# Agricultural Net Income Situation for Property Tax Calculations

#### Allen M. Featherstone and Leah J. Tsoodle

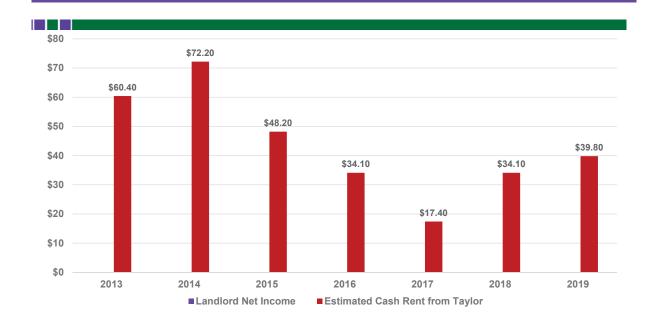
Department of Agricultural Economics Kansas State University



#### **Introduction**

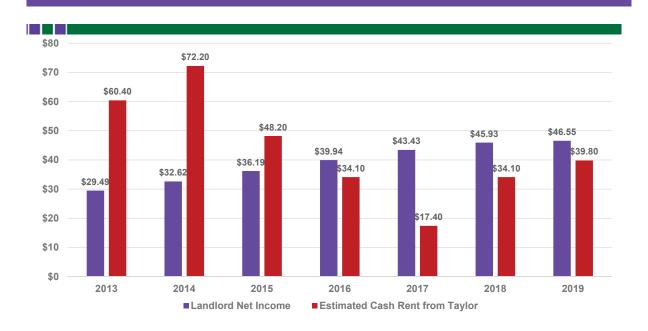
- Paradox between Expected Returns to Land and Property Tax Appraisals
- Calculation of Landlord Net Income for Property Tax Considerations
- Current Situation
- How Long before Property Tax Appraisals Turn?
- Impacts of Alternative Formula Changes

## Impact of Moving Forward One Year for Barton County





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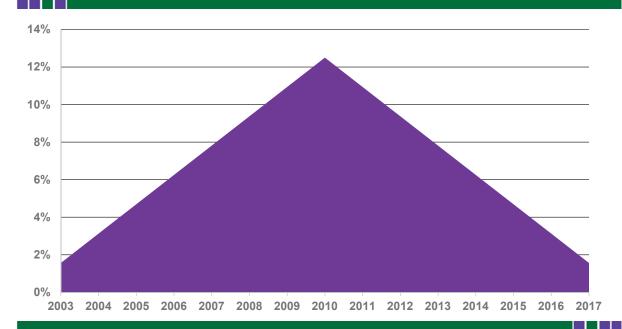


# Property Tax Computation

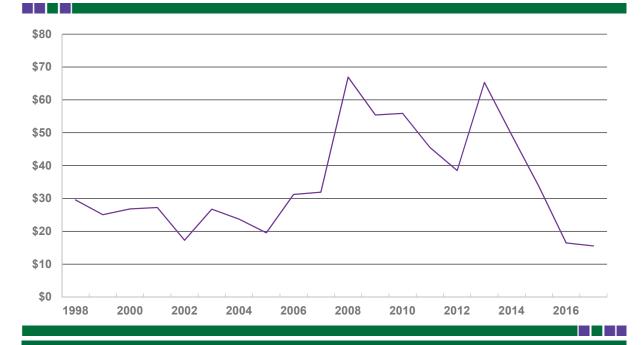
- Defined as the eight year average of eight year average of return to landlord
- This eight year average is then capitalized at the statute defined capitalization rate
- Process places a weight on middle years of the process
- Designed to have a more smoothing effect on tax values
  - Goal is to remove the variability of year to year changes
- Landlord net return made up of last 15 years return to the landlord
  - The 2019 Landlord Net Income made up of individual values from 2003 - 2017



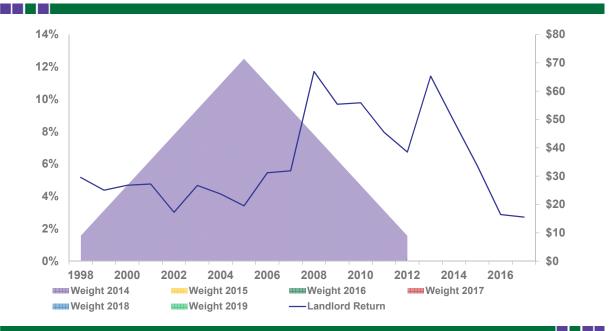
# Property Tax Computation Process Eight Year Average of an Eight Year Average



