

Outlook for Farmland Values and Cash Rents



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Mahaska County, IA Land Auction

Two Farms SOLD today!



**Tract 1 sold for \$396,425 or \$5,050 per acre,
and Tract 2 sold for \$273,600 or \$3,600 per acre!**

**Average farmland value in Mahaska Co. was
\$7,366 in November 2013 based on ISU survey.**

Farmland values and cash rents are always news!



- *“Results from this survey suggest that cash rents in 2014 will be slightly below 2013 levels.” (Schnitkey, Sept. 3, 2013)*
- *OSU economist: “2014 Ohio farm land values flat or in decline” (Ward, Dec. 1, 2013)*
- *“At this point in time, land prices appear to be moving gradually lower without significant volatility,” states Goss. (July 14, 2014)*
- *“The value of cropland in Nebraska continues its upward climb, rising 6.6 percent from a year ago to an average of \$5,180 an acre.” USDA (Aug. 2, 2014)*

USDA Cash Rent Estimates

State	2013	2014	% change
ILLINOIS	\$ 223	\$ 234	4.9%
INDIANA	\$ 192	\$ 195	1.6%
IOWA	\$ 255	\$ 260	2.0%
KANSAS	\$ 63	\$ 62	-0.8%
KENTUCKY	\$ 149	\$ 148	-0.7%
MICHIGAN	\$ 118	\$ 123	4.2%
MINNESOTA	\$ 178	\$ 186	4.5%
MISSOURI	\$ 121	\$ 132	9.1%
NEBRASKA	\$ 203	\$ 205	1.0%
NEW MEXICO	\$ 105	\$ 93	-11.4%
NORTH DAKOTA	\$ 65	\$ 68	4.6%
OHIO	\$ 139	\$ 144	3.6%
OKLAHOMA	\$ 34	\$ 34	0.0%
SOUTH DAKOTA	\$ 105	\$ 116	10.5%
WISCONSIN	\$ 124	\$ 135	8.9%

Iowa Cash Rent Survey Comparisons



	USDA Survey		ISU Survey	
Year	\$/acre	% change	\$/acre	% change
2010	176	1%	184	1%
2011	196	11%	214	16%
2012	235	20%	252	18%
2013	255	9%	270	7%
2014	260	2%	260	-4%

