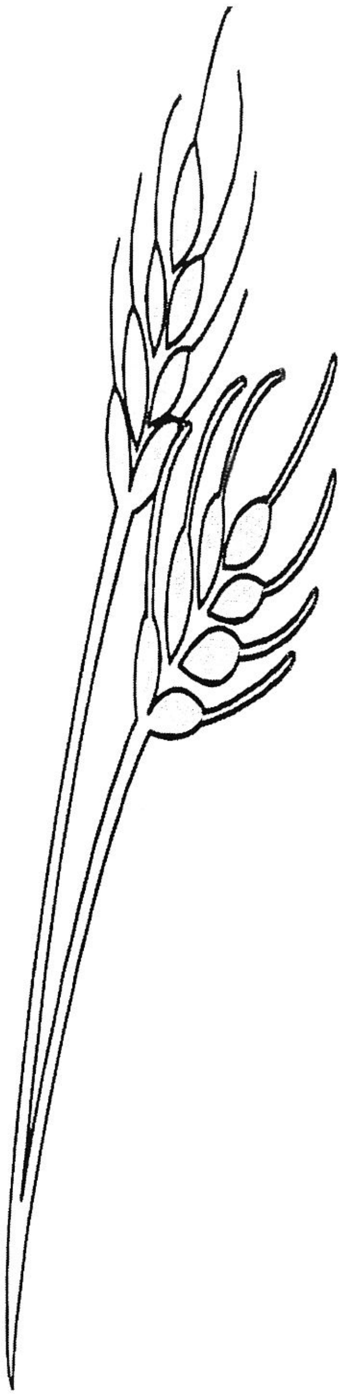

Agricultural Land Valuation in Kansas

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Kansas Department of Revenue
Division of Property Valuation

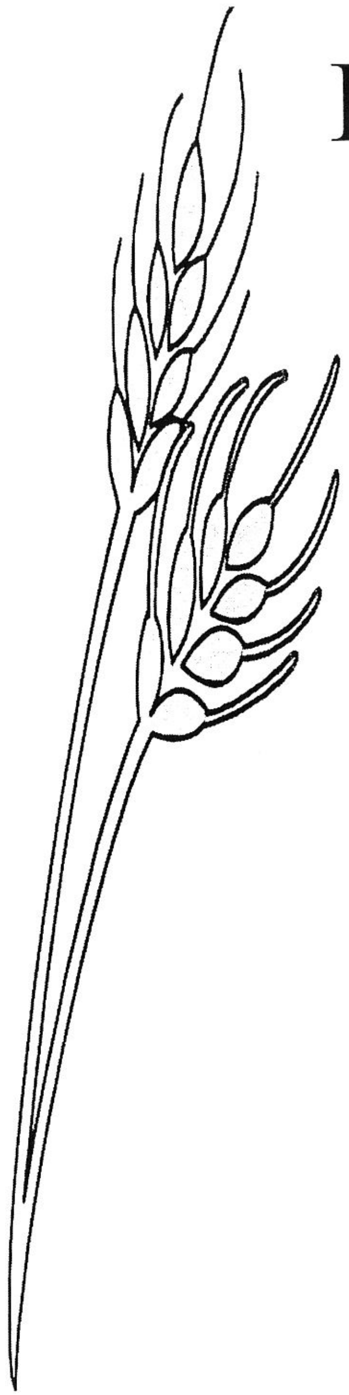
January 22, 2015

History

- Why the current law?
  - Legislators Recognized the Need for **Special Use Appraisal** of Agricultural Land.
    - In Kansas, property is to be valued at fair market value.
    - Insulate agricultural land owners from market influences outside of agriculture.
    - Supported by Farm Organizations.

