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# SCO Use by Crop and Region

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SCC-76 Annual Meetings 2017

March 31 to April 1

Pensacola, FL

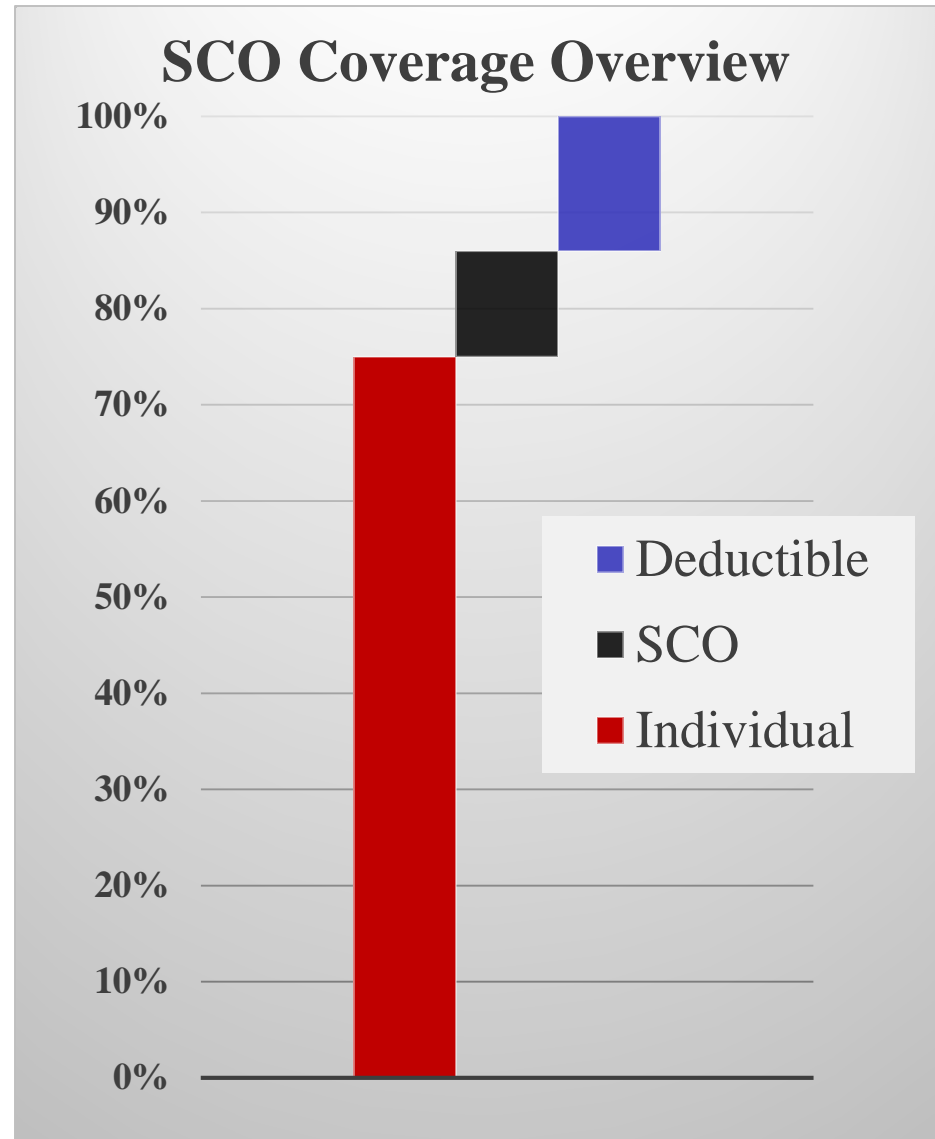
# SCO Background

- Supplemental Coverage Option – crop insurance program created in 2014 Farm Bill
- Available starting in 2015, expanded in future years
- Crop base enrolled in ARC-CO or ARC-IC not eligible
- Requires purchase of an individual insurance plan (YP, RP, RP-HPE)

- County-based coverage
  - 86% coverage level
  - Coverage band extends down to coverage level on individual plan
  - County triggers payment and determines relative payment size
  - County loss applied to underlying policy deductible range – determines individual farm-level payment

# SCO Background

- Example with 75% RP
- SCO range from 86% to 75%
- County trigger applied to individual deductible



# SCO Background

- Yield component
  - Same trend/expected yields used for existing area plans (i.e. GRIP/GRP or ARPI)
- Price component
  - Same futures prices used for existing insurance programs
- Guarantee
  - 86% of county trend yield when coupled with YP
  - 86% of county expected revenue (insurance price x trend yield) when coupled with RP or RP-HPE
- Premiums
  - Set by RMA
  - Flat subsidy rate of 65%

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- Does SCO
  - enter into a producer's optimal risk management portfolio?
  - impact their individual plan and coverage level choices?
  - provide meaningful risk management gains?
- What are the marginal or additional subsidy costs associated with the SCO program and can they be justified?
- Paulson, Schnitkey, and Kelly (2016)



