

2015 Kansas County-Level Land Values for Cropland and Pasture

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The value of Kansas cropland and pasture land has been changing rapidly over the past several years. As a result, many people are interested in current estimates of the value of an average parcel of ground for their county. Since Kansas is a non-disclosure state, there is very little publicly available information people may use for determining county-average land values.

In an attempt to improve the amount of land value information available, the Kansas Property Valuation Department (PVD) provides K-State with data on agricultural land sales.¹ These data reflect agricultural land sales in Kansas from 2010 through 2015. To obtain estimates that reflect land sold for agricultural purposes in an “arm’s-length” transaction, some observations were removed from the original dataset.² The sales data used in the analysis were limited to bare land (undeveloped) parcels of at least 35 acres in size. These filtered data were used in a regression analysis to estimate county-specific land (non-irrigated, irrigated, and pasture) values, referred to as KSU-PVD. The land-value model used characteristics of the parcels sold to determine impacts on price. Characteristics such as parcel size, soil quality rating, percent of pasture and cropland within a parcel, and when a parcel was sold were all used to estimate county-level land values.

The county-level estimates and the average for each of the Crop Reporting Districts (CRD) are shown in Table 1, where the CRD average is a simple average of the counties that fall within the region. Table 2 provides a comparison between the 2014 estimates using PVD data and the 2015 land value estimates at the CRD level. Land values rose between 2014 and 2015 for all the CRDs in the state, with the largest dollar per acre increase in the North Central district for irrigated land. Statewide, non-irrigated land increased by 4.7% between 2014 and 2015. Irrigated cropland across the state also increased by 4.7% between 2014 and 2015, while pasture increased by 10.5% during the same period. These increases are relatively flat as compared to the year-over-year increases between 2013 and 2014.

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² “Arm’s-length” refers to land sold through typical market channels and does not include intra-family transactions, court-ordered sales, or other transactions that may keep the sale from being considered a market-based transaction.

Irrigated cropland values are not reported for all counties. For statistical accuracy of the county-level estimates, a minimum number of land sales must be observed in a county. Counties with less than 4 observed sales of irrigated land over the period 2012 to 2015 are not presented in the table. As a result, irrigated land values at the CRD level are not reported for the three Eastern regions of the state.

Another source of land value data are from the U.S. Department of Agriculture’s National Agricultural Statistics Service (USDA-NASS), who report state average values for irrigated, non-irrigated, and pasture land. These values are based upon an annual survey of agricultural producers and landowners asking for their estimate of the market value of cropland and pasture land they own or operate. Figure 1 shows the state-level estimates of land values from USDA-NASS versus the KSU-PVD estimates for pasture, non-irrigated, and irrigated land between 2010 and 2015. The USDA-NASS land values estimates are consistently lower than the market-based KSU-PVD estimates. The reason for this difference may be due to USDA-NASS survey respondents not being fully aware of how much land values have changed over the past several years.

