



2011 Kansas Land Values and Cash Rents at the County Level

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Producers, landowners, lenders, appraisers, and others in agribusiness regularly request information pertaining to land values and cash rents at the county level (and even more localized levels in some cases). However, there is limited availability of publically reported price data at the county level for Kansas. Historically, the Kansas Field Office of the USDA National Agricultural Statistics Service (USDA NASS), also known as Kansas Agricultural Statistics (KAS), conducted an annual land survey and reported land values at the crop reporting district (CRD) level in Kansas. Recent budget reductions caused the district-level survey to be discontinued in 2011. Therefore, only state-level land values were reported in 2011. District-level land values were estimated based on year-to-year changes in the state value and historical relationships between district and state values. Starting in 2008, KAS began surveying cash rents at the county level in addition to the CRD level. This paper reports KAS county-level values for cash rents and our estimates of county-level land values. The county-level land values are calculated using our estimated CRD land values. Table 1 shows the 2011 CRD-level land values and statewide cash rents for both non-irrigated cropland and pasture as reported by KAS (cash rents and State land values) or estimated by us (CRD land values). Figure 1 shows the geographical regions for the different CRD regions.

Table 1. Kansas Crop Reporting District-Level Agricultural Land Values and Cash Rents.^a

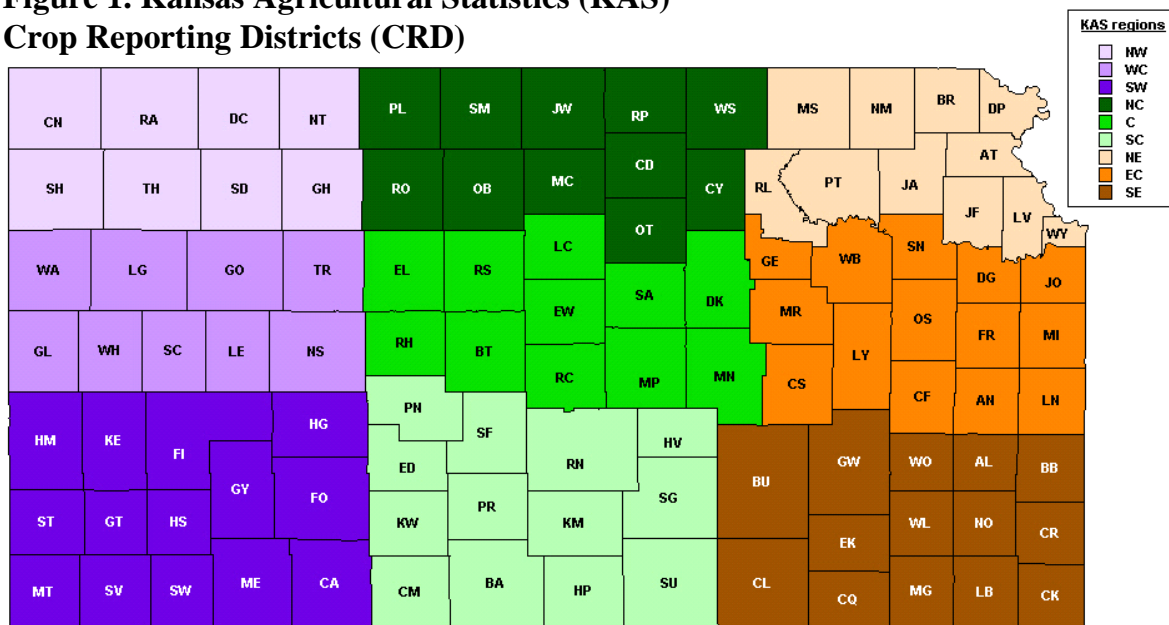
| Region (CRD) | Non-irrigated Cropland | | Pasture | |
|--------------------|------------------------|-------------|--------------|-------------|
| | Value, \$/ac | Rent, \$/ac | Value, \$/ac | Rent, \$/ac |
| Northwest (NW) | 820 | 37.00 | 416 | 12.50 |
| West Central (WC) | 767 | 33.00 | 453 | 11.50 |
| Southwest (SW) | 755 | 30.50 | 373 | 9.60 |
| North Central (NC) | 1,233 | 47.50 | 679 | 18.50 |
| Central (C) | 1,307 | 40.00 | 783 | 16.50 |
| South Central (SC) | 1,261 | 38.50 | 746 | 12.00 |
| Northeast (NE) | 2,104 | 84.50 | 1,226 | 21.50 |
| East Central (EC) | 2,249 | 48.50 | 1,343 | 21.00 |
| Southeast (SE) | 1,486 | 41.50 | 1,063 | 18.00 |
| State | 1,250 | 44.00 | 810 | 16.00 |

^a Values are from Kansas Agricultural Statistics, *Agricultural Land Values & Cash Rents*, September 12, 2011 (available at http://www.nass.usda.gov/Statistics_by_State/Kansas/index.asp).

