Sponsored by:

Hon. Roland Tkach, Huron County Auditor

Hon. Rick Jeffrey, Erie County Auditor

CAUV

Current Agricultural Use Value

Speakers:

Richard H. Hoffman, ASA, CAE, MAI, CRE, FRICS

Richard F. Hoffman, Esq.

6-YEAR VALUATION CYCLE

Triennial			Revaluation		
2015	**2016**	**2017**	**2018**	**2019**	**2020**
Year 4	Year 5	Year 6	Year 1	Year 2	Year 3
2021	**2022**	**2023**	**2024**	**2025**	**2026**
Triennial Update of values effective Jan. 1. **Pay Dec. of this year and July of next year**	New construction & destruction added to tax duplicate	New construction & destruction added to tax duplicate	**Revaluation completed effective Jan 1.** **Pay Dec & July of following year**	New construction & destruction added to tax duplicate	New construction & destruction added to tax duplicate

WHAT IS AGRICULTURAL USE?
OHIO REVISED CODE SECTION 5713.30

Must be for a commercial purpose

- **Animal or poultry husbandry, aquaculture, apiculture, commercial timber or timber contiguous to other qualifying land, field crops, tobacco, fruits, vegetables, nursery stock, ornamental trees, sod, or flowers**
- **Land devoted exclusively to biodiesel production, biomass energy production, electric or heat energy production, or biologically derived methane gas**
  - **At least 50% of feedstock must be produced on land under common ownership**
  - **Facility must be contiguous to, or on land under common ownership**

EXPLANATION OF THE CALCULATION OF VALUES FOR VARIOUS SOILS (2015)

- **CAUV land values are calculated by the capitalization of net income from agricultural products assuming typical management, cropping and land use patterns, and yields for given types of soils.**

- **There are 3514 different soil types with slopes of 25% or less.**

CAUV HISTORY

- **When CAUV was adopted in 1974 it was designed to reduce values by approximately 50%**
- **In 2005 CAUV provided a 90% reduction in value**
- **In 2010 the reduction was 77%**
- **In 2014 the reduction was 62%**
- **In 2015 the reduction was 52%**

WHO SETS CAUV VALUE?

OHIO DEPARTMENT OF TAXATION

AGRICULTURAL ADVISORY COMMITTEE

Order

COUNTY AUDITOR

SOIL HISTORY SAMPLE

ERIE COUNTY													
MAP		2015	2012	2009	2006	2003	2000	1997	1994	1991	1988	1985	1982
SYM	SOIL NAME												
AdD	Alexandria silt loam	1080	420	470	100	100	180	100	100	100	100	300	350
AdF2	Alexandria silt loam	350	230	100	100	100	70	50	70	100	50	50	50
AlA	Allis silty clay loam	350	350	200	170	100	100	100	100	100	150	170	120
AlB	Allis silty clay loam	350	350	190	120	100	100	100	100	100	130	150	120
AoA	Allis stony silt loam	350	350	200	200	100	100	100	100	100	150	170	120
ArA	Arkport loamy fine sand	1750	830	440	100	100	260	210	210	100	160	420	480

HURON COUNTY													
MAP		2015	2012	2009	2006	2003	2000	1994	1991	1988	1985	1982	1979
SYM	SOIL NAME												
AcF	Alexandria silt loam	350	230	100	100	100	70	70	100	100	210	190	210
AdD2	Alexandria silty clay loam, eroded	380	350	250	160	100	130	100	100	100	210	190	210
BgA	Bennington silt loam	2000	1170	540	100	120	290	230	120	180	410	450	580
BgB	Bennington silt loam	1740	960	530	100	100	240	200	100	100	330	290	370
BkA	Bixler loamy fine sand	1840	1050	470	100	100	250	210	120	180	410	450	580
BoA	Blount silt loam	2660	1510	820	290	290	470	440	270	330	410	450	580
BoB	Blount silt loam	2360	1330	810	280	260	420	400	200	330	330	290	370

WHY THE INCREASE?

