Risk Management and the New 2014 Farm Bill

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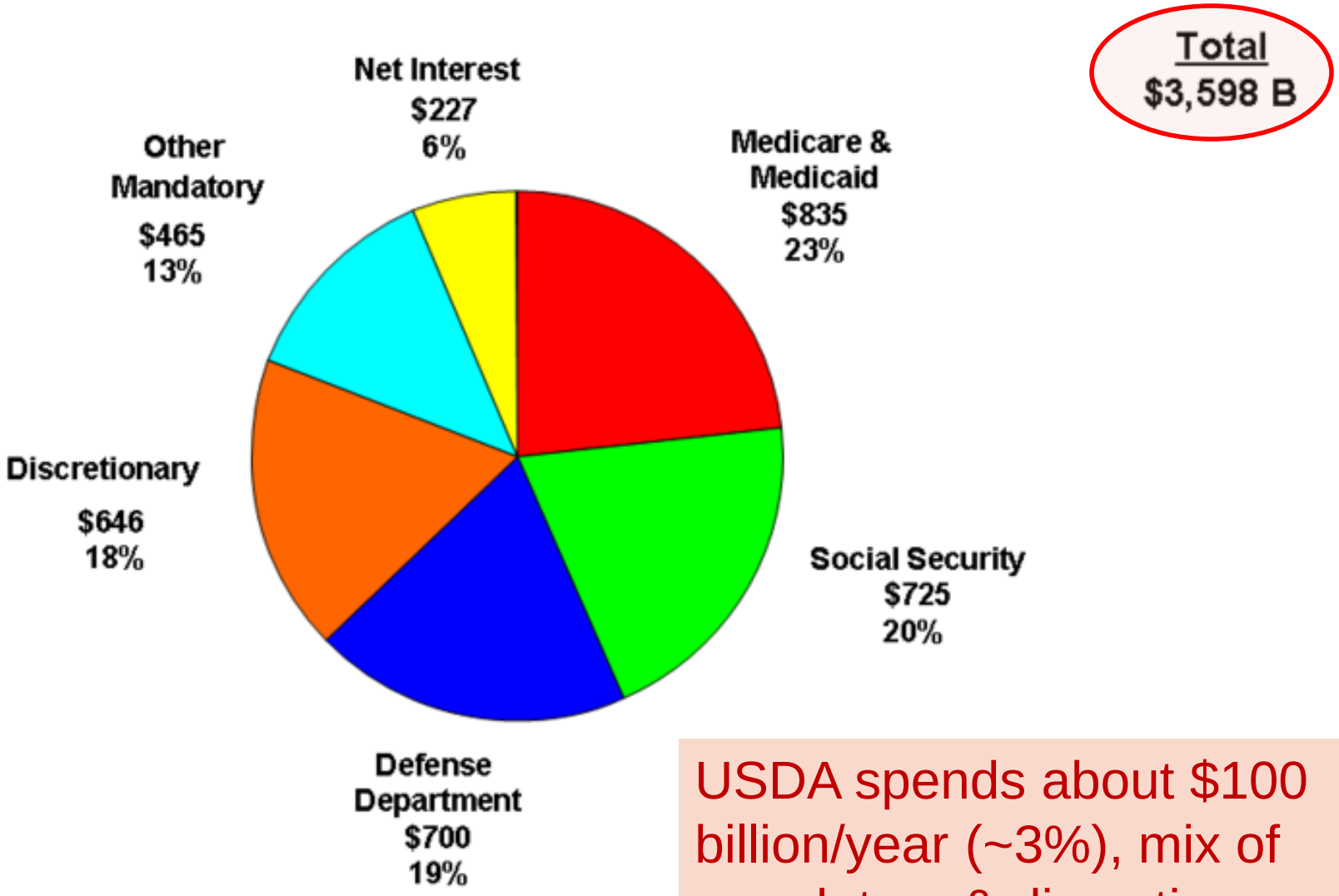
Goal Today

- Overview 2014 Farm Bill changes for Commodity Support
  - Decision points will come later this year, likely mid to late summer
- Overview crop insurance practices in WI and changes in the Farm Bill
  - Farm Bill passage has not changed anything for 2014, all the changes will take effect for the 2015 season
- Quick thoughts on profitability for corn and soybeans in 2014
  - As time allows

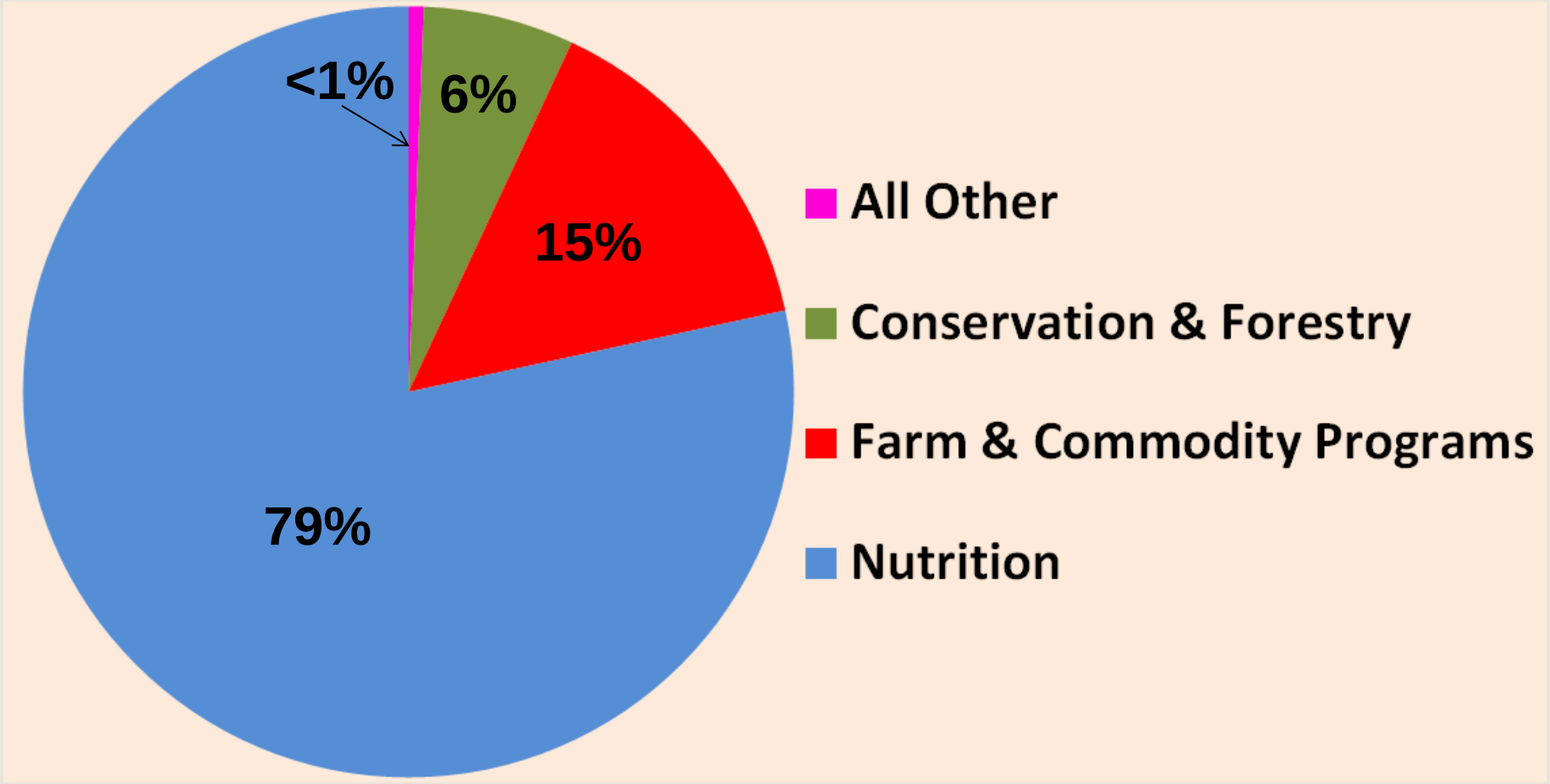
U.S. Federal Spending – Fiscal Year 2011 ($ Billions)

