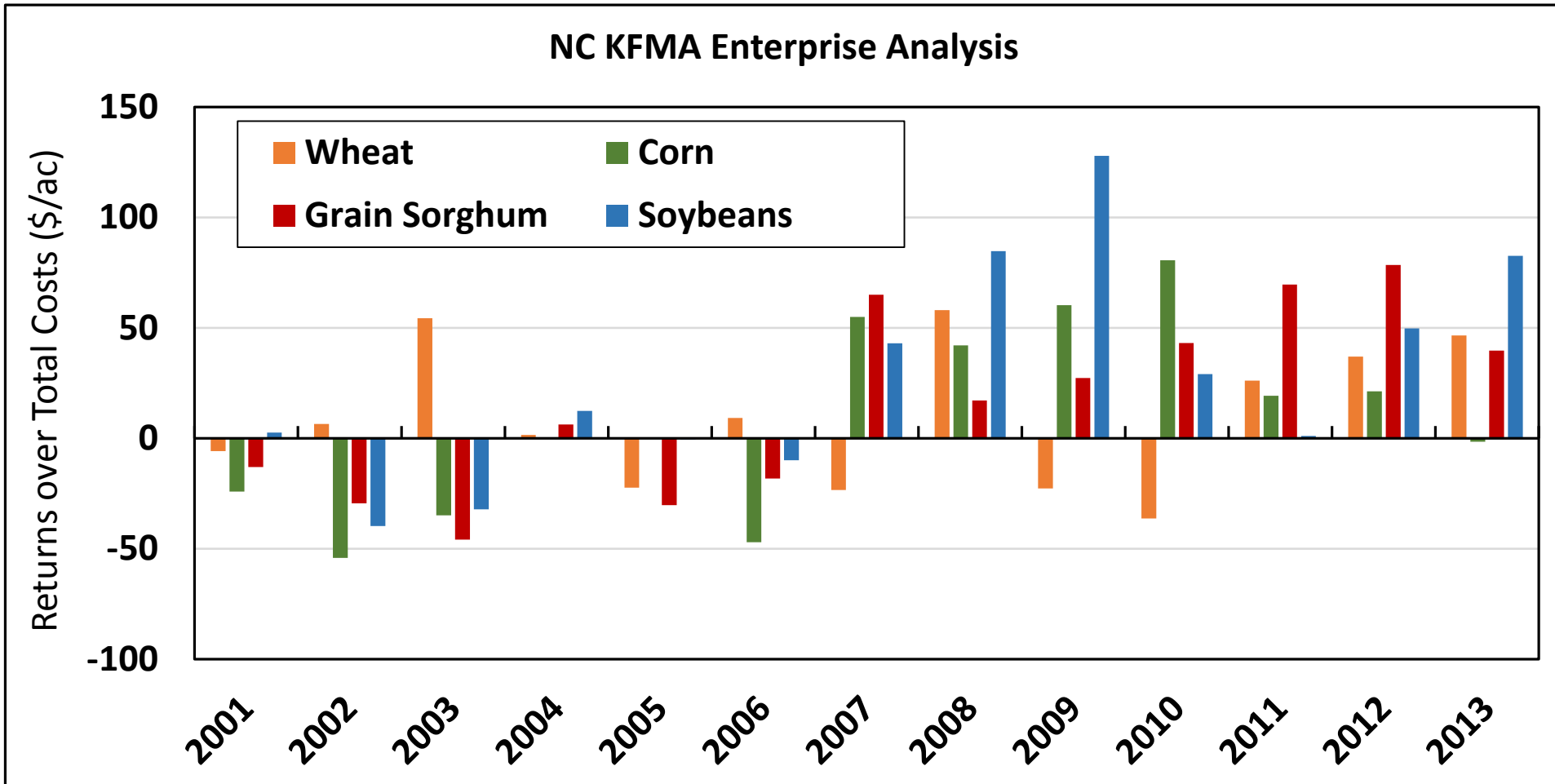


KANSAS FARM ECONOMY UPDATE

Dr. Mykel Taylor
Department of Agricultural Economics
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October 6, 2016