- 1984-2005 Yield Adjustment (catch up)
- Lower Prices Leaving Formula
- Higher Prices Joining Formula
- Lower Cap Rates (Fed Reserve Policy – 2014)
  - *Change in cap rate formula (2015 and Beyond)*

FACTOR CHANGES & CAP RATE 2015

- **Timelines of Data**
  - Reduce two-year lag to one year
    - Crop yields & Crop prices
  - Non-land production costs
    - Current OSU Crop Enterprise Budgets (2015)
- **Capitalization Rate**
  - Revise debt/equality split: 80% loan/20% equity
  - Farm Credit Services 25 –year fixed multi-flex rate for loan amounts over $25,000 and over.
  - Prime rate plus 2% at Bankrate.com WSJ Survey

WOODLAND VALUATION CHANGE

- Deduction for subsurface tile drainage
  - Increase from $500 to $770
    - OSU Farm Custom Rates, 2014 – statewide survey
- Deduction for surface drainage
  - Increase from $250 to $380 (37 soils)
- Deduction for clearing
  - Increase from $500 to $1,000 (all soils)

FACTORS IN FORMULA

TIMEFRAME

- **DTE uses a seven-year Olympic average**
- **The high and the low years removed**
- **2015 Years**
  - **2008, 2009, 2010, 2011, 2012, 2013, 2014**

YIELD ADJUSTMENT FACTORS

- **Base year = 1984 (Used from 1984-2005)**
- **Annual adjustment since 2006**
- **10 year statewide yield average**
- **Data from Ohio Department of Agriculture**

AVERAGE CROP YIELDS BY YEAR IN OHIO

YEAR	CORN	SOYBEANS	WHEAT
2005	143	45	71
2006	159	47	68
2007	150	47	61
2008	135	36	68
2009	174	49	72
2010	163	48	61
2011	158	47.5	58
2012	120	45	68
2013	174	49.5	70
2014	176	52.5	74
AVERAGE 05-14	155.2	46.7	67.1
1984 Base	118	36.5	44
Average/1984 Base	1.315254	1.279452	1.525000

Source: USDA/National Agricultural Statistics Service

CROP PRICES USED IN FIVE YR. AVERAGE

Crop Year	CORN	SOYBEANS	WHEAT
2014	$ 3.65	$ 10.40	$ 5.55
2013	$ 4.41	$ 13.00	$ 6.54
2012	$ 7.09	$ 14.60	$ 7.94
2011	$ 6.44	$ 13.00	$ 6.73
2010	$ 5.45	$ 11.50	$ 5.21
2009	$ 3.55	$ 9.78	$ 4.41
2008	$ 4.21	$ 10.30	$ 5.82
2007	$ 3.95	$ 10.10	$ 5.50

Source: USDA National Agricultural Statistics Service

ADJUSTED CROP PRICES IN THE MODEL 2012-2015

				Variance	
	2012	2014	2015	2012-15	2014-15
Corn	$3.19	$4.48	$4.55	$1.36	$0.07
				42.6%	1.6%
Beans	$7.74	$10.13	$11.09	$3.35	$0.96
				43.3%	9.5%
Wheat	$3.98	$5.16	$5.67	$1.69	$0.51
				42.5%	9.9%

Crop Yields/Cropping Pattern

- **Single crop pattern for most soils based on the most recent five-year average of acres harvested, 2010-2014:**
  - **Corn 40.0%**
  - **Soybeans 52.6%**
  - **Wheat 7.4%**
- **A pattern of 50% corn and 50% soybeans for organic soils.**

Source: USDA, National AG Stats Service – 2014 Summary

Non-Land Production Costs Base & Added Unit, 2012-2015

				Variance	
	2012	2014	2015	2012-15	2014-15
Corn	$350.71	$437.85	$516.99	$166.28	$79.14
+bu	$0.90	$1.18	$1.36	$0.46	$0.18
Beans	$227.51	$275.21	$325.42	$97.91	$50.21
+bu	$0.93	$1.27	$1.24	$0.31	($0.03)
Wheat	$211.52	$255.48	$296.98	$85.46	$41.50
+bu	$1.41	$1.80	$1.77	$0.36	($0.03)

Source: Field Crop Enterprise Budget 2015, OSU Extension, Department of Agriculture

