historical Yields Adjusted for Trend to a 2006 Equivalent Yield.*

*Prepared by G. A. (Art) Barnaby, Jr., Professor, Department of Agricultural Economics, K-State Research and Extension, Kansas State University, Manhattan, KS 66506, October 24, 2006, Phone 785-532-1515, e-mail - barnaby@ksu.edu

[1]The observed annual county and farm yields were adjusted for trend to a 2006 equivalent yield for comparison with 2006 guarantees.

[2]Estimated farm program payments are based on a Farm Bill plan proposed by National Corn Growers Association-Public Policy Action Team. The design is similar to Group Risk Income Protection (GRIP) based on county yield and NASS prices rather than futures prices. RCCP losses are triggered only by county revenue losses and individual farm level losses are not considered but farmers will also receive a 70% coverage Base Revenue Protection (BRP) based on a 5 year Olympic farm level net revenue guarantee based individual farm yields, NASS harvest prices, effective target price, and ERS cost of production.

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DRAFT; NCGA/AgRisk Management, Inc.'s Farm Program Based on 2006 RMA Expected Marshall County, KS Corn Yield of 94.1 Bushels Generating Simulated Revenue Payment per Acre based on 33 Years of prices and Historical Yields Adjusted for Trend to a 2006 Equivalent Yield.*

			Revenue Counter Cyclical Program (RCCP)				Protection (BRP)		
Yr	Harvt Yd	County Plant Yd	Trend Adj Plant Co. Yield to 2006[1]	Stop Loss Coverage Tar-get Price	MYA Havst Price	70% 100% RCCP Pymt $ Paid Per Ac[2]	Farm Yield Trend Adj to a 2006 yield[1]	BRP Farm Level Pymt[2]	Total For PPAT Pymt Plan
73	76	68	121.2	2.35	2.55	0.00	121.2	0.00	0.00
74	42	22	74.3	2.35	3.02	0.00	74.3	0.00	0.00
75	49	43	93.3	2.35	2.54	0.00	93.3	0.00	0.00
76	60	37	85.8	2.35	2.15	36.59	85.8	0.00	36.59
77	45	30	76.6	2.35	2.02	66.32	76.6	0.00	66.32
78	76	65	110.9	2.35	2.25	0.00	110.9	0.00	0.00
79	76	62	106.1	2.35	2.52	0.00	106.1	0.00	0.00
80	41	15	57.7	2.35	3.11	41.70	57.7	0.00	41.70
81	85	76	116.8	2.35	2.50	0.00	116.8	0.00	0.00
82	87	74	113.0	2.35	2.55	0.00	113.0	0.00	0.00
83	41	30	67.0	2.35	3.21	6.14	67.0	0.00	6.14
84	69	50	85.4	2.35	2.63	0.00	85.4	0.00	0.00
85	100	95	129.2	2.35	2.23	0.00	129.2	0.00	0.00
86	91	89	121.8	2.35	1.50	38.50	121.8	0.00	38.50
87	110	110	141.1	2.35	1.94	0.00	141.1	0.00	0.00
88	64	64	93.6	2.35	2.54	0.00	93.6	0.00	0.00
89	64	63	90.6	2.35	2.36	7.38	90.6	0.00	7.38
90	76	72	98.1	2.35	2.28	0.00	98.1	0.00	0.00
91	53	41	65.1	2.35	2.37	66.34	65.1	0.00	66.34
92	127	115	137.8	2.35	2.07	0.00	137.8	0.00	0.00
93	67	50	71.2	2.35	2.50	43.20	71.2	0.00	43.20
94	101	92	111.4	2.35	2.26	0.00	111.4	0.00	0.00
95	88	76	93.4	2.35	3.24	0.00	93.4	0.00	0.00

DRAFT; NCGA/AgRisk Management, Inc.'s Farm Program Based on 2006 RMA Expected Marshall County, KS Corn Yield of 94.1 Bushels Generating Simulated Revenue Payment per Acre based on 33 Years of prices and Historical Yields Adjusted for Trend to a 2006 Equivalent Yield.*

			Revenue Counter Cyclical Program (RCCP)				Protection (BRP)		
Yr	Harvt Yd	County Plant Yd	Trend Adj Plant Co. Yield to 2006[1]	Stop Loss Coverage Tar-get Price	MYA Havst Price	70% 100% RCCP Pymt $ Paid Per Ac[2]	Farm Yield Trend Adj to a 2006 yield[1]	BRP Farm Level Pymt[2]	Total For PPAT Pymt Plan
96	110	105	121.2	2.35	2.71	0.00	121.2	0.00	0.00
97	105	99	113.6	2.35	2.43	0.00	113.6	0.00	0.00
98	120	114	127.4	2.35	1.94	0.00	127.4	0.00	0.00
99	94	87	98.8	2.35	1.82	41.27	98.8	0.00	41.27
00	112	100	110.0	2.35	1.85	17.63	110.0	0.00	17.63
01	118	101	109.4	2.35	1.97	5.70	109.4	0.00	5.70
02	35	22	28.7	2.35	2.32	66.34	28.7	84.87	151.22
03	36	28	33.3	2.35	2.42	66.34	33.3	70.75	137.09
04	145	132	135.7	2.35	2.06	0.00	135.7	0.00	0.00
05	119	113	114.1	2.35	1.90	4.30	114.1	0.00	4.30
06[5]									
			RMA 2006 Corn Yield Est./ APH			94.1		(84.76)	
			Frequency of Claim			42%		6%	42%
			Average of Claim and Non-Claim Yrs			15.39		4.72	20.10
			Average Severity of Claim			36.27		77.81	47.38
			Standard Deviation of Claim			24.45		9.99	46.08
			Maximum Payment			66.34		84.87	151.22
			Minimum Payment			4.30		70.75	4.30
			Net Payments			508		156	663
			Frequency of 70% Stop Loss Coverage			9% 88.25			