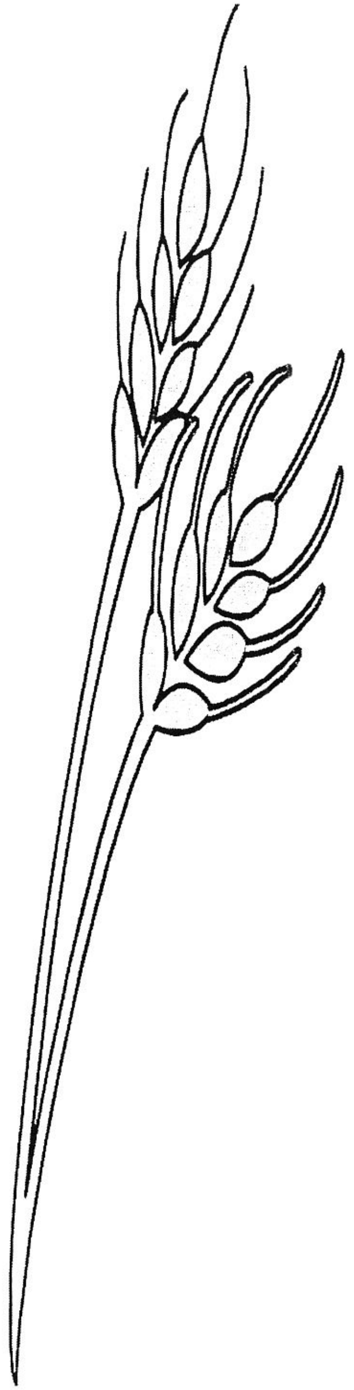
Kansas Law - K.S.A. 79 -1476

- Legislation passed in 1985.
- Implemented in 1989 along with the tax classification system (statewide reappraisal).
- Establishes valuation procedure for "land devoted to agricultural use".
- Uses a modified income approach to value agricultural land.



Procedures for Valuing Ag Land

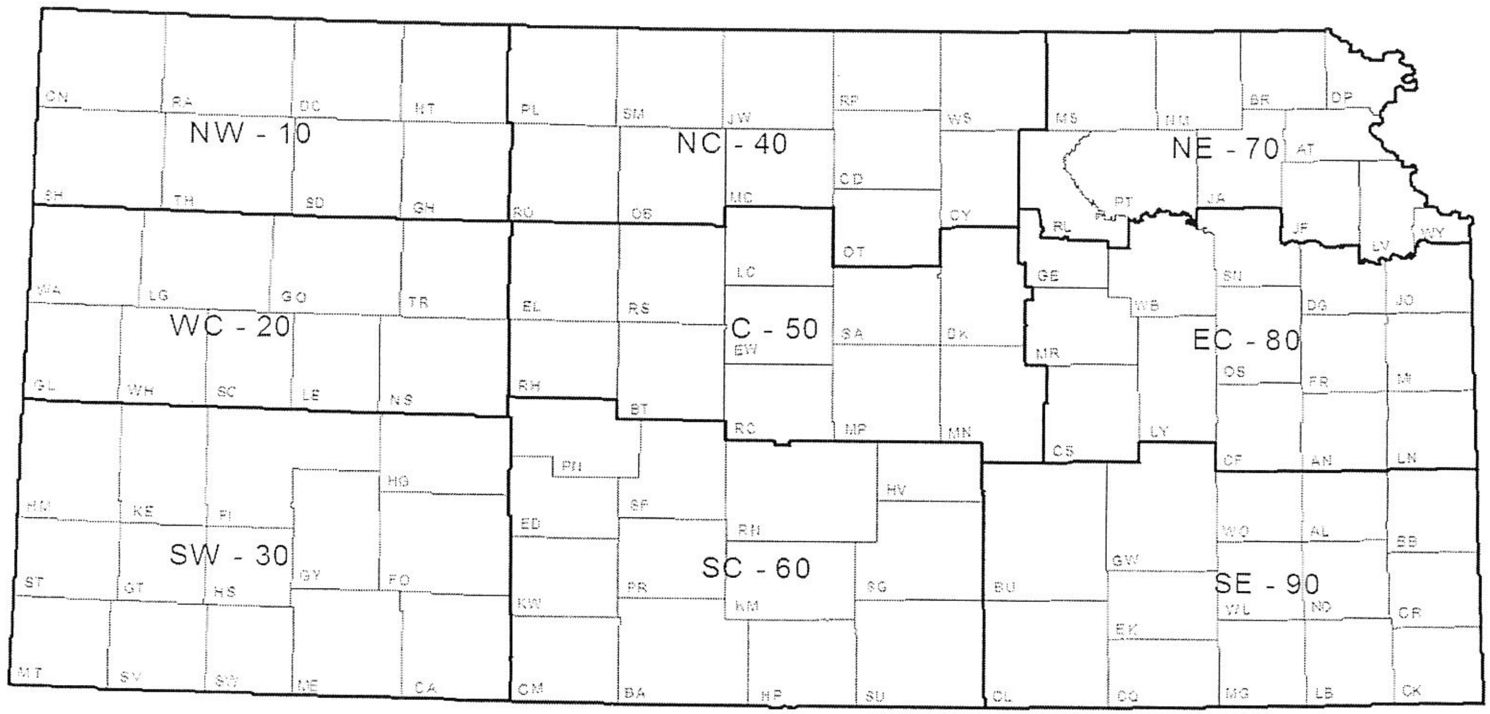
- **Value is to be based on:**
  - Use of the Land.
    - Cultivated **crop** land (dry and irrigated).
    - **Grassland** (native and tame).
  - Productivity of the Land.
    - Simply put, better land should be valued higher than the average. And poorer land should be valued lower than the average.
    - 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 (SRPG) index provided by NRCS.

