2026 Kansas County-Level Corn & Soybean Yields Guide

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This document provides a guide to the 2026 Kansas County-Level Corn & Soybean Yields product.

What is in this product:

- Four maps: corn irrigated, corn dryland, soybeans irrigated, and soybeans dryland. Each county shows the estimate (bushels per acre) and, below it, the 90% range (5th to 95th percentile).
- KS_county_yield_estimates_2026_oct: the numbers behind the maps, plus the 80% and 95% ranges, FSA's 2026 benchmark yield, the estimate as a percent of the benchmark, and each county's out-of-sample accuracy record for 2019-2025.
- KS_county_yield_estimates_2026_oct_COLUMN_DEFINITIONS: what each column in the file means, in plain language (the same as the list below).

What the estimates are:

These are estimates of the official county yield FSA will use for 2026 ARC-CO payments, by practice, made with the information available on October 15, 2026 (before USDA's November 10 Crop Production report). They come from a county yield model that averages three models: two trained on FSA's official ARC-CO yields and on RMA county yield histories, and a neural network (LSTM) that reads each season half-month by half-month. Inputs include NOAA daily county weather, MODIS satellite NDVI, the U.S. Drought Monitor, NASS crop progress and condition, and NASS state yield forecasts.

How to read the ranges:

The 90% range is where the official county yield should land 9 times in 10. It comes from the model's out-of-sample misses in 2019-2025, scaled by each county's yield volatility; in those tests, 88-90% of official yields fell inside the 90% range. The Excel file also gives a 95% range (2.5th to 97.5th percentile), built the same way, which held 94-95% of official yields (in Kansas, 2,186 of 2,315 county-years). Across U.S. counties, the median miss on October 15 was 6.1% for irrigated corn, 8.4% for non-irrigated corn, 6.2% for irrigated soybeans, and 7.4% for non-irrigated soybeans. Wide ranges in western Kansas dryland counties reflect how much dryland yields there swing from year to year.

Map Notes:

Irrigated maps use FSA's irrigated rows, and dryland maps its non-irrigated rows. Where FSA publishes one yield for all acres in a county (no irrigated/dryland split), the county appears in italics on the map for its main practice, from FSA's planted acres pooled over 2012-2026 (with under 1,000 acres on record, the practice its benchmark yield is closer to). In western Kansas the single soybean yield is mostly irrigated soybeans (67 to 100% of planted acres in most of those counties), so those counties appear on the irrigated soybean map. The eastern Kansas counties are almost all dryland.

- Grey: FSA has no yield for that crop and practice in the county.
- Colors use one scale per crop, so the irrigated and dryland maps compare directly.

Kansas Totals, for context:

Weighted by acres and scaled to NASS's state-yield basis, the county estimates put Kansas at 118 bushels per acre for corn and 30.3 for soybeans, against USDA's October forecasts of 125 and 33. In 2014-2025 tests, USDA's state corn forecasts were more accurate on average than the rolled-up county estimates, so the gap is a signal to watch rather than a correction.

Product Status

Preliminary research estimates from a working paper in progress. They will be updated after USDA's November 10 Crop Production report.

Columns in the Excel file (continues on next page):

Column Name	Description
crop	Corn or soybeans
practice	Irrigated, dryland, "all acres, mostly irrigated", or "all acres, mostly dryland" (FSA publishes one yield for all acres; the map it appears on)
fips	County FIPS code
county	County name
estimate	Estimated official county yield, bushels per acre
lo80, hi80	10th and 90th percentiles (80% range)
lo90, hi90	5th and 95th percentiles (90% range, shown on the maps)
lo95, hi95	2.5th and 97.5th percentiles (95% range)
fsa_benchmark	FSA's 2026 ARC-CO benchmark yield for the county row
pct_of_benchmark	Estimate as a percent of the benchmark

irrigated_share_of_acres	For all-acres counties: irrigated percent of the crop's FSA planted acres, 2012-2026 pooled (0 or 100 where under 1,000 acres were on record and the benchmark decided)
oos_years	Years in 2019-2025 with an official yield to score this county row against (blank where FSA first split the county into irrigated and dryland rows in 2026)
oos_median_miss_pct	Median miss of the October 15 estimate for this county row in those years, percent; out of sample, each year estimated by models that did not see it
oos_years_within_10pct	How many of those years came within 10% of the official yield
oos_years_in_90_range	How many of those years' official yields fell inside the 90% range
oos_years_in_95_range	How many of those years' official yields fell inside the 95% range
benchmark_median_miss_pct	The same median miss for FSA's benchmark yield used as the estimate, a no-model comparison
ibendahl_estimate	Gregg Ibendahl's October 20, 2026 estimate for the same county and practice (AgManager.info), as published: per harvested acre, distributed from USDA's October state estimate (corn all-acres rows: his dryland and irrigated combined by his acres; soybeans only for all-acres rows, since his soybean numbers combine both practices)
diff_from_ibendahl_bu	Estimate minus ibendahl_estimate, bushels per acre; his harvested-acre basis runs about 2% above planted acres for corn this year (1 to 4 bushels) and 0.6% for soybeans
as_of	Date of the information used

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