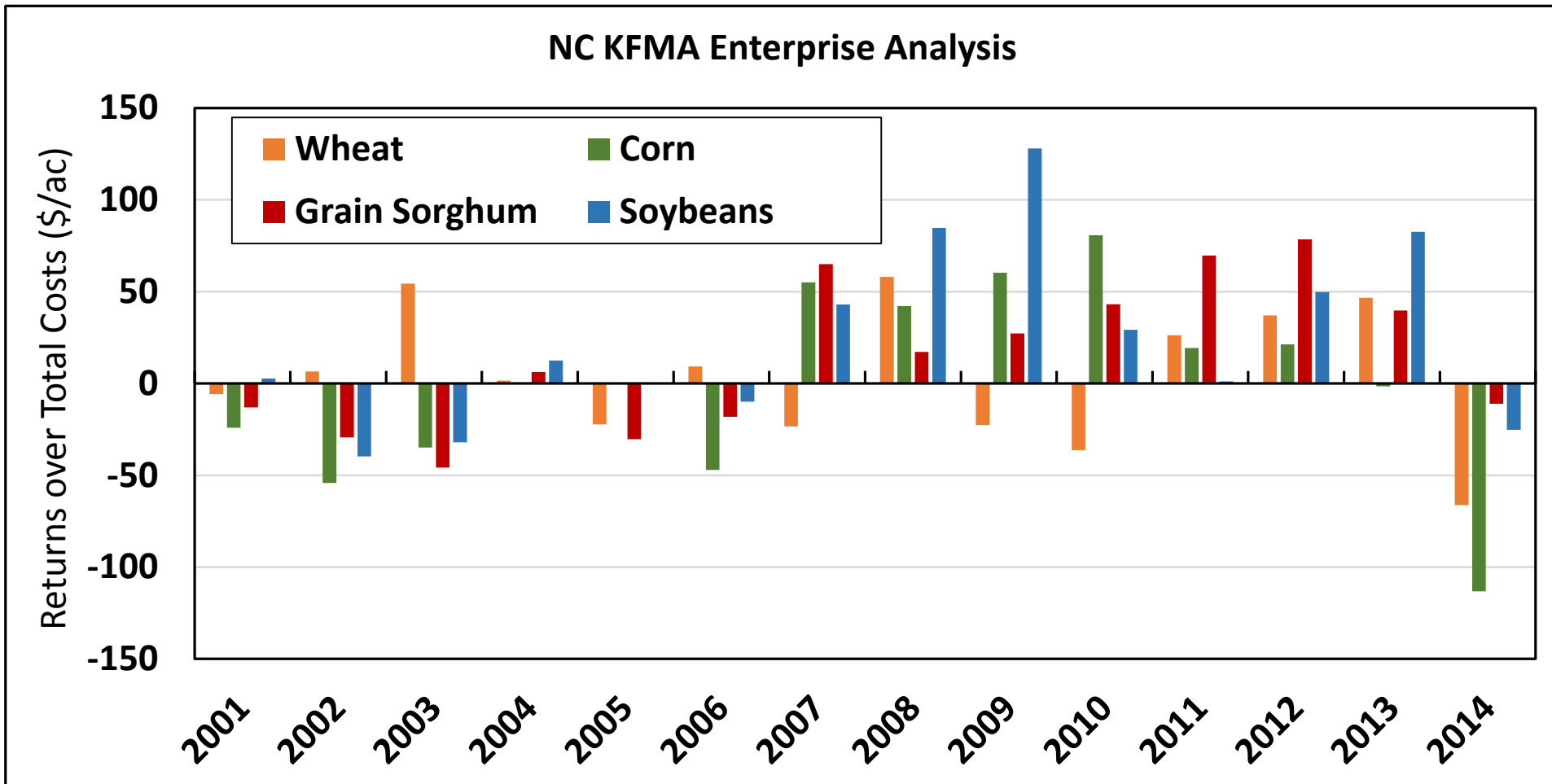
CURRENT CONDITIONS

Returns to Farming



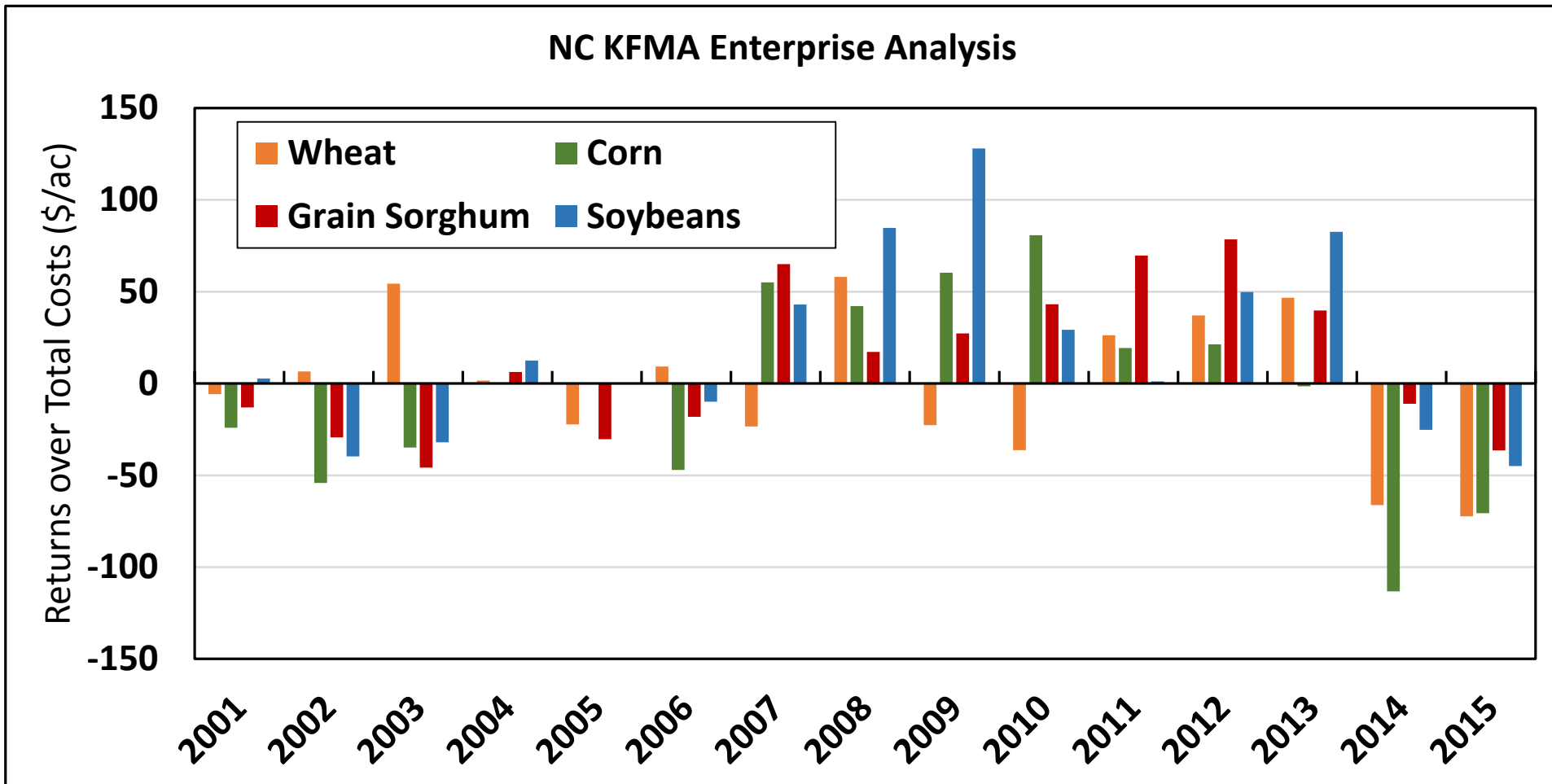
Source: KFMA Enterprise Reports (<http://www.agmanager.info/kfma>)

Returns to Farming



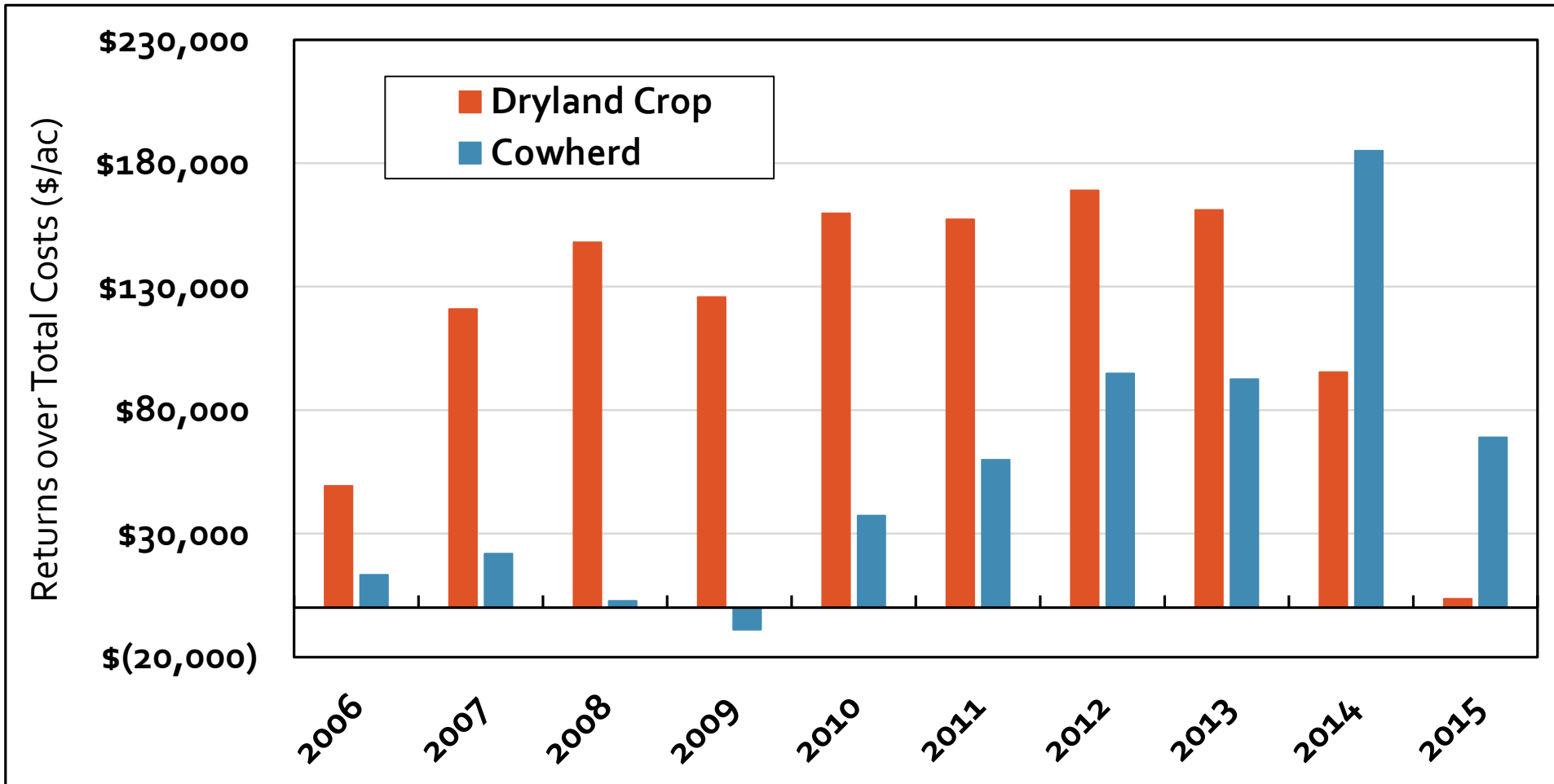
Source: KFMA Enterprise Reports (<http://www.agmanager.info/kfma>)