## Non-irrigated Single Year Landlord Return for Barton County, 1998 – 2017 (Central Kansas)



# Non-irrigated Computation Process for Barton County

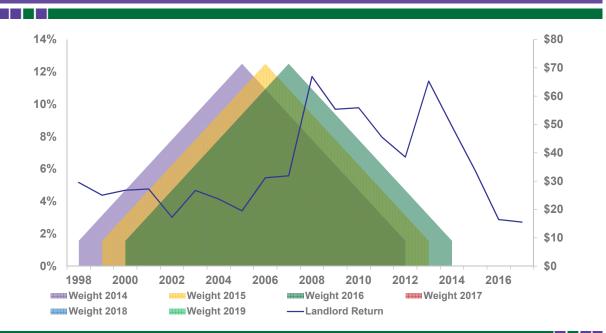


# Non-irrigated Computation Process for Barton County

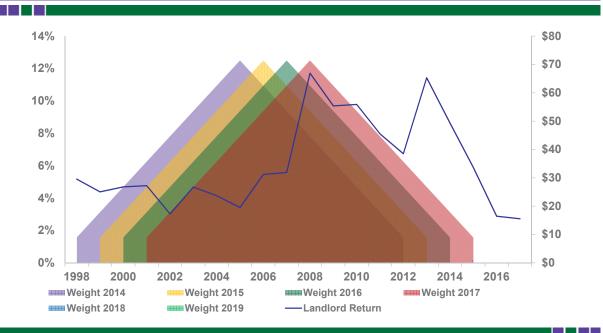




## Non-irrigated Computation Process for Barton County

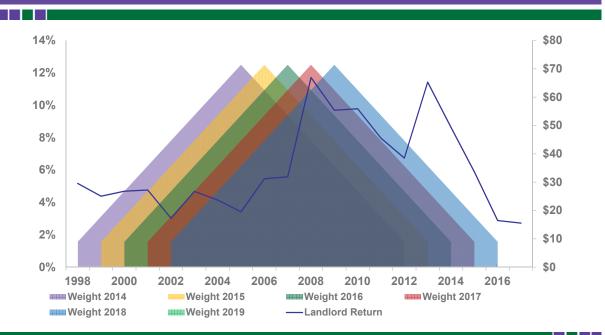


## Non-irrigated Computation Process for Barton County

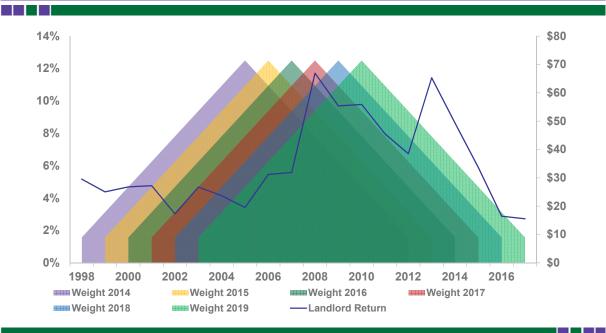




# Non-irrigated Computation Process for Barton County

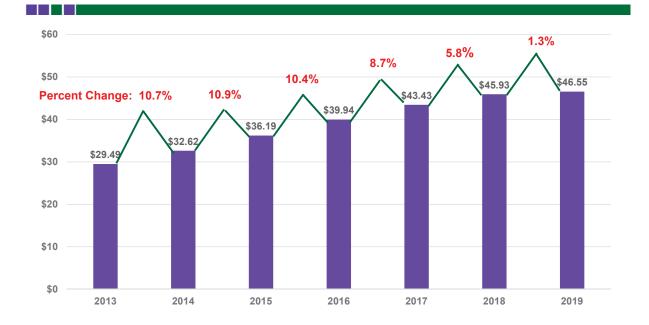


## Non-irrigated Computation Process for Barton County





#### One Year Percentage Change for Barton County



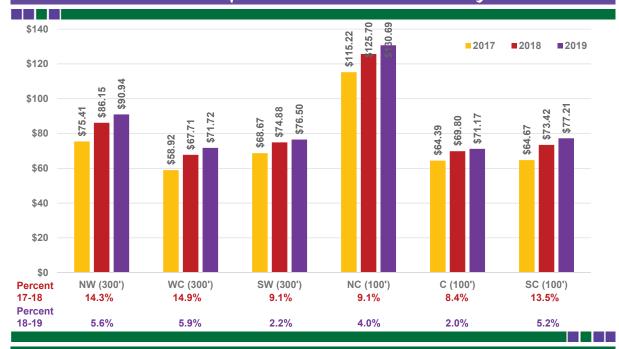
#### Impact of Moving Forward One Year for Kansas Dryland [Tax Years 2017 to 2018 and 2018 to 2019]