Although KAS surveys landowners and producers in every county of the state regarding their perceptions of land values, its sampling procedure is not designed to be statistically valid at the

county or CRD level (requiring a much larger sample size). Thus, the information presented in Table 1 for the state average is currently the only statistically valid information on land values that are reported on an annual basis and timely enough for this publication. Cash rents on the other hand are reported at the county-level for most counties for non-irrigated crop land and pasture land and this information is reported in Table 2. Additional information pertaining to the KAS land values survey and reports for previous years can be found at the Kansas Agricultural Statistics website (<http://www.nass.usda.gov/ks/>). The most recent 20 years of land values and cash rents reported by KAS are also summarized in *Kansas Land Prices and Cash Rental Rates* (MF-1100) available at www.agmanager.info.

Figure 1. Kansas Agricultural Statistics (KAS) Crop Reporting Districts (CRD)



Figures 2-5 on the following pages show the CRD-level land values and cash rents for non-irrigated cropland and pasture reported in Table 1 prorated to the county level (specific values displayed on the maps are also reported in Table 2). In order to prorate the estimated CRD-level land values to the county level (Figures 2 and 4), several pieces of information were required in addition to the CRD-level values. First, some measure of county-to-county variation is required, and second, a measure of acres in each county is needed. Information on county-level land values (average for the years 2005 through 2007) from the state Farm Service Agency (FSA) Land Value Survey (LVS) was used to index county-to-county variation.¹ After a county index was calculated, it was weighted to reflect the acres of non-irrigated cropland or pasture in that particular county relative to the CRD as a whole. The acreage weights were based on acres reported for each county in the 2007 Census of Agriculture (USDA NASS). The acreage-weighted indices were then multiplied by the CRD averages reported in Table 1 to give the county level values shown in Figures 2 and 4. Thus, the values displayed in Figures 2 and 4, when multiplied by the respective acreage-based weights and summed, will exactly equal our

¹ Methods of eliciting land values for this in-house survey are not necessarily consistent across counties and thus this database was simply used to create county indices for land values.

estimated values at the CRD level. Figures 3 and 5 (cash rents) reflect actual values reported by USDA NASS at the county level with a couple of minor exceptions (there were several counties that were not reported individually, but were reported at an aggregate level – see Table 2 footnote).

It is recognized that the values reported in Figures 2-5 may not perfectly represent market values and cash rents at the local level for a number of reasons (i.e., inconsistencies in the FSA survey data for land values, varying land quality, etc). For example, the quality of land can vary considerably due to soil type and location (bottom ground versus upland) within a county and thus by definition an average will not be reflective necessarily of individual parcels. However, the purpose of this paper and the procedures used in this analysis is to provide producers, landowners, lenders, appraisers, and others in agribusiness with another source of information for consideration when they negotiate land values and cash rents in their particular situations. Thus, the values in this report should not be viewed as *the* land values or cash rents in a particular county, but as simply one more piece of information to consider. For further information on land values and cash rents, additional resources (papers and spreadsheets) are available at www.agmanager.info.

Table 2. Estimated 2010 County-Level Nonirrigated and Pasture Land Values and Cash Rents^a

