

16. Myth Busters: Land Use Value Appraisal Debunked

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Abstract/Summary

Changes in land values are a major concern to agricultural producers, landowners, community businesses, and financial agencies. Over the past decade, agricultural land valuations have been declining slightly in Kansas as farm incomes have skyrocketed. This seeming paradox has led to questions about the mass appraisal method used to value agricultural land in the state. In this presentation, the use value appraisal method for Kansas will be explained, and the current outlook for land valuation will be provided.

Land Use Value Appraisal Debunked

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Outline

- Myth #1: Use Value = Market Value
- Myth #2: All Use Value appraisal is created equal.
- Myth #3: All real estate classes are taxed the same.
- Myth #4: My income is up, so my property taxes will go up.
- Myth #5: K-State is increasing my land values.

Myth #1: Market Value = Use Value

- MV—a theoretical amount determined by examining sales of comparable properties in the same region.
- The assumption is that comparable properties will sell for the same price if made available in the real estate market with reasonable marketing and with ample time provided to find a qualified and interested buyer.

Myth #1: Market Value = Use Value

- Use Value—the value derived from the actual use of a good.
- UV—an appraisal method used to establish a fair cash value of real property in its current use.
- In Kansas—the use value is the average estimated “farming” income earned by the land owner.
- Use Value \neq Market Value

Myth #2: All UV is Created Equal

- Different states have different procedures for valuing “land devoted to agricultural use”.
 - KS, AR, MO, OK, & CO: Income Capitalization Approach
 - NE: Market and Income Cap. Reconciliation
- Biggest differences among states
 - Eligibility requirements of land
 - Tax recapture with status change of land
 - Method to determine the capitalization rate

Myth #2 (continued): History of Use Value in Kansas

- Why the current law?
 - Legislators Recognized the Need for **Special Use Appraisal** of Agricultural Land.
 - Insulate agricultural land owners from market influences outside of agriculture.
 - Supported by Farm Organizations.

Myth #2 (continued): Kansas Law - K.S.A. 79 -1476

- Legislation passed in 1985
- Implemented in 1989, along with the tax classification system
- Established valuation procedure for “land devoted to agricultural use”
- Used a modified income approach to value agricultural land

Myth #3: All Real Estate Classes are Created Equal

- Use Value and Market Value
- Appraised vs. Assessed Value
- Real Property Classifications with Assessment Percentage

– Residential	12%
– Vacant Lots	12%
– Agricultural Use Value Land	30%
– All Other Real Property	30%
– Public Utility	30%

Myths #4 & #5: Why Are My Values Increasing?

- Does my increasing agricultural income increase agricultural land values?
- Why is K-State increasing my values?
- So how is my land valued?

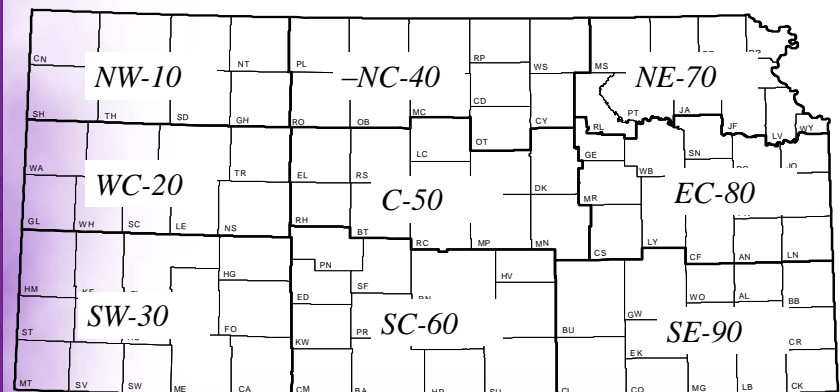
Procedures for Valuing Ag Land

- Value to be based on:
 - Use of the Land
 - Cultivated **crop** land (dry and irrigated)
 - **Grassland** (native and tame)
 - Productivity of the Land
 - Essentially, better land should be valued higher than the average, and poorer land should be valued less than the average.
 - Director shall adopt a classification system using criteria established by the USDA, Natural Resources Conservation Service (NRCS).
 - Currently using the Soil Rating for Plant Growth (KS-SRPG) index provided by NRCS.