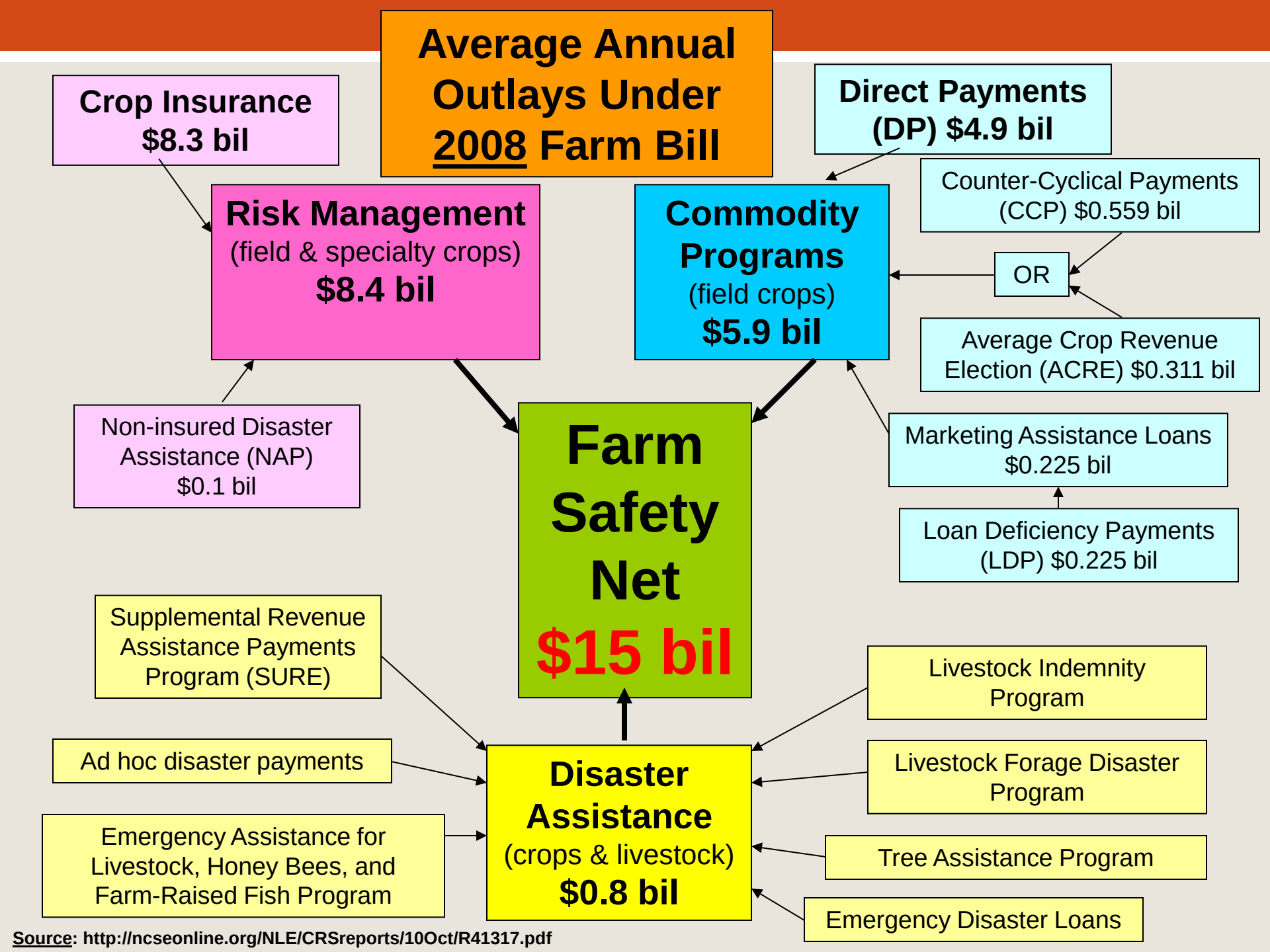


USDA spends about $100 billion/year (~3%), mix of mandatory & discretionary

Source Data: CBO Historical Tables

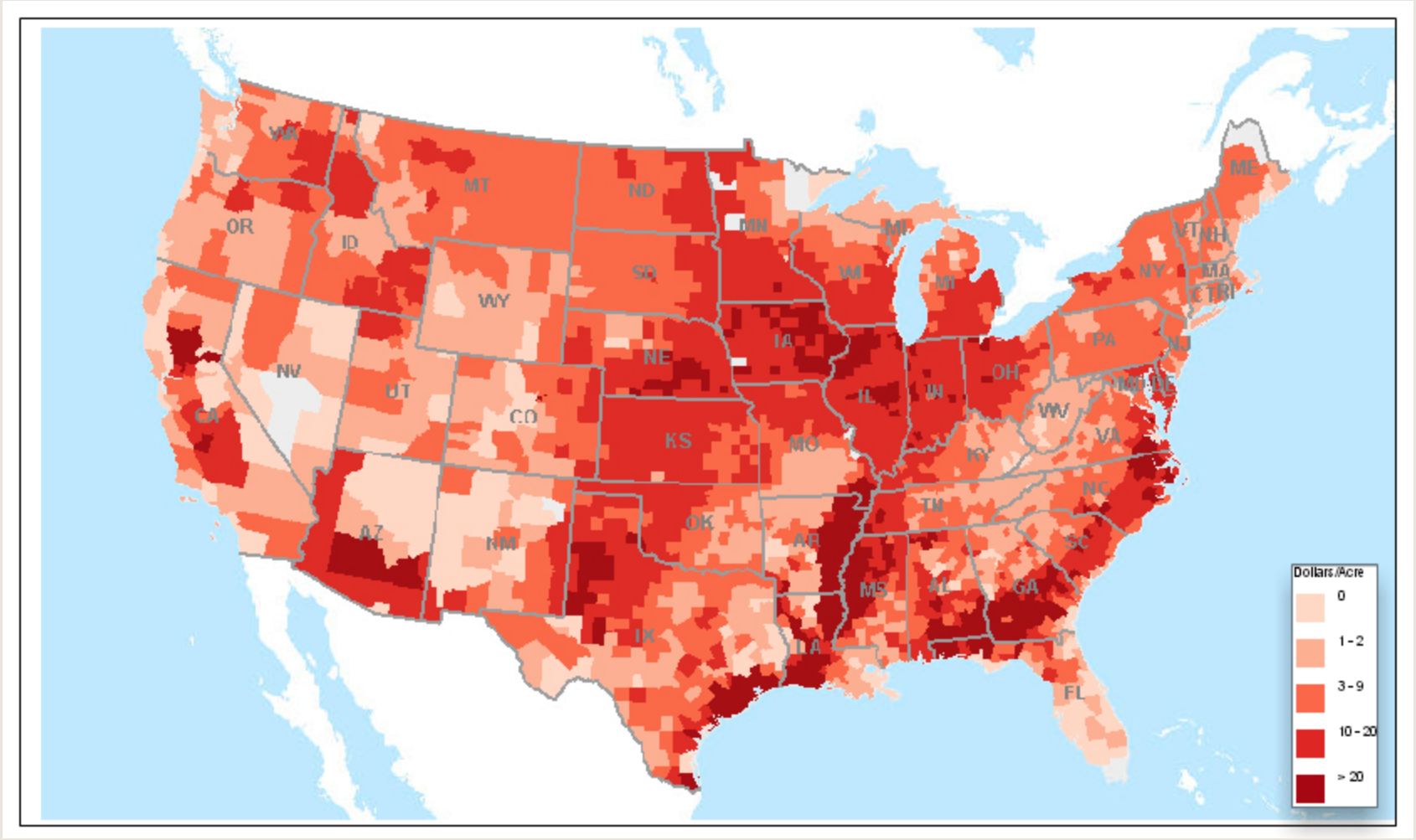
Most of the USDA budget under 2008 Farm Bill is for Nutrition Programs (SNAP/Food Stamps, WIC, School Lunch Program)





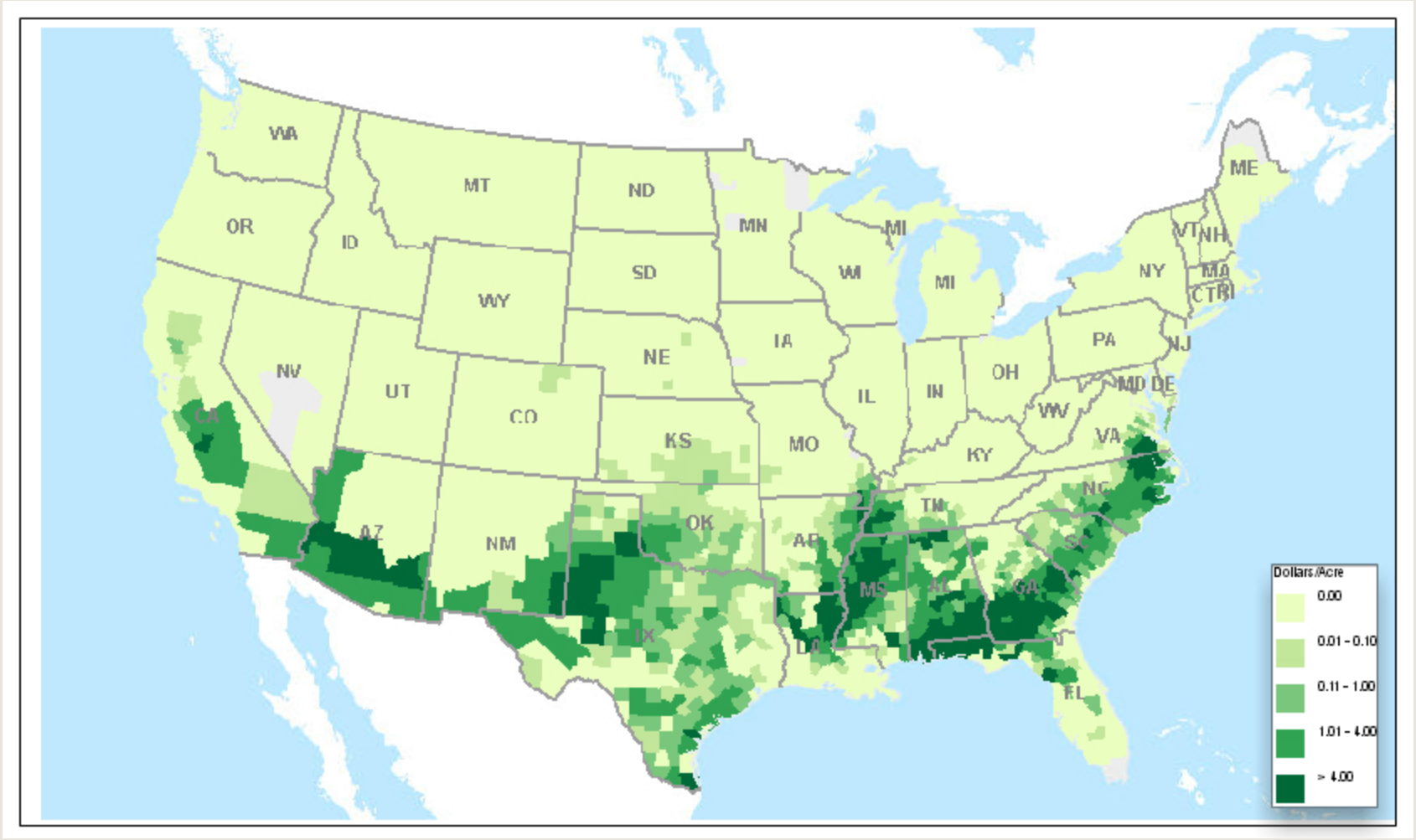
Source: http://ncseonline.org/NLE/CRSreports/10Oct/R41317.pdf