Returns to Land Identity

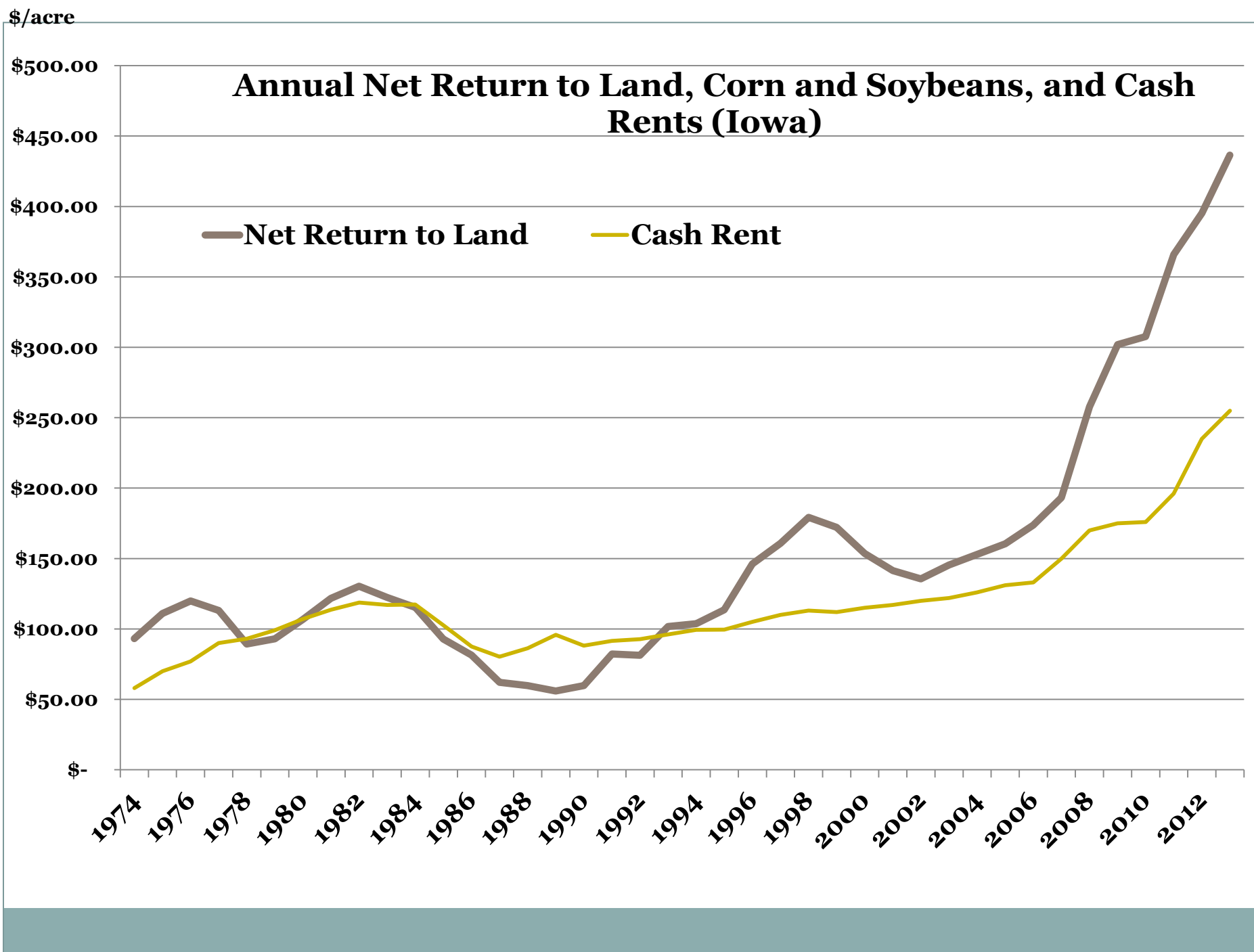


$$\begin{aligned} & \text{Yield} \times \text{Price} \\ & + \text{USDA payments} \\ & + \text{MPCI indemnities} \\ & - \text{Nonland costs of production} \\ & = \text{Net return to land} \\ & - \text{Cash rent} \\ & = \text{Tenant's "profit"} \end{aligned}$$

Data 1990-2013/2014



- Yields: NASS state averages
- Prices: USDA marketing year prices
- Costs: ISU budgets
- USDA payments: NASS or EWG
- MPCCI indemnities: RMA
- Rents: USDA survey or ISU survey



Projections 2014-2019



- Yields: Trend line since 1990
 - Corn +2.3 bu/yr
 - Soybeans +0.4 bu/yr
- Prices: FAPRI or USDA or CBOT
- USDA payments: ARC-CO
 - Corn: \$50, \$31, \$0, \$0, \$0, ?
 - Soybeans \$14, \$36, \$11, \$0, \$0, ?
- MPCCI indemnities: (farmer premium / 40%) x 90%
 - Corn \$45
 - Soybeans \$30
- Costs: Trend line from ISU budgets (+1% per year)



Corn Price Estimates (U.S. marketing year prices)



