

SUMMARY OF CHANGES FOR THE VOLATILITY FACTOR CALCULATION METHODOLOGY (27-CEPP-VF)
(Released June 2026)

The following is a brief description of changes to the Volatility Factor Calculation Methodology for the 2027 and succeeding crop years. Please refer to the Volatility Factor Calculation Methodology document below for complete information.

- The methodology document has been reformatted to align with other policy documents.
- Clarification that substitute implied volatilities may be used was added.

UNITED STATES DEPARTMENT OF AGRICULTURE
Federal Crop Insurance Corporation
Volatility Factor Calculation Methodology



The Commodity Exchange Price Provisions (CEPP) are an extension of the Common Crop Insurance Policy, Basic Provisions and the Area Risk Protection Insurance, Basic Provisions, along with the Crop Provisions.

Section I - General Information, of the CEPP contains information relevant for all applicable crops, including definitions and common policy material. Paragraph 2(k) of Section I states that for revenue protection coverage to be offered, implied volatilities must be available for an appropriate option contract. The implied volatility requirements are specified in the volatility factor calculation methodology paper on RMA's website. This document is the volatility factor calculation methodology paper referenced.

1. Overview

RMA uses a risk-implied volatility measure of price based on the Black-Scholes Model to calculate premium rates for revenue coverage. The result is that the premium rate RMA charges to lock-in a future (harvest time) price through crop insurance is equivalent to what the market charges to lock in a price using options.

Implied volatilities are adjusted to account for the time between projected and harvest price discovery periods. The RMA volatility factor for a given insurance offer is an average of time-adjusted volatility factors for the last five trading days of the projected pricing period.

2. Methodology

Determine the projected and harvest price discovery periods from the relevant CEPP Section II document. For each of the last five trading days of the projected price discovery period:

- Determine the number of days until the 16th day of the harvest price discovery period and divide that number by 365 (use 366 for leap years);
- Take the square root of the resulting quotient;
- Multiply the result by the implied volatility for the day; and
- Compute a simple average of these five values, rounded to two decimals.

3. Example

The CEPP Section II price definitions for corn state the projected price discovery period for Iowa is February 1-28 and the harvest price discovery period is October 1-31. The contract used is December corn. Example implied volatilities and resulting time-adjusted volatilities for the last five trading days of the projected price discovery period follow. In a non-leap year, for February 24, there are 234 days until October 16. The resulting adjusted volatility calculation for February 24 is:

$$0.253 \times \sqrt{\frac{234}{365}} = 0.202573$$

	Implied Volatility	Adjusted Volatilities
Feb 24	0.253	0.202573
Feb 25	0.255	0.203738
Feb 26	0.254	0.202503
Feb 27	0.260	0.206839
Feb 28	0.261	0.207185

A simple average of the five time-adjusted volatilities, rounded to two decimals results in a price volatility factor of 0.20.

4. Substitute Implied Volatilities

If appropriate implied volatilities cannot be obtained for options of the futures contract specified in the CEPP Section II price definitions, implied volatilities from substitute options may be used. Similar to substitute average daily settlement prices, the substitute implied volatilities will generally be obtained from options immediately prior to the futures contract specified in the crop's price definitions, or as otherwise determined by RMA.