#### Impact of Moving Forward One Year for Kansas Pasture (Tax Years 2017 to 2018 and 2018 to 2019)



#### Impact of Moving Forward One Year for Kansas Irrigated (Tax Years 2017 to 2018 and 2018 to 2019)



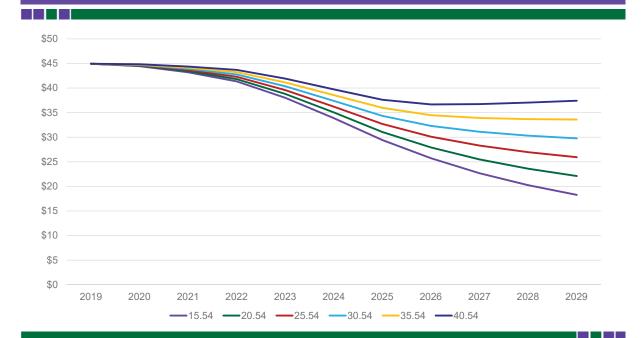


#### In 2019, the Landlord Net Income Fell in Some Situations

Non-Irrigated	Non-Irrigated	Irrigated
SW – Clark	SC – Kiowa	WC – 700' Well
SW - Grant	SC – Pawnee	SW – 500' Well
SW – Hamilton	SC – Reno	SW – 600' Well
SW – Morton	SC – Sedgwick	SW - 700' Well
SW – Stevens	SC – Stafford	
EC - Chase	SC – Barber	
EC – Coffey	SC – Comanche	
EC – Lyon	SC – Harper	
EC – Morris	SC – Kingman	
SE – Greenwood		

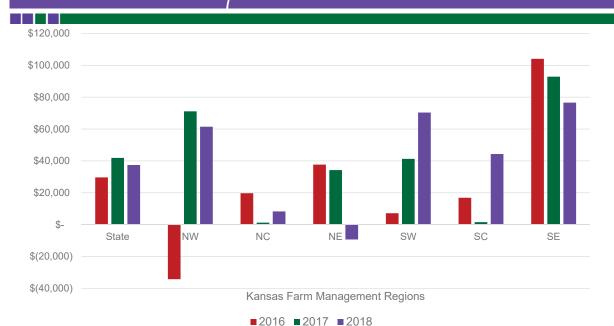


## When might the Non-irrigated Returns Begin to Fall





#### Net Farm Income without Government Payments and Net Crop Insurance Proceeds



## Turning Point Of Landlord Returns

- 15-year Average is \$38.37
- 15-year Minimum is \$15.54
- Assumes equal returns in the future
- Turning point in 2020

	Turning Point	% Change from 2019
\$15.54	2020	-1.1%
\$20.54	2020	-0.9%
\$25.54	2020	-0.7%
\$30.54	2020	-0.6%
\$35.54	2020	-0.4%
\$40.54	2020	-0.2%



#### Landlord Returns 2024 with Various LN9s

- 15-year Average is \$38.37
- 15-year Minimum is \$15.54
- Assumes equal returns in the future
- Turning point in 2020
- LNIs likely to fall by more than 10% in five years

	Turning Point	% Change from 2019
\$15.54	2020	-24.6%
\$20.54	2020	-22.0%
\$25.54	2020	-19.4%
\$30.54	2020	-16.8%
\$35.54	2020	-14.2%
\$40.54	2020	-11.6%

#### Formula Changes

- House Bill 2293 Introduced
- http://www.kslegislature.org/li/b2019 20/measures/HB2293/
  - "Prior to July 1, 2020, commodity prices, crop yields and pasture and rangeland rental rates and expenses shall be based on an average of the eight calendar years immediately preceding the calendar year which immediately precedes the year of valuation"
  - "On and after July 1, 2020, commodity prices, crop yields and pasture and rangeland rental rates and expenses shall be based on an average of the calendar year immediately preceding the calendar year that immediately precedes the year of valuation"
  - The productivity index also was adjusted to eliminate the eight year average



#### Formula Changes

- Using Barton, Dickinson, and Rush county as a guide several scenarios will be examined
  - (Scenario 1) Using eight year averages of single years for price, productivity, crop-mix, and yield
  - (Scenario 2) Using eight year averages of single years for price, eight year averages of yields, crop mix, and productivity
  - (Scenario 3) Using five year averages of five year averages

## Formula Change – Single Year Scenario 1





## Formula Change - Single Year Price Scenario 2

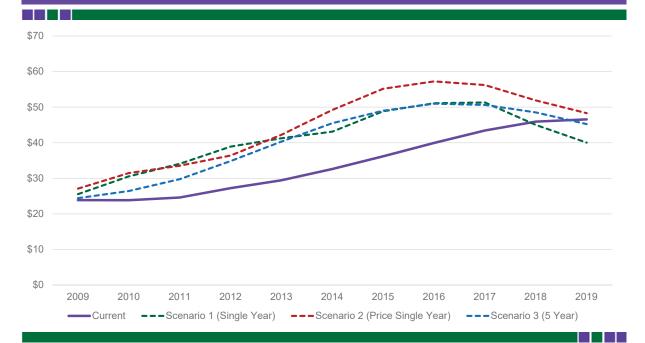


## Formula Change – Five Year Scenario 3





## Formula Change – Barton County Kansas Comparison





#### Summary

- Kansas real estate tax values on non-irrigated land are likely to begin to decrease in the next year
  - Percentage decreases are likely to be small unless Kansas agriculture's profitability remains at low levels
- Kansas real estate tax values on irrigated land are likely to begin to decrease in the next year
  - Percentage increase is likely to be similar to non-irrigated
- Kansas real estate tax values on pasture are likely to be fairly stable over the next few years
- The decrease over the next 5 years could be more than 10% unless landlord net incomes increase to above the 15 year average



#### Questions?

Allen Featherstone
Department of Agricultural Economics
Kansas State University
afeather@ksu.edu