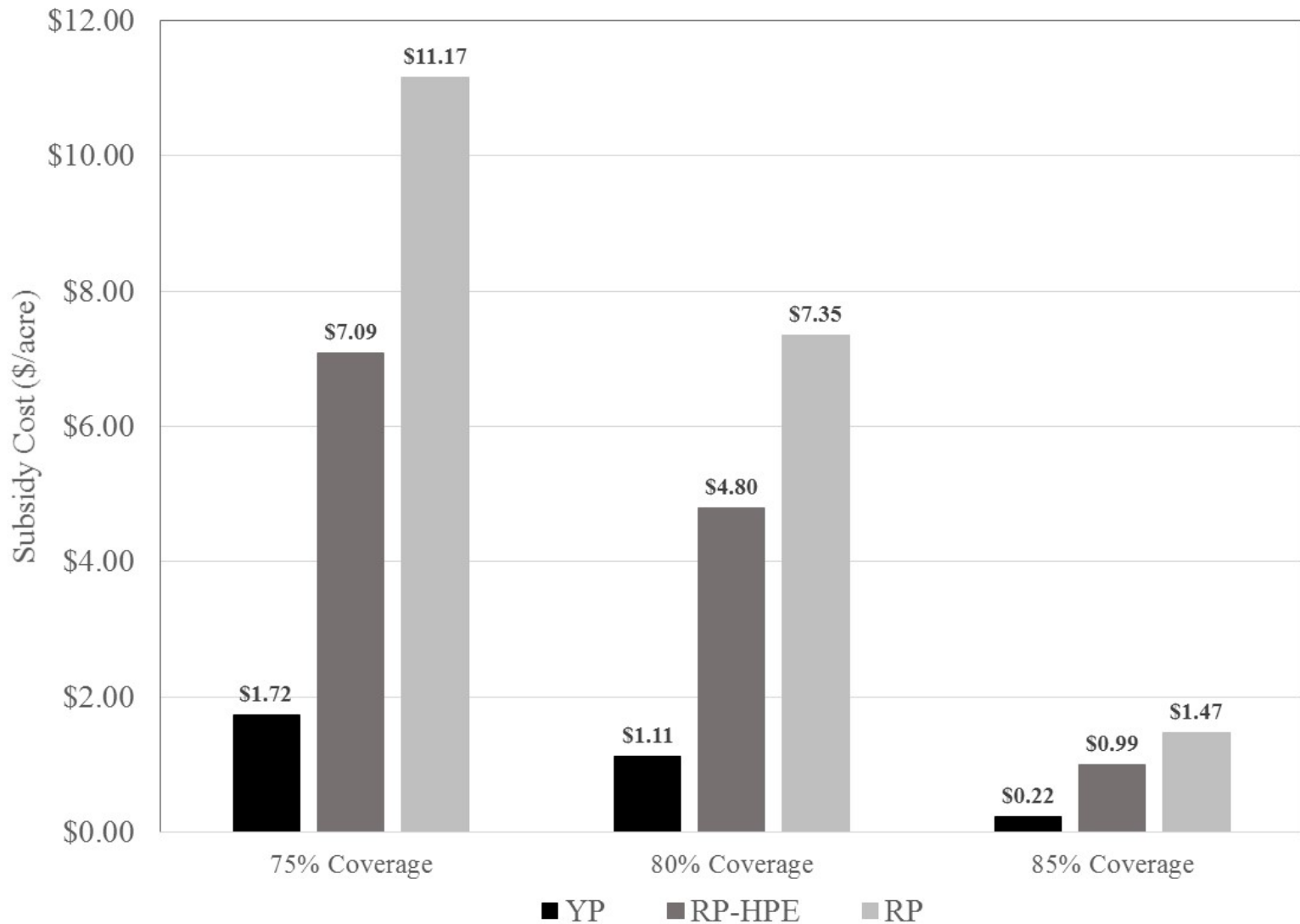
- Does SCO
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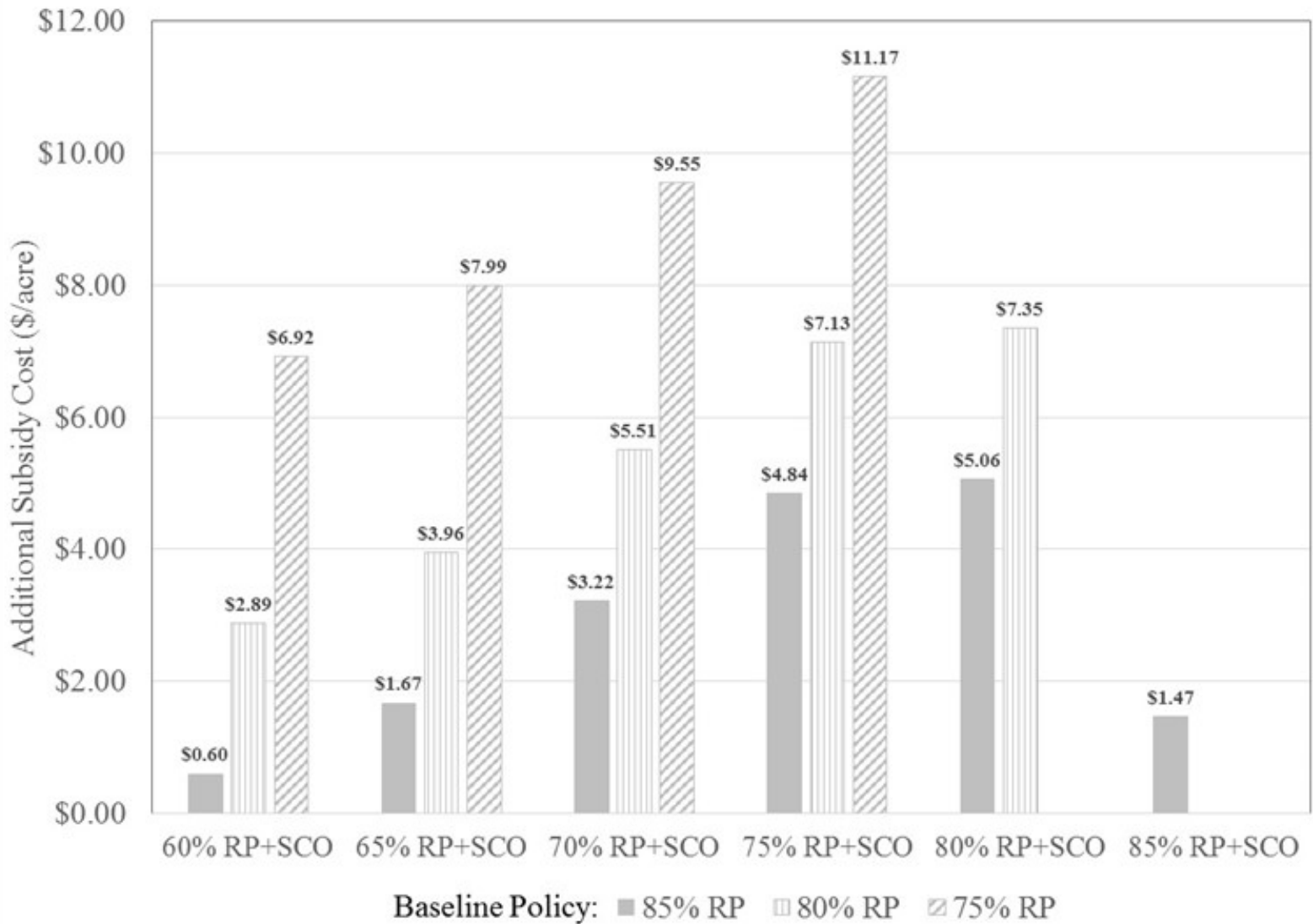
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**MAYBE**
- What are the marginal or additional subsidy costs associated with the SCO program and can they be justified? **POTENTIALLY LARGE**