Returns to Farming



Source: KFMA Enterprise Reports (<http://www.agmanager.info/kfma>)

Net Farm Income by Operation



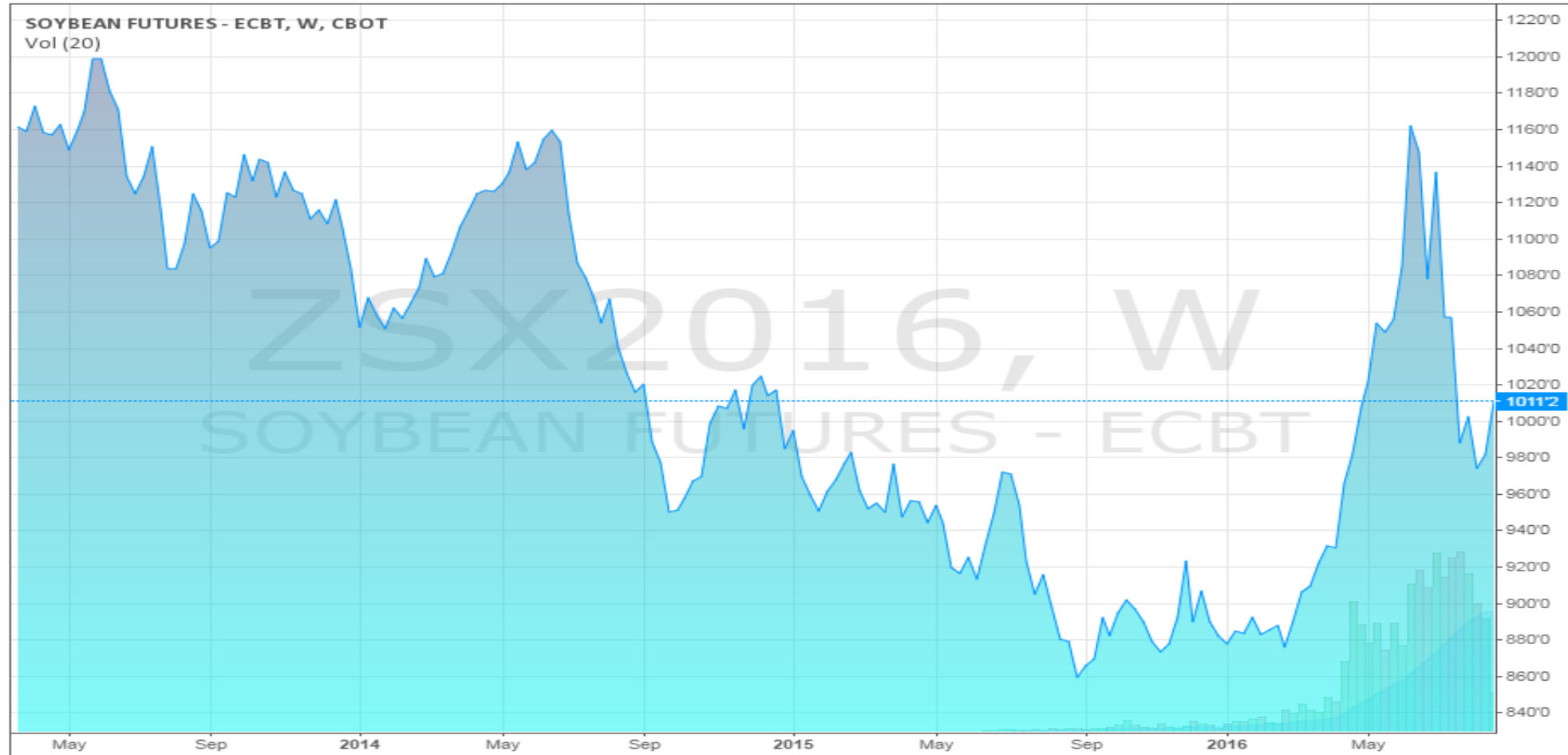
Source: KFMA Executive Reports (<http://www.agmanager.info/kfma>)

Profit Projections

- **Profitability of farming is driven by**
 - Crop prices
 - Costs of production
- **Crop prices**
 - Highly volatile and driven by production in Kansas and rest of the world

