



## Weekly Farm Economics Crop Insurance Premiums and Guarantee Levels for 2014

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The Risk Management Agency (RMA) recently released rates which can be used to calculate 2014 insurance premiums for corn and soybeans. For corn, insurance premiums likely will be slightly lower than in 2013. Guarantees will be much lower in 2014 as compared to 2013. For most cash rent farmland, guarantee levels from crop insurance will not cover total costs in 2014.

### Premiums in 2014

Revenue Protection (RP) insurance premiums are estimated for corn in Sangamon County, Illinois using a 100 acre enterprise unit and a 187 bushel per acre Trend Adjusted Actual Production History yield. Insurance premiums for 2014 will be influenced by the projected price and volatility which will be known at the end of February. Premiums for 2014 are estimated using a \$4.60 projected price and a .22 volatility. The \$4.60 projected price is based on currently levels of the December 2014 Chicago Mercantile Exchange corn future contract, the contract that will be used to set the 2014 projected price. The \$4.60 price is \$1.05 lower than the 2013 projected price of \$5.65. The .22 volatility is higher than the .20 volatility for 2013. Premiums will be higher if either the projected price or volatility is higher than those used to estimate premium. The converse is true as well: premiums will be lower for a lower projected price and a lower volatility.

At an 85% coverage level, the 2013 premium is \$25.63 per acre (see Table 1). The 2014 premium is \$1.22 lower at \$24.41 per acre. At 75% and higher coverage levels, 2014 premiums are projected to be between 2 and 5 percent lower in 2014 as compared to 2013.

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**Table 1. Revenue Protection Premium and Guarantee Levels for Sangamon County, Illinois, Corn, 2013 and Projected 2014.**

Coverage Level	RP Premium <sup>1</sup>		Minimum Guarantee Level <sup>2</sup>	
	2013	2014P	2013	2014P
	\$ per acre		\$ per acre	
50%	0.80	0.80	528	430
55%	1.18	1.20	528	473
60%	1.66	1.65	581	516
65%	2.47	2.45	634	559
70%	3.65	3.65	687	602
75%	6.22	6.12	740	645
80%	12.89	12.47	792	688
85%	25.63	24.41	845	731

<sup>1</sup> Premiums are for an enterprise unit based on a 177 bushel Actual Projection History (APH) yield, 187 bushel per acre Trend Adjusted APH yield, and a 100 acre enterprise unit. For 2014 premiums, a \$4.60 projected price and .22 volatility are used.

<sup>2</sup> Minimum per acre guarantees equal Trend Adjusted APH yield x projected price x coverage level. The actual guarantee will be higher if the harvest price exceeds the projected price. Based on a 187 Trend Adjusted APH yield, The projected price for 2013 is \$5.65. A \$4.60 projected price is used for 2014.

### Guarantee Levels in 2014

The guarantee for RP equals

Trend Adjusted APH yield x higher of projected or harvest price x coverage level.

When the projected price is announced, a minimum guarantee is known.

Unless very unlikely events occur, the minimum guarantee in 2014 will be much lower than in 2013 because the 2014 projected price will be lower than the 2013 projected price. Using a 187 Trend Adjusted APH yield, and a \$4.60 price, the minimum guarantee at an 85% coverage level equals \$731 per acre (187 Trend Adjusted APH yield x \$4.60 projected price x .85). The 2013 guarantee at an 85% coverage level using the same guarantee yield is \$845 per acre. At an 85% coverage level, the 2014 guarantee is \$114 per acre lower than the 2013 guarantee.

For the Sangamon County example, farmers will have to increase their coverage levels to receive the same per acre guarantee level. For example, the 70% RP has a 2013 guarantee of \$687 per acre. To get the same guarantee level in 2014 an 80% coverage level has to be chosen, which results in a minimum guarantee is \$688 per acre (see Table 1). Similarly, an 85% coverage level in 2014 will give roughly the same guarantee as a 75% coverage level in 2013.

Farmers who purchased 80% and 85% coverage levels in 2013 will not be able to get the same per acre guarantee level in 2014. Guarantees will be lower. In 2013, 80% of the corn acres insured in Illinois were at 80 and 85% coverage levels. Hence, most acres will have lower guarantee levels in 2014 as compared to 2013.

Non-land costs for corn contained in the 2014 Illinois Crop Budgets total \$537 per acre. According to the National Agricultural Statistical Service, the average 2013 cash rent in Sangamon County is \$371 per acre. Total cost for cash rent farmland at average cash rents is \$908 per acre. The 85% guarantee level of \$731 per acre is below the total costs for cash rent farmland. In 2014, guarantee levels are below total

costs on farms with cash rent farmland.

### **Summary**

In most cases, premium levels across coverage levels will be slightly lower in 2014 as compared to 2013. Guarantee levels will be much lower and losses will occur at per acre guarantee levels offered by crop insurance. Given guarantee levels, farmers who have not purchased at the highest coverage levels should consider higher coverage levels due to lower guarantee levels.