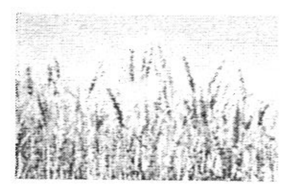


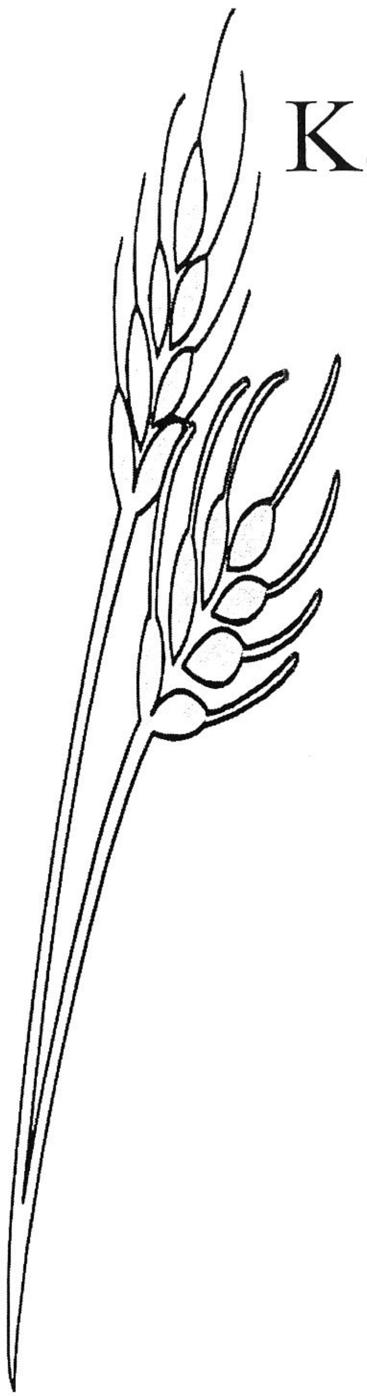
Procedures Continued

- 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



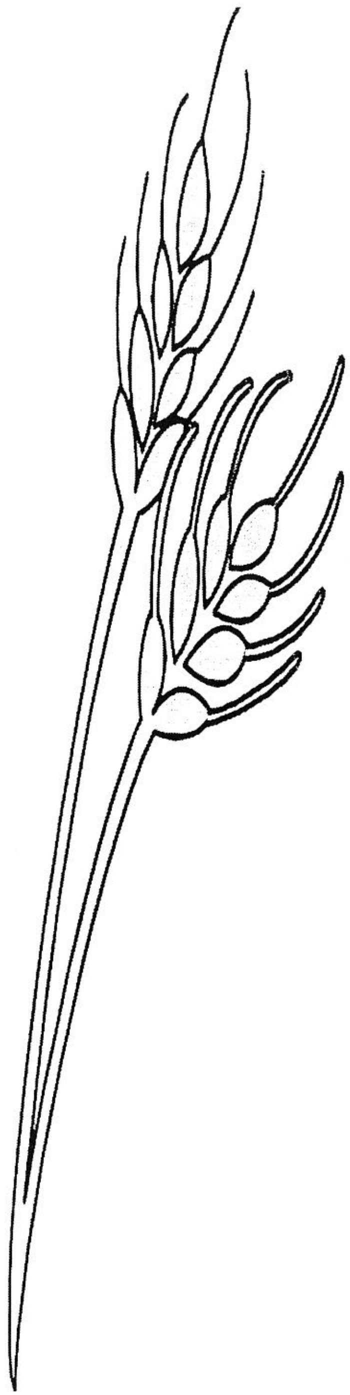




Kansas Agricultural Land Valuation

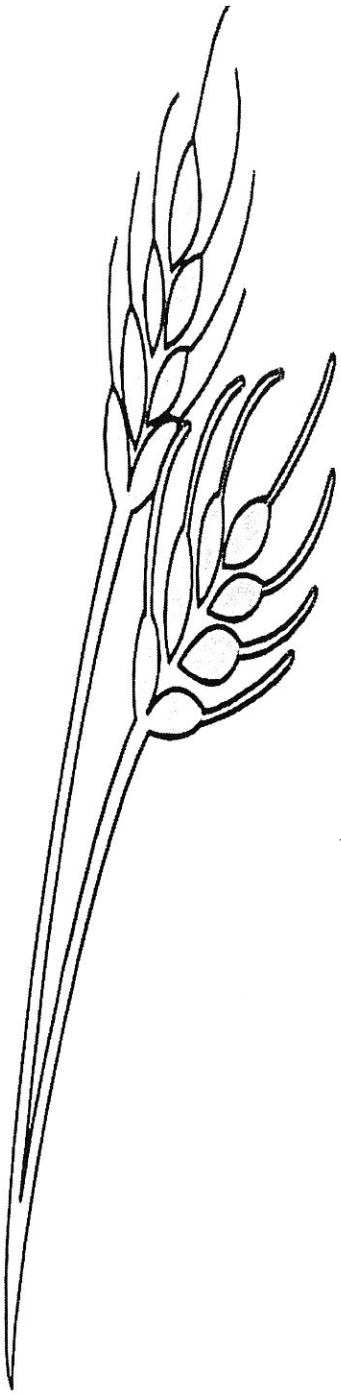
Basic Valuation Process

$$
\begin{array}{rl}
 & \text{Landlord Gross Income} \\
- & \underline{\text{Landlord Expenses}} \\
 & \text{Landlord Net Income} \\
\div & \underline{\text{Capitalization Rate}} \\
= & \text{Ag Use Appraised Value}
\end{array}
$$



Crop Land Valuation