# Additional Subsidy Cost



# Additional Subsidy Cost



# In Practice?

- Results all based on a simulation model of a risk averse farmer
- Does evidence exist in practice?
- Use RMA SOB data to look at:
  - Amount of use
  - Differences by and across:
    - Crops and regions
    - Coverage levels

# SCO Use in 2015

**Table 1. Measures of SCO and STAX Use in 2015 by Commodity**

Commodity	SCO/STAX Liability (\$ million)	Individual Plan Liability (\$ million)	SCO/STAX % of Liability	SCO/STAX % of Policies	SCO/STAX % of Units
Barley	\$1.1	\$520	0.21%	0.42%	0.73%
Corn	\$19	\$38,809	0.05%	0.27%	0.30%
Cotton (SCO)	\$0.5	\$2,716	0.02%		
Cotton (STAX)	\$229	\$2,716	7.79%	18.56%	21.49%
Rice	\$80	\$1,415	5.35%	16.95%	16.71%
Sorghum	\$6.1	\$1,094	0.56%	1.73%	2.08%
Soybean	\$16	\$23,466	0.07%	0.28%	0.36%
Wheat	\$70	\$8,265	0.84%	4.31%	4.94%

Note: Computed from the Risk Management Agency's Summary of Business for 2015



# Insurance Coverage and Program Choice

**Table 2. Average 2015 Crop Insurance Coverage Level and Base Acre Enrollment in PLC by Commodity**

Commodity	Average Crop Insurance Coverage Level	% Base Acres Enrolled in PLC Program
Barley	70.3%	74.8%
Corn	76.3%	6.6%
Cotton	67.0%	n/a
Rice	66.9%	99.7%
Sorghum	67.6%	66.4%
Soybean	75.1%	3.1%
Wheat	70.7%	42.5%

Note: Average coverage level is for all RP, RP-HPE, and YP policies weighted by net acres.

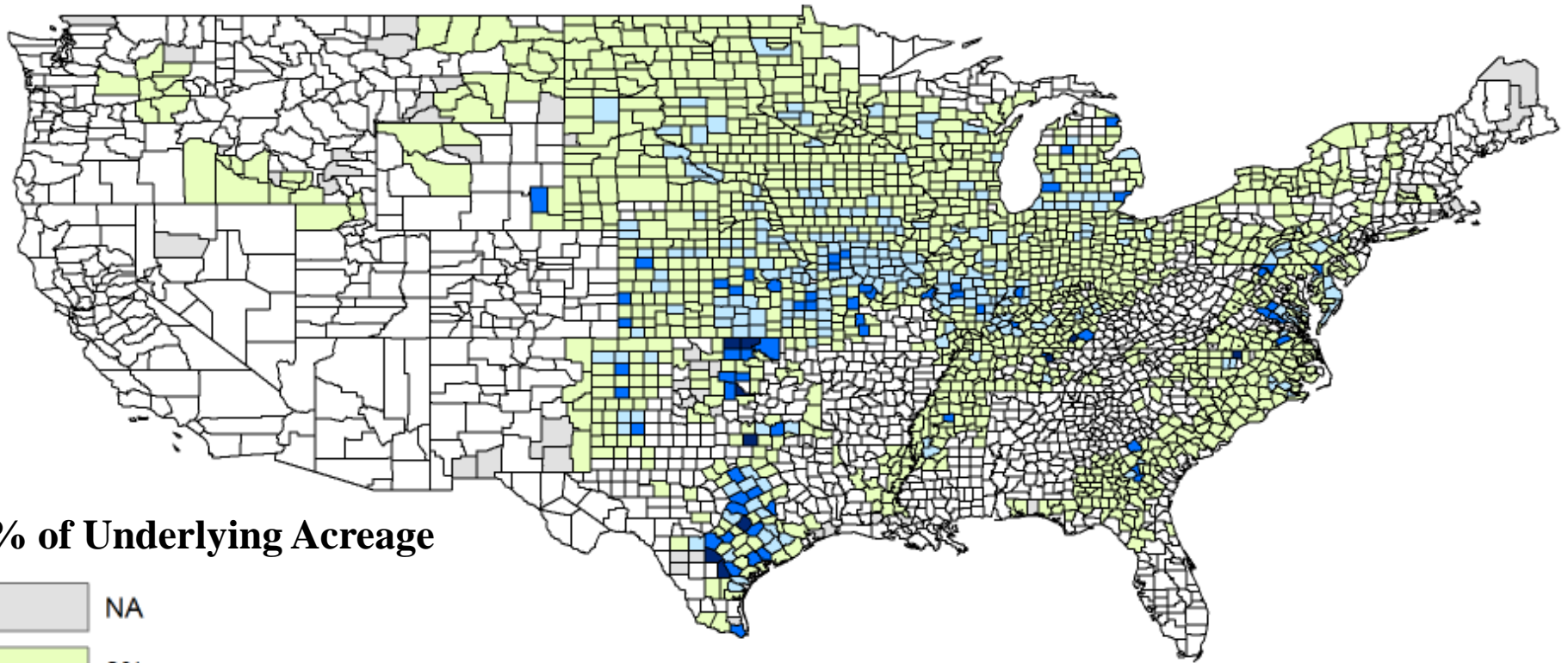
# SCO Net Acres

Crop	Year	SCO-RP	SCO-RPHPE	SCO-YP
Corn	2015	260,363	989	14,623
Soybean	2015	259,475	1,177	21,871
Rice	2015	211,305	44,291	328,474
Wheat	2015	2,502,714	20,691	114,146

