

2026 Kansas County-Level Cash Rental Rates Non-Irrigated Cropland

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Purpose of these KSU Non-Irrigated Cash Rent Estimates¹

Determining cash rental rates is an important decision for nearly every farmer in the state since over 90 percent of Kansas farmers rent at least some of their farmland. Cash leases are often determined by competitive local markets, which may or may not reflect the ability of the land to support “going” market rental rates. This publication provides non-irrigated cash lease breakeven estimates that incorporate land productivity to provide renters and landowners another perspective when negotiating lease rates.

A **tenant’s residual method** is used to *estimate non-irrigated county breakeven cash rents for 2026* – incorporating county yield histories, recent grain prices, and KFMA farm expenses. These breakeven cash rent estimates can help farmland renters and owners determine equitable cash rentals rates for specific farms.

These Kansas State University estimates for 2026 county-level non-irrigated breakeven cash rental rates are found in Figures 5, 6, 7, 8, and 9 at the end of this publication. These estimates incorporate the September 2025 NASS county non-irrigated cash rental rate estimates into the model. *Based on the modeling approach used here, non-irrigated cash rents for newly rented ground are expected to: decrease by 16% in Eastern Kansas, decrease by 17% in Central Kansas, and by 22% in Western Kansas.*

Intended Use of Breakeven Cash Rental Rate Estimates

The rental rate estimates provided in this publication are intended for the **2026 crop year**. These estimates include an expectation of 2025 and 2026 farm profitability. Because the estimate is based on average yields for the county, actual lease rates could be higher or lower depending on actual yield history. Estimates are also a function of USDA-NASS cash rental rate surveys from 2025 to help smooth out the estimate – anchoring the numbers to recent cash rental rate history.

These breakeven cash rent estimates are intended to cover all expenses and not only the cash or direct cost of crop production. As such, these non-irrigated cash rental rate estimates represent what farm operators can pay and cover *full economic cost* of production with no extra profits. If a crop producer's crop yields, production costs or selling prices vary from these crop budget assumptions, then the full economic cost breakeven cash rental rate that can be paid in 2026 will vary from these estimates.

Given the assumptions involved in calculating them, it holds true that **these non-irrigated cash rental rate estimates are also NOT an endorsement for what a tenant should actually pay to a landlord.** Instead, they are provided to give a starting point in lease negotiations, with care and attention given to the yield, production cost, and price estimates that these breakeven cash rental rate estimates have used.

Any lease that a tenant and landlord willingly agree to in which they have both utilized the best information they have available to them in making a decision, is considered here to be a “fair” and/or “equitable” lease.

Changes in the Model from Last Year's 2024 Estimates.

The model is essentially unchanged since the [2023 publication](#)

Background – Estimating Farmland Cash Rental Rates

Farmers across the U.S. make extensive use of farmland leasing to provide a base of farmland for their operations. As shown in Figure 1, the median percentage of land rented is about 75% of the total cropland base on a farm (the red dashed line on the figure). There are very few crop and livestock producing farming operations in the United States that are not using at least some rented cropland and/or pasture. Note that the red line in Figure 1 shows that less than 10% of farms have no rented land. The data for Figure 1 comes from an analysis of Kansas Farm Management Association (KFMA) farm records for the last 50 years. KFMA data is also used in the estimates of expenses that help determine the county level cash rents.

Part of the reason that so many farmers lease at least a portion of their farmland is the non-depreciable nature of farmland. Not only is land not depreciable but it typically appreciates in price. It is not unusual for half or more of a farm's real net returns to occur as land

appreciation. These characteristics of farmland result in an asset that will very seldom ever cash flow (Oltmans, 1995). That is, when a farmer purchases farmland, the income provided from that land will not cover the principle and interest payments. Thus, in order for a farmer to cash flow any new farmland purchase, the income from other land is needed to cover the cash flow needs.

There are at least two main approaches of estimating cash lease rates. The first approach is based on either formal or informal surveys of what others are paying. Discussions with neighboring farmers would be a type of an informal approach. A more formal approach is a survey like the type USDA-NASS uses to estimate cash lease rates each year. The main issues with the survey approach are whether responses are accurately reported, the delay in time to collect a survey (resulting in outdated lease rates), and whether the stated lease rate is actually something a tenant can pay and still cover all cash and non-cash expenses.

A secondary issue with the USDA-NASS surveys is missing data in some counties. The USDA is required to have a certain number of responses before they can publish the data. While most counties do have publishable non-irrigated rents, there has been a trend of these underrepresented counties increasing. The situation is even worse for the reported irrigated cash rents as there are many counties with cash leased irrigated acres but no reported rental rate from the USDA.