- Landlord gross income is determined.
  - Information from KS Ag Statistics.
  - <u>Yields</u> times <u>Prices</u> times <u>Landlord's share</u> weighted by <u>crops grown</u>.
- Landlord expenses deducted.
  - Landlord's typical share of expenses.
  - Management fee. (10% of gross)
- Landlord net income (LNI).
  - LNI's provided for all soil map units for all counties. (Irrigated & Dry)



Calculation of LNI

Dry Cropland

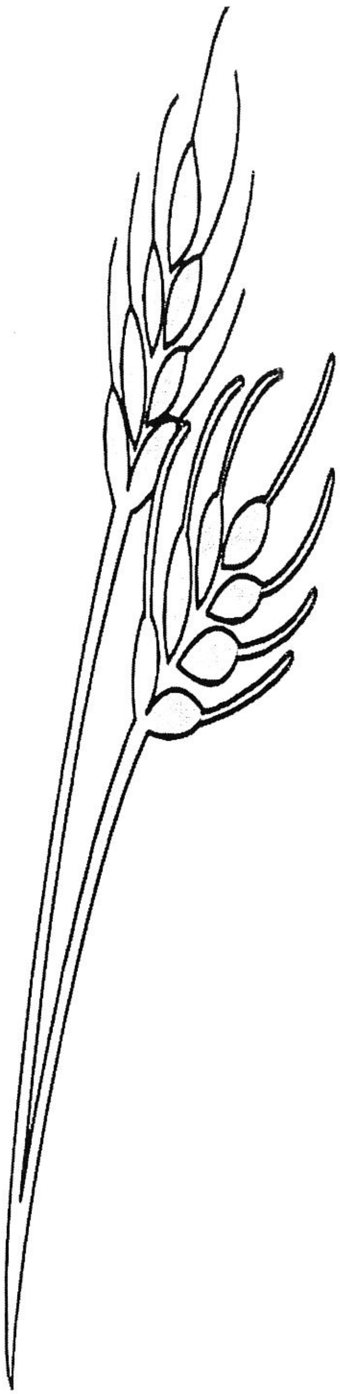
- Based on Monthly Avg. Price
- Weighted by amount of crops sold per month.