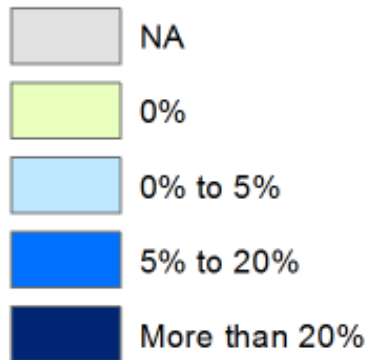
# SCO Acres as Percentage of Underlying Plan

Crop	Year	SCO-RP	SCO-RPHPE	SCO-YP
Corn	2015	0.37%	0.15%	0.42%
Soybean	2015	0.39%	0.19%	0.58%
<b>Rice</b>	<b>2015</b>	<b>29.1%</b>	<b>59.4%</b>	<b>23.9%</b>
<b>Wheat</b>	<b>2015</b>	<b>6.19%</b>	<b>7.33%</b>	<b>3.10%</b>

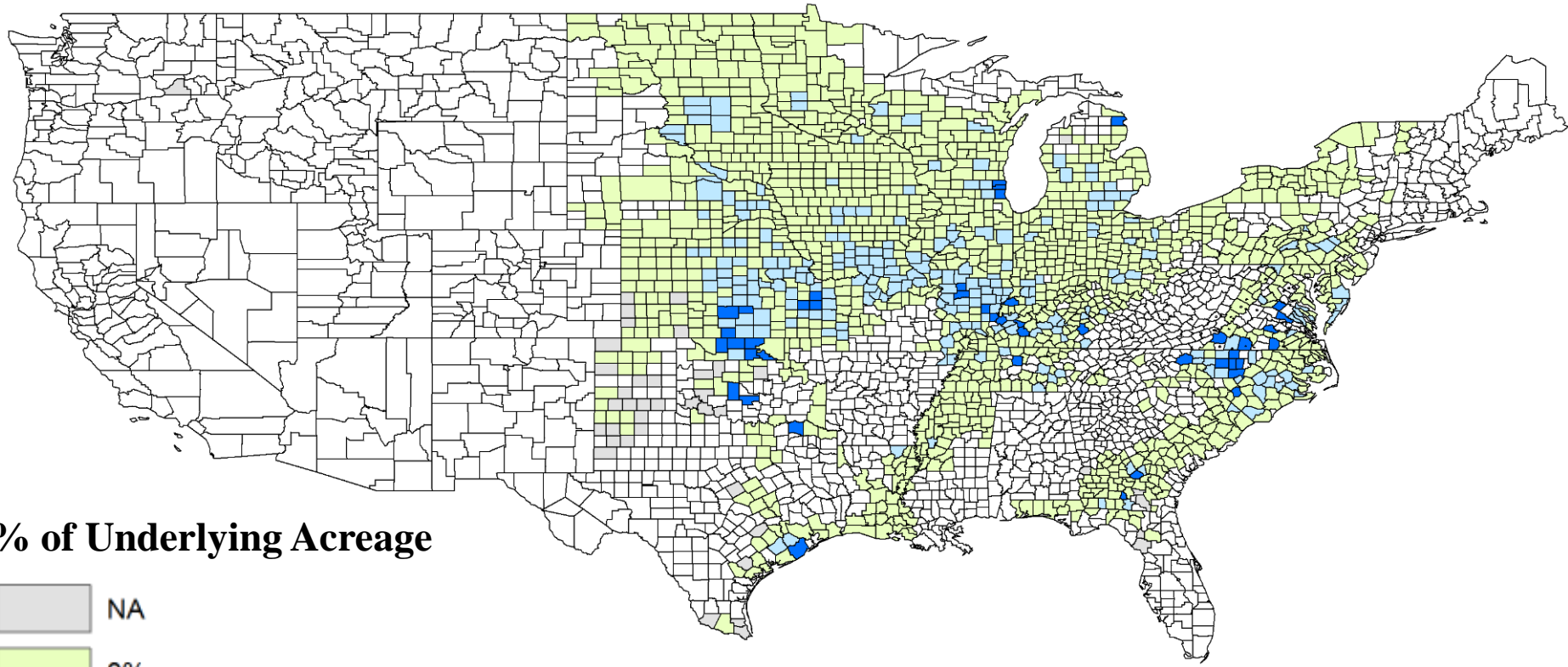