The second approach is to estimate breakeven cash lease rates based on soil productivity and market prices. These estimation methods have the advantage of looking forward rather than just using past experience. Also, a tenant can be more certain of covering all expenses if the calculations are developed correctly. The major disadvantage is that any forward projections are uncertain, and much more information is needed in order to develop an accurate cash lease estimate.

There are at least six methods of estimating a cash lease using the productivity approach. These are: 1) Average yields; 2) Corn suitability rating; 3) Share of gross crop value or revenue; 4) Return on investment; 5) Crop share equivalent; and 6) Tenant's residual. Iowa State University Extension has a publication detailing all of these methods and approaches (Plastina and Edwards, File C2-20).

NASS has been performing surveys of producers for cash rent expenses at the state level since 1994. They also have cash rent survey for individual counties but for a much shorter timeframe. Figure 2 plots this state rental data for both irrigated and non-irrigated cropland.

Cash rental rates are correlated with farm profitability to some extent as shown by the net farm income per crop acre for western, central, and eastern Kansas. These net farm income numbers per crop acre are shown in Figure 3. Net farm income increased from 2005 until about 2013 before starting to decline. Net farm income reached a low point in 2015 but then increased every year until 2022. NFI has since declined. A visual inspection of cash rents from NASS shows more stickiness of rates likely reflecting the nature of the NASS survey (NASS asks for the rental rates for all crop rented land and not just newly rented land).

Approach

In this paper, the tenant's residual approach is used to estimate how much income the tenant has available for rent payments after subtracting all the tenant's costs associated with producing the crop. These costs include variable costs of production along with fixed costs of depreciation and interest, a charge to operator labor, and a management fee. Also needed is the expected revenue for the farm. Once all the costs have been accounted for, the remaining amount that is available is assumed to be allocated for the payment of cash rent.

All of these calculations are taken down to the per acre basis for both irrigated and non-irrigated estimates. This paper estimates the breakeven non-irrigated cash rental amount using the tenant's residual approach method on a county basis for Kansas. A future companion paper will examine irrigated cropland breakeven cash rental rates on a county basis in Kansas.

Income

To calculate gross revenue an estimate is needed of crop yields and crop prices for the county as well as an estimate of the government payments per acre. Because estimates are developed for both irrigated and non-irrigated cropland, yields need to be specified for both irrigated and non-irrigated crops. NASS used to provide this information but for the last several years, they only provide a single yield estimate per crop per county. Fortunately, the FSA does have this information by irrigated and non-irrigated crop per county. FSA also has the number of crops acres in a county.

Yields and prices and acres

Because yields are expected to generally follow a trend-line over time, the last five years of FSA yields were used to estimate the average yield per crop per year. With only 5 years of data, a true trend could not be estimated but the trend-line yield over time should not vary much from the simple average for the most recent 5-year period.

Acres and crop prices do not follow a discernible trend pattern over the last 5 years. Thus, while the last 5 years of data were used, a weighted average approach was incorporated so that more recent years had more weight. Once the gross crop revenue was calculated, the revenue per acre was calculated based on the number of crop acres. For this analysis of Kansas non-irrigated cropland, only corn, soybeans, wheat, and grain sorghum were used in the calculation.

Expenses

KFMA (Kansas Farm Management Association) crop enterprise data was used to estimate crop production expenses in this approach. Crop production expenses per crop were estimated at the Crop Reporting District (CRD) level. While KFMA has detailed whole farm numbers, the enterprise level data is limited. To get around this limitation, a similar approach to the estimate of net farm income was used (see <https://www.agmanager.info/farm-management/farm-profitability/may-2021-estimate-2021-kansas-net-farm-income-and-projection-2022>).

An entire farm's expense data from the KFMA database was used. However, these expenses were allocated to a specific crop by using the ratios of the KFMA state level enterprise summaries. This procedure not only gave an expense item per crop, but it also allows for the calculation of total non-irrigated crop expenses. Any "extra" crop acres that were not part of the four major crops were rolled into extra soybean acres when calculating a cost per acre per crop per farm.

The next step was to calculate a representative cost per crop per Kansas CRD. With nearly 1,000 KFMA farms in the KFMA database, there are adequate numbers of crop farms by CRD for these calculations to be credible. At this point the median expense per crop is calculated from those farms within that CRD. Government payments were estimated in a similar manner. As discussed above in revision section, counties along a CRD border had their crop expenses

and government payment per acre blended with the neighboring CRD by using a ratio of two-thirds weight from a county's home CRD and one-third weight from the neighboring county's CRD. This last change helped to smooth the crop expenses per acre when moving from one CRD to a neighboring CRD.