- Based on Planted Acres
- Adjusted for Summer Fallow

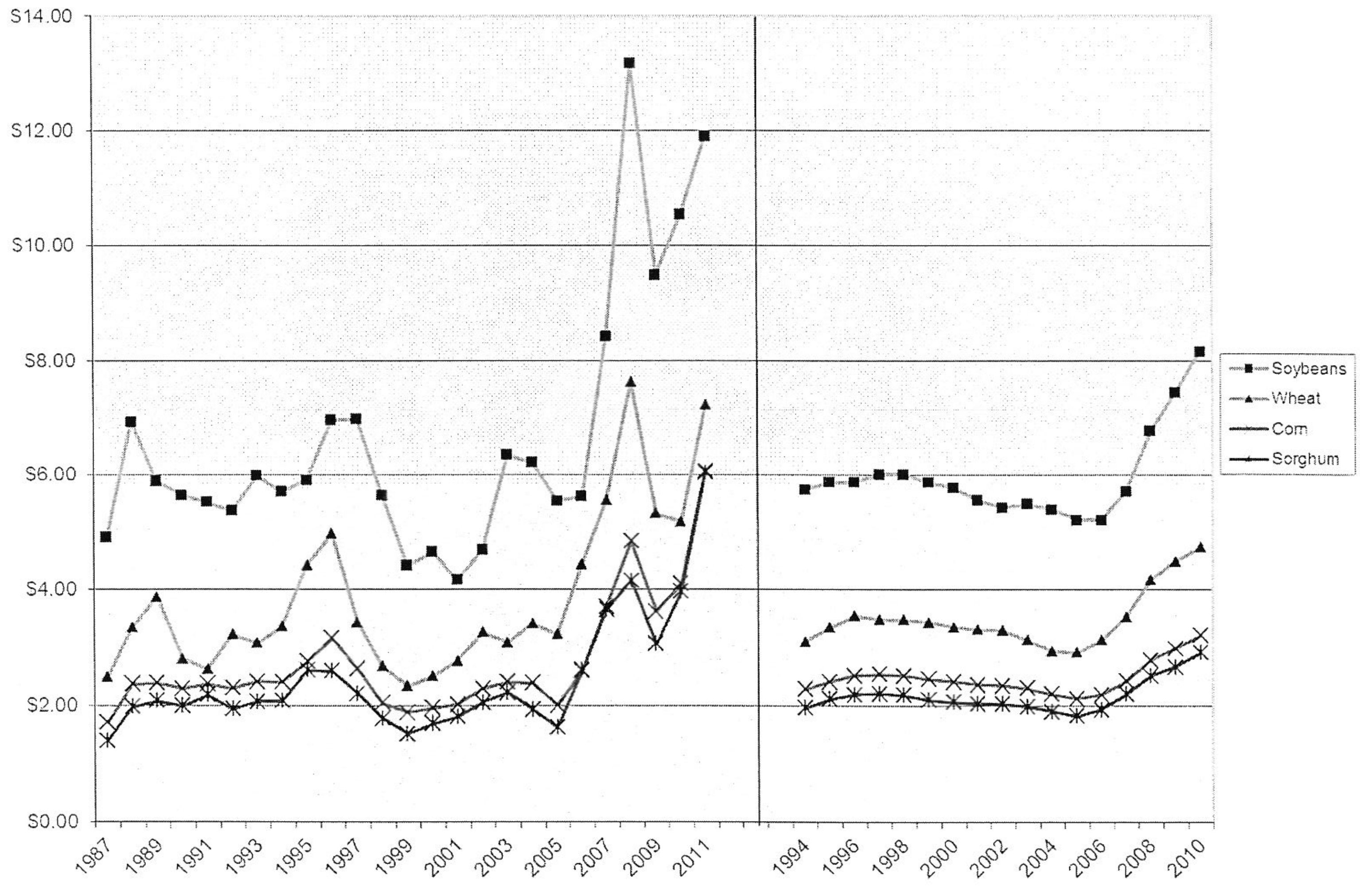
- Gross Income Yield X Price

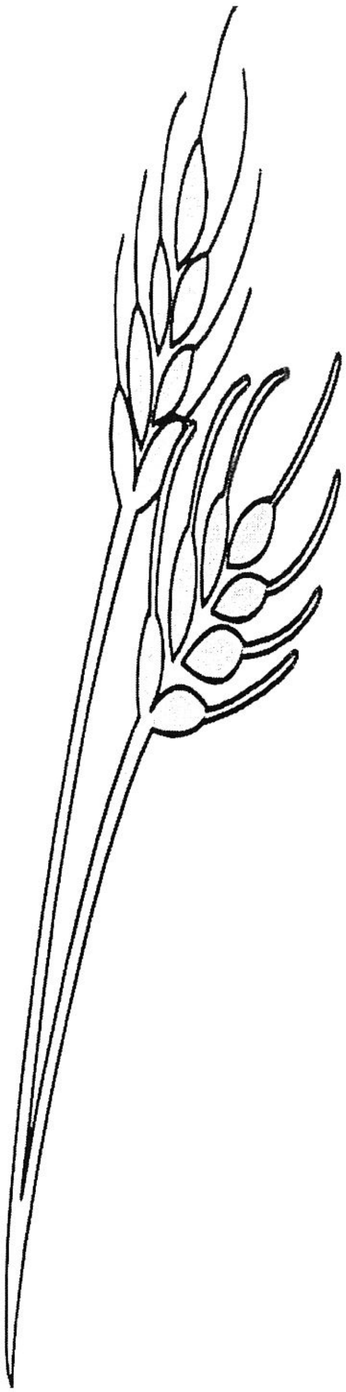
- Typical Landlord Share determined by survey.

District	County	Crop	Yield	Price	Gross Income	Crop Mix	Landlord Share	Weighted Landlord Gross Income
South Central	Example	Wheat	29.2 x	$5.24 =	$153.01 x	0.695 x	0.33 =	$35.09
		Sorghum	50.8 x	$3.38 =	$171.70 x	0.183 x	0.33 =	$10.37