# SCO – Corn, RP, 2015



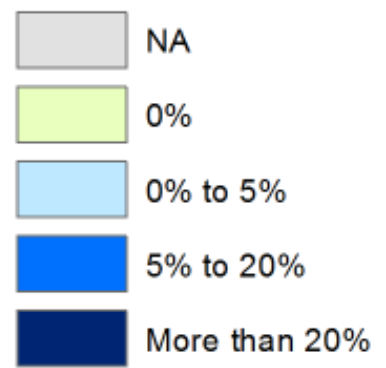
**% of Underlying Acreage**



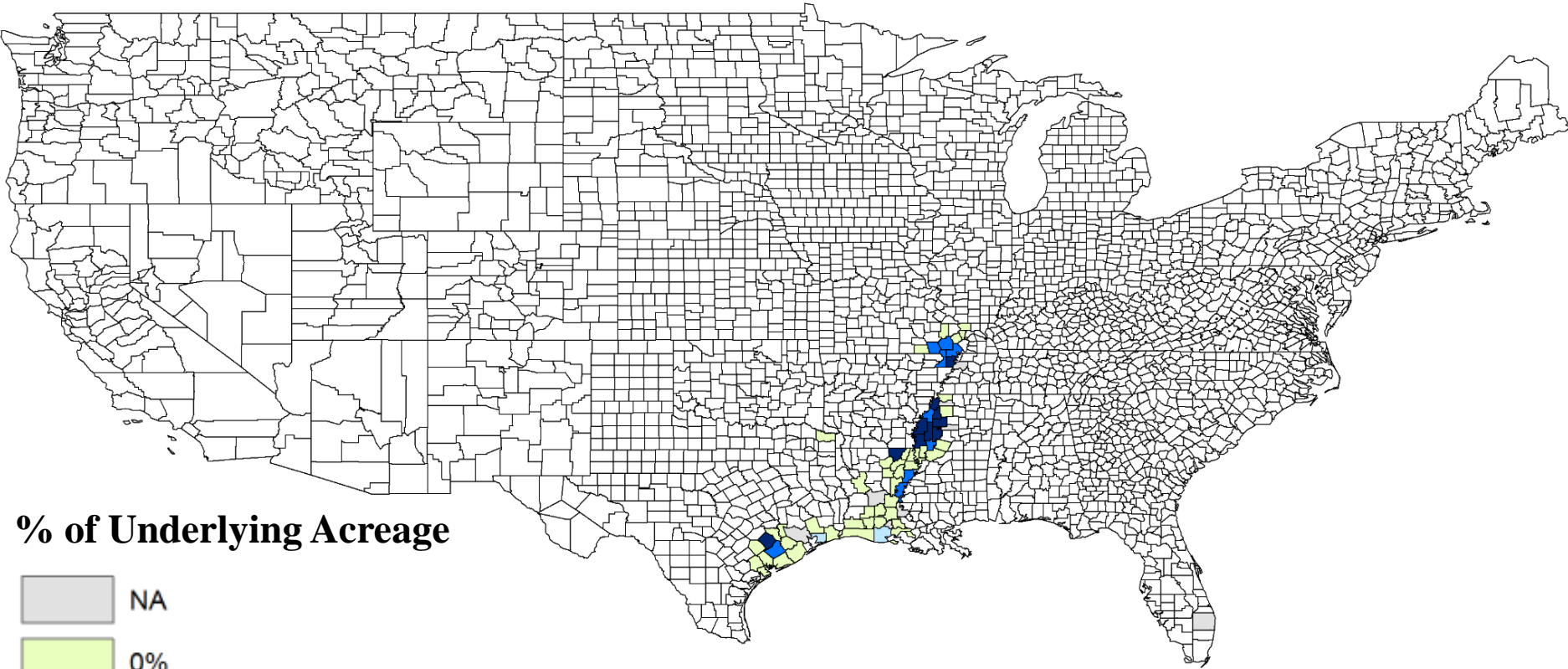
# SCO – Soybeans, RP, 2015



**% of Underlying Acreage**



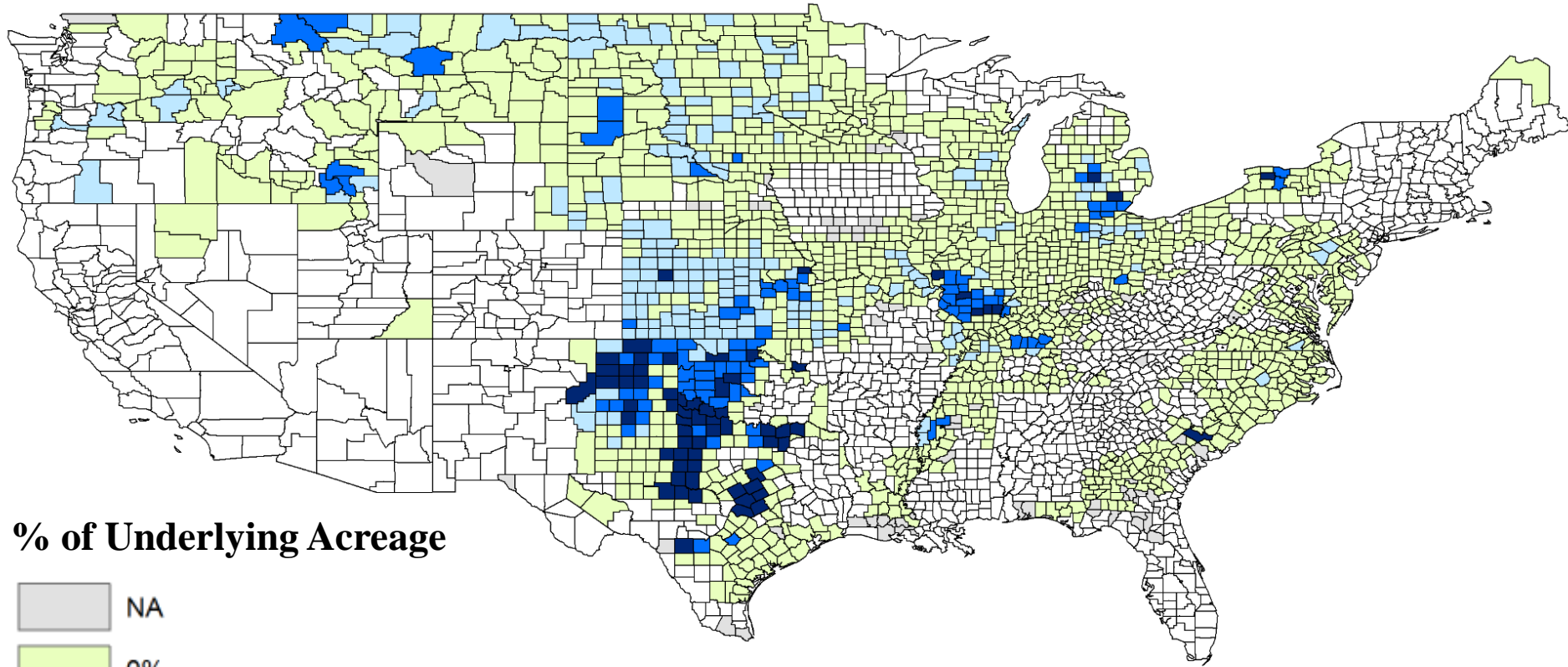
# SCO – Rice, RP, 2015



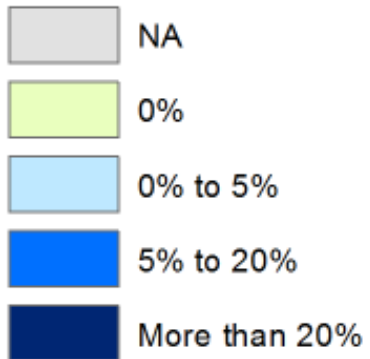