Revenue

At this point, with gross revenue per crop per acre, government payments per acre, and expenses per crop per acre, a net income per acre can be calculated for each year. Because all expenses need to be accounted for, 75% of unpaid operator labor is included as well as a 2% management charge based on gross revenue. Only 75% of unpaid operator labor is used to account for other farm activities not related to crop production. The 2% management fee is for both management and the interest charge for any machinery equity on the farm.

As discussed above, yields are a 5-year average while the rest of the inputs to the model are a weighted average. 2024 has a weight of 0.25, while the years 2023 through 2021 have weights of 0.20, 0.15 and 0.10 respectively. Although numbers don't exist for 2025 yet, an earlier estimate of 2025 net farm income is predicting a decrease in net farm income. However, the estimate for 2025 is near historical low level. There is little improvement seen in 2026 as well. This current year and future year's estimate is given a 0.30 weight. In theory, cash rents should be based on an expectation of future NFI. Here, we are making the assumption that the past 4 years (plus an estimate of this next year - and the expectations for the following years) are a guide to future NFI.

The tenant's residual per acre calculated is further adjusted by incorporating a relationship to the NASS 2025 reported county cash rent. The final per acre number is 60% of the NASS 2024 estimate and 40% of the calculated value. This residual calculation is further constrained to be no more than a 25 percent increase or decrease from the 2025 KSU estimate. The estimate is also constrained to be no more than a 40 percent increase above the NASS survey and also no less than a 25 percent decrease below the NASS survey.

The final step in estimating a tenant's residual was to adjust for land use intensity. In western Kansas, there are fallow acres and in southeast Kansas there are double crop acres. To adjust for this, all KFMA farms within a CRD are used to calculate a land use percentage by dividing the number of harvested crop acres by the total number of physical crop acres. This fraction is multiplied by the previous tenant's residual to get the final value.

Range for tenant's residual

A range of values was estimated to account for various crop yield differences within a county. Using the same mix of farms by CRD, a net farm income per crop acre was calculated. The 25th and 75th percentiles were calculated in the crop reporting district, which were then compared to the estimated tenant's residual value. These differences were used to calculate a low and high range for each county.

The calculated difference really represents two sources of variation; variation within a county and variation across counties. It was assumed that the two sources of variation were equal and thus the calculated percent difference was divided in two.

Results

Figures 5, 6, 7, and 8 show the results of estimating a potential breakeven cash rent for 2026 using a Tenant's residual method. The 2025 NASS cash rental rate survey estimate is shown along with the predicted KSU value and the potential ranges for cash rents. For comparison, the 2024 NASS estimate is also shown along with the KSU prediction from last year.

Figure 5 shows the estimated KSU cash rent for 2026 on a color-coded state map of Kansas counties. The figure is capped at the ends so any county with a predicted cash rent above \$150 per acre shows the darkest color and any county with a predicted rent below \$40 per acre shows the lightest color.

Figure 4 shows the 2025 reported NASS survey estimates of cash rental rates for the state on a color-coded map similar to Figure 5. Given that KSU values incorporate the NASS survey numbers, producers should be interested in seeing these survey results.

Discussion

Net farm income in 2024 was near historic lows for Kansas grain farms. Current estimates for 2025 and 2026 show little improvement, so it should be expected that cash rents are expected to drop for newly rented land in 2026. While these estimates are calculated with full costs in mind, tenants and landlords sometimes likely also have other economic and some non-economic considerations in mind when negotiating leases.

For example, rented cropland located adjacent to a farmer might have more value to a particular farmer just because of location. Likewise, a landlord may have developed trust in a particular tenant and adjusts rent accordingly.

Communication and full information are needed in any discussion of cropland leases. This publication has been developed to help both tenants and landlords make as fully informed decisions as possible when negotiating cash rental rate agreements for the 2025 year.

Ad hoc payments are the wildcard for the cash rent market. 2024 and 2025 saw large Ad hoc payments above the regular government payments. 2026 could also see more ad hoc payments. Should these ad hoc payments be incorporated into the cash rental rates? If the payments are truly ad hoc, then the answer would be “no”. However, if these payments become more regular then at some point both tenants and landlords will start to factor ad hoc payments into the cash rental rates.

References

Oltmans, A W. 1995. Why farmland cannot, will not and should not pay for itself. Journal of the American Society of Farm Managers and Rural Appraisers, 59(1): 57–67.