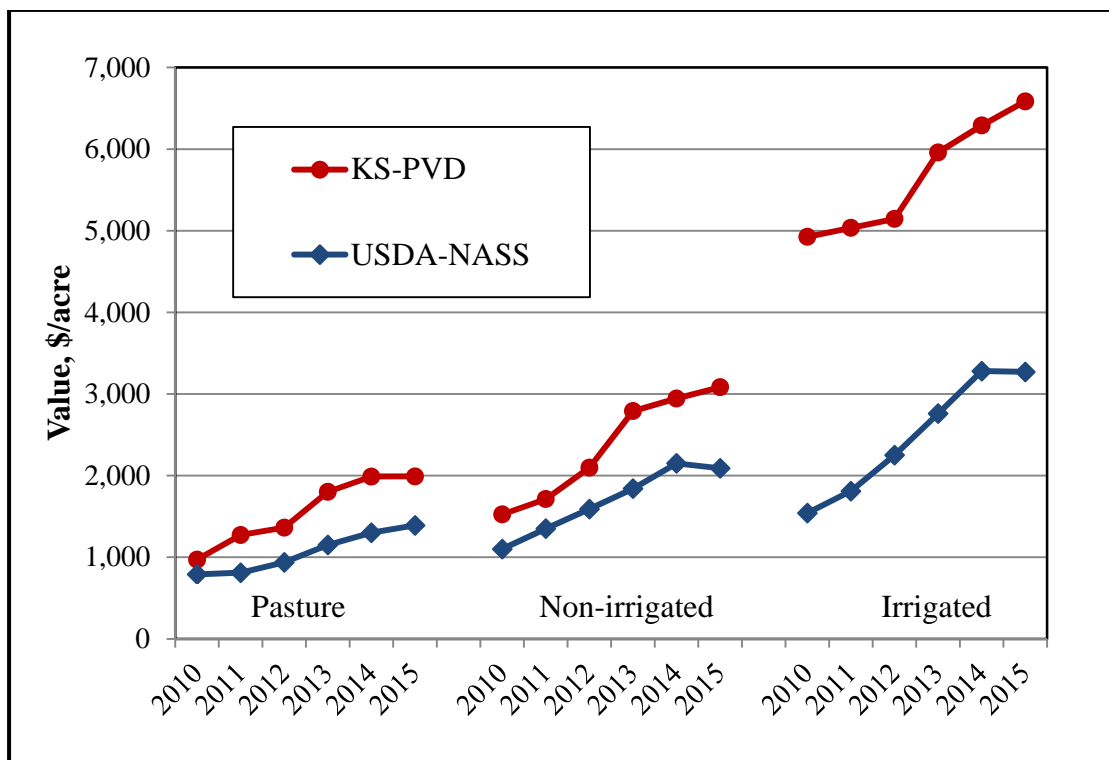


Figure 1. Average Kansas Land Values and Percent Differences between KSU-PVD Estimates and USDA-NASS Estimates (2010 – 2015)