Markets Can Change Quickly

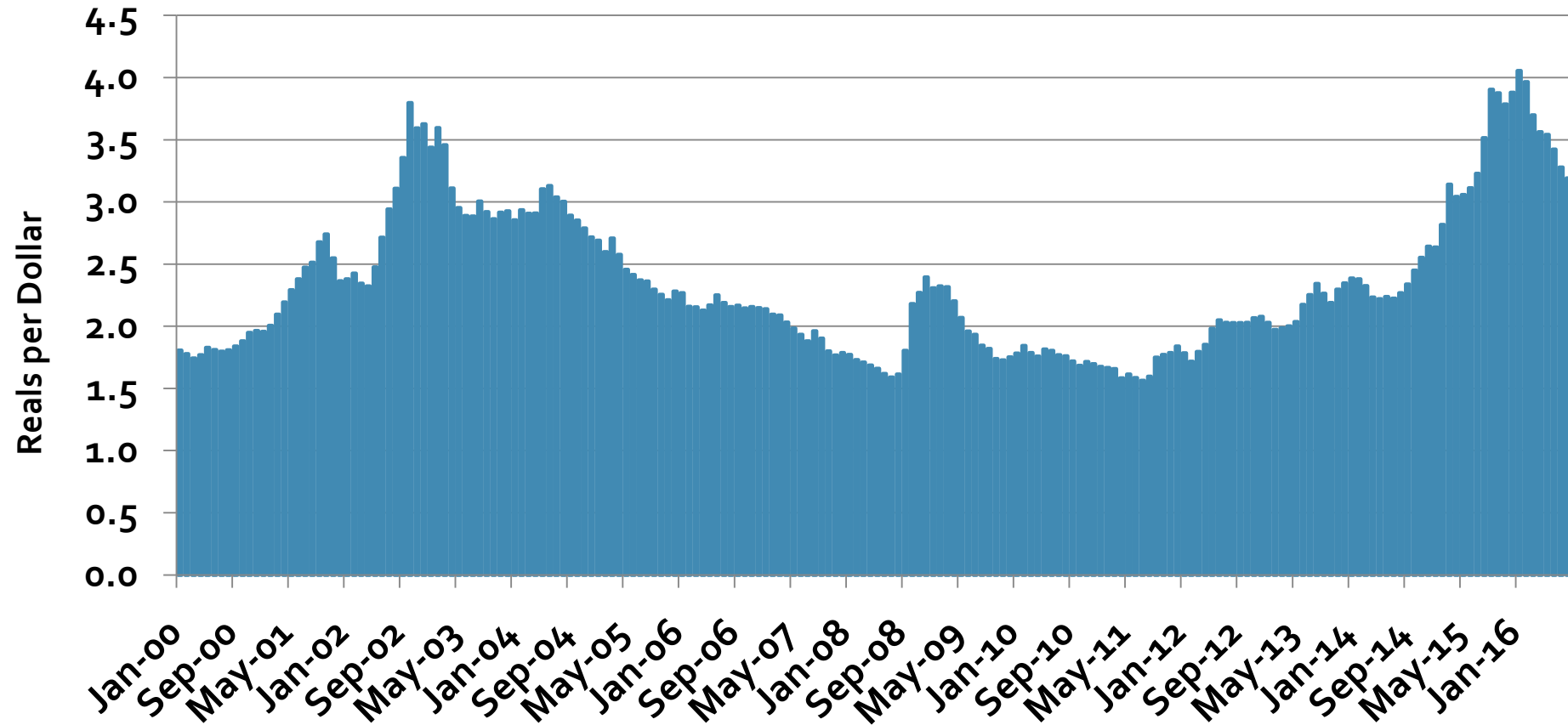
CBOT:ZSX2016, W 1011'2 ▲ +2'0 (+0.2%) O: 981'4 H:1015'6 L:980'0 C:1011'2



Profit Projections

- **Profitability of farming is driven by**
 - Crop prices
 - Costs of production
- **Crop prices**
 - Highly volatile and driven by production in Kansas and rest of the world
 - Kansas' ability to compete in export market is affected by strength of the U.S. dollar

Brazilian Real-U.S. Dollar Exchange Rate



Profit Projections

- **Profitability of farming is driven by**
 - Crop prices
 - Costs of production
- **Crop prices**
 - Highly volatile and driven by production in Kansas and rest of the world
 - Kansas' ability to compete in export market is affected by strength of the U.S. dollar
- **Cost of production**
 - Bought a large amount of new machinery (accelerated depreciation)
 - Rental rates increased to reflect strong competition for land

Cost of Production: NI Cropland (\$/ac)

Year	Corn		Soybean	
	Variable Cost	Total Cost	Variable Cost	Total Cost
2015	\$312	\$434	\$225	\$339
2014	\$322	\$447	\$229	\$339
2013	\$308	\$420	\$224	\$342
2012	\$325	\$435	\$202	\$299
2011	\$281	\$391	\$192	\$286
2010	\$268	\$382	\$176	\$268
2009	\$267	\$371	\$173	\$261
2008	\$265	\$374	\$167	\$250
2007	\$231	\$331	\$145	\$229
2006	\$191	\$269	\$125	\$183

Impacts of Low Profitability

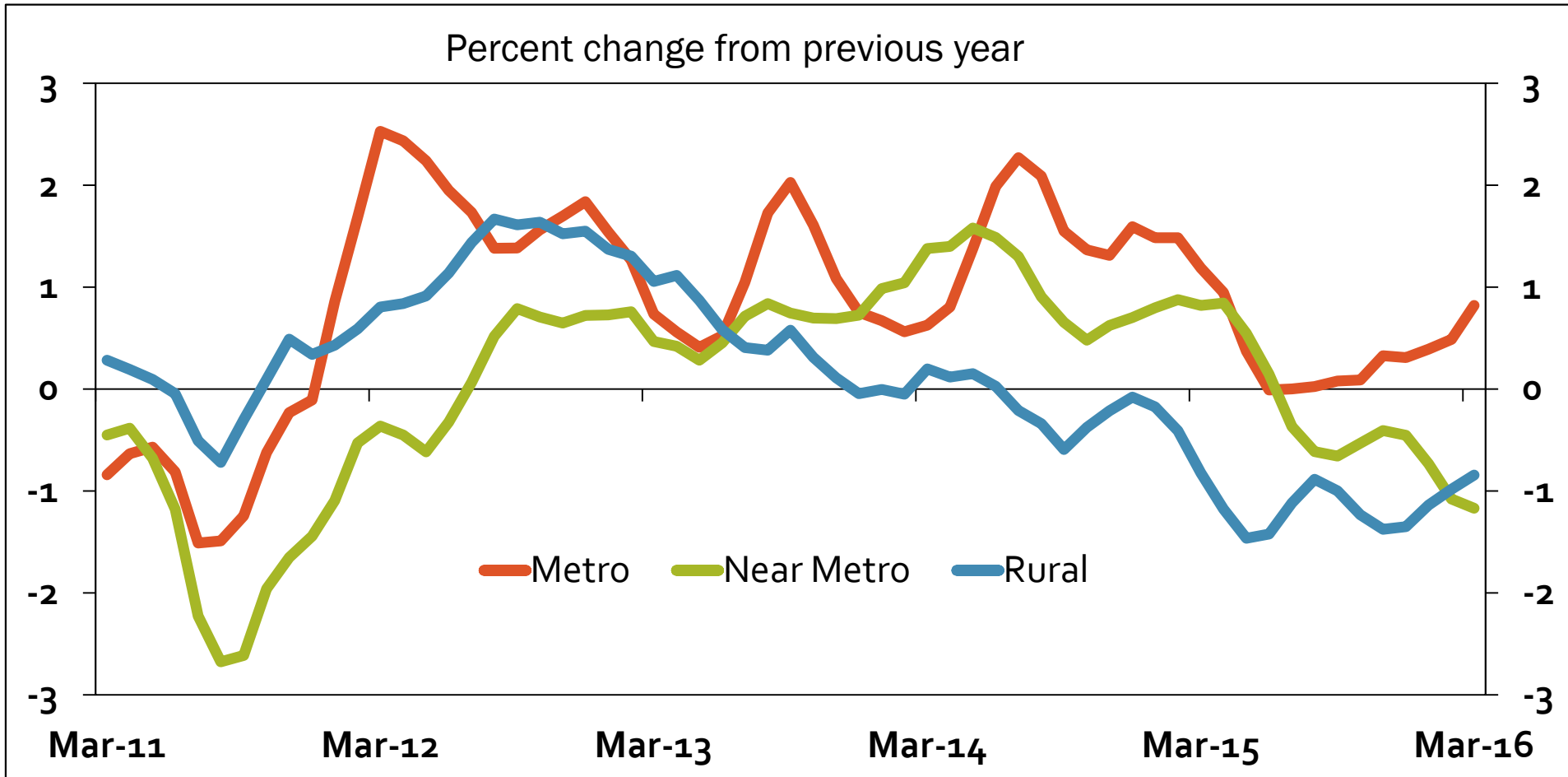
- Debt repayment capacity has deteriorated significantly in last two years
- Negative cash flows are eroding working capital
- Loans will have to be restructured
 - Extending life of debt
 - Liquidating assets