Plastina, A, and W. Edwards. 2021. “Computing a Cropland Cash Rental Rate.” File C2-20. <https://www.extension.iastate.edu/agdm/wholefarm/pdf/c2-20.pdf>

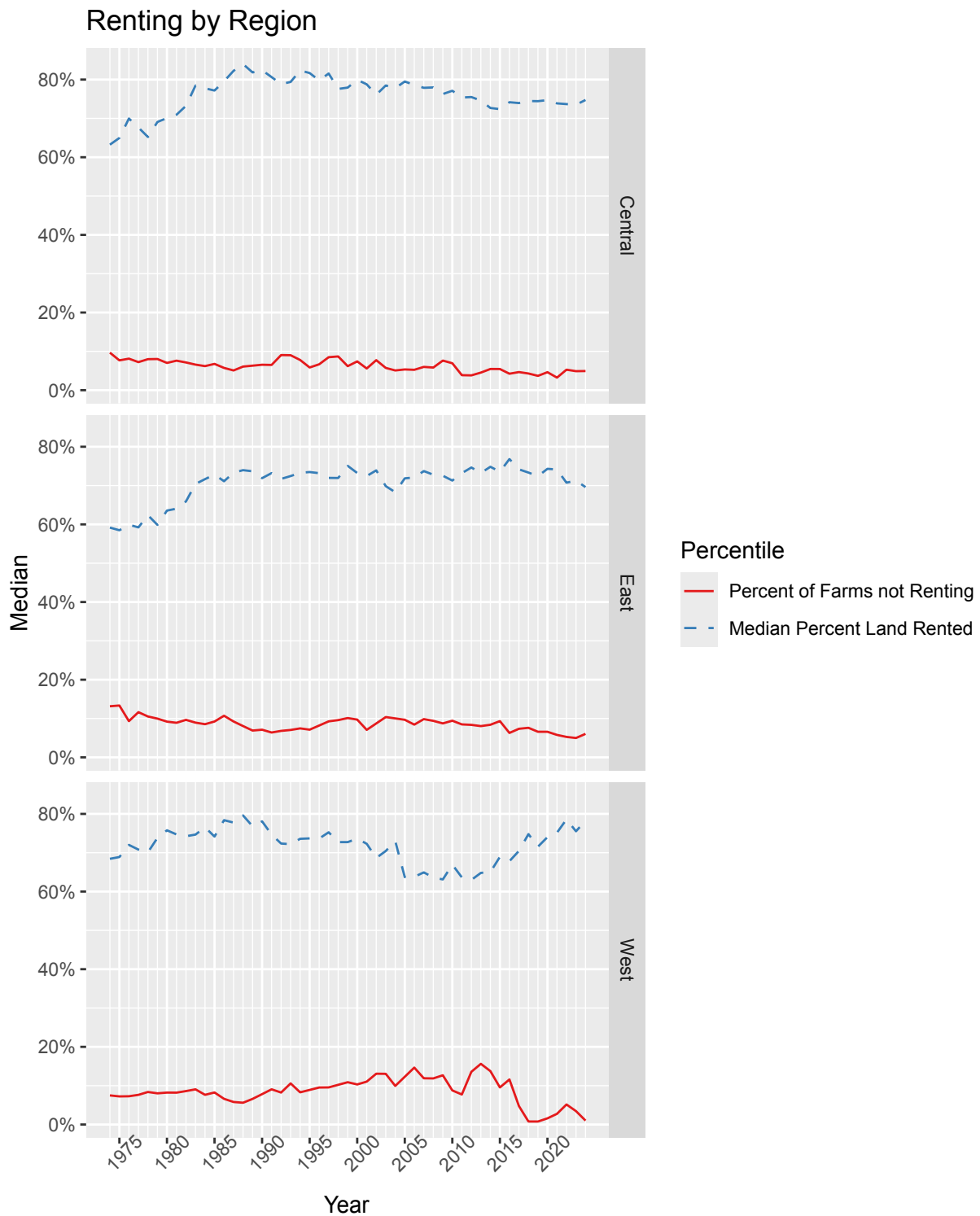


Figure 1. Percentage of Land Rented by Farm and the Percentage of Farms with no Rented Land