Table 1. Estimated Agricultural Land Values for 2015 using PVD Land Sales Data

		Non-Irrigated,	Irrigated,	Pasture,			Non-Irrigated,	Irrigated,	Pasture,			Non-Irrigated,	Irrigated,	Pasture,				
CRD	County	\$/ac	\$/ac	\$/ac	CRD	County	\$/ac	\$/ac	\$/ac	CRD	County	\$/ac	\$/ac	\$/ac				
Northwest	Cheyenne	1,177	--	759	North	Clay	4,545	11,055	2,934	Northeast	Atchison	4,833	--	3,119				
	Decatur	2,480	6,031	1,600		Central	Cloud	3,454	8,402		2,229	Brown	6,301	--	4,066			
	Graham	2,054	--	1,326			Jewell	2,508	--		1,619	Doniphan	5,298	--	3,419			
	Norton	2,894	7,039	1,868			Mitchell	2,594	6,308		1,674	Jackson	4,882	--	3,151			
	Rawlins	1,995	4,853	1,288			Osborne	1,631	3,966		1,052	Jefferson	4,164	--	2,687			
	Sheridan	3,192	7,765	2,060			Ottawa	3,605	--		2,327	Leavenworth	7,170	--	4,628			
	Sherman	2,766	6,728	1,785			Phillips	2,212	--		1,427	Marshall	5,651	--	3,647			
	Thomas	3,559	8,655	2,297			Republic	4,510	10,970		2,911	Nemaha	3,957	--	2,554			
				Rooks	1,502		--	970	Pottawatomie	4,185	--	2,701						
				Smith	3,129	7,610	2,019	Riley	4,736	--	3,056							
				Washington	3,836	--	2,476	Wyandotte	--	--	--							
	Average:	2,515	6,845	1,623		Average:	3,048	8,052	1,967		Average:	5,118		3,303				
West	Gove	1,451	3,529	937	Central	Barton	2,660	6,471	1,717	East	Anderson	3,208	--	2,071				
Central	Greeley	2,767	6,729	1,786		Dickinson	4,446	--	2,869		Central	Chase	2,586	--	1,669			
	Lane	2,031	4,940	1,311		Ellis	2,495	--	1,611			Coffey	3,652	--	2,357			
	Logan	1,666	4,052	1,075		Ellsworth	1,222	--	789			Douglas	6,577	--	4,244			
	Ness	2,119	--	1,367		Lincoln	2,906	--	1,876			Franklin	5,176	--	3,340			
	Scott	2,318	5,637	1,496		Marion	3,596	--	2,321			Geary	3,324	--	2,145			
	Trego	2,667	--	1,722		McPherson	3,973	9,663	2,564			Johnson	--	--	--			
	Wallace	1,953	4,751	1,261		Rice	2,986	7,263	1,927			Linn	4,302	--	2,776			
	Wichita	2,218	5,395	1,432		Rush	1,582	--	1,021			Lyon	3,719	--	2,400			
						Russell	2,623	--	1,693			Miami	7,496	--	4,838			
						Saline	4,597	--	2,967			Morris	2,587	--	1,670			
								Osage	3,828	--		2,471						
								Shawnee	4,512	--	2,912							
								Wabaunsee	2,868	--	1,851							
	Average:	2,132	5,005	1,376		Average:	3,008	7,799	1,941		Average:	4,141		2,673				
Southwest	Clark	2,439	--	1,574	South	Barber	1,654	--	1,068	Southeast	Allen	3,034	--	1,958				
	Finney	1,354	3,293	874		Central	Comanche	628	--		405	Bourbon	3,710	--	2,394			
	Ford	2,310	5,620	1,491			Edwards	3,460	8,416		2,233	Butler	5,005	--	3,230			
	Grant	1,849	4,497	1,193			Harper	3,466	--		2,237	Chautauqua	2,430	--	1,569			
	Gray	1,966	4,781	1,269			Harvey	4,585	11,151		2,959	Cherokee	3,677	--	2,373			
	Hamilton	1,341	3,261	865			Kingman	3,206	--		2,069	Cowley	2,430	--	1,568			
	Haskell	2,065	5,023	1,333			Kiowa	1,816	4,417		1,172	Crawford	3,023	--	1,951			
	Hodgeman	1,505	--	971			Pawnee	2,831	6,885		1,827	Elk	2,583	--	1,667			
	Kearny	1,392	3,386	899			Pratt	2,445	5,948		1,578	Greenwood	3,212	--	2,073			
	Meade	1,976	4,807	1,275			Reno	2,985	7,261		1,927	Labette	3,366	--	2,173			
	Morton	1,029	2,503	664			Sedgwick	5,552	13,505		3,583	Montgomery	3,190	--	2,059			
	Seward	1,406	3,419	907			Stafford	2,609	6,346		1,684	Neosho	3,291	--	2,124			
	Stanton	1,078	2,623	696			Sumner	2,628	--		1,696	Wilson	2,801	--	1,808			
	Stevens	1,058	2,573	683								Woodson	3,717	--	2,399			
		Average:	1,626	3,815			1,050		Average:		2,913	7,991	1,880		Average:	3,248		2,096

Note: Missing estimates for land value are due to insufficient observations of land sales (less than four individual sales).

Table 2. Estimated Average Land Values by Crop Reporting District, 2014-2015

	Crop Reporting District									State
	West			North		South	East			
	Northwest	Central	Southwest	Central	Central	Central	Northeast	Central	Southeast	
Non-Irrigated										
2014	2,402	2,037	1,553	2,911	2,873	2,782	4,888	3,956	3,102	2,945
2015	2,515	2,132	1,626	3,048	3,008	2,913	5,118	4,141	3,248	3,083
Difference, \$/ac	113	95	73	137	135	130	229	185	145	138
Difference, %										4.7
Irrigated										
2014	6,539	4,781	3,645	7,691	7,449	7,633	--	--	--	6,290
2015	6,845	5,005	3,815	8,052	7,799	7,991	--	--	--	6,585
Difference, \$/ac	307	224	171	361	349	358	--	--	--	295
Difference, %										4.7
Pasture										
2014	1,469	1,246	950	1,780	1,757	1,701	2,989	2,419	1,897	1,801
2015	1,623	1,376	1,050	1,967	1,941	1,880	3,303	2,673	2,096	1,990
Difference, \$/ac	154	131	100	187	184	178	313	254	199	189
Difference, %										10.5