Direct Payments $/ac in 2009



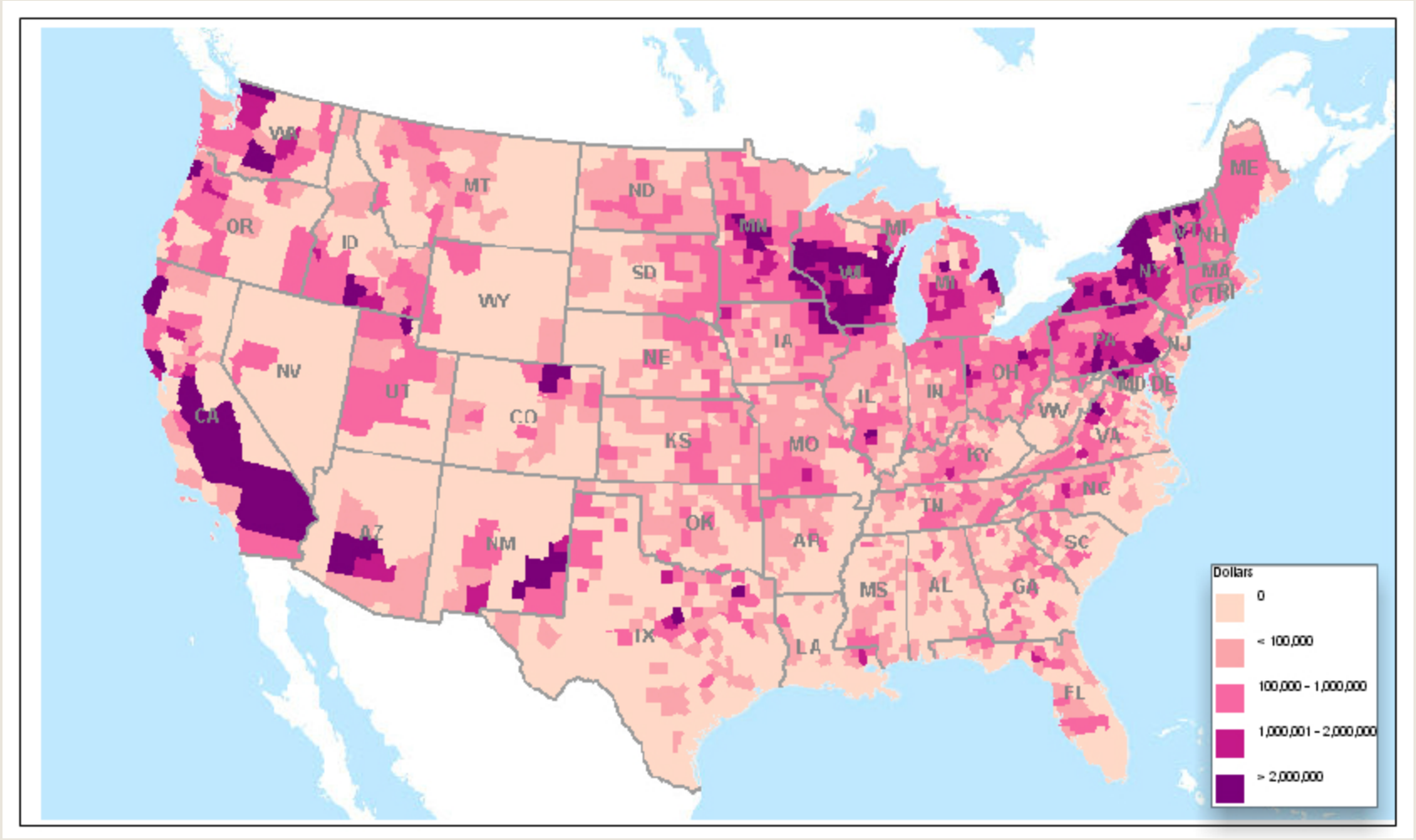
Source: USDA-ERS Farm Program Atlas http://www.ers.usda.gov/data-products/farm-program-atlas/go-to-the-atlas.aspx#.UgvP3pLCY6k

Counter-Cyclical Payments $/ac in 2009



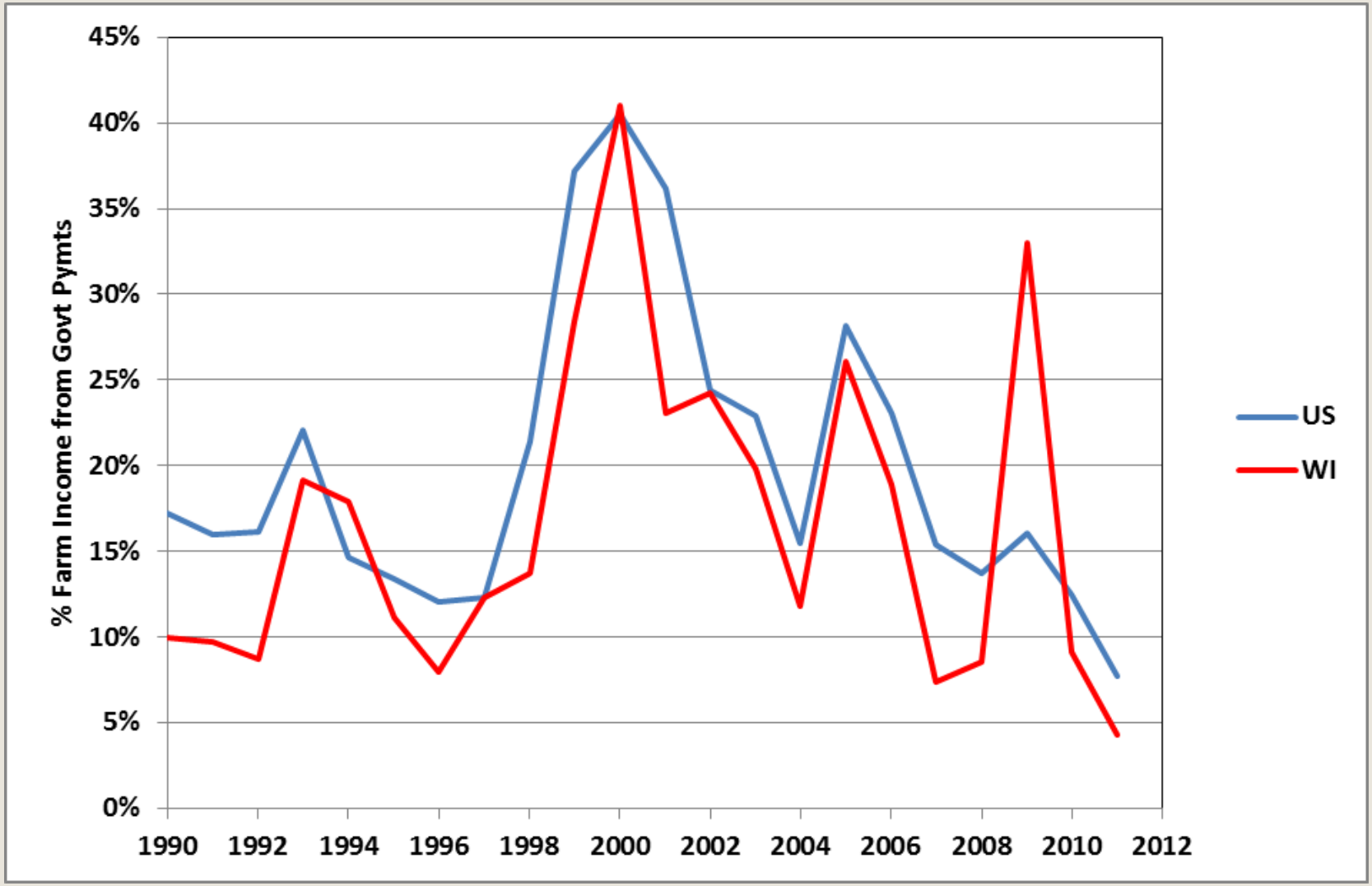
Source: USDA-ERS Farm Program Atlas http://www.ers.usda.gov/data-products/farm-program-atlas/go-to-the-atlas.aspx#.UgvP3pLCY6k