| County | Code | Region | Nonirrigated Land | | Pasture Land | |
|-------------|------|--------|-------------------|---------------------|--------------|--------------------|
| | | | Value, \$/ac | Rent, \$/ac | Value, \$/ac | Rent, \$/ac |
| Allen | AL | SE | 1,176 | 44.00 | 931 | 18.00 |
| Anderson | AN | EC | 1,292 | 50.00 | 938 | 23.00 |
| Atchison | AT | NE | 2,263 | 84.00 | 1,045 | 28.00 |
| Barber | BA | SC | 1,268 | 37.00 | 1,085 | 10.00 |
| Barton | BT | C | 945 | 36.50 | 692 | 14.50 |
| Bourbon | BB | SE | 1,353 | 35.00 | 1,264 | 20.00 |
| Brown | BR | NE | 2,080 | 104.00 ^b | 960 | 27.50 |
| Butler | BU | SE | 1,680 | 42.50 | 1,131 | 19.50 |
| Chase | CS | EC | 1,596 | 44.00 | 827 | 20.00 |
| Chautauqua | CQ | SE | 1,037 | 35.50 | 698 | 12.00 |
| Cherokee | CK | SE | 1,904 | 52.50 | 1,231 | 23.50 |
| Cheyenne | CN | NW | 813 | 35.00 | 340 | 11.00 |
| Clark | CA | SW | 669 | 29.50 | 448 | 9.80 |
| Clay | CY | NC | 1,445 | 55.50 | 889 | 21.00 |
| Cloud | CD | NC | 1,585 | 56.00 | 764 | 23.50 |
| Coffey | CF | EC | 1,195 | 44.00 | 827 | 19.00 |
| Comanche | CM | SC | 689 | 27.50 | 610 | 9.40 |
| Cowley | CL | SE | 1,528 | 36.00 | 1,098 | 15.00 |
| Crawford | CR | SE | 1,244 | 44.00 | 931 | 23.50 |
| Decatur | DC | NW | 864 | 38.00 | 435 | 12.00 |
| Dickinson | DK | C | 1,593 | 39.50 | 900 | 20.50 |
| Doniphan | DP | NE | 2,956 | 104.00 ^b | 1,666 | 33.00 |
| Douglas | DG | EC | 4,143 | 53.00 | 3,943 | 20.00 |
| Edwards | ED | SC | 883 | 32.00 | 441 | 10.50 ^b |
| Elk | EK | SE | 1,353 | 41.00 | 885 | 15.50 |
| Ellis | EL | C | 1,147 | 31.50 | 620 | 13.00 |
| Ellsworth | EW | C | 1,020 | 41.50 | 838 | 17.00 |
| Finney | FI | SW | 849 | 34.00 | 337 | 9.80 |
| Ford | FO | SW | 957 | 28.00 | 516 | 10.50 |
| Franklin | FR | EC | 1,862 | 55.50 | 1,158 | 17.50 |
| Gearry | GE | EC | 1,596 | 51.00 | 965 | 17.50 |
| Gove | GO | WC | 674 | 39.00 | 502 | 12.50 |
| Graham | GH | NW | 733 | 32.00 | 468 | 12.50 |
| Grant | GT | SW | 761 | 35.00 ^b | 241 | 7.80 ^b |
| Gray | GY | SW | 808 | 35.50 | 379 | 11.00 |
| Greeley | GL | WC | 785 | 29.50 | 286 | 10.00 |
| Greenwood | GW | SE | 1,484 | 41.00 | 1,197 | 19.50 |
| Hamilton | HM | SW | 715 | 27.00 | 248 | 7.50 |
| Harper | HP | SC | 985 | 39.00 | 525 | 16.00 |
| Harvey | HV | SC | 2,084 | 45.00 | 1,356 | 18.00 |
| Haskell | HS | SW | 854 | 37.00 | 379 | 7.80 ^b |
| Hodgeman | HG | SW | 595 | 32.50 | 303 | 11.50 |
| Jackson | JA | NE | 1,314 | 60.00 | 904 | 22.00 |
| Jefferson | JF | NE | 1,715 | 51.00 | 1,299 | 22.00 |
| Jewell | JW | NC | 1,044 | 50.50 | 611 | 20.50 |
| Johnson | JO | EC | 12,352 | 57.00 | 9,652 | 21.00 |
| Kearny | KE | SW | 789 | 35.00 | 358 | 11.50 |
| Kingman | KM | SC | 1,291 | 34.50 ^b | 814 | 15.50 |
| Kiowa | KW | SC | 1,064 | 29.50 | 542 | 10.50 ^b |
| Labette | LB | SE | 1,346 | 44.50 | 1,104 | 24.00 |
| Lane | LE | WC | 722 | 28.00 | 473 | 9.50 |
| Leavenworth | LV | NE | 3,284 | 55.00 | 3,389 | 20.00 ^b |