Procedures for Valuing Ag Land (continued)

- Value to be based on:
 - Management reflecting median production levels
 - Average Yields (8-Yr. Avg.)
 - Average Prices (8-Yr. Avg.)
 - Average Grass Cash Rent (8-Yr. Avg.)
 - Source: Kansas Agricultural Statistics
 - 8-year average of Landlord Net Income (crop) or Landlord Net Rental Income (grass)
 - 5-year average of Farm Credit Bank land loan rate to develop the capitalization rate

Kansas Agricultural Statistics' Crop Reporting Districts



Kansas Agricultural Land Valuation

Basic Valuation Process

$$\frac{\text{Landlord Gross Income} - \text{Landlord Expenses}}{\text{Capitalization Rate}} = \text{Ag Use Appraised Value}$$

Crop Land Valuation

- Determine Landlord gross income
 - Information from KS Ag Statistics
 - Yields * Prices * Landlord's share weighted by crops grown
- Deduct Landlord expenses
 - Landlord's typical share of expenses weighted by crops grown
 - Management fee (10% of gross)
- Equals Landlord Net Income (LNI)
 - LNI's provided for all soil map units for all counties (Irrigated & Dry)

Calculation of LNI

Example County Dry Cropland

District	County	Crop	Yield	Price	Gross Income	Crop Mix	Landlord Share	Weighted Landlord Gross Income
South Central	Example	Wheat	29.2 x	\$4.72 =	\$137.82 x	0.695 x	0.33 =	\$31.61
		Sorghum	50.8 x	\$2.90 =	\$147.32 x	0.183 x	0.33 =	\$8.90
		Alfalfa	3.7 x	\$98.52 =	\$364.52 x	0.058 x	0.33 =	\$6.98
		Com	57.2 x	\$3.20 =	\$183.04 x	0.047 x	0.33 =	\$2.84
		Soybeans	23.3 x	\$8.17 =	\$190.36 x	0.017 x	0.33 =	\$1.07

- Based on Monthly Avg. Price
- Weighted by amount of crops sold per month.

- Gross Income Price X Yield

- Typical Landlord Share determined by survey.

- Based on Planted Acres
- Adjusted for Summer Fallow

Calculation of LNI (continued)

Example County Dry Cropland

District	County	Crop	Weighted Landlord Gross Income	Landlord Production Costs	Crop Mix	Weighted Landlord Production Costs	10% Management Charge	Landlord Net Income
South Central	Example	Wheat	\$31.61	6.68 x	0.695 =	\$4.64		
		Sorghum	\$8.90	7.50 x	0.183 =	\$1.37		
		Alfalfa	\$6.98	8.53 x	0.058 =	\$0.49		
		Com	\$2.84	14.58 x	0.047 =	\$0.69		
		Soybeans	\$1.07	6.61 x	0.017 =	\$0.11		
					\$51.40			\$7.31

- Landlord Gross Income is weighted by typical crops grown in county (Crop Mix).

- Landlord Production Costs are weighted by Crop Mix.

8-Year Summary

Example County Dry Cropland

County	Soil	Landlord Net Income									8-Yr Avg.	8-Yr Avg.
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2009 LNI	2010 LNI
Example	6330	\$2.05	\$2.03	\$1.98	\$1.78	\$2.02	\$1.86	\$2.02	\$2.49	\$6.16	\$2.03	\$2.54
	5928	\$14.66	\$14.11	\$12.48	\$10.69	\$13.24	\$7.48	\$11.25	\$17.60	\$22.84	\$12.69	\$13.71
	5910	\$39.07	\$39.62	\$37.54	\$35.41	\$38.69	\$30.23	\$37.96	\$46.86	\$55.15	\$38.17	\$40.18

LNI dropping off for 2012 value year.

New LNI being added to the 2012 8-yr average.

Grass Land Valuation

- Determine cash rental rate
 - Information from KS Ag Statistics
 - Used as average Landlord gross income
- Deduct Landlord expenses
 - Fence ownership cost
 - Pasture maintenance cost
 - Watering cost
 - Management fee (10% of gross)
- Equals Landlord Net Income (LNI)

Capitalization Rate

- Capitalization is the division of a present income by an appropriate rate of return to estimate the value of the income stream.
 - **(Income / Rate = Value)**
- In terms of use value, it is a composite rate used to convert property income into property value.

Cap Rate Comparison

2011 - 2012

		2011	2012
Farm Credit Bank	2005	6.89%	
ag land only	2006	7.58%	7.58%
loan rate:	2007	7.32%	7.32%
	2008	6.29%	6.29%
	2009	5.77%	5.77%
	2010		5.23%
Five year average of loan rates:		6.77%	6.44%
Statutory Add On Rate:	+	0.75%	0.75%
Directors Add on:	+	2.00%	2.00%
Capitalization Rate:		9.52%	9.19%
OR not less than:		11.00%	11.00%
Average rural levies:		0.11490	0.12030
Multiply by assessment rate:	X	0.30	0.30
Average agricultural tax rate:	+	3.45%	3.61%
Overall capitalization rate		14.45%	14.61%

Income / Cap Rate = Ag Value

- \$40 LNI divided by 14.45 % =
\$277/Ac
- \$40 LNI divided by 13.22 % =
\$303/Ac
- \$40 LNI divided by 16.03 % =
\$250/Ac