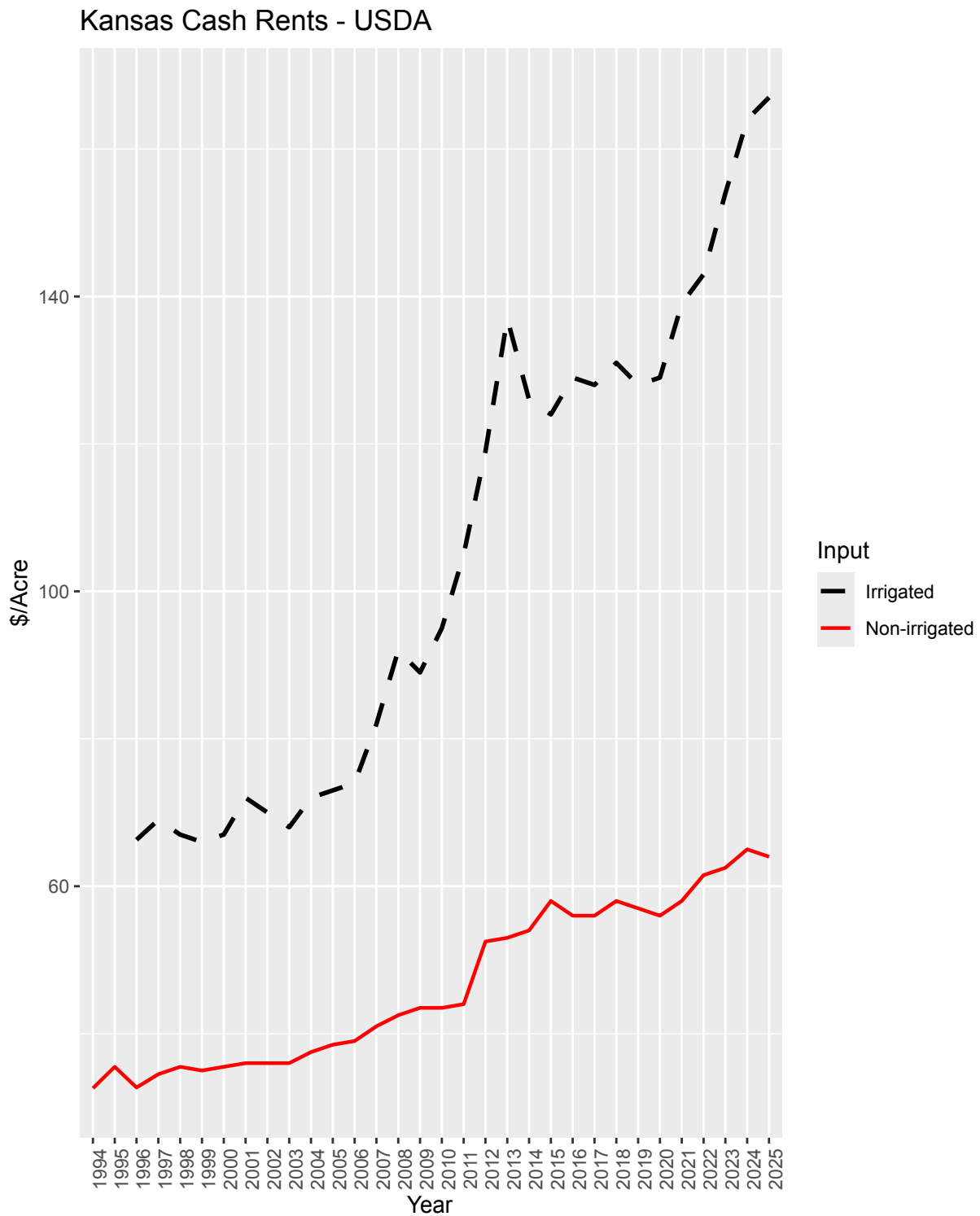


Figure 2. USDA-NASS Estimate of Kansas Irrigated and Non-Irrigated Cash Lease Rates