Capitalization Rate
TY 2012-2015

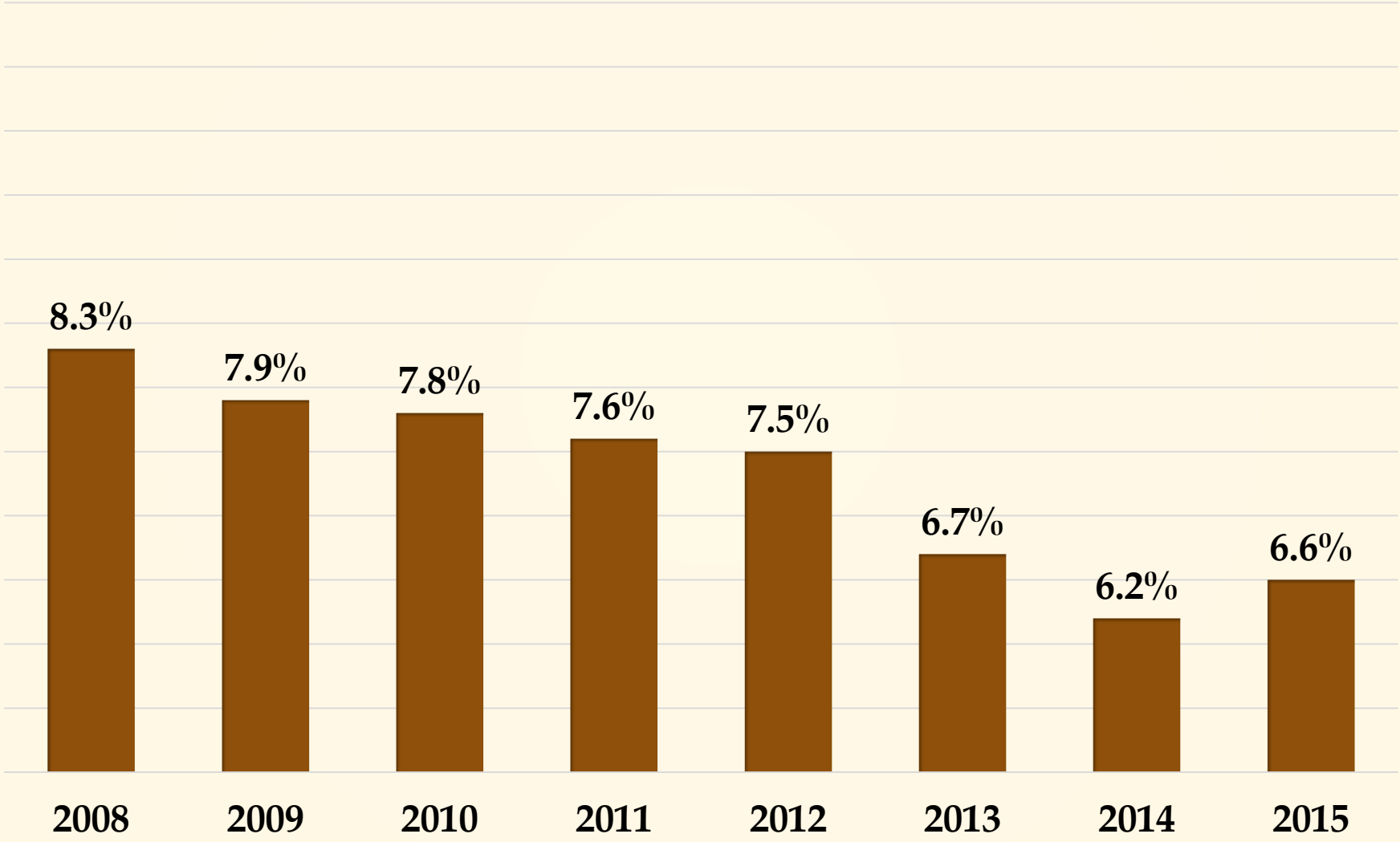
	2012	2015
Mortgage/Equity Ratio	60/40	80/20
Interest Rate, 15-Year Fixed (2012); 25- Year Fixed (2015) *	6.79	6.15
Equity Rate**	6.90	5.25
Tax Additur	1.5	1.5
Capitalization Rate	**7.5%**	**6.6%**

*Farm Credit Services 25-year fixed multi-flex rate for loan amounts $25,000 and over.

