

2014 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 2014. 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 40 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 KS-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 2013 estimates using PVD data and the 2014 land value estimates at the CRD level. Land values rose between 2013 and 2014 for all the CRDs in the state, with the largest dollar per acre increase in the Northwest district for irrigated land. Statewide, non-irrigated land increased by 6.2% between 2013 and 2014. Irrigated cropland across the state increased by 9.0% between 2013 and 2014, while pasture increased by 10.2% during the same period.

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

¹ The author would like to thank Leah Tsoodle (Kansas State University) and Mike Dahlman (Property Valuation Department) and others for their assistance with data collection and interpretation.

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.

with less than 10 observed sales of irrigated land are not presented in the table. As a result, irrigated land values at the CRD level are only reported for the three Western regions and the South-Central region.

Another source of land value data are from the National Agricultural Statistics Service of the U.S. Department of Agriculture (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 displays the state-level estimates of land values from USDA-NASS versus the KS-PVD estimates for pasture, non-irrigated, and irrigated land between 2010 and 2014. The values shown in Figure 1 are listed in Table 3. The USDA-NASS land values estimates are consistently lower than the market-based KS-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.

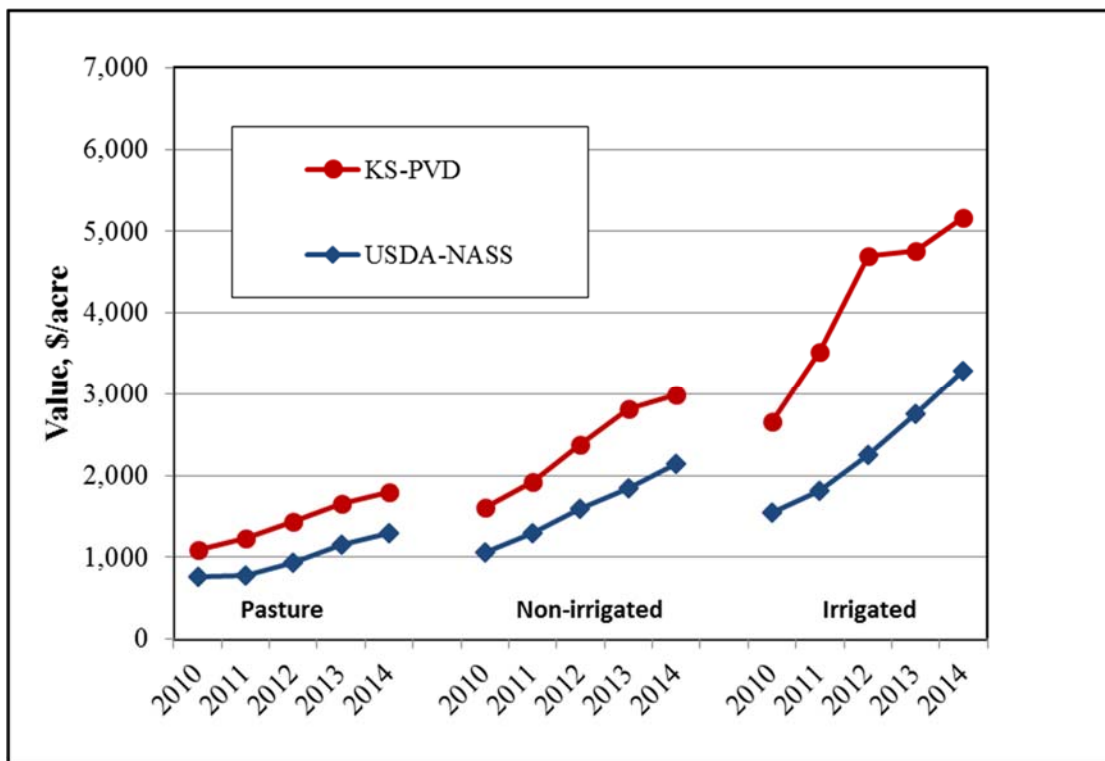


Figure 1. Average Kansas Land Values and Percent Differences between KS-PVD Estimates and USDA-NASS Estimates (2010 – 2014)