Impact of Agricultural Sector

- Does agriculture impact the economic condition of the rest of Kansas?
- Economic indicators
- Land values
- Property taxes

ECONOMIC INDICATORS

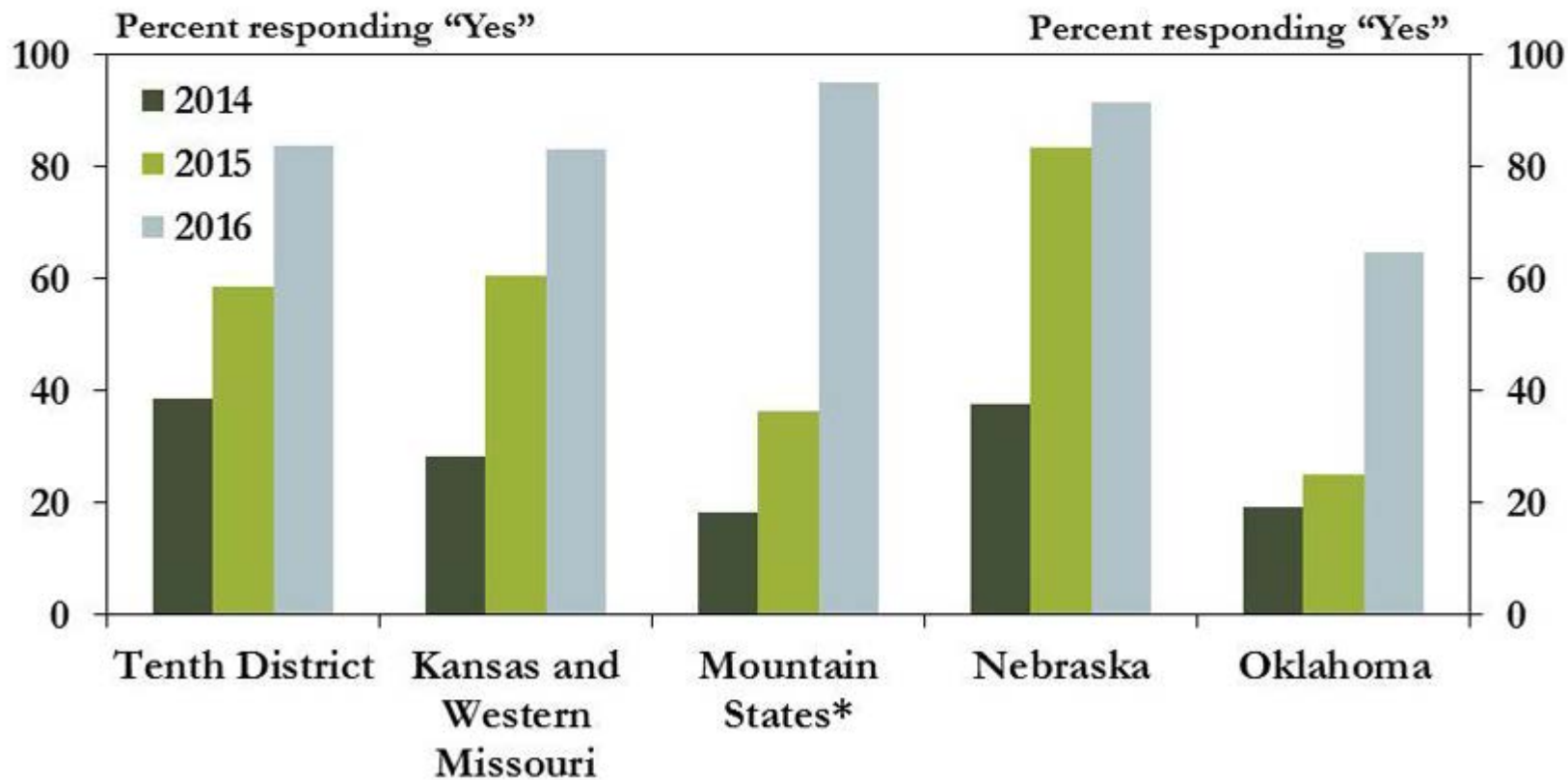
Employment Growth in Kansas



Source: U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages

Chart 4: Effect of Current Agricultural Economy on Main Street Business Activity

Is a weakening agricultural economy leading to weaker Main Street business activity?

