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Kansas Farmers Have $284 Million at Risk — And $6 Diesel Could Turn Harvest Into a Cash-Flow Squeeze

Joint research finds Midwest diesel is up nearly 76% since January. If today's prices persist, Kansas farms could face roughly $189.5 million to $379.0 million in additional annualized fuel costs.

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Kansas farms face an estimated $284.3 million in additional annualized fuel costs if Midwest diesel stays near early-September levels. Diesel reached $5.946 a gallon on September 7, up $2.559 — nearly 76% — from January 5. That increase is arriving as farmers move into harvest, when combines, tractors, grain trucks and other equipment consume large amounts of fuel. Kansas farms reported $725.4 million in gasoline, fuel and oil purchases in the 2022 Census of Agriculture. Our base case assumes 75% of reconstructed farm fuel volume is economically exposed to the diesel move, producing the $284.3 million estimate; a wider reasonable range runs from $189.5 million to $379.0 million. No $284 million loss has already occurred: these are annualized gross cost-exposure scenarios, not predictions or realized losses.

WHY THE FUEL BILL IS RISING SO FAST

Oil explains only part of the move. Front-month West Texas Intermediate crude rose from $58.32 a barrel on January 5 to $96.19 on September 10 in the Bloomberg data used for this analysis. That crude increase represents roughly 90 cents per gallon of crude input, while Midwest retail diesel rose by about $2.56 per gallon. The gap points to another source of pressure between the oil field and the pump: refined-diesel markets.

One useful measure is the ULSD crack spread, which approximates how much more diesel is worth than the crude oil used to make it. In the same period, that spread widened from about $31.68 a barrel to $102.89. It is not the same thing as refinery profit, but it shows that diesel became dramatically more expensive relative to crude. Because the Gulf Coast is a major source of U.S. refined fuel, tighter refining conditions can move through pipelines, terminals and wholesalers and eventually reach farms hundreds of miles away.

WHAT THE KANSAS EXPOSURE LOOKS LIKE

Scenario	Fuel volume exposed	Added annualized cost
Low	50%	$189.5 million
Base	**75%**	**$284.3 million**
High	100%	$379.0 million

Method note: USDA reports gasoline, fuels and oils together, not diesel alone. The model therefore reconstructs roughly 148.1 million diesel-equivalent gallons and tests 50%, 75% and 100% exposure rather than assuming every dollar of the category is diesel.

WHY THIS MATTERS BEYOND THE FUEL TANK

More than 50,000 Kansas farms reported buying gasoline, fuels and oils in the latest agricultural census. At the $284.3 million base case, the statewide exposure averages roughly $5,650 per fuel-purchasing farm, but that average understates how concentrated the risk is. USDA reported 3,377 Kansas farms with fuel bills of $50,000 or more in 2022, so larger crop and livestock operations can absorb a disproportionate share of the increase.

A higher diesel bill does not automatically reduce farm profit dollar for dollar. Prepaid fuel, contracts, hedges, strong crop prices, better yields, insurance payments and operating changes can offset part of the pressure. But fuel dollars cannot also pay for equipment, repairs, hired services or debt reduction. If the increase persists without an offset, the effect can move from the farm into equipment dealers, repair shops, transport firms and other rural businesses that depend on agricultural cash flow.

THE LINE TO WATCH: At $6 diesel, the reconstructed full-volume Kansas farm fuel bill would exceed roughly $888 million on an annualized basis, while the 75% base-case increase versus January would approach $290 million. If Midwest diesel falls below roughly $4.25 before the main harvest fuel window, the modeled base-case increase falls below $100 million.

WHAT SHOULD HAPPEN NOW

This is a manageable risk if farms and agricultural businesses treat fuel as a cash-flow exposure rather than just another operating expense.

1. **Quantify the gallons that still have to be bought.** Estimate remaining harvest and post-harvest fuel needs, then separate gallons already prepaid or contracted from gallons still exposed to market prices.
2. **Stress-test the budget around the $6 level.** Re-run operating cash flow using current diesel prices and a persistence case through the main harvest window. The goal is to identify whether higher fuel costs crowd out repairs, equipment purchases, hired services or debt payments.
3. **Use price triggers instead of guessing.** Track Midwest diesel and refined-product conditions and set pre-defined procurement points. In this model, a move below roughly $4.25 materially reduces the statewide base-case exposure, while sustained prices near $6 keep the risk elevated.

Kansas farmers do not control refinery margins or global oil markets, and harvest does not wait for cheaper fuel. The practical question is how much of the crop will have to be moved with diesel near $6 a gallon. If current prices persist, a market problem that begins in oil and refining can become a roughly $284 million rural cash-flow problem.

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Source basis: U.S. Energy Information Administration Midwest No. 2 diesel prices; USDA NASS 2022 Census of Agriculture, Kansas; Bloomberg front-month WTI crude and ULSD market data. Full supporting data and methodology available on request.