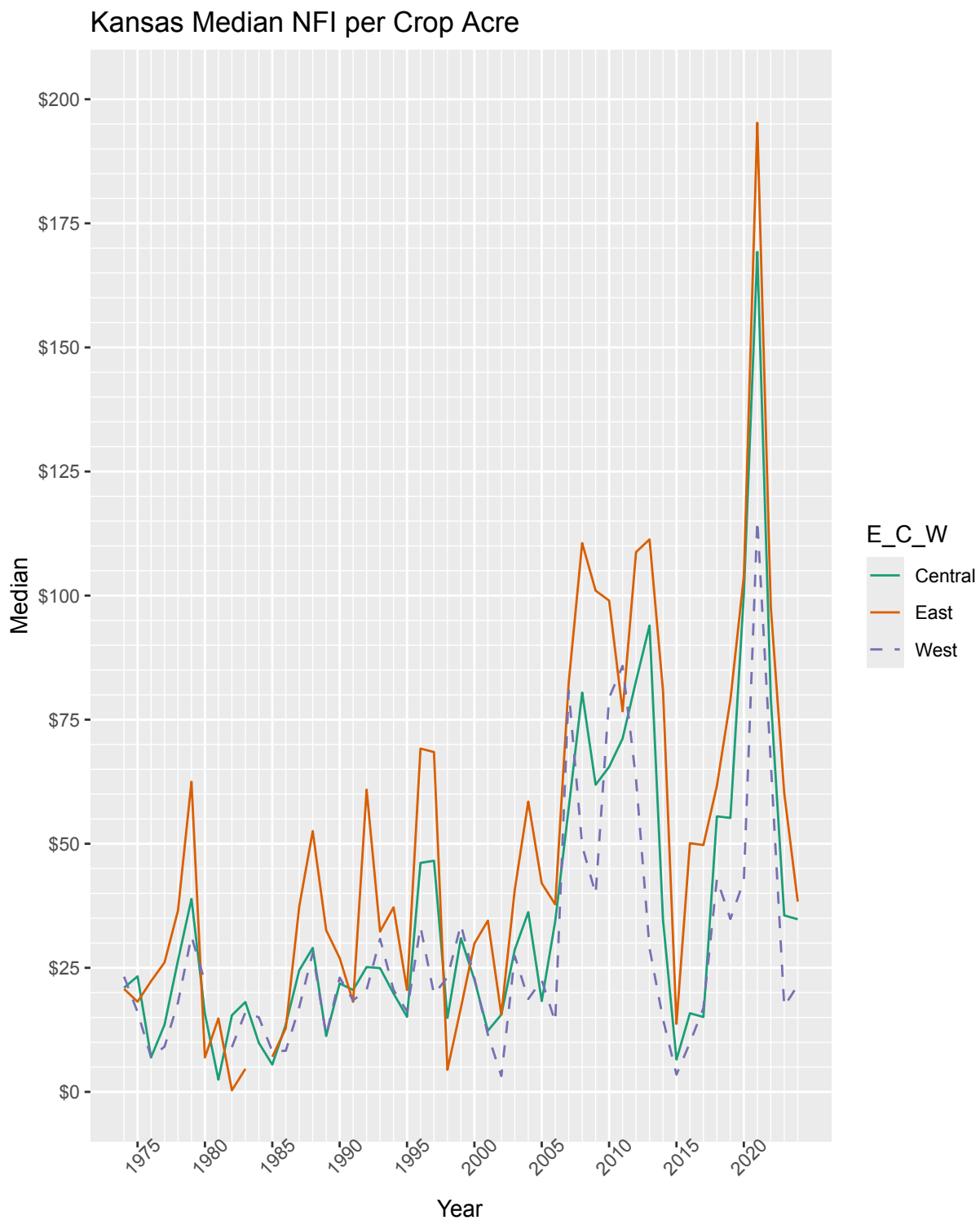


Figure 3. Median Kansas Net Farm Income per Crop Acre by Region

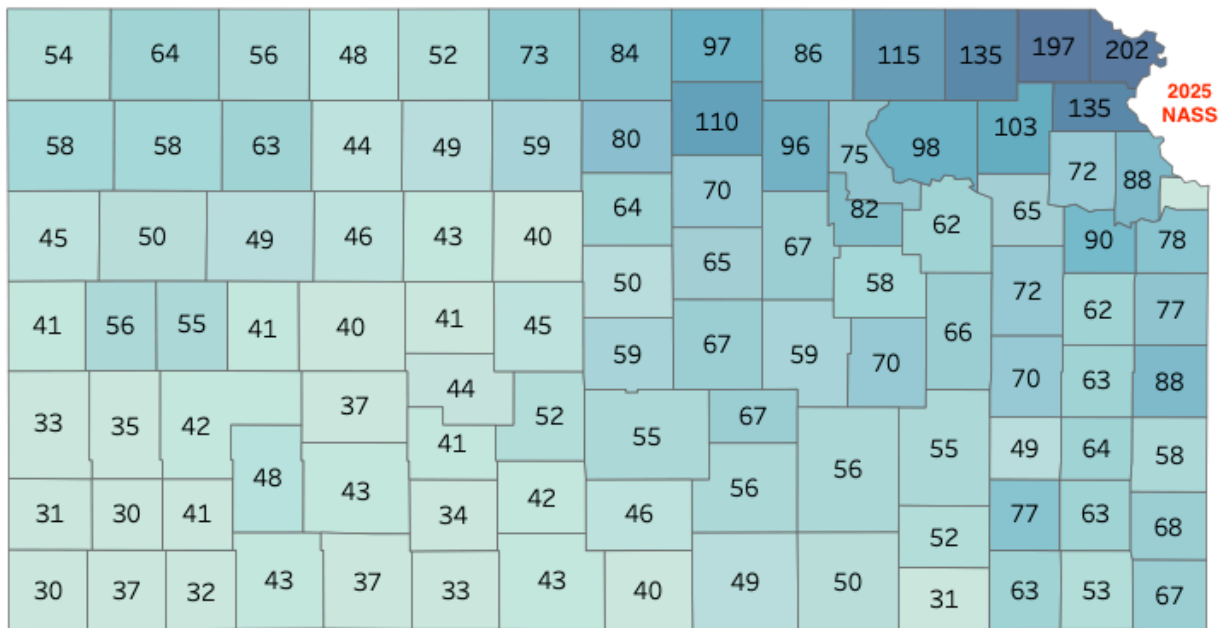


Figure 4. 2025 USDA-NASS Cash Lease Survey Results for Non-Irrigated Crop Land in Kansas. Color Code by (\$/ac).

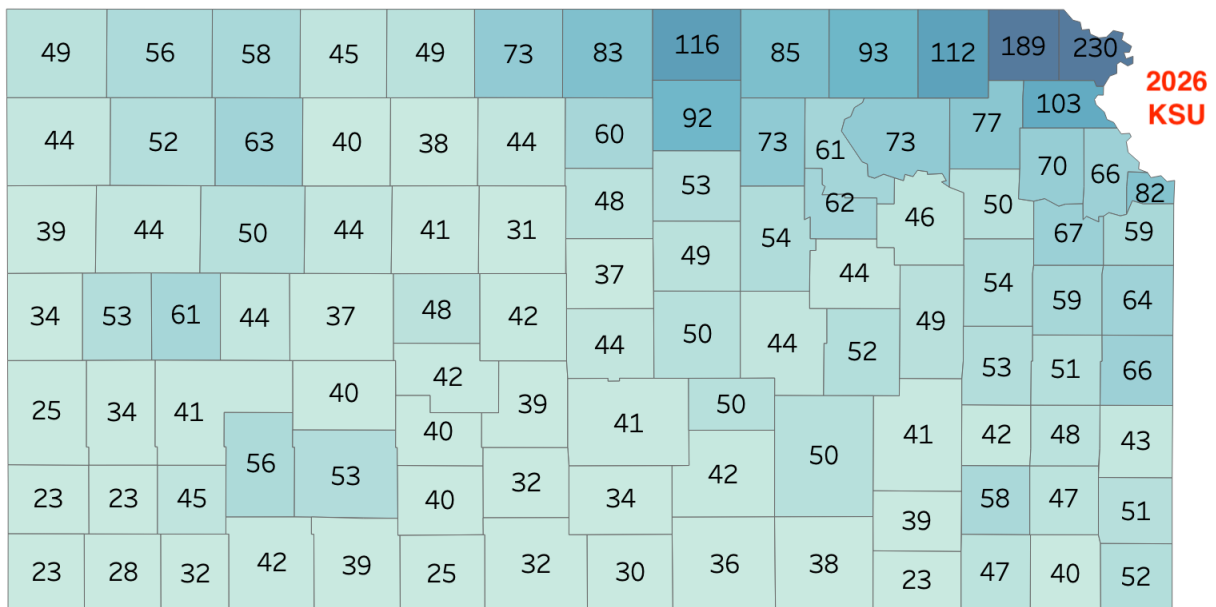


Figure 5. 2026 KSU Cash Lease Estimates for Non-Irrigated Crop Land in Kansas Using Tenant's Residual Approach. Color Coded by (\$/ac).

Region	County	2024 NASS	2025 KSU	2025 NASS	2026 KSU	25th Percentile	75th Percentile
Northwest	Cheyenne	59	63	54	49	30	69
	Decatur	65	78	56	58	36	83
	Graham	42	53	44	40	25	57
	Norton	52	60	48	45	28	64
	Rawlins	67	74	64	56	35	79
	Sheridan	60	82	63	63	40	90
	Sherman	62	56	58	44	27	62
	Thomas	67	69	58	52	32	73
West Central	Gove	51	66	49	50	32	68
	Greeley	43	45	41	34	22	46
	Lane	42	59	41	44	28	60
	Logan	46	56	50	44	28	60
	Ness	37	50	40	37	24	50
	Scott	65	81	55	61	39	82
	Trego	35	49	46	44	28	60
	Wallace	45	53	45	39	25	53
	Wichita	57	70	56	53	34	72
Southwest	Clark	35	47	37	39	28	48
	Finney	45	55	42	41	29	50
	Ford	45	61	43	53	38	65
	Grant	31	30	30	23	20	28
	Gray	54	75	48	56	40	68
	Hamilton	33	33	33	25	20	30
	Haskell	43	60	41	45	32	55
	Hodgeman	36	50	37	40	28	49
	Kearny	34	46	35	34	24	42
	Meade	46	55	43	42	30	51
	Morton	31	24	30	23	20	27
	Seward	35	43	32	32	23	39
	Stanton	33	30	31	23	20	28
	Stevens	33	25	37	28	20	34