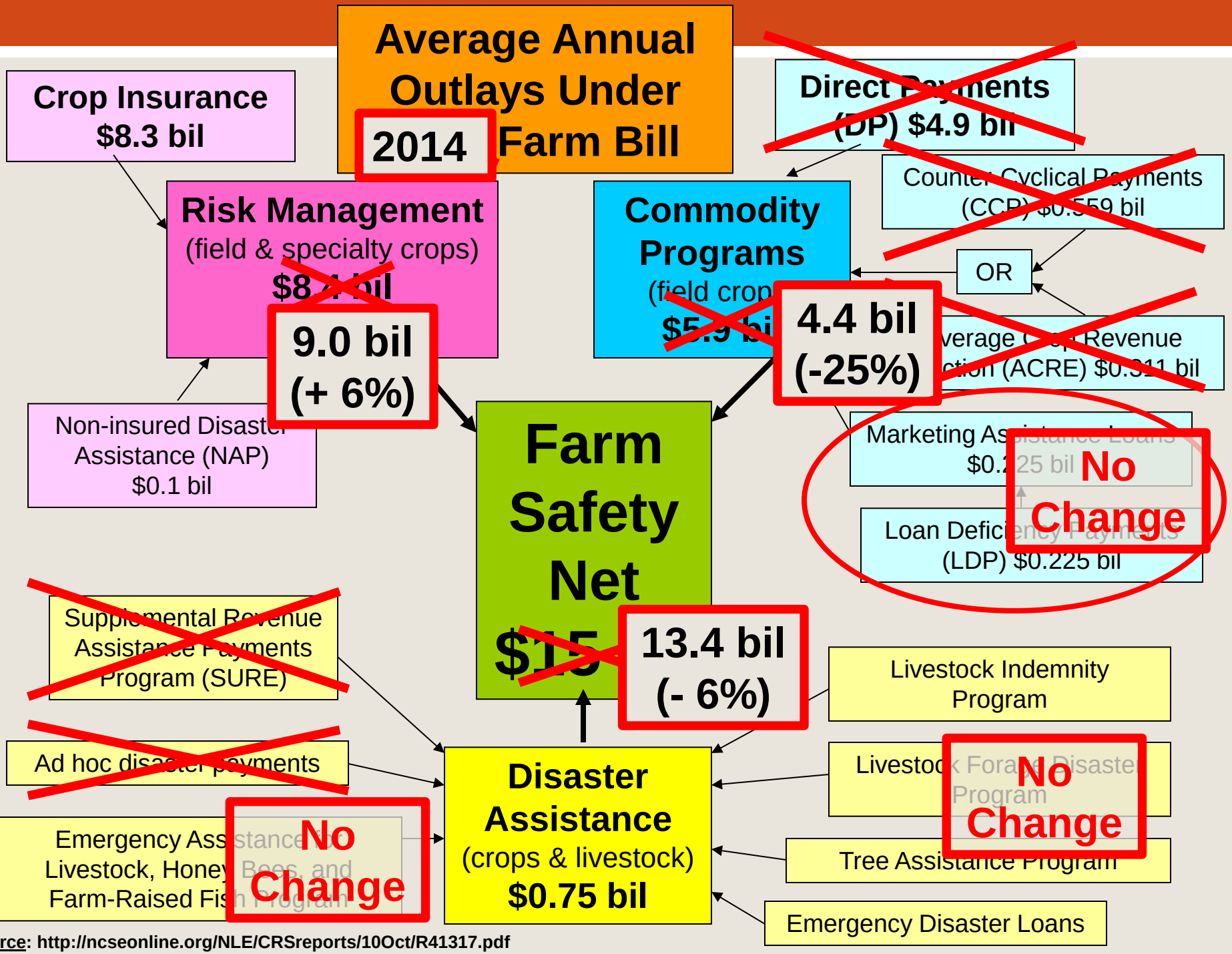
MILC Payments 2009



Source: USDA-ERS Farm Program Atlas http://www.ers.usda.gov/data-products/farm-program-atlas/go-to-the-atlas.aspx#.UgvP3pLCY6k

% Net Cash Income from Govt. Payments
not including premium subsidies or indemnities

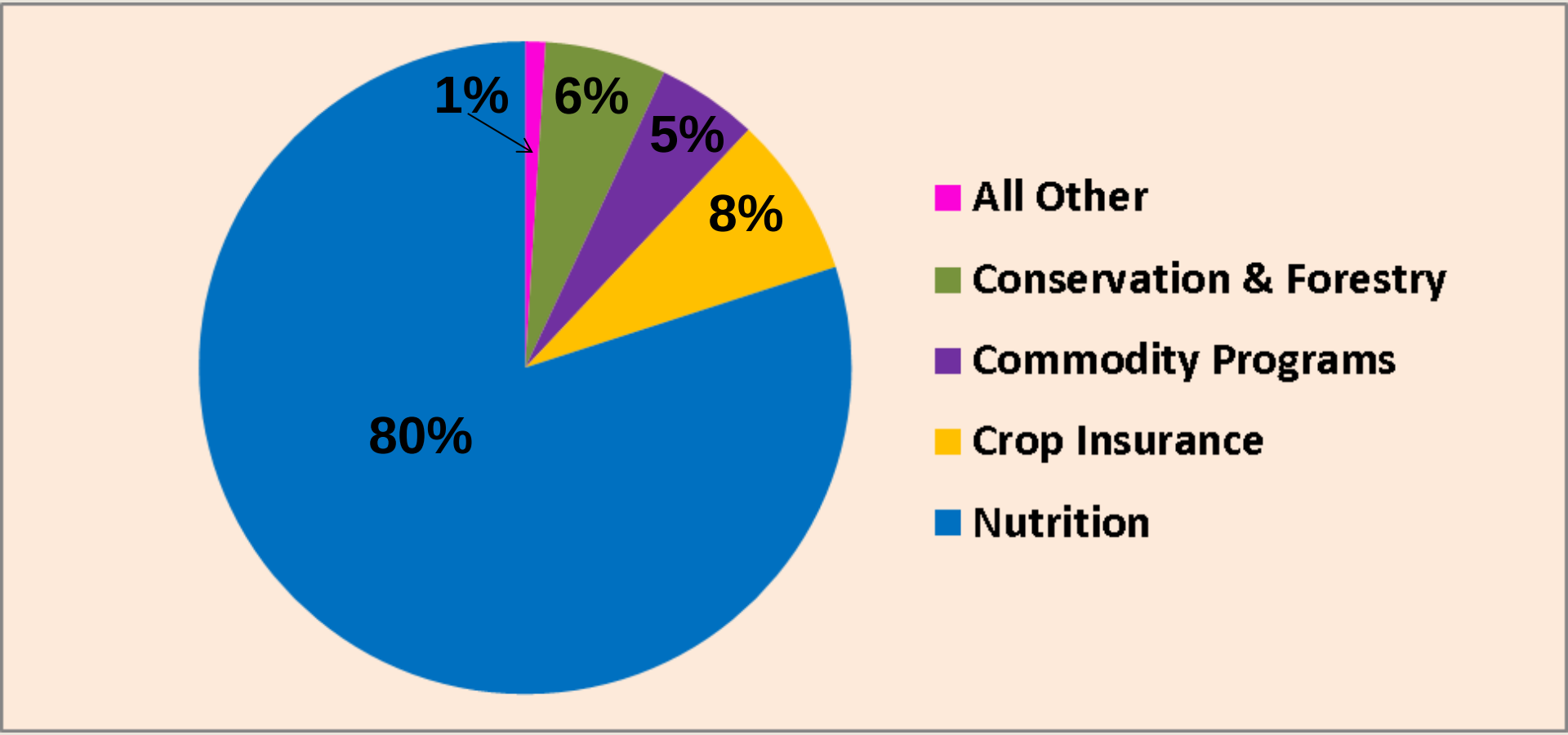




Source: http://ncseonline.org/NLE/CRSreports/10Oct/R41317.pdf

Most of the USDA budget under 2014 Farm Bill is still for Nutrition Programs

Commodity Support now a 13% share (vs 15%)



New Commodity Support Programs

- Price Loss Coverage (PLC)
  - Basically counter-cyclical payments (CCP) with higher target prices
  - Can add Supplemental Coverage Option (SCO)
- Agriculture Risk Coverage (ARC)
  - New and improved ACRE program (revenue support)
  - County revenue by crop or Individual revenue for whole farm
- In 2014, farmers/land owners will have to choose PLC, County ARC by crop or Whole Farm ARC
  - Irrevocable for 2014 – 2018 crop years
  - FSA will announce signup, likely mid to late summer

Price Loss Coverage (PLC)

- Same as CCP, but higher “Reference Prices”
  - Corn $3.70, Soybeans $8.40, Wheat $5.50, Oats $2.40
- If National Marketing Year Average Price is less than the Reference Price, PLC payments made
  - PLC PaymentRate = ReferencePrice – MYAPrice
  - 85% x BaseAcres x PaymentYield x PLC PaymentRate
- Can’t increase Base Acres, but can reallocate Base Acres based on shares of covered crops planted 2009-2012
- Can update Payment Yields to 90% of the farm average yield over 2008-2012
- Eligible for Supplemental Coverage Option (SCO) [later]

Updating Base Acres

- Suppose an FSA “Farm” has 100 base acres: 50 corn, 30 soybean and 20 oats based on previous history
- Average acres planted during 2009-2012: 55 corn acres, 35 soybean and 10 oats
- Can shift PLC payments to crops have been planting the last few years: from oats to more corn and more soybeans
- Beneficial because expect higher payments with corn and/or soybeans than oats
- Note that the farm cannot increase total base acres, only the shares for corn, soybean, oats or other program crops planted during 2009-2012

Updating: Payment Yields

- It's been awhile since allowed to update payment yields to reflect current yield potentials
- Payment yields have always been low relative or the farm's expected yield
- Payment Yields now 90% of the farm average yield during 2008-2012
- PLC Payments
  - PLC PaymentRate = ReferencePrice – MYAPrice
  - 85% x BaseAcres x PaymentYield x PLC PaymentRate

Agriculture Risk Coverage (ARC)

- County ARC payments made if Actual County Revenue is less than County Guarantee
- Actual Revenue = County Average Yield x MYA Price
- County Benchmark = 5-Year Olympic Average County Yield x 5-Year Olympic Average MYA Price
  - Use PLC Reference Price if higher than MYA Price
  - Use 70% County T Yield if higher than County Yield
- County Guarantee = 86% of County Benchmark
- ARC Payment Rate = County Guarantee – Actual County Revenue, up to 10% of County Benchmark
- ARC Payment = 85% x BaseAcres x ARC Payment Rate

Corn 2014 Example St. Croix County

Year	Yield	Price
2013	85.4	*4.50*
2012	165.6	6.89
2011	164.6	6.22
2010	172	5.18
2009	167	3.55