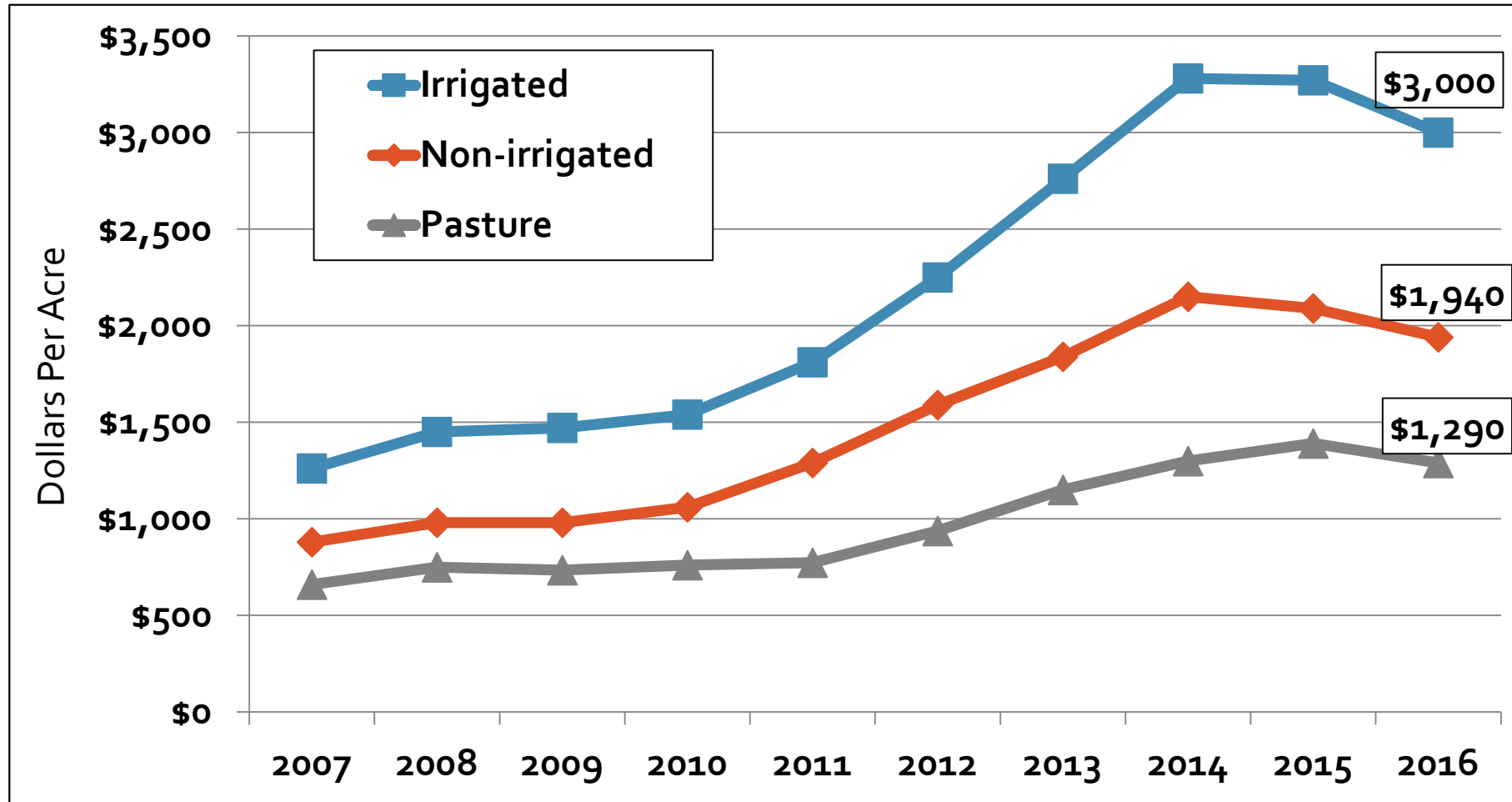


* Mountain States include Colorado, northern New Mexico and Wyoming

Source: <https://www.kansascityfed.org/research/indicatorsdata/agcreditsurvey>

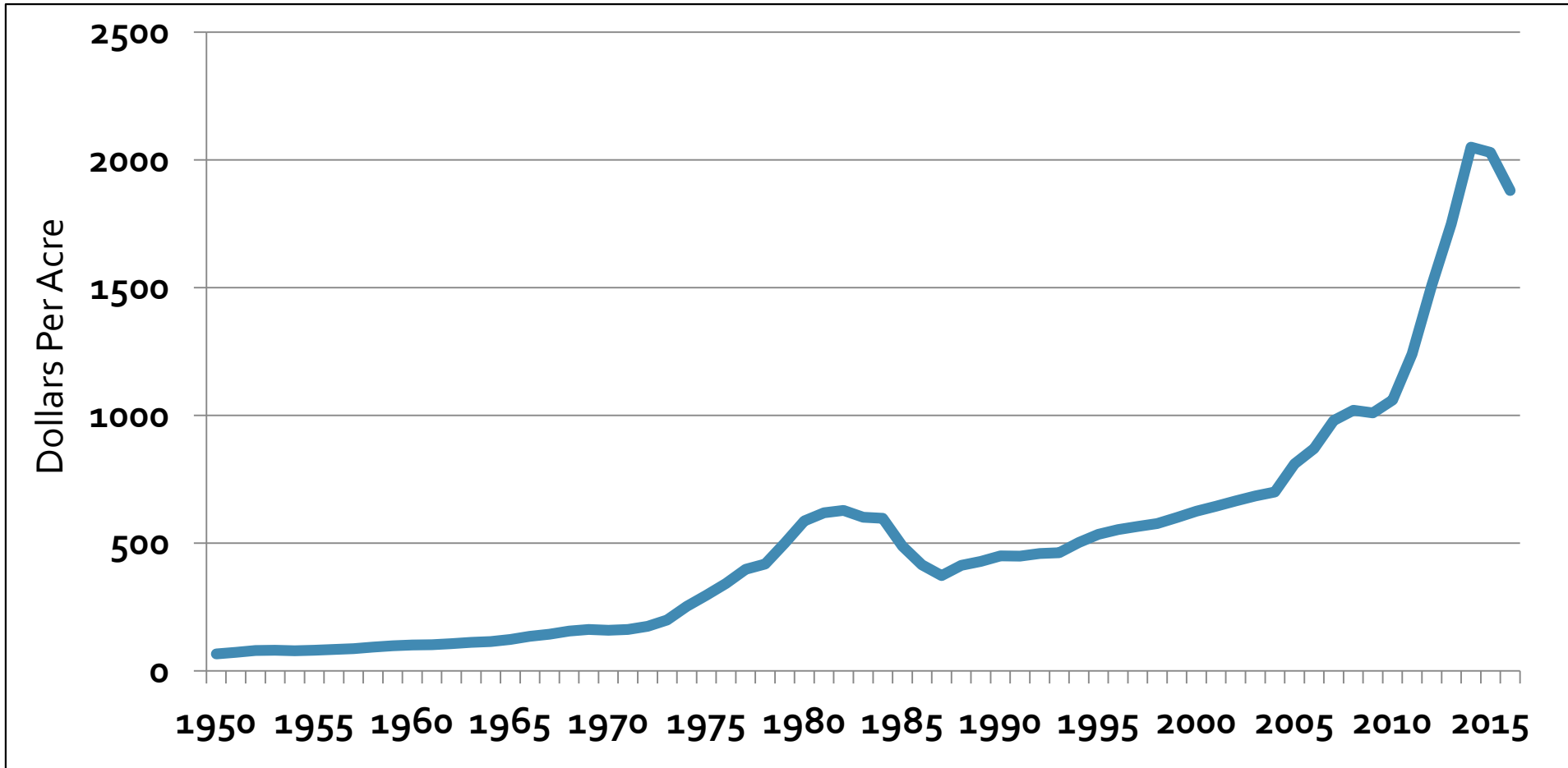
LAND VALUES

Kansas Land Values



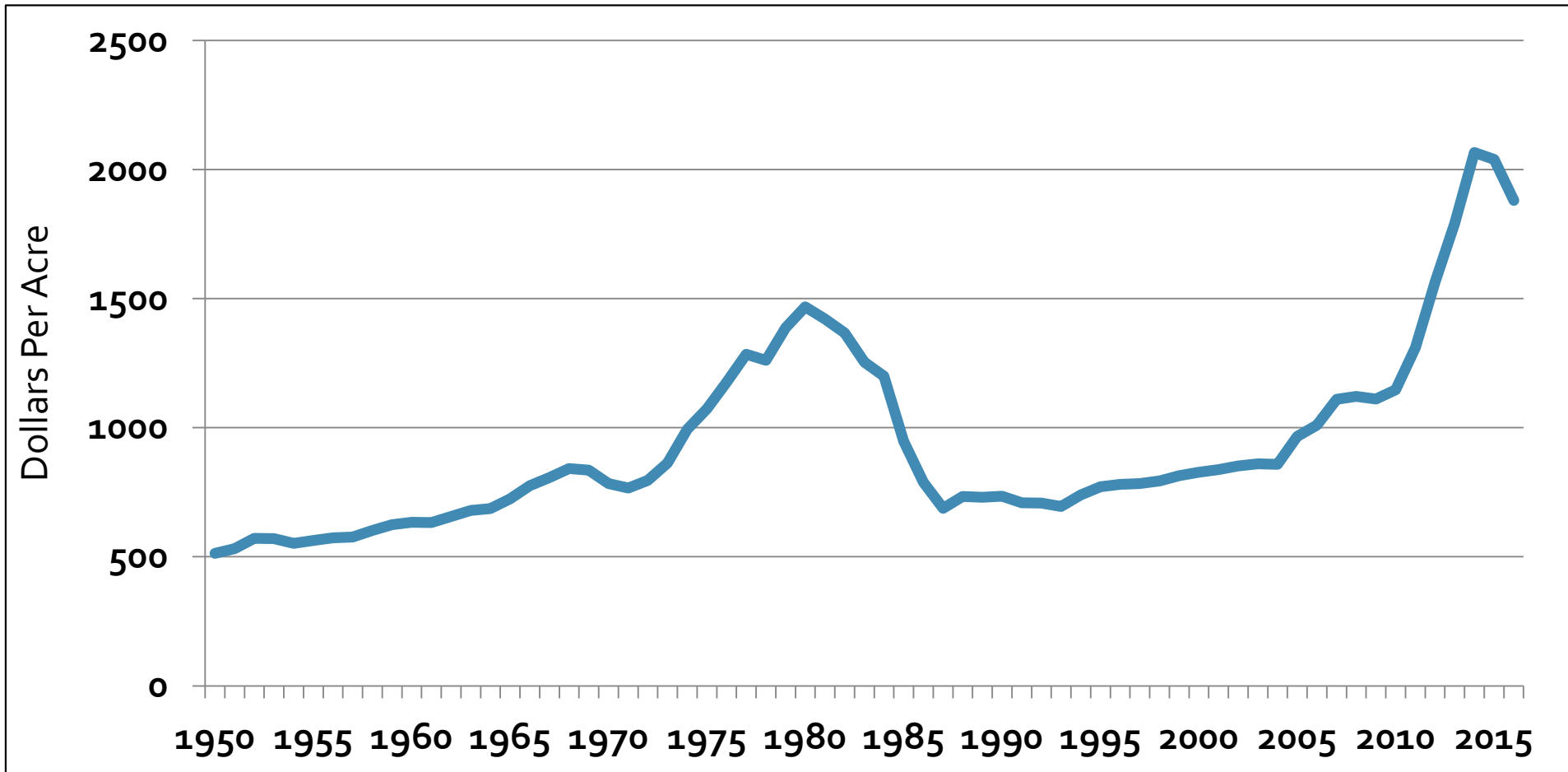
Source: USDA-NASS

Kansas Land Values



Source: USDA-NASS

Inflation-Adjusted Land Values



