

CROP INSURANCE OPTIONS

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Center for Commercial Agriculture

Definitions

➤ **Basic Units**

- All of one crop in a county for a specific share of production.
 - ❖ All owned and cash rent land for one crop in one county is a basic unit.
 - ❖ Each share rent landowner arrangement would be a separate basic unit.

➤ **Optional Units**

- Each farm and crop is insured separately.

➤ **Enterprise Units**

- Addition of all basic units in one county for a single crop.

Potential Products

- **Yield Policies**

- AYP = area yield protection
 - Insures against county-wide production loss (based on county yield)
 - Policy protection = dollar amount of protection per acre x net acres
 - 70 to 90% coverage levels
- YP = yield protection
 - Insures against production loss (based on individual farm yield)
 - Yield protection guarantee = APH approved yield x coverage level x projected price
 - 50 to 85% coverage levels

Potential Products

- **Revenue Policies**

- ARP = area revenue protection
 - Insures against county-wide revenue loss (based on county revenue)
 - Policy protection = county yield x coverage level x greater of projected price or harvest price
 - 70 to 90% coverage levels

Potential Products

- **Revenue Policies, continued**
 - Revenue Protection
 - Insures against revenue loss due to increase or decrease in price, low yield, or combination of these (based on individual farm revenue)
 - Revenue protection guarantee = APH approved yield x coverage level x greater of projected price or harvest price
 - 50 to 85% coverage levels

Projected and Harvest Prices

➤ **Projected Price**

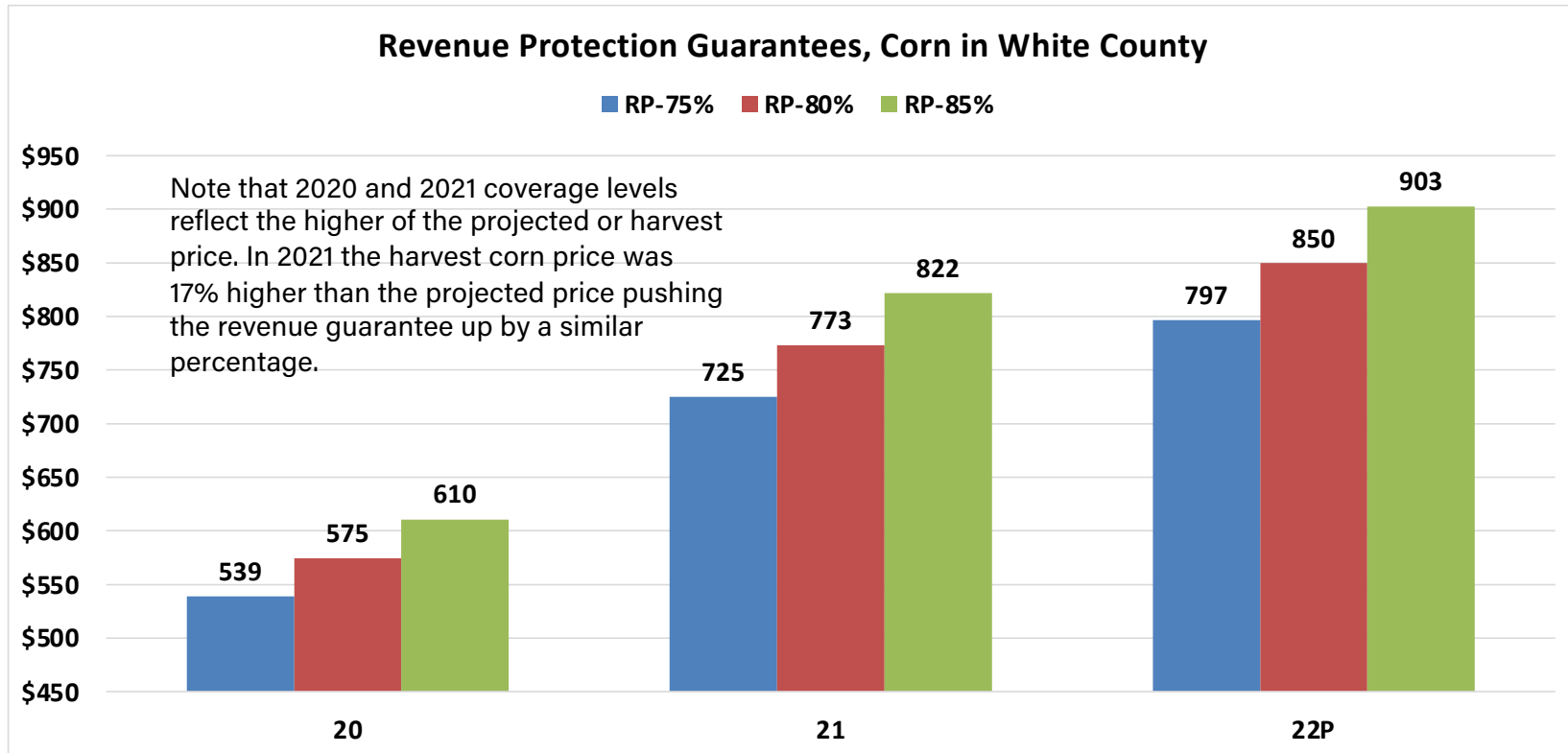
- ❖ Based on settlement prices for futures contracts during February
- ❖ 2021: Corn = \$4.58 and Soybeans = \$11.87
- ❖ 2022: Corn = \$5.90 (+28%) and Soybeans = \$14.33 (+21%)