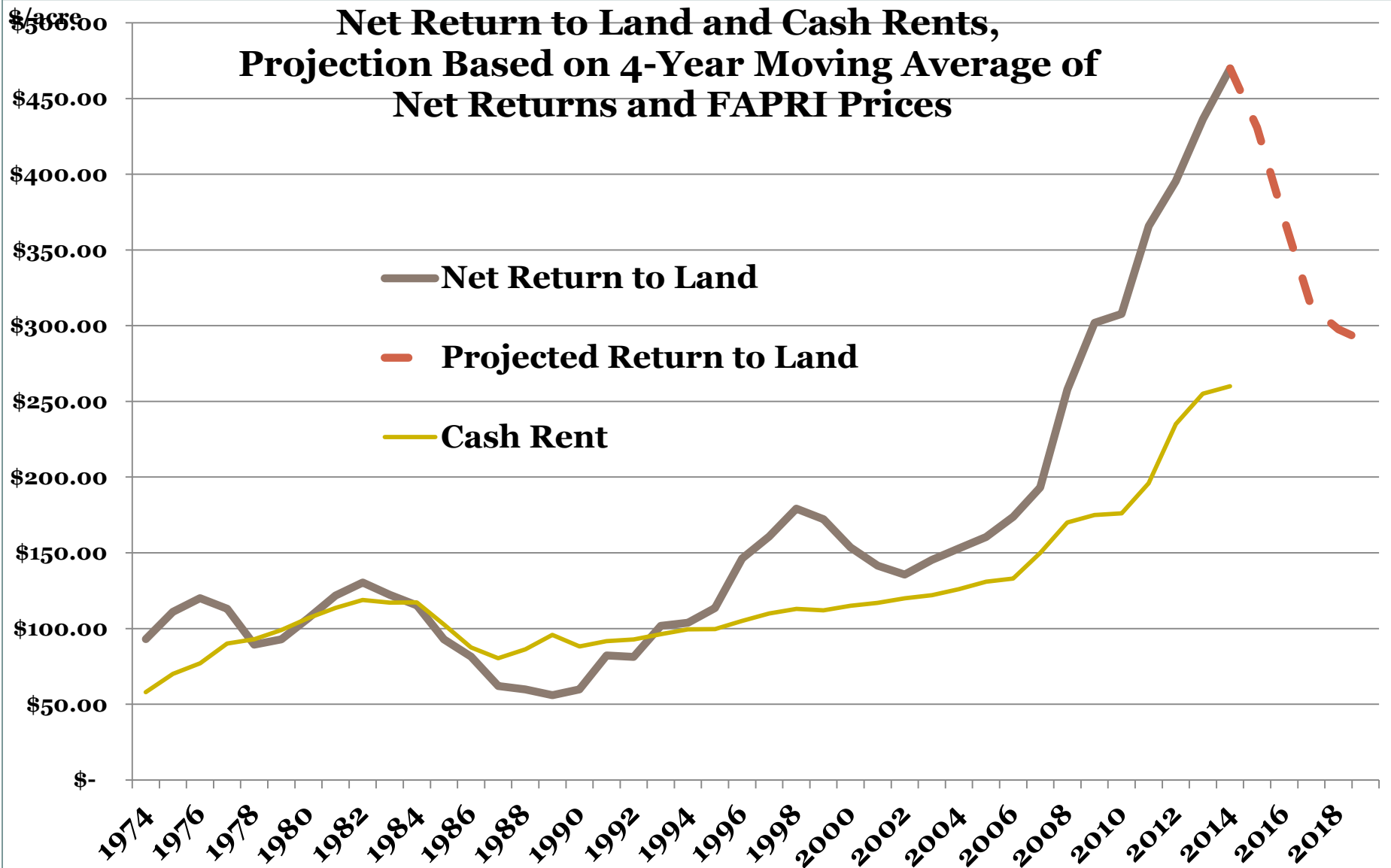
Source	FAPRI	USDA	OPTIMISTIC
2013	\$ 4.42	\$ 4.50	\$ 4.45
2014	\$ 4.17	\$ 3.65	\$ 4.60
2015	\$ 4.09	\$ 3.30	\$ 4.60
2016	\$ 4.07	\$ 3.35	\$ 4.60
2017	\$ 4.06	\$ 3.45	\$ 4.60
2018	\$ 4.04	\$ 3.60	\$ 4.60
2019	\$ 4.02	\$ 3.75	\$ 4.60

Soybean Price Estimates (U.S. marketing year prices)

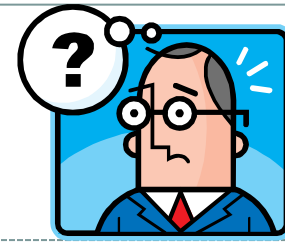


Source	FAPRI	USDA	OPTIMISTIC
2013	\$ 12.57	\$ 12.15	\$ 12.30
2014	\$ 9.84	\$ 9.75	\$ 10.58
2015	\$ 9.80	\$ 8.85	\$ 10.58
2016	\$ 9.68	\$ 8.90	\$ 10.58
2017	\$ 9.68	\$ 9.05	\$ 10.58
2018	\$ 9.77	\$ 9.25	\$ 10.58
2019	\$ 9.85	\$ 9.45	\$ 10.58

Net Return to Land and Cash Rents, Projection Based on 4-Year Moving Average of Net Returns and FAPRI Prices



Cash Rents?



Look at historical relationship since 1975.
Regress cash rent on net return to land

- Current year
- 3-year moving average
- 4-year moving average
- 5-year moving average