Source: USDA-NASS

Land Value Effects

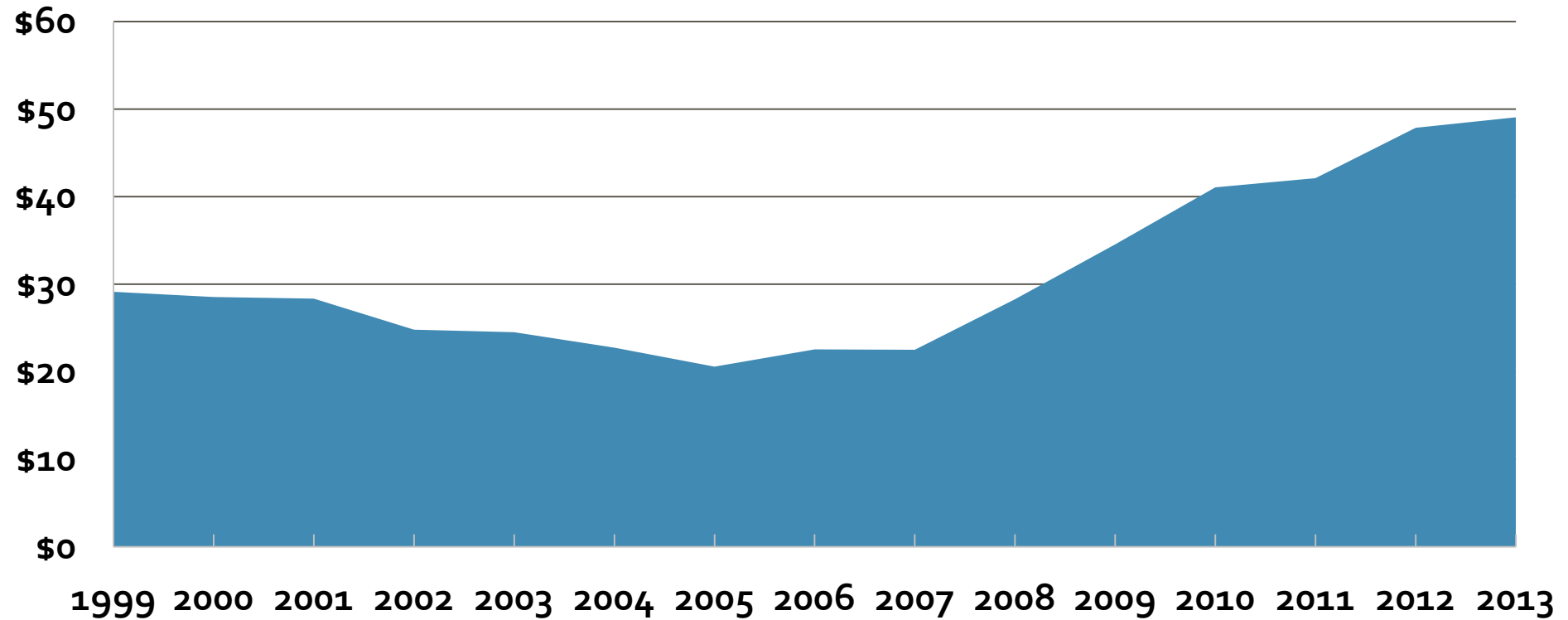
- **Recent study by Featherstone, Taylor, and Gibson**
 - Looked at 40-years of Kansas land values and profitability
 - Long-run implied capitalization rate of 4.61%
- **At an estimated net farm income of \$46/ac**
 - Long-run land value is \$999/ac
 - This is about a 50% decline from market high (2015)