- Olympic Average Yield = 165.7
- Olympic Average Price = 5.30
- ARC County Benchmark = 5.30 x 165.7 = $878.21
- ARC Guarantee = 86% x $878.21 = $755.26
- Maximum ARC Payment = 10% x $755.26= $75.53

Agriculture Risk Coverage (ARC)

- Individual ARC based on revenue from all program crops as a whole for a farm, not crop by crop
- To be simple, assume 2 program crops (corn & soybeans)
- Benchmark Revenue by Crop = 5-Year Olympic Average of Yield per Planted Acre x MYA Price
- Individual Benchmark Revenue =

  (Corn Acres/Total Acres) x Corn Benchmark Revenue +

  (Soy Acres/Total Acres) x Soy Benchmark Revenue
- Individual Guarantee = 86% of Farm Benchmark Revenue

Agriculture Risk Coverage (ARC)

- Individual ARC Payment Rate = Farm Guarantee – Actual Farm Revenue, up to 10% of County Benchmark
- Individual ARC Payment = **65%** x Base Acres x Individual ARC Payment Rate
  - Maximum is 10% of County Benchmark
- Actual Revenue = (Corn Production x MYA Corn Price) + (Soy Production x MYA Soy Price) / Total Planted Acres
  - Use PLC Reference Price if higher than MYA Price
  - Use 70% County T Yield if higher than your Yield

Corn	Year	Yld	Price	Revenue
	2013	175	*4.50*	787.50
Acres	2012	150	6.89	1,033.50
300	2011	185	6.22	1,150.70
	2010	170	5.18	880.60
	2009	150	3.55	532.50
Crop Benchmark				900.53
Soy	Year	Yld	Price	Revenue
	2013	43	*12.70*	546.10
Acres	2012	45	14.40	648.00
200	2011	51	12.50	637.50
	2010	43	11.30	485.90
	2009	35	9.59	335.65
Crop Benchmark				556.50

Hypothetical Example

- Individual Benchmark = (300/500) x 900.53 + (200/500) x 556.50 = $762.92
- Individual Guarantee = 86% x $762.92 = $656.11
- "Actual" 2013 Corn = (300 x 160 x $4.62) + (200 x 40 x $11.36) /500 = $625.28/acre
- Payment Rate = 656.11 – 625.28 = $30.83
- ARC Payment = **65%** x Base Acres x $30.83

Commodity Crop Support Summary

- All producers for a farm will have to choose one of these if they have base acres (PLC is the default)

1. PLC: Same as CCP, but higher reference prices
   - $3.70 for corn and $8.40 for soybeans
   - Have the option to buy SCO
2. County ARC: Basis risk for your farm versus county
3. Individual ARC: Tied to farm revenue, but crops can offset each other

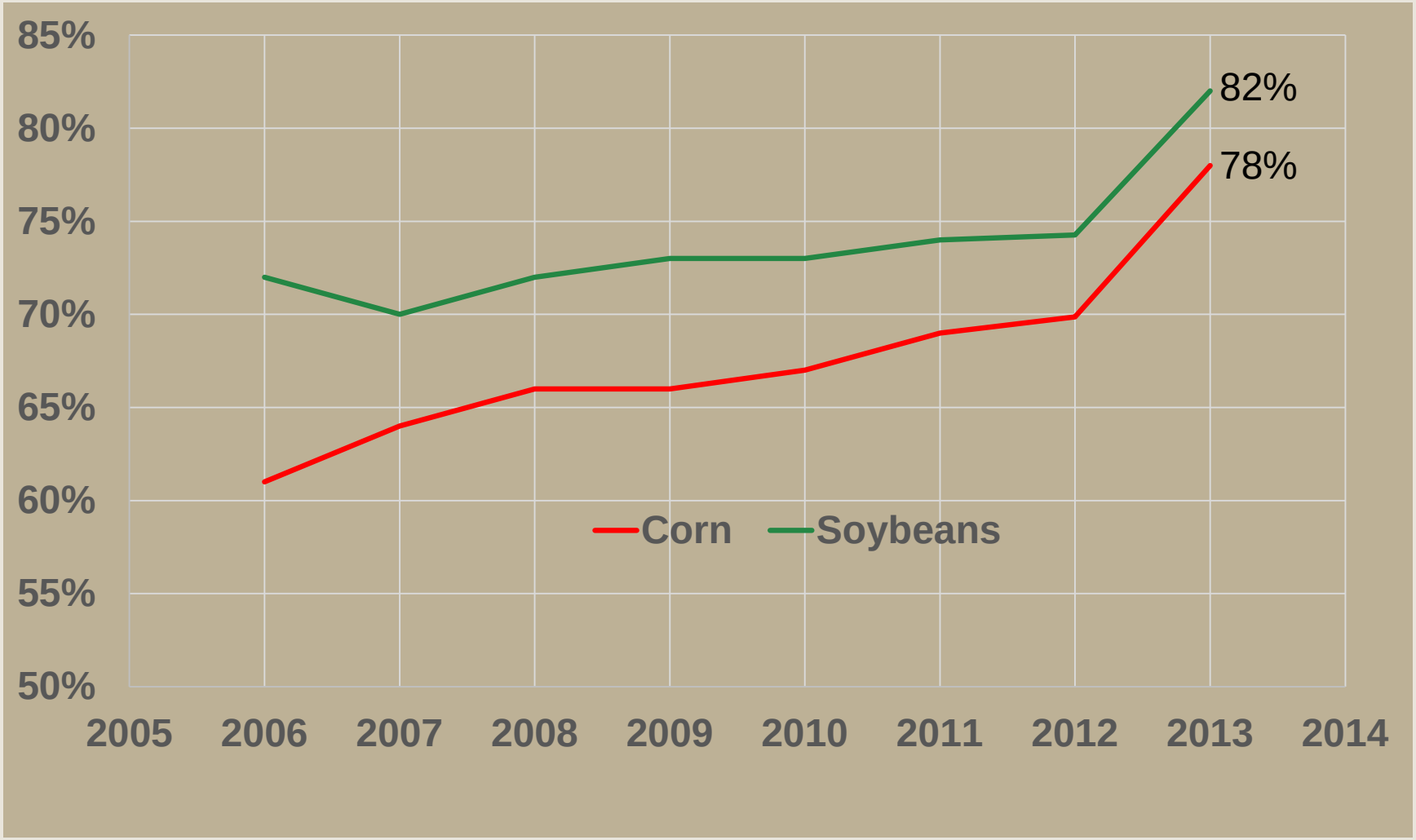
- Wait for USDA-FSA to announce sign-up deadlines
- All producers for each FSA farm will have to sign the form
- Note: no Direct Payments will come fall of 2014
  - If PLC/ARC payments are due to you for 2014, will be paid in fall of 2015 after 2014 Marketing Year

Questions?

Crop Insurance: What's New for 2014?

- Premiums will be lower
  - Lower crop prices: Corn $4.62 and Soybeans $11.36
    - Last year $5.65 and $12.87, so 18% and 12% lower
  - Lower volatilities: even lower prices for RP
- Enterprise Units becoming more popular because of larger premium discounts: more cost effective
  - Insure all of your corn in a county as a single unit
  - Great if have homogenous acres
- Introduced new area yield insurance policies
  - AYP and ARP, same as the old GRP and GRIP

Trends in WI Crop Insurance Participation



WI Crop Insurance Policies: Corn & Soybeans

So Many Options!!	Individual (Farm)	Area-Wide (County)
Yield	YP Yield Protection	Area Risk Protection Insurance (ARPI) Area Yield Protection AYP
Revenue	RP Revenue Protection	ARPI Area Revenue Protection ARP
	RP-HPE: Harvest Price Exclusion	ARP-HPE w/ Harvest Price Exclusion

- **Catastrophic coverage (CAT):** For YP, ARPI
- **AGR-Lite**: Insure Schedule F income

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- **Catastrophic coverage (CAT):** For YP, ARPI
- **AGR-Lite**: Insure Schedule F income

CORN: % insured acres under each policy

Year	RP	YP	Other
2009	69%	22%	9%
2010	71%	21%	8%
2011	76%	16%	7%
2012	81%	14%	4%
2013	84%	11%	6%

SOYBEAN: % insured acres under each policy

Year	RP	YP	Other
2009	77%	16%	8%
2010	82%	13%	5%
2011	84%	11%	4%
2012	88%	10%	1%
2013	91%	8%	1%

Coverage Levels used by WI farmers for RP and YP in 2012 for Corn and Soybeans

Coverage Level	Corn RP	Soy RP	Corn YP	Soy YP
CAT	---	---	**43%**	**40%**
50%	1%	1%	7%	7%
55%	0%	0%	1%	2%
60%	3%	2%	6%	6%
65%	6%	5%	15%	15%
70%	28%	24%	**22%**	**21%**
75%	**38%**	**43%**	6%	8%
80%	20%	21%	1%	2%
85%	4%	4%	0%	0%

Coverage Levels used by WI farmers for RP and YP in 2012 for Corn and Soybeans

Coverage Level	Corn RP	Soy RP	Corn YP	Soy YP
CAT	---	---	43%	40%
50%	1%	1%		
55%	0%	0%		
60%	3%	2%		
65%	6%	5%	15%	15%
70%	**28%**	**24%**	22%	21%
75%	**38%**	**43%**	6%	8%
80%	**20%**	**21%**	1%	2%
85%	4%	4%	0%	0%

86% **88%**

56% of WI corn and 66% of WI soybeans use RP with 70% to 80% coverage level

% of Fair Premium Paid by Government

Coverage Level	Basic & Optional	Enterprise	Whole Farm
50%	67%	80%	80%
55%	64%	80%	80%
60%	64%	80%	80%
65%	59%	80%	80%
70%	59%	80%	80%
75%	55%	77%	80%
80%	48%	68%	71%
85%	38%	53%	56%

Impact of Enterprise Units on Premiums

- FarmDOC (U of IL) Crop Insurance Premium Calculator
- http://www.farmdoc.illinois.edu/cropins/toolbox/Common_Files/calculator_2014.asp
- Pick a state, county and crop, and the yield potential (low, average, high)
- Dane, High Yield Potential (182 bu/ac insurance average)
- 75% RP, Premiums ($/acres) by unit size
- Optional $22.86 Basic $20.48
- Enterprise, 250 A $8.52 Enterprise, 450 A $7.79
- See the large cost reductions with enterprise units
- Can you afford higher coverage (protect your margin)?