\$/acre

\$300

\$250

\$200

\$150

\$100

\$50

\$-

Iowa Cash Rents, Actual & Projected

— 3-yr avg

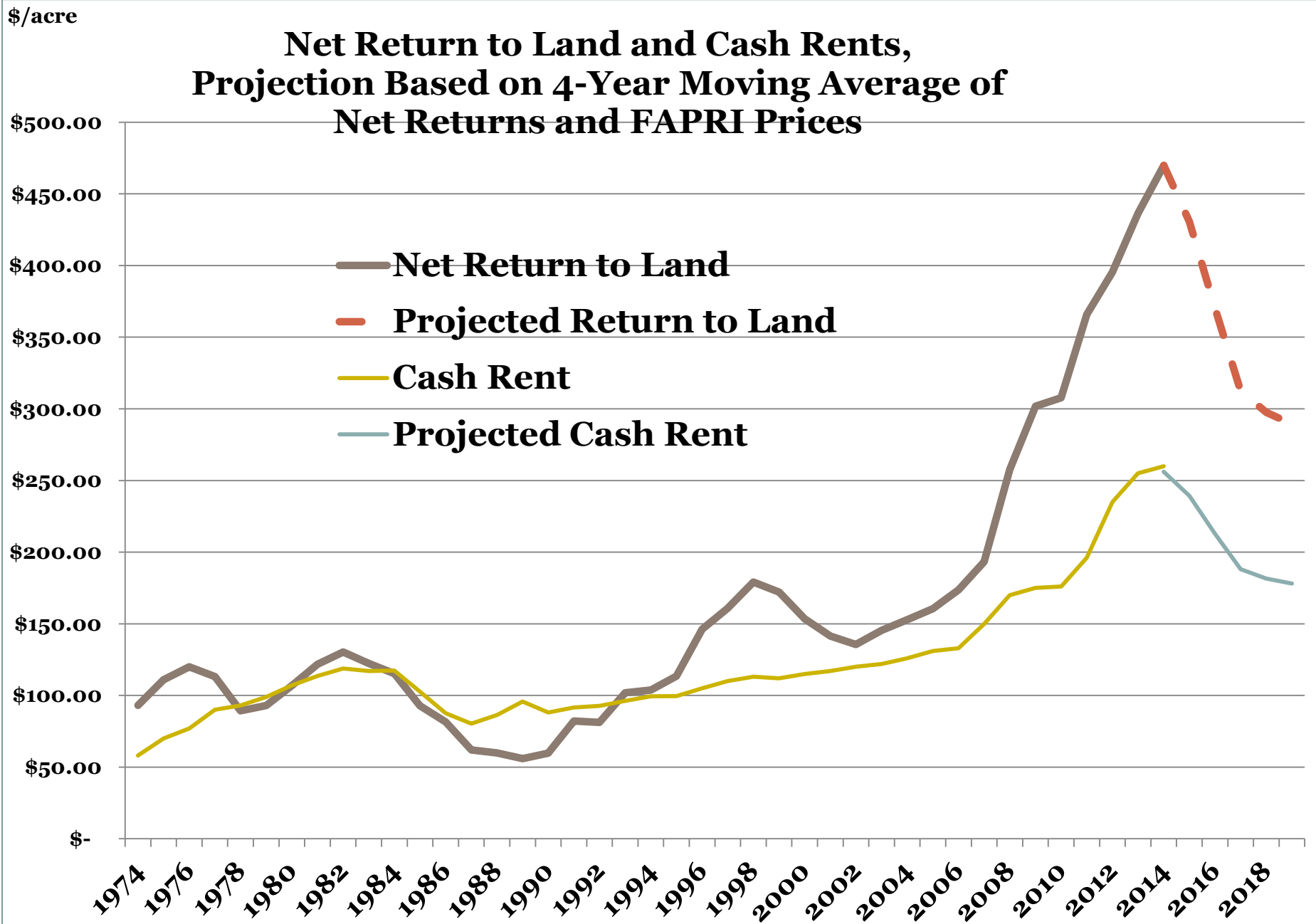
— 4-yr avg

— 5-yr avg

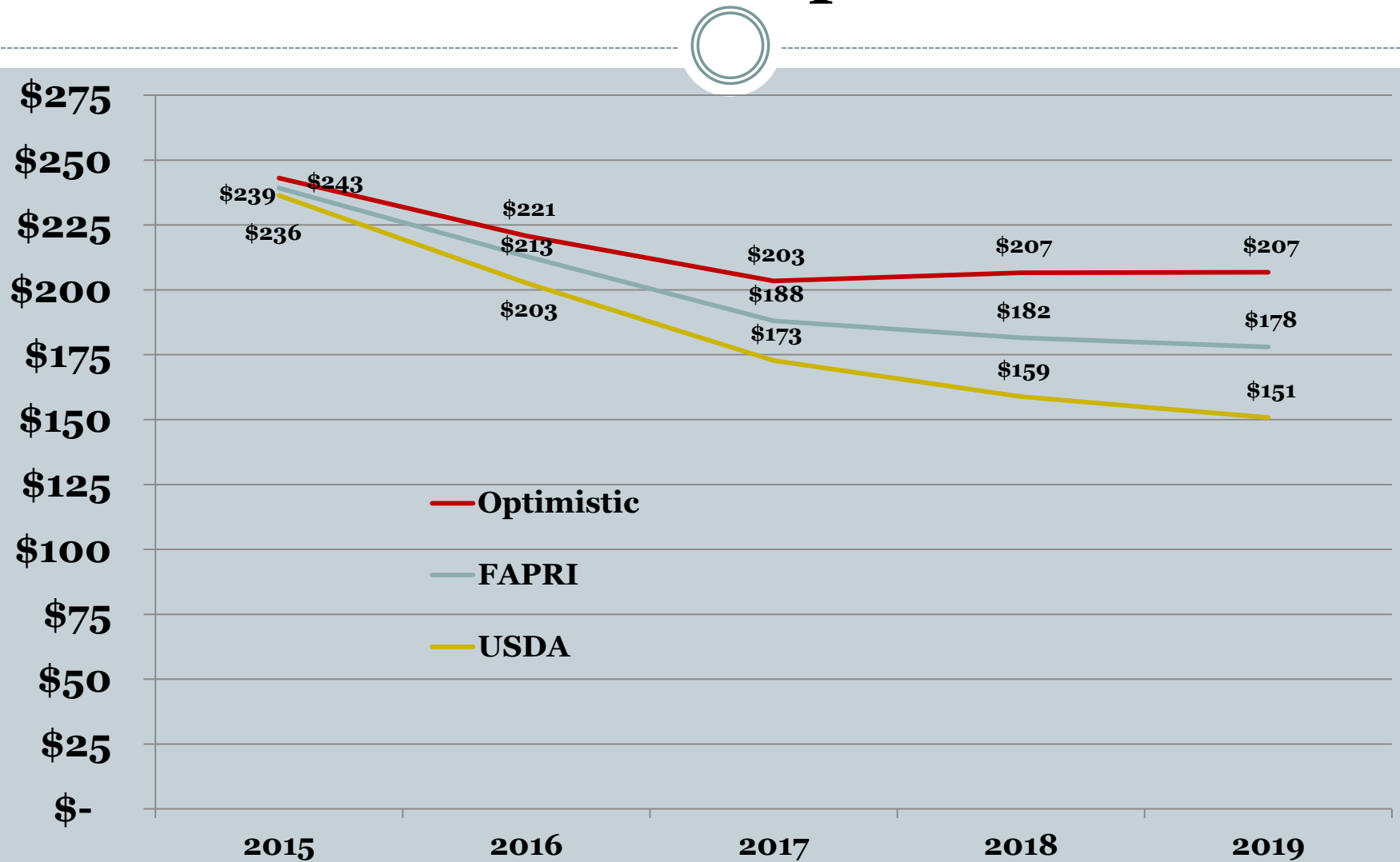
— Actual Rent

1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019

**Net Return to Land and Cash Rents,
Projection Based on 4-Year Moving Average of
Net Returns and FAPRI Prices**



Projected Iowa Average Cash Rent (based on alternative price scenarios)



Are rents “sticky downward”?



“They think the tenants should bleed for a while and give the profits from previous years to the landlords.”
– ISU Extension field specialist, quoting landowners.

Most operators still have some liquidity to burn.



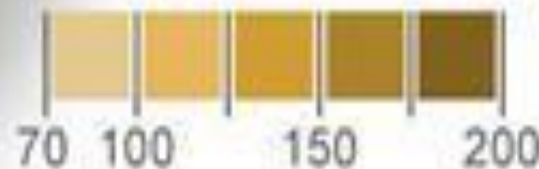
Iowa land deals head west

Sioux
County

The height of each county represents change in land values between 2001 and 2010

The color of each county represents bushels of corn harvested per acre, 2010

150%
100
50



Sources: Iowa State University (land values); USDA (yields)