Table 2. Continued

| County | Code | Region | Nonirrigated Land | | Pasture Land | |
|--------------|------|--------|-------------------|---------------------|--------------|--------------------|
| | | | Value, \$/ac | Rent, \$/ac | Value, \$/ac | Rent, \$/ac |
| Lincoln | LC | C | 998 | 47.00 | 683 | 17.00 |
| Linn | LN | EC | 1,520 | 57.00 | 1,103 | 25.00 |
| Logan | LG | WC | 733 | 36.00 | 347 | 11.50 |
| Lyon | LY | EC | 1,102 | 43.50 | 814 | 22.00 |
| Marion | MN | C | 1,657 | 39.50 | 931 | 18.00 |
| Marshall | MS | NE | 2,044 | 72.00 | 1,017 | 25.00 |
| McPherson | McP | C | 1,869 | 44.00 | 1,055 | 19.00 |
| Meade | ME | SW | 831 | 30.50 | 482 | 9.50 |
| Miami | MI | EC | 4,941 | 45.50 | 3,861 | 20.50 |
| Mitchell | MC | NC | 1,268 | 52.00 | 583 | 20.50 |
| Montgomery | MG | SE | 1,419 | 45.50 | 1,098 | 22.50 |
| Morris | MR | EC | 988 | 43.50 | 910 | 21.00 |
| Morton | MT | SW | 508 | 26.50 | 172 | 6.00 |
| Nemaha | NM | NE | 1,971 | 99.00 | 1,045 | 27.50 |
| Neosho | NO | SE | 1,440 | 40.00 | 1,114 | 24.00 |
| Ness | NS | WC | 868 | 27.00 | 633 | 11.00 |
| Norton | NT | NW | 844 | 36.00 | 535 | 15.00 |
| Osage | OS | EC | 1,292 | 49.50 | 965 | 17.00 |
| Osborne | OB | NC | 988 | 41.00 | 486 | 16.00 |
| Ottawa | OT | NC | 1,445 | 49.00 | 972 | 20.00 |
| Pawnee | PN | SC | 838 | 37.00 | 407 | 17.00 |
| Phillips | PL | NC | 895 | 37.50 | 500 | 16.00 |
| Pottawatomie | PT | NE | 1,396 | 65.00 | 1,073 | 15.50 |
| Pratt | PR | SC | 1,098 | 38.00 | 610 | 11.50 |
| Rawlins | RA | NW | 914 | 37.50 ^b | 418 | 10.50 |
| Reno | RN | SC | 1,200 | 44.00 | 678 | 15.50 |
| Republic | RP | NC | 1,660 | 56.50 | 861 | 20.00 |
| Rice | RC | C | 1,094 | 39.50 | 714 | 15.00 |
| Riley | RL | NE | 1,761 | 57.50 | 1,130 | 16.50 |
| Rooks | RO | NC | 746 | 29.50 | 514 | 14.50 |
| Rush | RH | C | 807 | 34.00 | 527 | 12.50 |
| Russell | RS | C | 935 | 33.00 | 558 | 14.50 |
| Saline | SA | C | 1,933 | 48.50 | 1,085 | 18.50 |
| Scott | SC | WC | 806 | 38.00 | 305 | 14.50 |
| Sedgwick | SG | SC | 2,220 | 43.50 | 1,085 | 18.50 |
| Seward | SW | SW | 669 | 25.00 | 344 | 6.40 |
| Shawnee | SN | EC | 2,090 | 53.50 | 938 | 18.50 |
| Sheridan | SD | NW | 793 | 37.50 | 351 | 13.00 |
| Sherman | SH | NW | 753 | 41.00 | 368 | 11.00 |
| Smith | SM | NC | 970 | 46.00 | 500 | 17.00 |
| Stafford | SF | SC | 1,087 | 38.00 | 678 | 15.50 |
| Stanton | ST | SW | 854 | 33.00 | 344 | 7.80 ^b |
| Stevens | SV | SW | 600 | 28.00 | 344 | 7.80 ^b |
| Sumner | SU | SC | 1,216 | 39.00 | 807 | 14.00 |
| Thomas | TH | NW | 854 | 37.50 ^b | 335 | 13.50 |
| Trego | TR | WC | 628 | 28.50 | 463 | 12.50 |
| Wabaunsee | WB | EC | 1,520 | 45.00 | 1,062 | 21.00 |
| Wallace | WA | WC | 754 | 32.00 | 463 | 9.80 |
| Washington | WS | NC | 1,604 | 57.50 | 1,055 | 21.50 |
| Wichita | WH | WC | 869 | 38.50 | 386 | 9.50 |
| Wilson | WL | SE | 1,344 | 49.00 | 898 | 15.50 |
| Woodson | WO | SE | 1,877 | 37.00 | 1,164 | 20.00 |
| Wyandotte | WY | NE | 8,211 | 104.00 ^b | 8,474 | 20.00 ^b |

^a Values estimated using KAS crop reporting district (CRD) level values and rents directly from KAS county surveyed values.

^b Value is based on multi-county average for region as opposed to a county-specific value.