Summary

- Most WI corn and soybean acres are insured and use Revenue Protection (RP), 70%-80% Coverage Level
  - Likely more Optional Units
  - Consider Enterprise Units for 2014 to lower cost and then use a higher coverage level
- Smaller group of insured corn and soybean farmers use
  - Yield Protection (YP), Catastrophic policy (CAT)
  - Likely more Basic Units

- **If you are doing something different than this for crop insurance, you should be sure you have thought about it and have a good reason why**

Crop Insurance in the 2014 Farm Bill

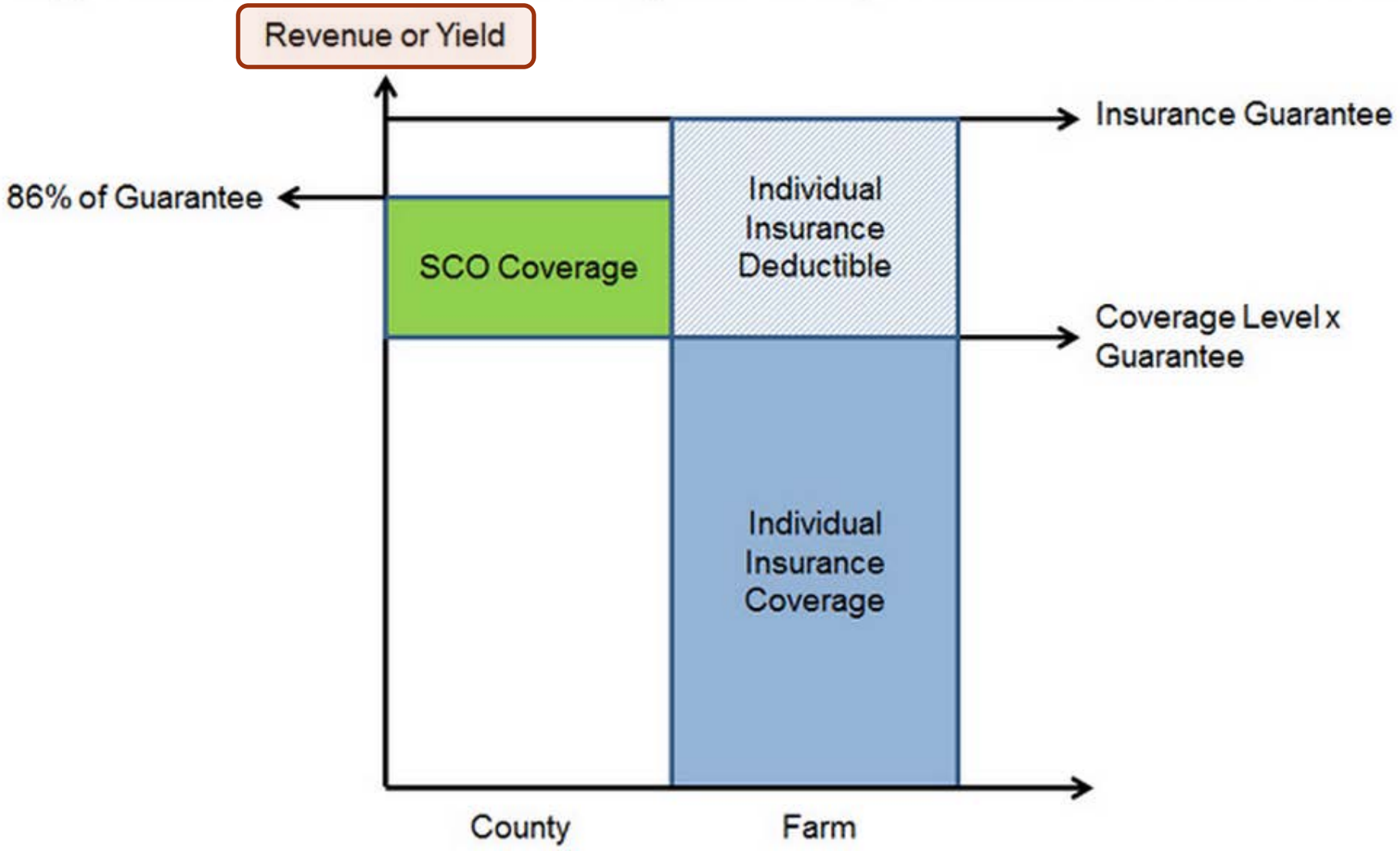
- Several (mostly minor) changes, none implemented until 2015 crop year

1. **Supplemental Coverage Option (SCO)**
2. **Conservation compliance for premium subsidies**
3. Lower premium subsidies if break native sod
4. Choose different coverage levels for irrigated vs dryland
5. Enterprise unit discounts made permanent
6. Increasing county yield plugs for yield history
7. Focus on underserved commodities: rice margin insurance, peanut RP, sorghum irrigation, livestock catastrophic disease, organic price elections, …

Supplemental Coverage Option (SCO)

- SCO: allows you to insure part of your RP/YP deductible with a county policy
  - Layer individual & county coverage
  - Can't exceed 86% total coverage if using RP
- Add SCO to RP policy to increase coverage up to 86% maximum
  - SCO will not pay until county loss exceeds 14%
  - SCO premium subsidy is 65%
- SCO available in 2015, only if choose PLC
  - If choose ARC, cannot buy SCO

Figure 1. Illustration of SCO Coverage when Coupled with Individual Insurance



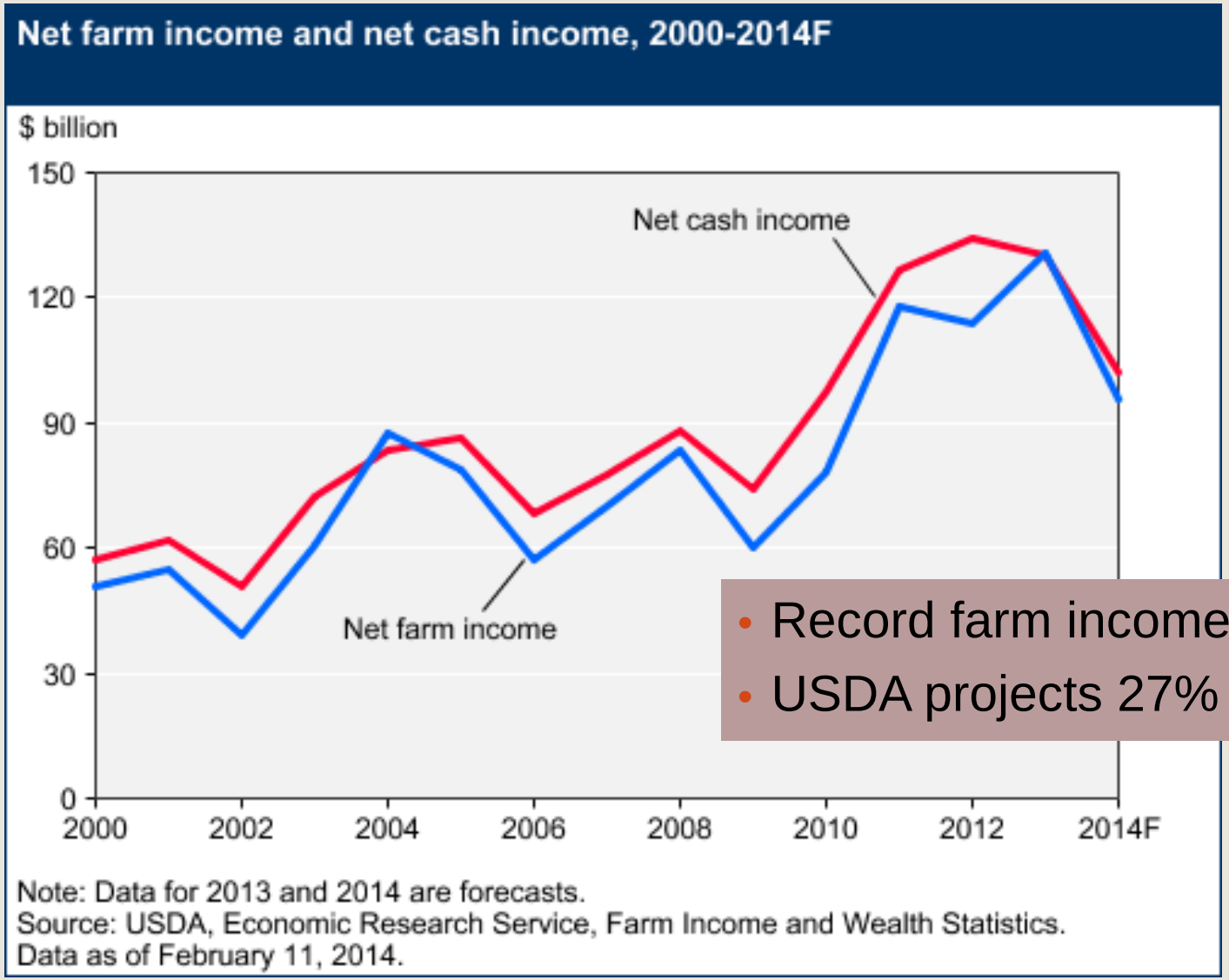
Source: Nick Paulson, U of IL ACE: http://farmdocdaily.illinois.edu/2014/02/2014-farm-bill-the-supplementa.html

Supplemental Coverage Option (SCO)

- Suppose have 75% RP on corn (25% deductible)
- Suppose added 86% SCO (max)
- Suppose county revenue is 80% of average
- Suppose your revenue is 65% of guarantee
- Receive SCO indemnity for a 6% loss
- Receive RP indemnity for a 10% loss
- Can receive SCO and no RP indemnity, or an RP and no SCO indemnity, or no indemnity at all
- Will buy from crop insurance agent
- First available in **2015**

Questions?