Iowa Land Value Surveys

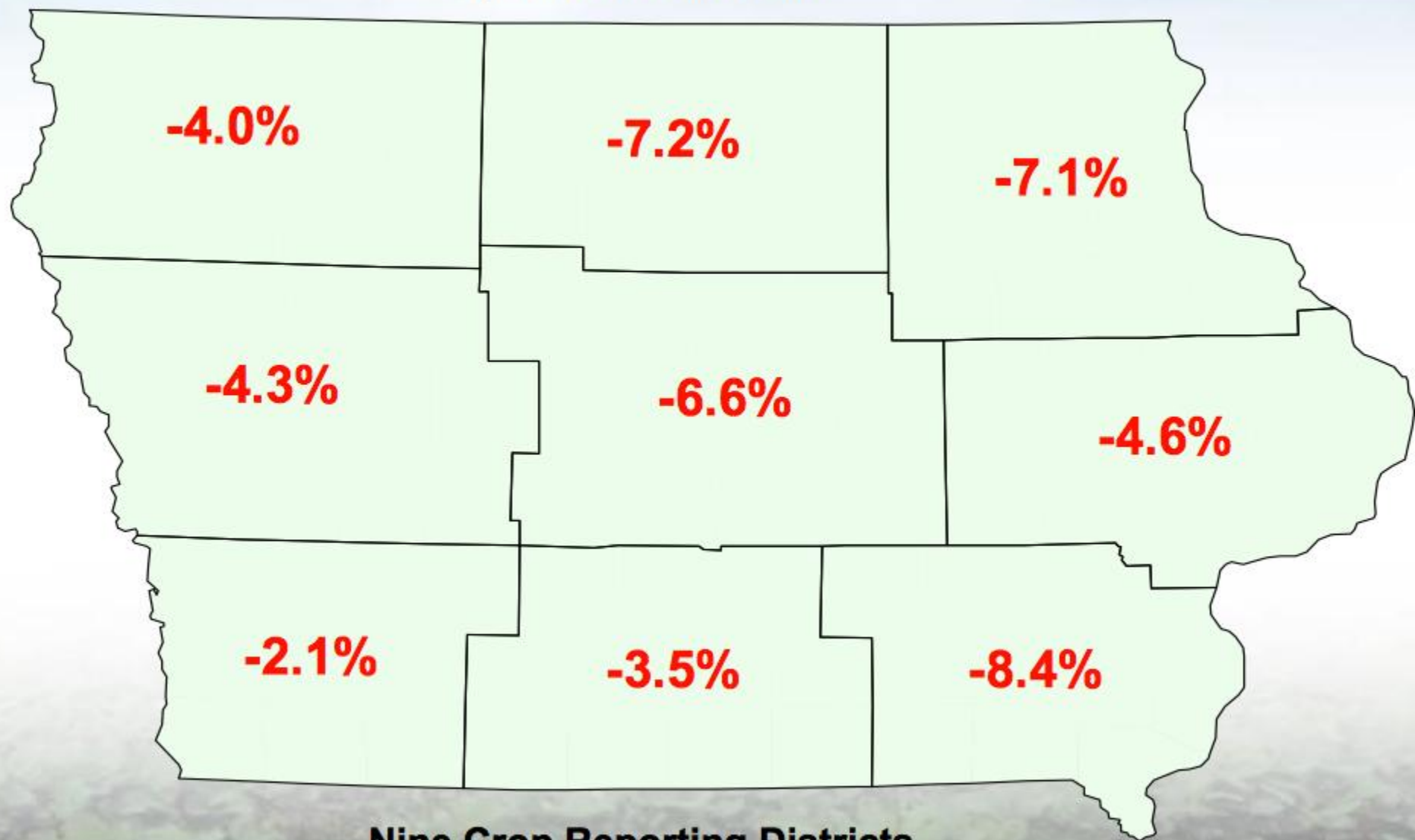


- ISU (November, ag realtor survey)
 - Farmland: \$8,716 (up 5.1% annually)
- USDA (January, farmer survey)
 - Cropland: \$8,750 (up 9.4% annually)
 - Pasture: \$3,400 (up 5.5% annually)
- Iowa Realtors Land Institute (April, ag realtor survey)
 - Cropland: \$8,286 (down 5.4% since Sept.)
 - Pasture: \$2,736 (up 2% since Sept.)
- Federal Reserve Bank of Chicago (April, bank survey)
 - “Good” farmland: down 2% annually