Figure 6. Estimated Cash Rental Rates for Non-Irrigated Cropland in Western Kansas

Region	County	2024 NASS	2025 KSU	2025 NASS	2026 KSU	25th Percentile	75th Percentile
North Central	Clay	94	98	96	73	62	85
	Cloud	102	114	110	92	77	106
	Jewell	81	106	84	83	70	97
	Mitchell	76	79	80	60	50	70
	Osborne	51	54	59	44	37	51
	Ottawa	70	71	70	53	45	62
	Phillips	52	65	52	49	41	57
	Republic	96	134	97	116	98	135
	Rooks	43	51	49	38	32	44
	Smith	82	97	73	73	61	84
	Washington	83	113	86	85	71	99
Central	Barton	53	56	45	42	34	51
	Dickinson	76	72	67	54	43	66
	Ellis	42	54	43	41	33	50
	Ellsworth	54	49	50	37	30	46
	Lincoln	67	63	64	48	38	58
	Marion	59	47	59	44	35	54
	McPherson	74	56	67	50	40	62
	Rice	60	53	59	44	35	54
	Rush	46	64	41	48	39	59
	Russell	42	42	40	31	25	38
	Saline	67	54	65	49	39	60
South Central	Barber	48	36	43	32	26	40
	Comanche	32	26	33	25	20	31
	Edwards	45	53	41	40	33	50
	Harper	41	32	40	30	24	37
	Harvey	68	56	67	50	41	62
	Kingman	48	36	46	34	28	43
	Kiowa	39	54	34	40	33	51
	Pawnee	41	56	44	42	34	52
	Pratt	50	39	42	32	26	39
	Reno	58	43	55	41	34	51
	Sedgwick	51	38	56	42	35	53
	Stafford	47	36	52	39	32	48
	Sumner	53	44	49	36	30	45

Figure 7. Estimated Cash Rental Rates for Non-Irrigated Cropland in Central Kansas

Region	County	2024 NASS	2025 KSU	2025 NASS	2026 KSU	25th Percentile	75th Percentile
Northeast	Atchison	126	131	135	103	80	132
	Brown	206	211	197	189	146	242
	Doniphan	194	247	202	230	178	295
	Jackson	93	85	103	77	60	99
	Jefferson	80	90	72	70	54	89
	Leavenworth	82	70	88	66	51	85
	Marshall	125	123	115	93	72	119
	Nemaha	150	140	135	112	87	144
	Pottawatomie	94	87	98	73	57	94
	Riley	83	82	75	61	47	78
	Wyandotte	0	109	0	82	63	105
East Central	Anderson	71	68	63	51	41	61
	Chase	67	62	70	52	41	62
	Coffey	65	58	70	53	42	63
	Douglas	84	77	90	67	53	80
	Franklin	71	79	62	59	47	71
	Geary	76	82	82	62	49	74
	Johnson	66	60	78	59	47	70
	Linn	82	69	88	66	53	79
	Lyon	75	58	66	49	39	59
	Miami	87	86	77	64	51	77
	Morris	57	56	58	44	35	52
	Osage	68	57	72	54	43	64
	Shawnee	72	67	65	50	40	60
	Wabaunsee	65	62	62	46	37	55
Southeast	Allen	66	61	64	48	35	63
	Bourbon	61	56	58	43	31	57
	Butler	53	66	56	50	36	66
	Chautauqua	39	30	31	23	20	30
	Cherokee	60	68	67	52	38	69
	Cowley	62	47	50	38	27	50
	Crawford	57	59	68	51	37	67
	Elk	52	39	52	39	28	51
	Greenwood	48	44	55	41	30	55
	Labette	51	41	53	40	29	53
	Montgomery	71	53	63	47	34	63
	Neosho	55	47	63	47	34	63
	Wilson	77	67	77	58	42	77
	Woodson	54	56	49	42	31	56

Figure 8. Estimated Cash Rental Rates for Non-Irrigated Cropland in Eastern Kansas

		KSU	NASS
EAST	Northeast	107	122
	East Central	55	71
	Southeast	44	57
CENTRAL	North Central	70	78
	Central	44	54
	South Central	37	46
WEST	Northwest	51	56
	West Central	45	47
	Southwest	36	37

Figure 9. Comparison of KSU and NASS Estimates for Non-Irrigated Cropland by CRD

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