Farm Income: 2013 versus 2014

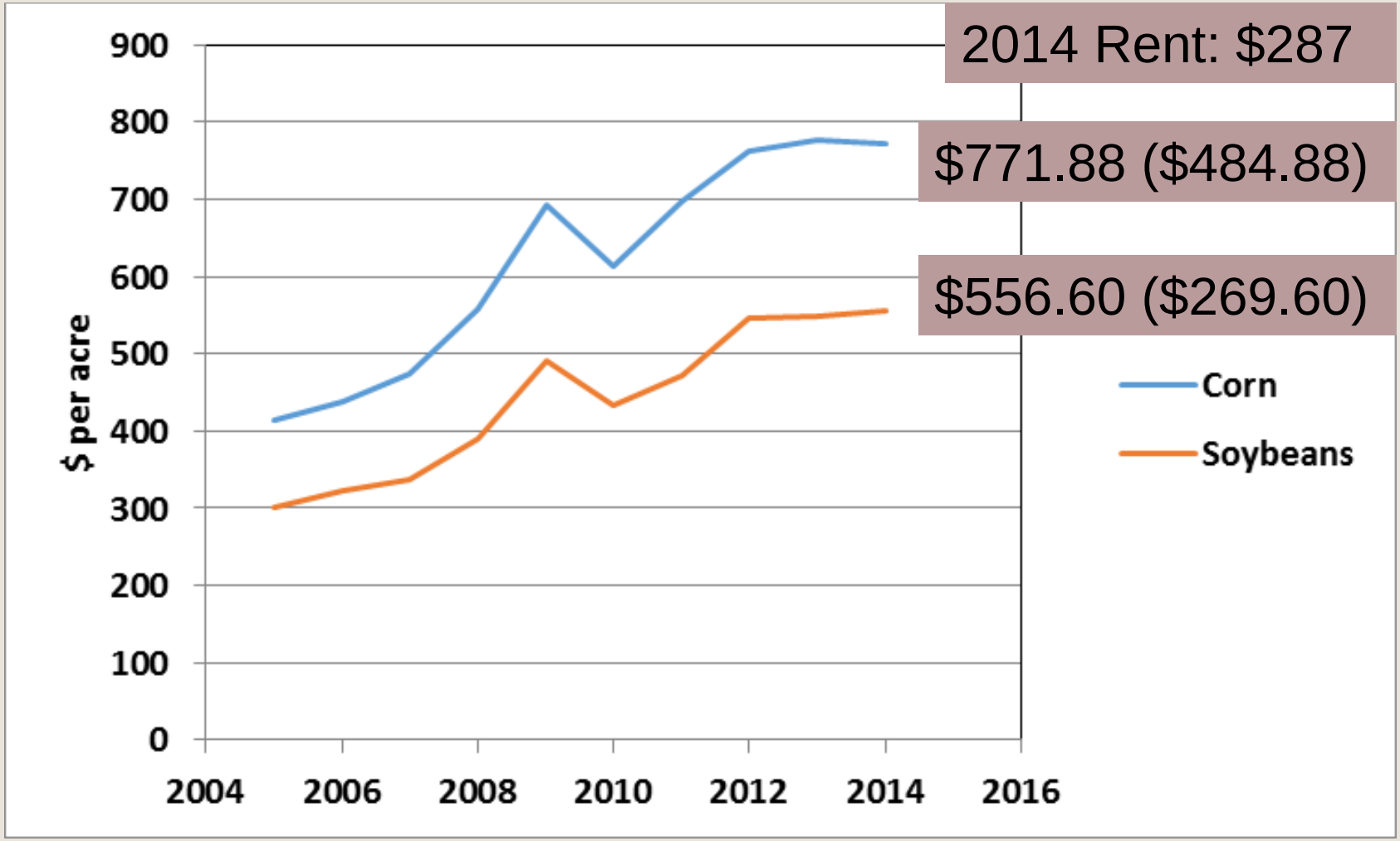


- Record farm income in 2013
- USDA projects 27% drop in 2014

Profitability for Corn & Soy in 2014

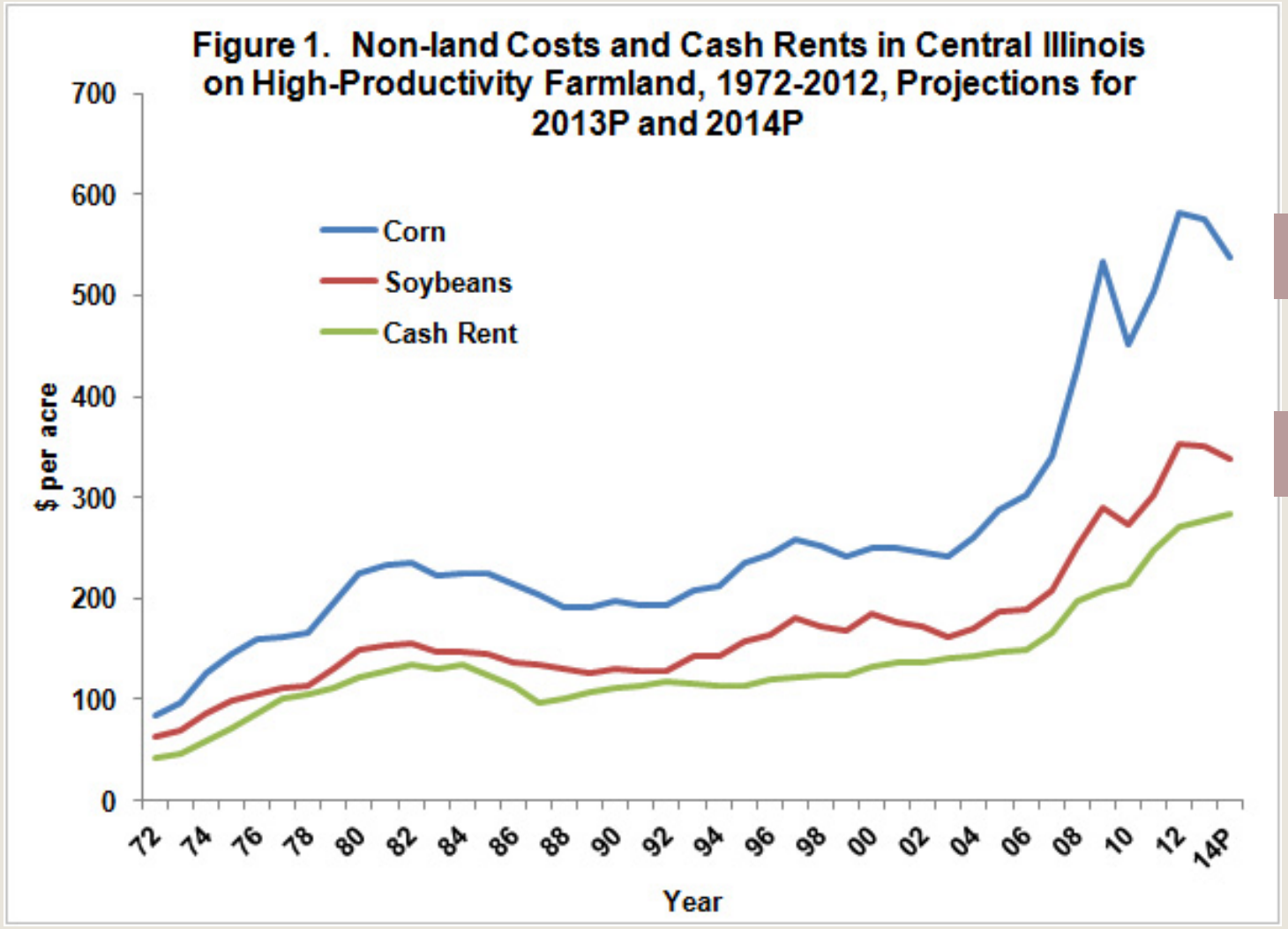
- $7 corn and $15 soybeans has hidden a lot of management problems!!
- Being profitable in 2014 will require better management than in the last few years
  - Tighter margins ahead
- My opinion: Controlling costs will be important this year
- First take a quick look at budgets
- Then some thoughts on controlling costs in 2014

Iowa State University Estimated Costs for Corn and Soybeans 2005-2014



Source: http://www.extension.iastate.edu/agdm/crops/html/a1-20.html

Non-land Cost for Corn and Soybean Production in Illinois for the past 30+ years



$565

$335

Source: http://farmdocdaily.illinois.edu/2014/01/controlling-costs-with-lower-crop-revenues.html

UWEX's FARM Team

- Crop budgets for farmers to use: Non-Land Costs
- http://www.uwex.edu/ces/farmteam/budgets/fieldcrop.cfm
- Corn slight increase, soybeans slight decrease