Realtors Land Institute Land Value Survey

March 1, 2014

September 2013 – March 2014



Nine Crop Reporting Districts

Tillable Acres

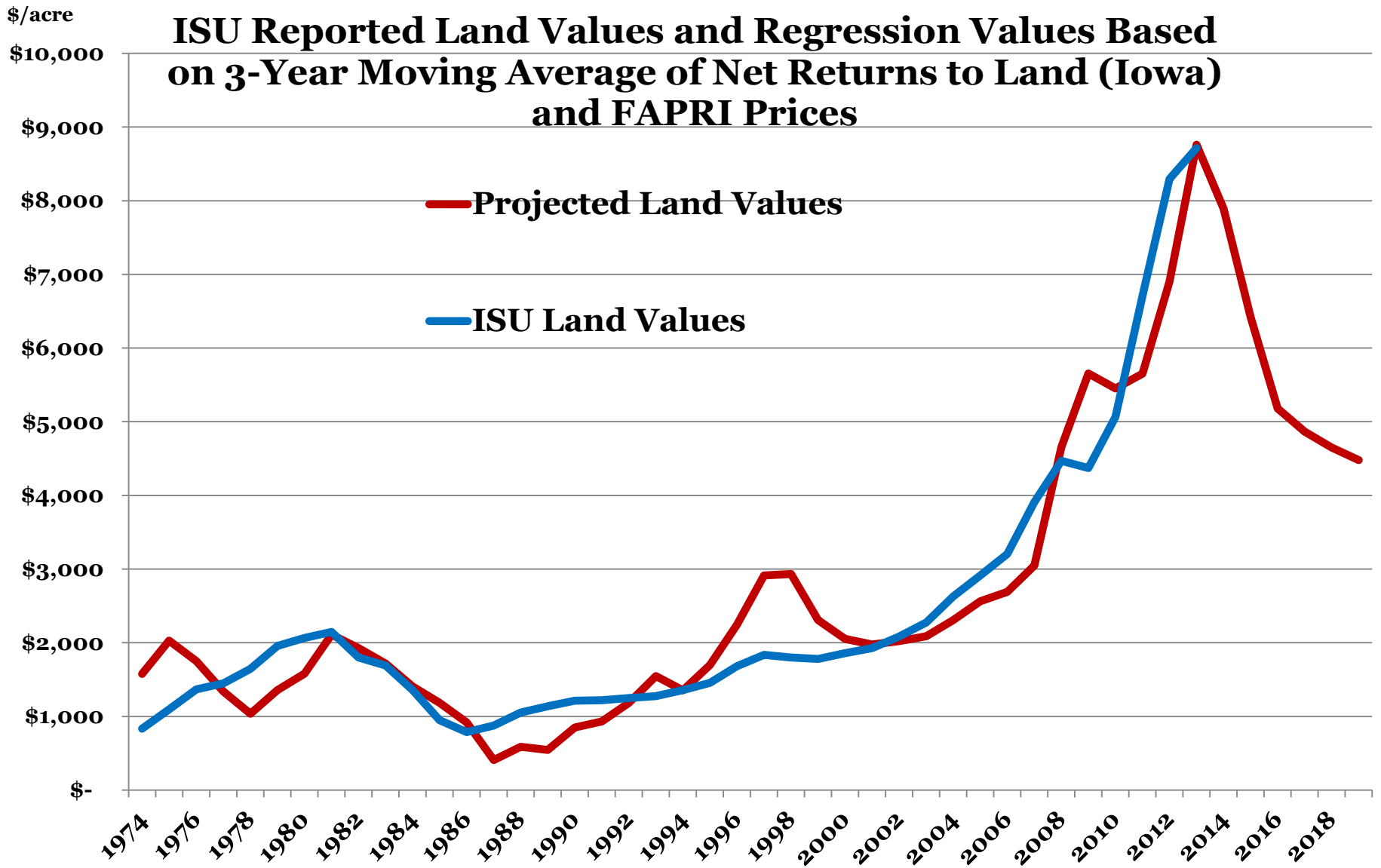
Projections from Soil Management and Land Valuation Conference (May 2014)