Table 1. Estimated Agricultural Land Values for 2014 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	1,752	--	1,056	North	Clay	4,741	--	2,858	Northeast	Atchison	4,883	--	2,944			
	Decatur	2,433	--	1,467		Central	Cloud	4,445	--		2,680	Brown	6,600	--	3,980		
	Graham	1,645	--	992			Jewell	3,449	--		2,080	Doniphan	6,300	--	3,798		
	Norton	2,547	--	1,535			Mitchell	2,610	--		1,573	Jackson	4,089	--	2,465		
	Rawlins	2,088	--	1,259			Osborne	2,248	--		1,356	Jefferson	4,578	--	2,760		
	Sheridan	2,596	--	1,565			Ottawa	2,859	--		1,724	Leavenworth	5,716	--	3,446		
	Sherman	2,130	4,790	1,284			Phillips	2,002	--		1,207	Marshall	5,399	--	3,255		
	Thomas	3,180	7,151	1,917			Republic	4,846	--		2,922	Nemaha	5,259	--	3,170		
				Rooks	1,640		--	989	Pottawatomie	3,823	--	2,305					
				Smith	2,662	--	1,605	Riley	4,687	--	2,826						
				Washington	4,131	--	2,491	Wyandotte	--	--	--						
	Average:	2,296	5,970	1,385		Average:	3,239	1,953		Average:	5,133	3,095					
West	Gove	1,862	--	1,123	Central	Barton	2,766	--	1,668	East	Anderson	2,953	--	1,780			
Central	Greeley	2,051	--	1,236		Dickinson	3,695	--	2,228		Central	Chase	2,522	--	1,520		
	Lane	2,088	--	1,259		Ellis	2,999	--	1,808			Coffey	3,143	--	1,895		
	Logan	2,177	--	1,312		Ellsworth	1,281	--	772			Douglas	6,640	--	4,003		
	Ness	1,780	--	1,073		Lincoln	2,403	--	1,449			Franklin	4,480	--	2,701		
	Scott	2,773	--	1,672		Marian	3,399	--	2,050			Geary	2,739	--	1,651		
	Trego	1,862	--	1,123		McPherson	3,527	--	2,126			Johnson	--	--	--		
	Wallace	1,544	--	931		Rice	2,659	--	1,603			Linn	3,424	--	2,064		
	Wichita	2,407	5,413	1,451	Rush	1,497	--	903	Lyon	2,989		--	1,802				
				Russell	2,427	--	1,464	Miami	7,319	--	4,413						
				Saline	4,418	--	2,664	Morris	2,617	--	1,578						
								Osage	3,358	--	2,025						
								Shawnee	4,856	--	2,928						
								Wabaunsee	3,509	--	2,116						
	Average:	2,060	5,413	1,242		Average:	2,825	1,703		Average:	3,888	2,344					
Southwest	Clark	1,941	--	1,170	South	Barber	3,192	--	1,924	Southeast	Allen	4,419	--	2,665			
	Finney	1,719	3,866	1,037		Central	Comanche	2,124	--		1,281	Bourbon	2,971	--	1,791		
	Ford	2,386	5,367	1,439			Edwards	2,515	5,655		1,516	Butler	4,308	--	2,597		
	Grant	1,268	2,852	765			Harper	2,900	--		1,749	Chautauqua	2,622	--	1,581		
	Gray	1,806	4,062	1,089			Harvey	3,787	8,517		2,284	Cherokee	3,105	--	1,872		
	Hamilton	1,218	--	734			Kingman	2,717	--		1,638	Cowley	2,758	--	1,663		
	Haskell	1,555	3,496	937			Kiowa	1,937	--		1,168	Crawford	2,722	--	1,641		
	Hodgeman	1,526	--	920			Pawnee	2,420	5,443		1,459	Elk	2,793	--	1,684		
	Kearny	1,313	--	792			Pratt	2,219	4,990		1,338	Greenwood	3,149	--	1,899		
	Meade	1,491	--	899			Reno	2,745	6,173		1,655	Labette	3,247	--	1,958		
	Morton	1,057	--	637			Sedgwick	5,270	--		3,178	Mongtomery	2,795	--	1,685		
	Seward	1,270	2,855	765			Stafford	2,342	5,266		1,412	Neosho	3,098	--	1,868		
	Stanton	1,000	2,248	603			Sumner	2,909	--		1,754	Wilson	2,802	--	1,689		
	Stevens	1,052	2,366	634								Woodson	3,168	--	1,910		
		Average:	1,472	3,389			887		Average:		2,852	6,008	1,720		Average:	3,140	1,893

Note: Missing estimates for land value are due to insufficient observations of land sales.

Table 2. Estimated Average Land Values by Crop Reporting District, 2013-2014

	Crop Reporting District									State
	Northwest	West Central	Southwest	North Central	Central	South Central	Northeast	East Central	Southeast	
Non-Irrigated										
2013	2,168	1,945	1,389	3,058	2,667	2,693	4,847	3,671	2,964	2,822
2014	2,296	2,060	1,472	3,239	2,825	2,852	5,133	3,888	3,140	2,990
Difference, \$/ac	128	115	82	181	158	159	287	217	175	167
Difference, %	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Irrigated										
2013	5,500	4,987	3,025	--	--	5,534	--	--	--	4,761
2014	5,970	5,413	3,284	--	--	6,008	--	--	--	5,169
Difference, \$/ac	471	427	259	--	--	474	--	--	--	407
Difference, %	8.6	8.6	8.6	--	--	8.6	--	--	--	8.6
Pasture										
2013	1,274	1,143	816	1,797	1,567	1,582	2,848	2,157	1,742	1,658
2014	1,385	1,242	887	1,953	1,703	1,720	3,095	2,344	1,893	1,802
Difference, \$/ac	111	99	71	156	136	137	247	187	151	144
Difference, %	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7

Table 3. Estimated Average Land Values by Type for Kansas, 2010-2014

Year	Non-Irrigated	Irrigated	All Agricultural	
	Cropland	Cropland	Pastureland	Land
2010	1,608	2,660	1,092	1,787
2011	1,920	3,526	1,238	2,228
2012	2,381	4,706	1,437	2,841
2013	2,822	4,761	1,658	3,080
2014	2,990	5,169	1,802	3,320