**% of Underlying Acreage**

- NA
- 0%
- 0% to 5%
- 5% to 20%
- More than 20%

# SCO – Wheat, RP, 2015

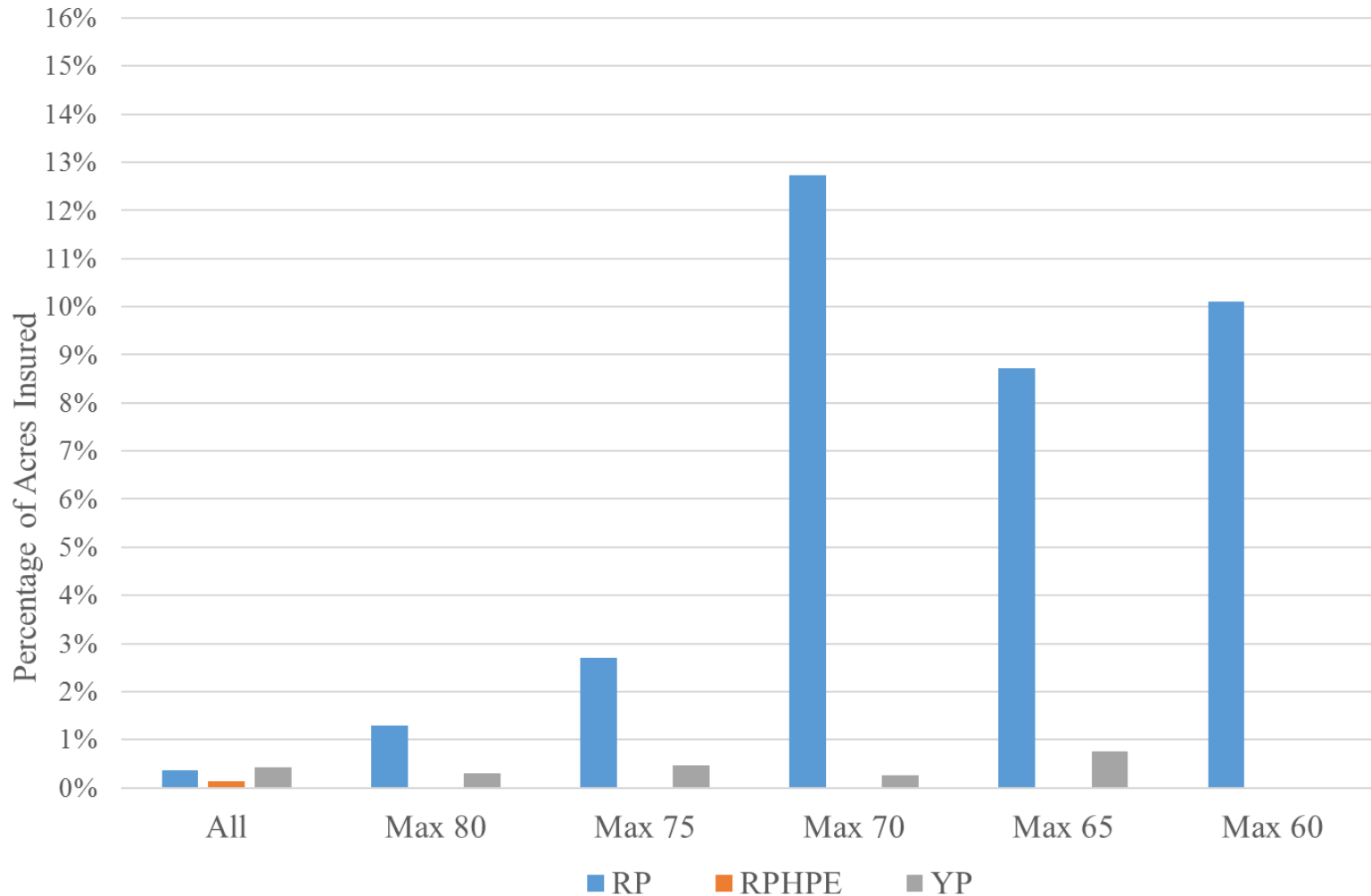


**% of Underlying Acreage**



# Corn by Plan and Coverage - 2015

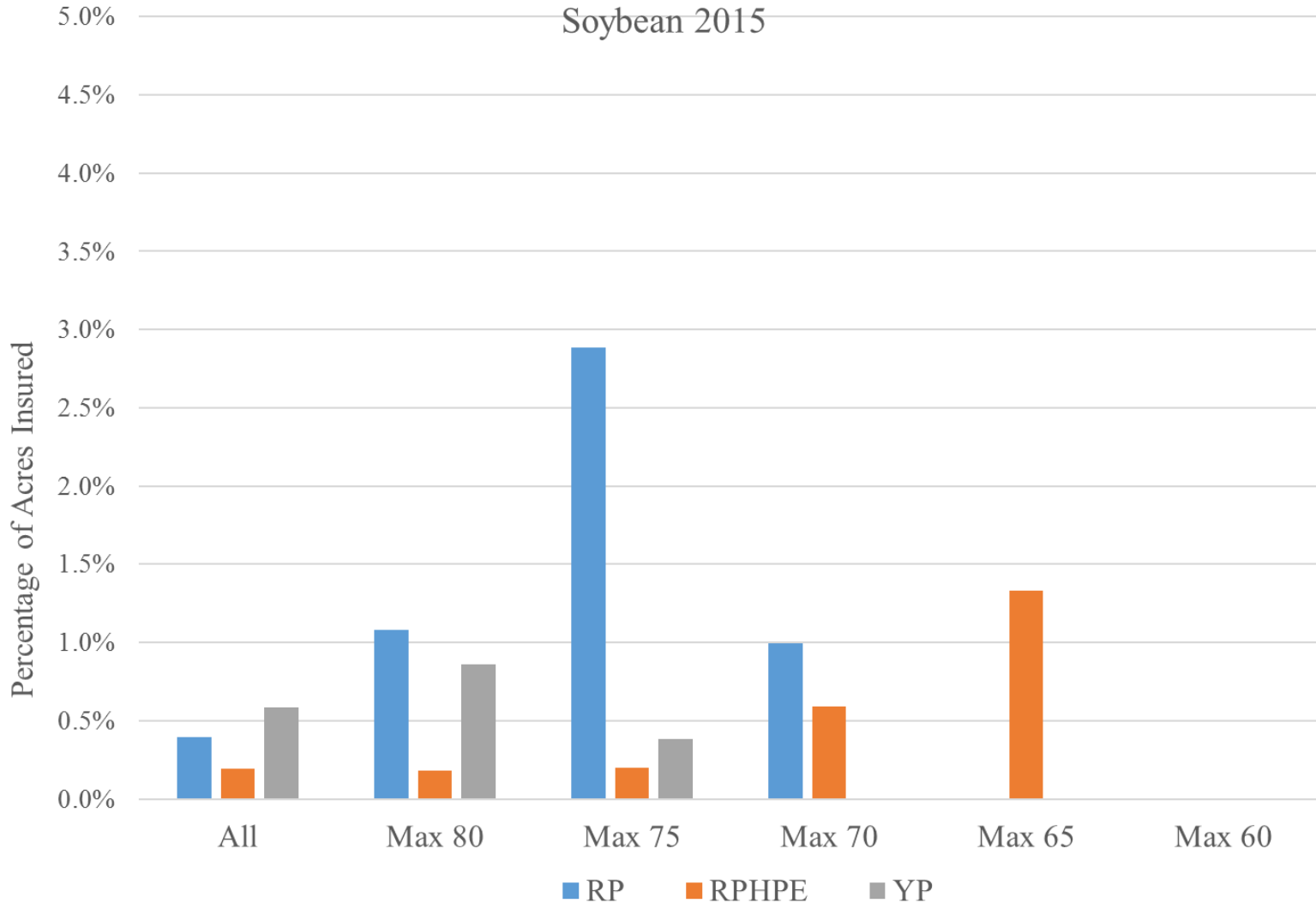
Acres Insured with SCO by Plan and Max Available Coverage Level,  
Corn 2015