IFRP and RCCP; Similar to GRIP

Item		PPAT	Zulauf		
	IL	KS	USA	IL	KS
RMA/WASDE Yd	164.0	94.1	149.0		
Claim Freq	58%	42%	73%		
APH				163.2	99.23
Avg Claim Pymt	$52.43	$36.27	14.31%	$63.56	$38.65
St. D. of Claims	$40.61	$24.45	6.93%	$35.17	$21.39
Max. Pymt	$115.62	$66.34	24.10%	$145.52	$88.48
Min. Pymt	$1.38	$4.30	2.94%	$11.60	$7.05
Total Pymt	$996	$508		$1,525	$928
Avg Pymt/Yr	$30.19	$15.39		$46.23	$28.11

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Farm Level Coverage BRP and RA (Enterprise)

Item		PPAT	70% RA (Enterprise)	
	IL	KS	IL	KS
Oly Avg Net Rev	109.6	(84.8)		
Claim Freq	15%	6%	3%	12%
APH			163.2	99.2
Avg Claim Pymt	$22.19	$77.81	$26.60	$53.62
St. D. of Claims	$15.59	$9.99		$40.31
Max. Pymt	$39.50	$84.87	$26.60	$89.73
Min. Pymt	$2.88	$70.75	$26.60	$18.03
Total Pymt	$110.97	$155.63	($74.68)	$158.45
Avg Pymt/Yr	$3.36	$4.72	$0.00	$4.80

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Combined RCCP & BRP and IFRP & Net RA

Item		PPAT	Zulauf	
	IL	KS	IL	KS
Avg Claim Pymt	$58.28	$47.38	$60.32	$36.09
St. D. of Claims	$50.42	$46.08	$34.92	$22.65
Max. Pymt	$155.12	$151.22	$140.92	$81.99
Min. Pymt	$1.38	$4.30	$8.65	$2.87
Total Pymt	$1,107	$663	$1,421	$739
Avg Pymt/Yr	$33.55	$20.10	$43.06	$22.41

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Discussion: RCCP & BRP Proposed Farm Program

- Eliminates any safety net for non-program crops that currently have crop insurance, if crop insurance subsides are used to fund RCCP & BRP.
- Large farms' enterprise yields are more likely correlated with county yields. "If one farmed the whole county the yields are the same"

RMA K-STATE Research and Extension 66

Discussion: RCCP Proposed Farm Program

- No payment limit on crop insurance but will this apply to a Farm Program?
- No crop insurance product choice, "one size fits all"
- Farmers would retain the GRIP basis risk but without the 150% scalar
- A 100% RCCP & 70% BPR program would favor areas/states with high yield risk, i.e. free insurance

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Discussion: RCCP Proposed Farm Program

- Little RCCP protection for dryland producers in irrigated counties unless county yields are by practice. Will likely require additional NASS funding for analysis.
- Some counties that have no GRIP offer do not have yield data for all program crops so USDA will need an estimate. Using crop reporting district/state data as a substitute for county yields may not be acceptable. Will likely require additional NASS funding for analysis.

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Discussion: RCCP & BRP Proposed Farm Program

- Would likely eliminate some forms of private insurance products leaving only a hail industry.
- With only a hail industry left, farmers would need to depend on the government to provide risk protection in the future. Do farmers see USDA as a stable partner for providing that protection?

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Discussion: IFRP (Zuluaf) Proposed Farm Program

- IFRP payments are deducted from crop insurance payments. In past USDA did not reduce disaster payments for insured farmers (except 2003).
- Assumes lower premiums or higher coverages.

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Discussion: IFRP (Zuluaf) Proposed Farm Program

- RMA is slow to recognize reduced claims and lower premiums in their experience rating method.
- Current subsidy system reduces subsidy rate with higher coverages.

Policy Issues: Crop Insurance Delivery Costs

- Babcock & Hart conclude in their CARD paper, taxpayers have paid $15.1 billion to deliver $8.82 billion in net crop insurance payments. They concluded USDA could provide the coverage for less.