		Alfalfa	3.7 x	$109.27 =	$404.30 x	0.058 x	0.33 =	$7.74
		Corn	57.2 x	$3.66 =	$209.35 x	0.047 x	0.33 =	$3.25
		Soybeans	23.3 x	$8.86 =	$206.44 x	0.017 x	0.33 =	$1.16
								$57.61



Crop Prices - 8 year average example



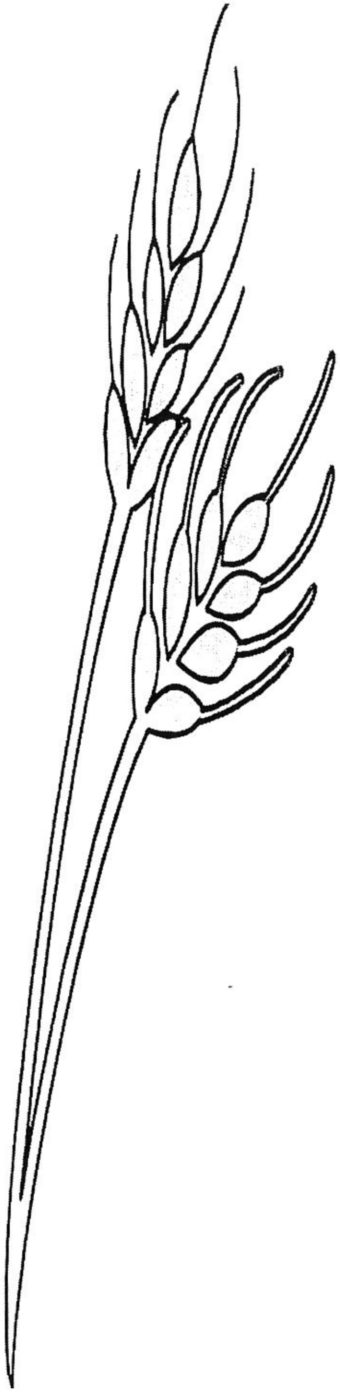


Calculations Continued
Dry Cropland

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

- Landlord Production Costs are weighted by Crop Mix.