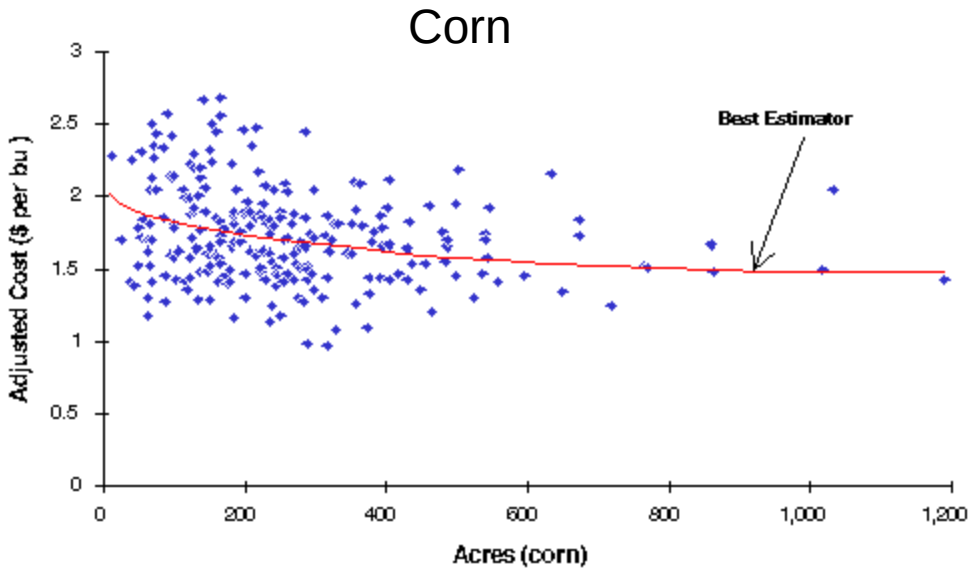
Year	Corn	Soybeans
2013	$557.96	$408.65
2014	$563.52	$393.77

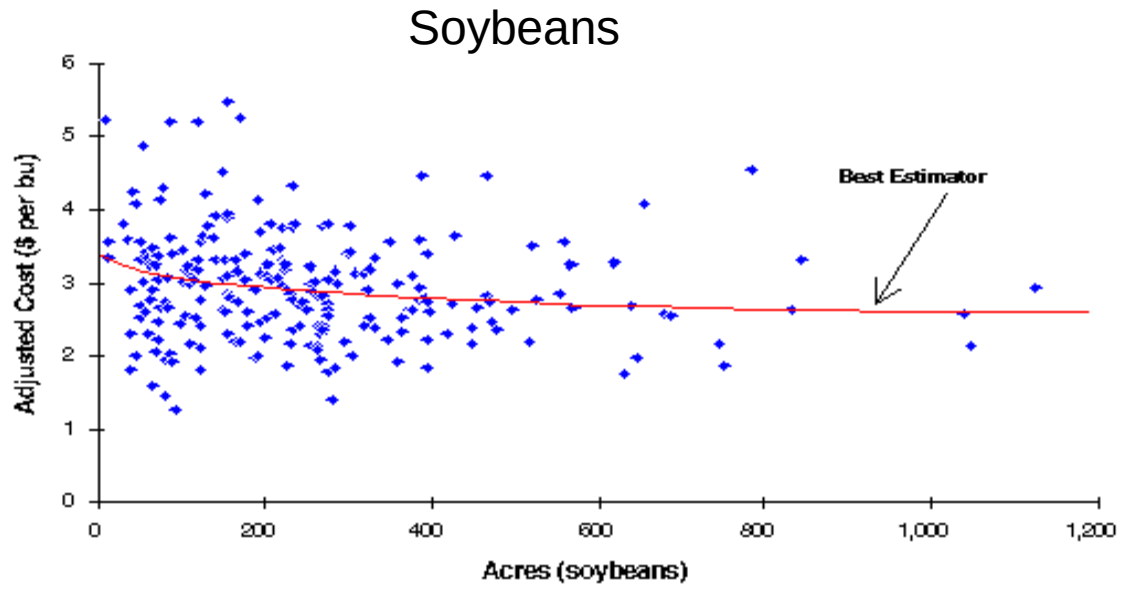
Comparing Numbers: Non-Land Costs

State	Corn	Soybeans
IA	$484.88	$269.60
IL	$565.00	$335.00
WI	$563.52	$393.77

- Budgets are averages and guesses
- In reality, there is a lot of variation among farmers
- An average cost of production does not really matter to you, what you need to know is your cost of production, not the state average, and only you can answer that

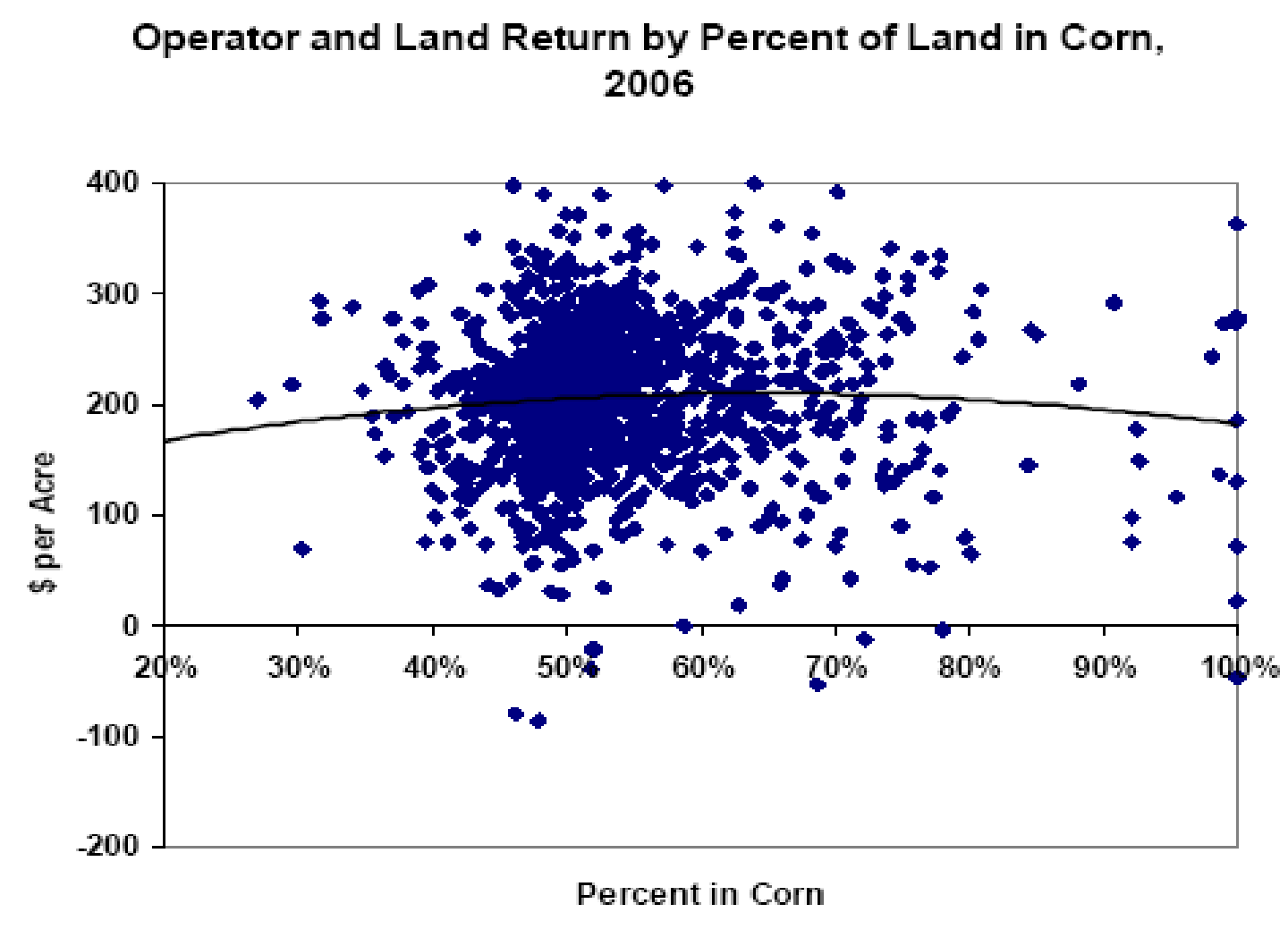
1996 Data for about 250 Minnesota Corn and Soybean Farmers





Source: Southeastern and Southwestern Minnesota Farm Business Management Associations

Illinois Data for 2006



Source: http://www.farmdoc.illinois.edu/presentations/2007%20items/ifes2007/Farm%20Economic%20Summit%20-%20Schnitkey.pdf

Controlling Costs: Suggestions

- With high costs, tight margins, a short crop is the biggest risk faced
- Re-evaluate your crop insurance
  - Enterprise units to cut costs and then use a higher coverage level (80% or 85%) to insure a higher margin
- Do a good job marketing: hire help if you need it
  - A few extra cents a bushel can mean the difference between breaking even and making money
  - If uncomfortable with marketing company, give them a smaller part of your crop to see what they can do

Controlling Costs: Suggestions

- Control input costs
  - Use tools to optimize seeding rates and nutrients that respond to prices
  - Cost effectively protect your yield potential
  - Scout and only apply when you need inputs
- Negotiate lower rents
- Use machinery to its capacity, sell excess

Controlling Costs: Machinery

- A lot of machinery bought in recent years to avoid taxes on large incomes: High machinery demand, high prices
- Farmers will be paying high depreciation on machinery for years
- U of IL shows machinery costs doubled (100% increase) from 2006 to 2012
  - 61% of this increase due to increased depreciation
- Maintain equipment properly
- Use equipment fully/over right amount of acres
  - Tractors that sit around too much?
  - Combine needs 3000-4000 acres/year
  - Reduce tillage passes?

Crop Budget Help

- UWEX's FARM Team & Center for Dairy Profitability http://www.uwex.edu/ces/farmteam/budgets/fieldcrop.cfm
- U of IL: http://farmdoc.illinois.edu/manage/2014_crop_budgets.pdf
- Iowa State University: http://www.extension.iastate.edu/agdm/crops/html/a1-20.html

Thanks for Your Attention!

Questions?

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