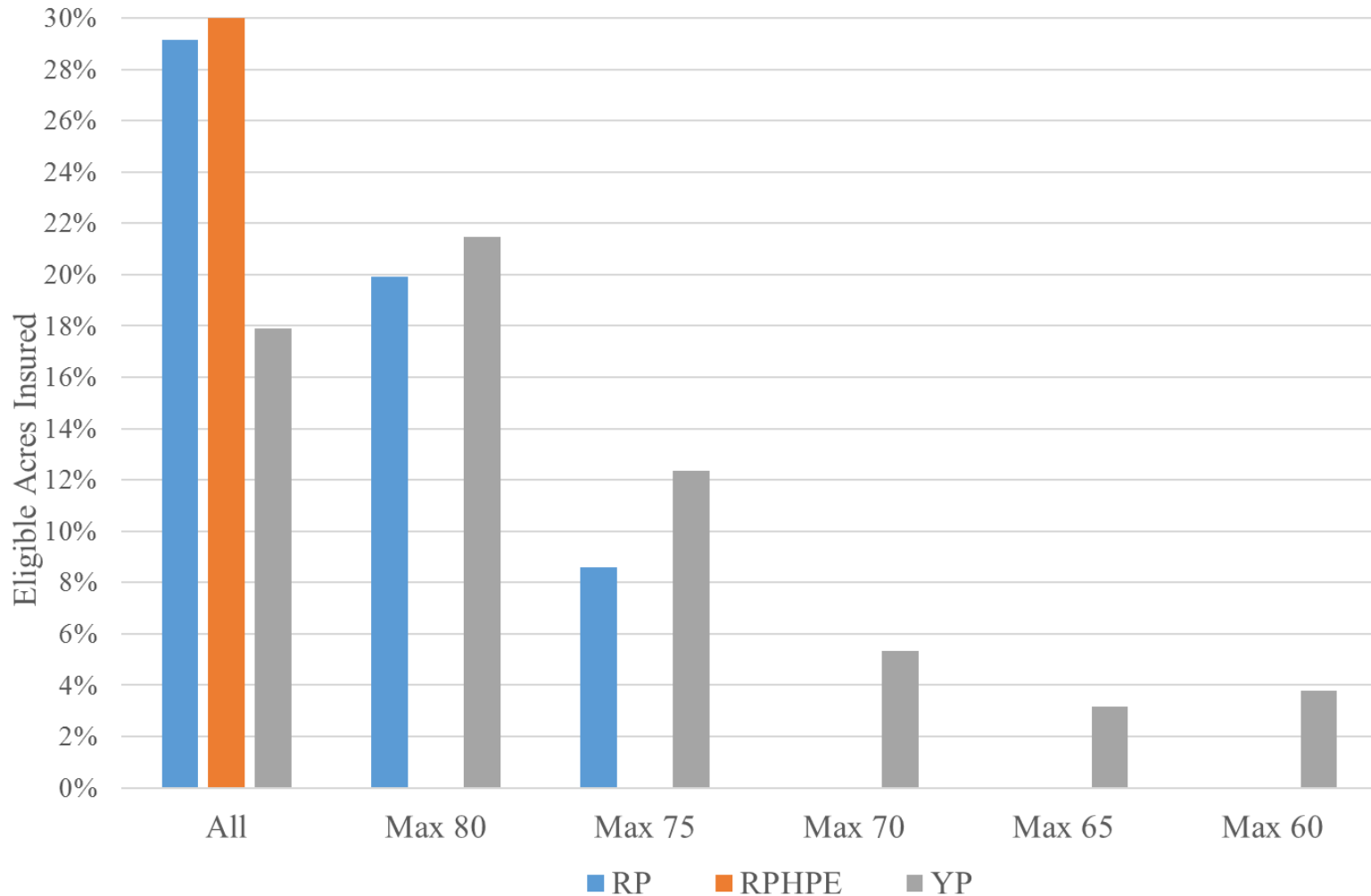
# Soybean by Plan and Coverage - 2015

Acres Insured with SCO by Plan and Max Available Coverage Level,  
Soybean 2015



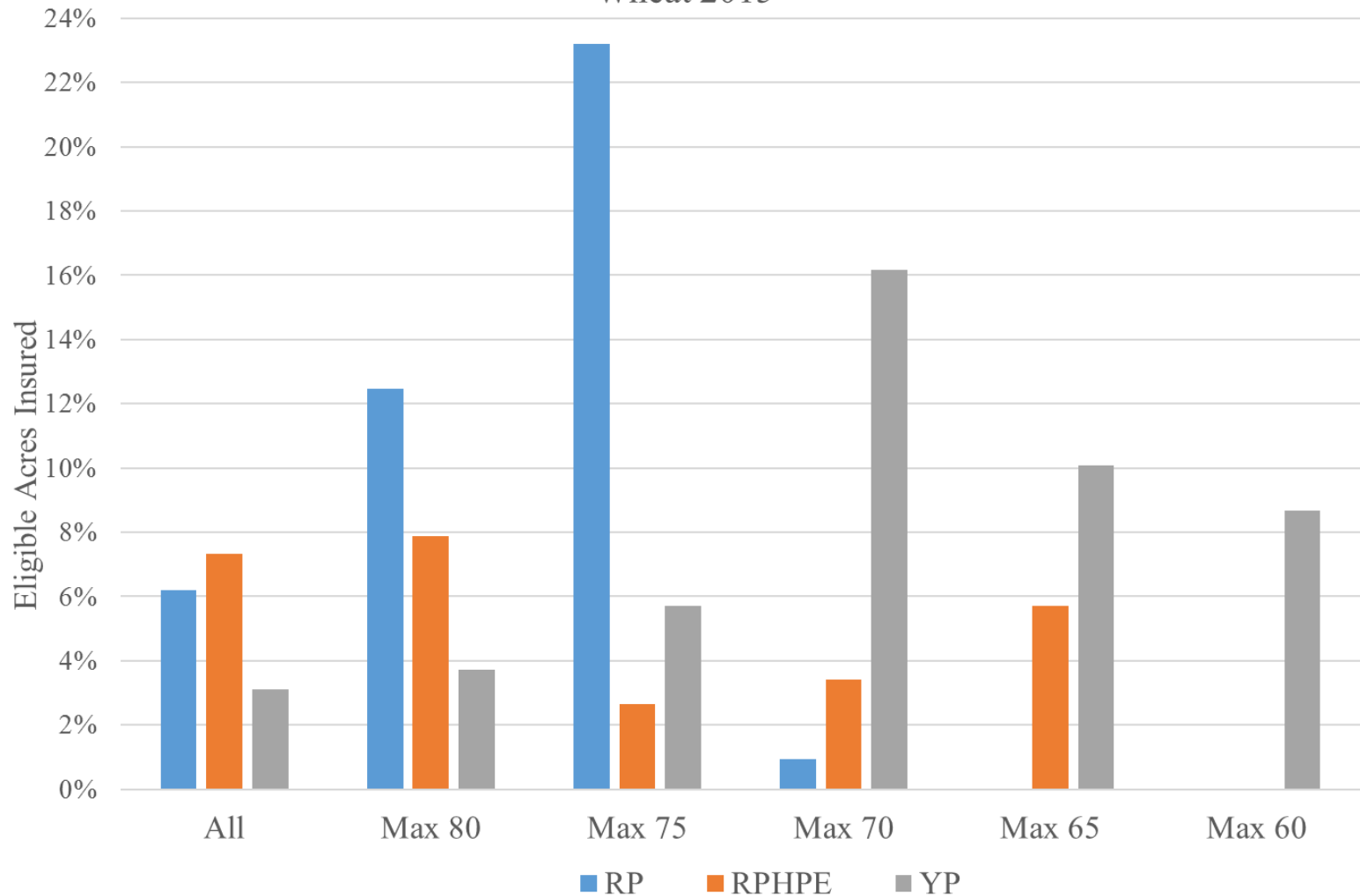
# Rice by Plan and Coverage - 2015

Acres Insured with SCO by Plan and Max Available Coverage Level,  
Rice 2015



# Wheat by Plan and Coverage- 2015

Acres Insured with SCO by Plan and Max Available Coverage Level,  
Wheat 2015



# Conclusions

- Patterns in use by crop follows commodity program choice and resulting eligibility
- More intensive use in counties with lower available coverage levels
- No significant evidence of a “buydown” effect
- Potential additional subsidy cost is significant, but program use remains relatively small
- Bigger question – 2018 Farm Bill, impact on CBO baseline of shifts in program choice?