➤ **Harvest Price**

- ❖ Based on settlement prices for futures contracts during October
- ❖ 2021: Corn = \$5.37 and Soybeans = \$12.30
- ❖ **2022: Corn = TBD and Soybeans = TBD**

Revenue Guarantees

Guarantee for 2022 RP Products Represent Minimums



Crop Insurance Endorsements

- Supplemental Coverage Option (SCO):
 - SCO provides coverage from 86% to the coverage level of the underlying RP or YP policy.
 - SCO can only be purchased on acres on which PLC is chosen.
 - Coverage is based on county yields rather than farm yields.
 - SCO indemnity payments are capped.
 - For example, if we have 85% RP and expected county revenue for corn of \$1,062 (\$5.90 harvest price x trend adjusted county yield of 180), the maximum indemnity payment would be \$10.62 (1% of \$1,062).

Crop Insurance Endorsements, Continued

- Enhanced Coverage Option (ECO):
 - ECO (90% or 95% coverage level) can be purchased as an endorsement to an eligible individual insurance plan such RP or YP.
 - Coverage extends from the selected level down to 86%, the point where SCO begins to offer coverage.
 - Coverage is based on county yields rather than farm yields.
 - A producer can purchase ECO and not SCO, and vice versa.
 - ECO indemnity payments are capped.
 - For example, if we have 85% RP, 95% ECO, and expected county revenue of \$1,062 (\$5.90 harvest price x trend adjusted county yield of 180), the maximum indemnity payment would be \$95.58 (9% of \$1,062).



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Comparison of Crop Insurance Bundles for Corn

Assumptions (White County, Indiana): \$5.90 projected price; volatility = 0.23 farm and county trend yield = 180 Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 80%	\$17.29	\$850	\$0
RP: 85%	\$33.04	\$903	\$0
RP: 85% and SCO	\$34.72	\$903	+\$10
RP: 85%, SCO, and ECO: 90%	\$47.69	\$903	+\$53
RP: 85%, SCO, and ECO: 95%	\$69.02	\$903	+\$106

Comparison of Crop Insurance Indemnity Payments for Corn

Assumptions (White County, Indiana): \$5.90 projected price; volatility = 0.23 farm and county trend yield = 180	PP = \$5.90 HP = \$5.00 Farm Y = 180 County Y = 180	PP = \$5.90 HP = \$5.90 Farm Y = 150 County = 180	PP = \$5.90 HP = \$6.50 Farm Y = 150 County Y = 150
RP: 80%	\$0	\$0	\$0
RP: 85%	\$3	\$18	\$20
RP: 85% and SCO	\$3+\$10	\$0	\$20 + \$11
RP: 85%, SCO, and ECO: 90%	\$3+\$53	\$0	\$20 + \$58
RP: 85%, SCO, and ECO: 95%	\$3+\$106	\$0	\$20 + \$117

Comparison of Crop Insurance Bundles for Soybeans

Assumptions (White County, Indiana): \$14.33 projected price; volatility = 0.19 farm and county trend yield = 56 Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 80%	\$10.02	\$642	\$0
RP: 85%	\$19.70	\$682	\$0
RP: 85% and SCO	\$20.59	\$682	+\$8
RP: 85%, SCO, and ECO: 90%	\$27.69	\$682	+\$40
RP: 85%, SCO, and ECO: 95%	\$40.58	\$682	+\$80

Comparison of Crop Insurance Indemnity Payments for Soybeans

Assumptions (White County, Indiana): \$14.33 projected price; volatility = 0.19 farm and county trend yield = 56	PP = \$14.33 HP = \$12.50 Farm Y = 56 County Y = 56	PP = \$14.33 HP = \$14.33 Farm Y = 46 County = 56	PP = \$14.33 HP = \$16.50 Farm Y = 46 County Y = 46
RP: 80%	\$0	\$0	\$0
RP: 85%	\$0	\$23	\$26
RP: 85% and SCO	\$0	\$0	\$26 + \$10
RP: 85%, SCO, and ECO: 90%	\$22	\$0	\$26 + \$47
RP: 85%, SCO, and ECO: 95%	\$62	\$0	\$26 + \$93

Summary of Crop Insurance Products

- Revenue Protection (RP)
 - RP establishes a minimum revenue guarantee based on projected price and farm yield. If harvest price is higher than projected price, the revenue guarantee increases.
- Supplemental Coverage Option (SCO)
 - SCO can be purchased on acres on which PLC was chosen. Provides coverage from 86% to the coverage level of the underlying RP or YP policy. Coverage is based on county yields rather than farm yields.
- Enhanced Coverage Option (ECO)
 - ECO (90% or 95%) extends coverage from the selected level down to 86%, the point where SCO begins to offer coverage. Premiums are relatively high, particularly for the 95% coverage level, because indemnity payments will be triggered more frequently.

Crop Insurance Tools

- www.farmdoc.illinois.edu/crop-insurance
 - Premium Calculator
 - Payment Evaluator
 - Price Distribution
 - Decision Tool (Spreadsheet)