District	County	Crop	Weighted Landlord Gross Income	Landlord Production Costs		Crop Mix		Weighted Landlord Production Costs		10% Manage-Ment Charge		Landlord Net Income
South Central	Example	Wheat	$35.09	6.68	x	0.695	=	$4.64				
		Sorghum	$10.37	7.50	x	0.183	=	$1.37				
		Alfalfa	$7.74	8.53	x	0.058	=	$0.49				
		Corn	$3.25	14.58	x	0.047	=	$0.69				
		Soybeans	$1.16	6.61	x	0.017	=	$0.11				
			$57.61				-	**$7.31**	-	**$5.76**	=	**$44.54**



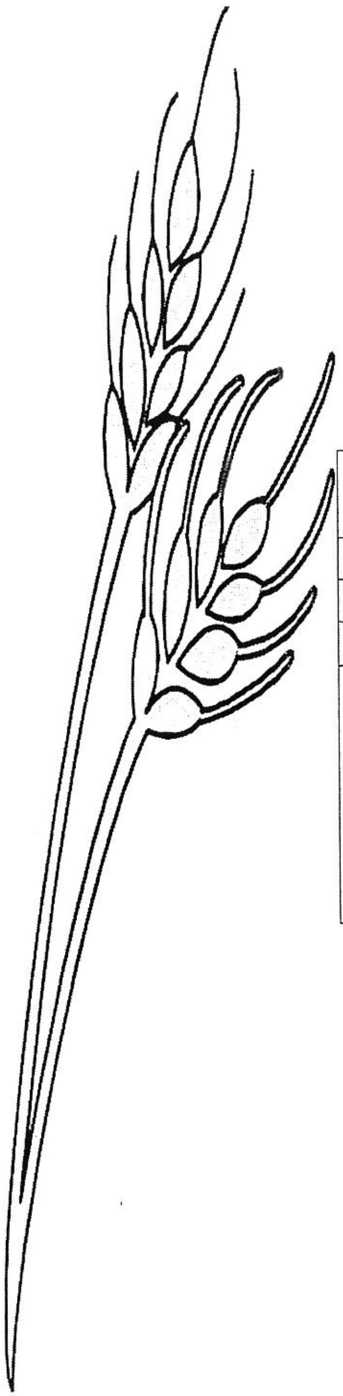
8-Year Summary

Dry Cropland

Landlord Net Income											8-Yr Avg.	8-Yr Avg.
County	Soil	2004	2005	2006	2007	2008	2009	2010	2011	**2012**	2011 LNI	2012 LNI
Example	2633	$21.73	$20.60	$17.91	$19.59	$19.58	$24.42	$35.43	$38.95	**$44.54**	$24.78	$30.34

LNI dropping off for 2014 value year.

New LNI being added to the 2014 8-yr average.



8-Year Summary
Dry Cropland

		LNI's reflecting approximate average for the county									8-Yr Avg.	8-Yr Avg.
District	County	2004	2005	2006	2007	2008	2009	2010	2011	**2012**	2011	2012
Southwest	Stevens	$4.44	$3.03	$3.00	$3.66	$4.22	$3.73	$5.64	$13.82	**$17.43**	$5.19	$7.37
Central	McPherson	$29.66	$27.65	$21.94	$28.38	$24.72	$34.73	$44.30	$51.24	**$49.17**	$32.83	$38.97
Northeast	Doniphan	$56.91	$50.25	$47.87	$49.76	$64.13	$73.31	$101.21	$121.32	**$144.23**	$70.60	$88.62

LNI dropping off for 2014

New LNI being added to the 2014 8-yr average.

Grass Land Valuation

- Cash rental rate is determined.
  - Information from KS Ag Statistics.
  - Used as average gross income.
- Landlord expenses deducted.
  - Fence ownership cost.
  - Pasture maintenance cost.
  - Watering cost.
  - Management fee. (10% of gross)
- Landlord net rental income.

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)

- Or a composite rate used for converting property income into property value.

Cap Rate Comparison

2013 - 2014

			2013	2014
	2007		**7.32%**	
Farm Credit Bank	2008		6.29%	6.29%
ag land only	2009		5.77%	5.77%
loan rate:	2010		5.23%	5.23%
	2011		4.97%	4.97%
	2012			**4.97%**
Five year average of loan rates:			5.92%	5.45%
Statutory Add On Rate:		+	0.75%	0.75%
Directors Add on:		+	2.00%	2.00%
Capitalization Rate:			8.67%	8.20%
OR not less than:			**11.00%**	**11.00%**
Average rural levies:			0.12119	0.12190
Multiply by assessment rate:		X	0.30	0.30
Average agricultural tax rate:		+	3.64%	3.66%
Overall capitalization rate			14.64%	14.66%

Income / Cap Rate = Ag Value

- Value per acre calculation
- $40 LNI divided by 14.66 % = $273 / Ac

- Tax on a quarter of land at $273/Ac
- 160Ac X 30% X .121900 = $1,597