Policy Issues: Compare Crop Insurance Delivery Cost with Private P/C Insurance

RMA Data Presented in Private Insurance Format[1]

Year	A&O ($ Millions)	+ Company Underwriting Gains[2] ($ Millions)	= Total $ Earned by Comp-anies ($ Millions)	Pure Premium ($ Millions)	Total Premium + A&O +Gain ($ Millions)	% of Premium A&O exp-ense & Gain	Total ($ Millions)	% of Total Premium Paid Out in Indem-nities
2001	626	342	968	2,962	3,930	24.6%	2,960	75.3%
2002	743	-52	691	2,916	3,607	19.2%	4,067	112.8%
2003	859	378	1,237	3,431	4,668	26.5%	3,259	69.8%
2004	869	848	1,717	4,186	5,903	29.1%	3,207	54.3%
Totals	3,097	1,516	4,613	13,495	18,108	25.5%	13,493	74.5%
				simple average		24.8%		78.1%

[1]Source of data: Doctors Bruce Babcock and Chard Hart, "Crop Insurance: A Good Deal for Taxpayers?" posted on the CARD WEB site at: http://www.card.iastate.edu/iowa_ag_review/summer_06/article1.aspx

[2]The underwriting grain does not include the 5% quota share that companies started paying to RMA in 2005 that would have reduced the four year underwriting gains by about $76 million.

Private Auto Insurer's Expense rate 33.4% of Premium
Private Auto Insurer's 68.7% of premium paid in claims

Cost of Risk Reduction with Insurance: 1995-1997 (% of total premium paid in claims)

- accident and health (1997 only) 83
- commercial auto 67
- passenger auto 66
- homeowners 67
- product liability 72
- medical malpractice 57
- workers' compensation 63
- private crop hail 60-70
- federal crop insurance[1] 74

[1]Includes A&O, underwriting gain, and premium subsidy in total RMA premium for 2001-2004 (Babcock & Hart). Does not include the reduction in company underwriting gain from the 5% quota share started in 2005.

What Cost will be reduced with either Plan?

- Lowest administrative cost method is to provide money in the direct payment but both plans are based on risk management.
- PPAT eliminates the administration of CC payment. PPAT would retain the loan but require repayment so cost will only decline with participation in loan program.
- Zulauf eliminates CC payment and marketing loan.

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What Cost will be reduced with either Plan?

- PPAT eliminates insurance agent commissions.
- PPAT eliminates crop insurance companies' underwriting gains.
- Zulauf would retain all current crop insurance costs.

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What Cost will be Retained with either Plan?

- PPAT will require farm yields to be reported and verified by FSA.
- PPAT will require proven farm net revenues.
- PPAT will require trend yields and payment calculations for each county.
- Zulauf will require a single national % loss times expected farm revenue.

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What Cost will be Retained with either Plan?

- PPAT uses projected county yields and it is likely NASS will need additional funding to supply irrigated, dryland, and data for additional counties.
- PPAT requires farm level loss adjustment, Zulauf has no farm level guarantee but retains the current crop insurance program.
- PPAT is effectively free crop insurance and more farm acres are likely to be covered so it is necessary for ad hoc disaster aid to be eliminated in order to save USDA funds.

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What Cost will be Retained with either Plan?

- Will effective guarantees be allowed to go to zero with multiple year losses in a 5 year Olympic average?
- If Policy makers put in a limited coverage to equal cost or some other value and not allow the effective guarantee to approach zero (equal zero) will that make the policy out of compliance with WTO?
- How will new farmers or farmers planting a new crop be covered? Currently "T" yields for crop insurance.

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What Cost will be Retained with either Plan?

- PPAT will require cost of production from ERS.
- Currently cost of production covers multiple states and does not separate irrigated from dryland crop acres. Will this be acceptable?
- If cost of production values must be localized and separated by practices then ERS cost will increase.

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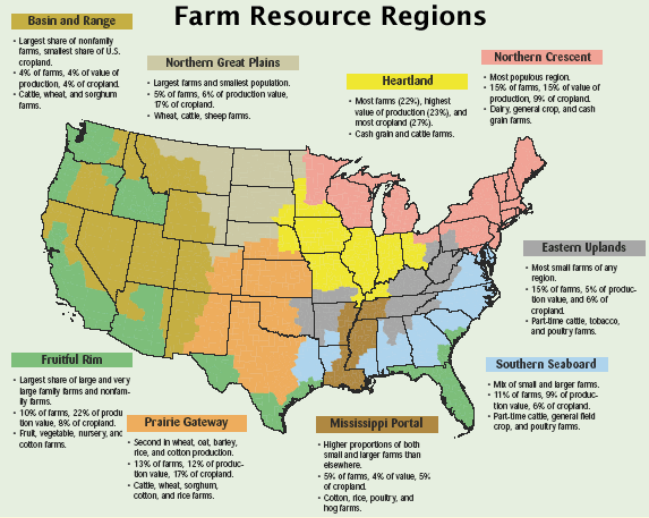
ERS Cost of Production Regions



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Major Debate Issues

- **PPAT will eliminate insurance agents and insurance companies from selling Federal crop insurance.**
- **Zulauf will deduct farm payments from crop insurance indemnity payments.**
- **How will the two plans effect other regions and crops?**
- **Both programs will need to under go cost reviews from OBM.**

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Thank You

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