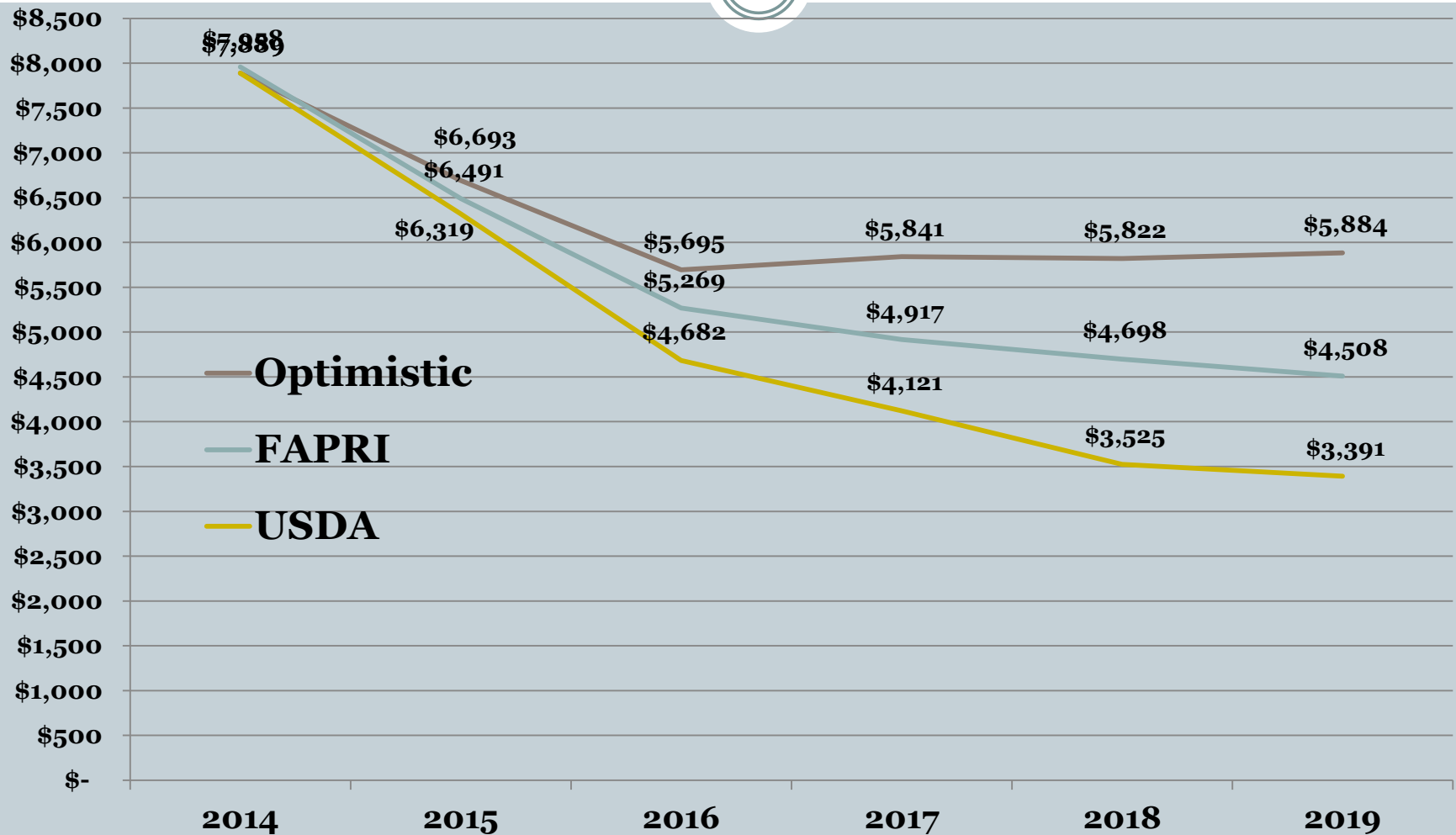
- ISU survey value Nov. 2013 \$8,716
- Audience projection Nov. 2014 \$8,568 (-1.7%)
- Audience projection Nov. 2015 \$8,900 (+3.4%)

USDA Land Value Estimates

State	2013 Original	2013 Revised	2014	% change
ILLINOIS	\$ 7,900	\$ 7,190	\$ 7,700	7.1%
INDIANA	\$ 7,100	\$ 6,590	\$ 7,050	7.0%
IOWA	\$ 8,600	\$ 8,000	\$ 8,750	9.4%
KANSAS	\$ 2,100	\$ 1,930	\$ 2,260	17.1%
KENTUCKY	\$ 3,750	\$ 3,430	\$ 3,550	3.5%
MICHIGAN	\$ 4,600	\$ 4,120	\$ 4,500	9.2%
MINNESOTA	\$ 4,850	\$ 4,390	\$ 4,870	10.9%
MISSOURI	\$ 3,800	\$ 3,500	\$ 3,810	8.9%
NEBRASKA	\$ 5,330	\$ 4,860	\$ 5,180	6.6%
NEW MEXICO	\$ 1,516	\$ 1,450	\$ 1,450	0.0%
N. DAKOTA	\$ 1,910	\$ 1,750	\$ 2,050	17.1%
OHIO	\$ 5,700	\$ 5,190	\$ 5,650	8.9%
OKLAHOMA	\$ 1,520	\$ 1,390	\$ 1,500	7.9%
S. DAKOTA	\$ 3,020	\$ 2,840	\$ 3,430	20.8%
WISCONSIN	\$ 4,300	\$ 4,010	\$ 4,350	8.5%



Projected Iowa Land Values under Alternative Price Scenarios



Summary



- Using current price projections, cash rents could fall 20-40% and land values 30-60% from 2014 levels.
- Is that a good thing or a bad thing?
- Are you a tenant? Landowner? Owner-operator?
- Rents and land values reflect the ag economy.



What else could happen?



- Interest rates could go up (neg. for values)
- Inflation could increase (mixed bag)
- Weather could be bad (where?)
- Increased livestock feeding (positive)
- Increased biofuel production (positive)
- Acres could contract in response to low prices
- Livestock profits could support land values
- More cash leases are “flexible” (18% in Iowa)

Questions?