PROPERTY TAXES

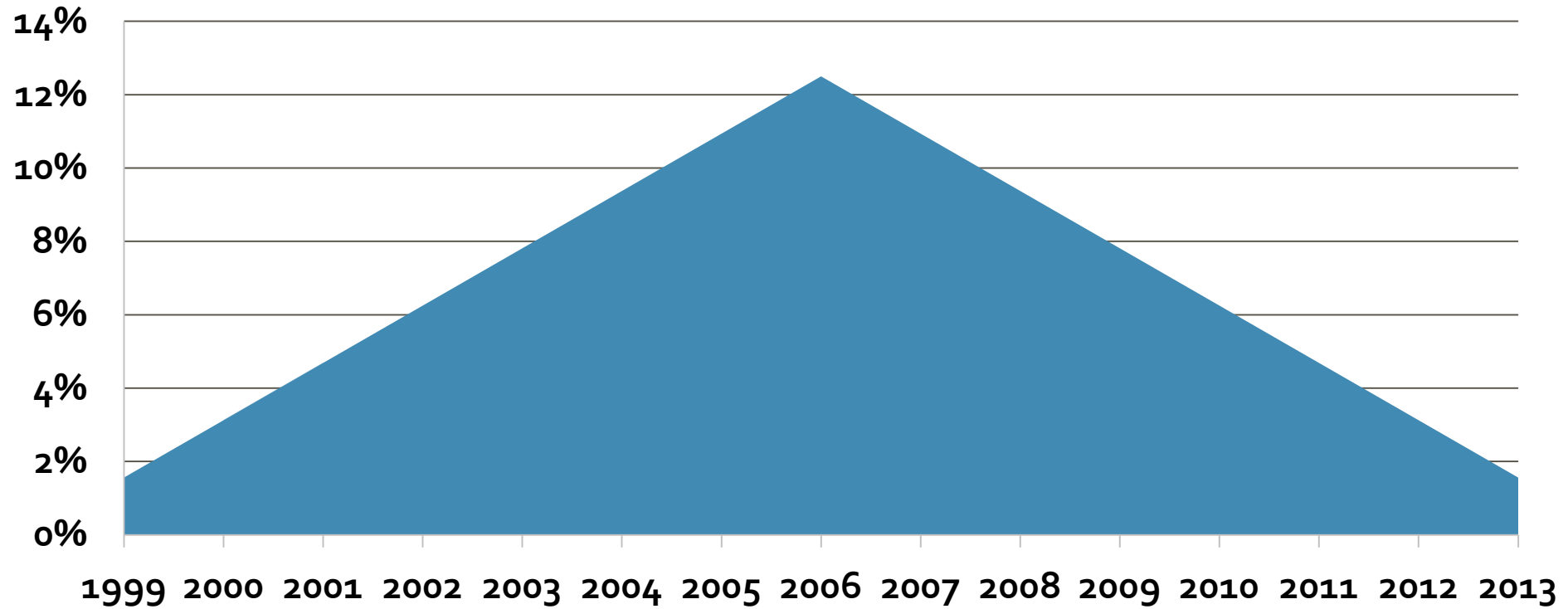
Agricultural Property Taxes

- **Defined as the eight year average of eight year average of returns to landlord**
 - This eight year average is then capitalized at the statute-defined capitalization rate
- **Process places a higher weight on middle years of the eight year window**
- **Designed to have a more smoothing effect on tax values**
 - Goal is to remove the variability of year to year changes in returns

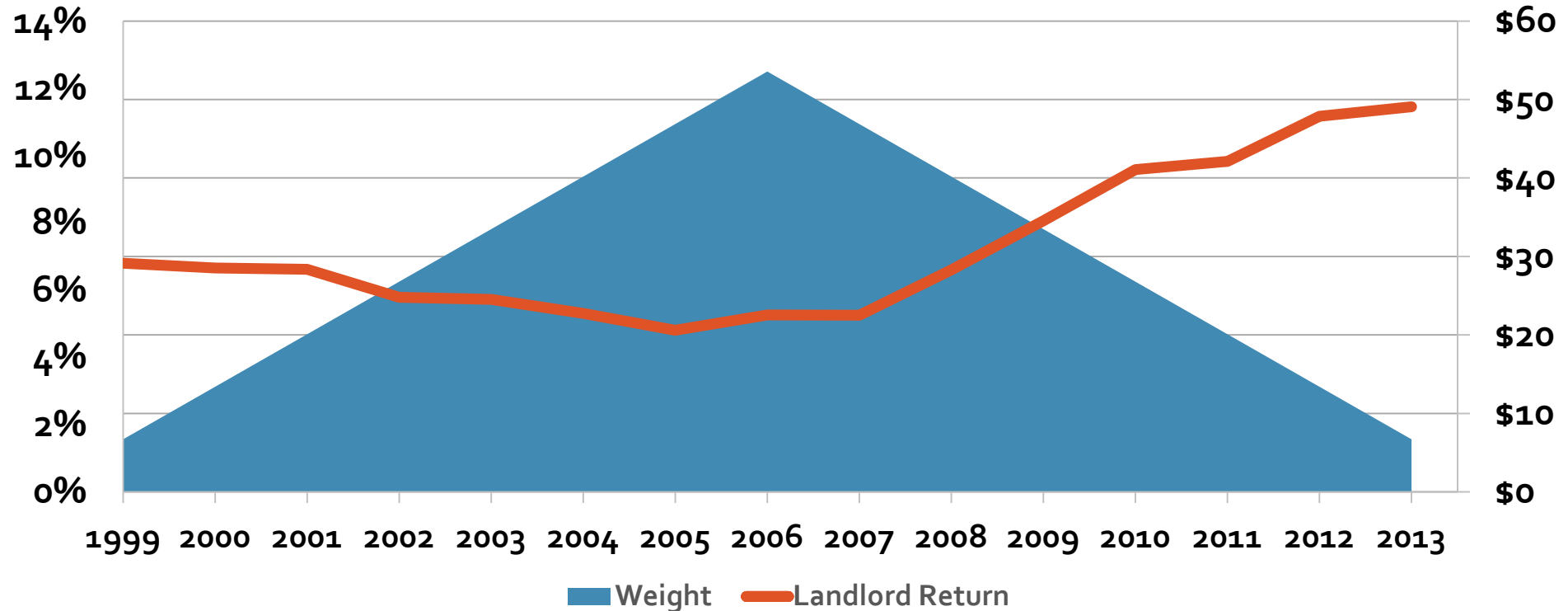
Landlord Returns by Year (\$/ac)



Property Tax Weights by Year



Property Tax Computation



Agricultural Property Taxes

- **Tax revenues will continue to increase over next several years**
 - Reflects the moving average starting to include the better years
- **Does not reflect current profitability in farming**
 - Disconnect between the property tax calculation and current situation

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