**Equity rate is the prime lending rate plus 2%.

Source: Ohio Department of Taxation

2015 RESULTS– CAPITALIZATION RATE



2015 Sample Calculation - Miami

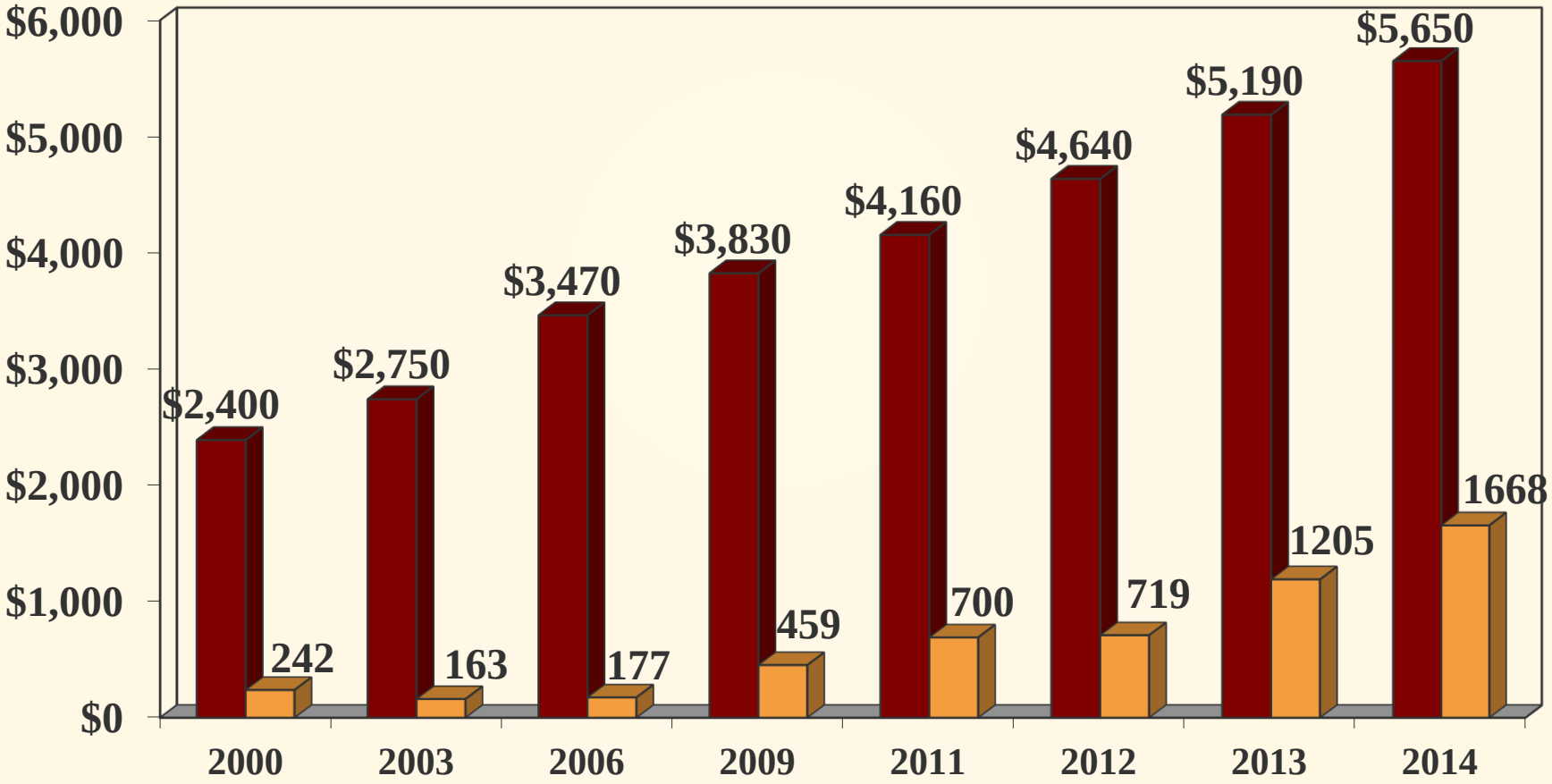
SOIL: Miami Silt Loam			
SLOPE, EROSION: 2-6, SLIGHT			
DRAINAGE: Well			
PROD. INDEX: 76			
	CORN	BEANS	WHEAT
Adjusted Yield (bu/A)	142	49	76
X Crop Price/unit	$4.55	$11.09	$5.67
= GROSS INCOME / ACRE	$646.10	$543.41	$430.92
Adjusted Yield (bu/A)	142	49	76
Base Yield	124	36	54
= YIELD ABOVE BASE	18	13	22
X Added Unit Cost	$1.36	$1.24	$1.77
= ADDED UNIT COST/ACRE	$24.48	$16.12	$38.94
+ Base Yield Cost/Acre	$516.99	$325.42	$296.98
= TOTAL NON-LAND PROD. COST	$541.47	$341.54	$335.92
NET RETURN / ACRE	$104.63	$201.87	$95.00
X Cropping Pattern	0.4	0.526	0.074
= ROTATIONAL NET RETURN / ACRE	$41.85	$106.18	$7.03
TOTAL ROTATIONAL NET RETURN	$155.07		
Capitalization Rate	0.066		
CAUV VALUE/ACRE: Net Return/Cap Rate	$2,349.48		$2,350

Source: Ohio Department of Taxation & Ohio Agricultural Statistical Service

2015 RESULTS vs. 2012

	Mill Grove Silt Loam	*Miami Silt Loam*
CAUV Land Value- 2015	**$5,110**	**$2,650**
CAUV Land Values-2012	**$2,490**	**$1,140**
% Increase	**105%**	**132%**

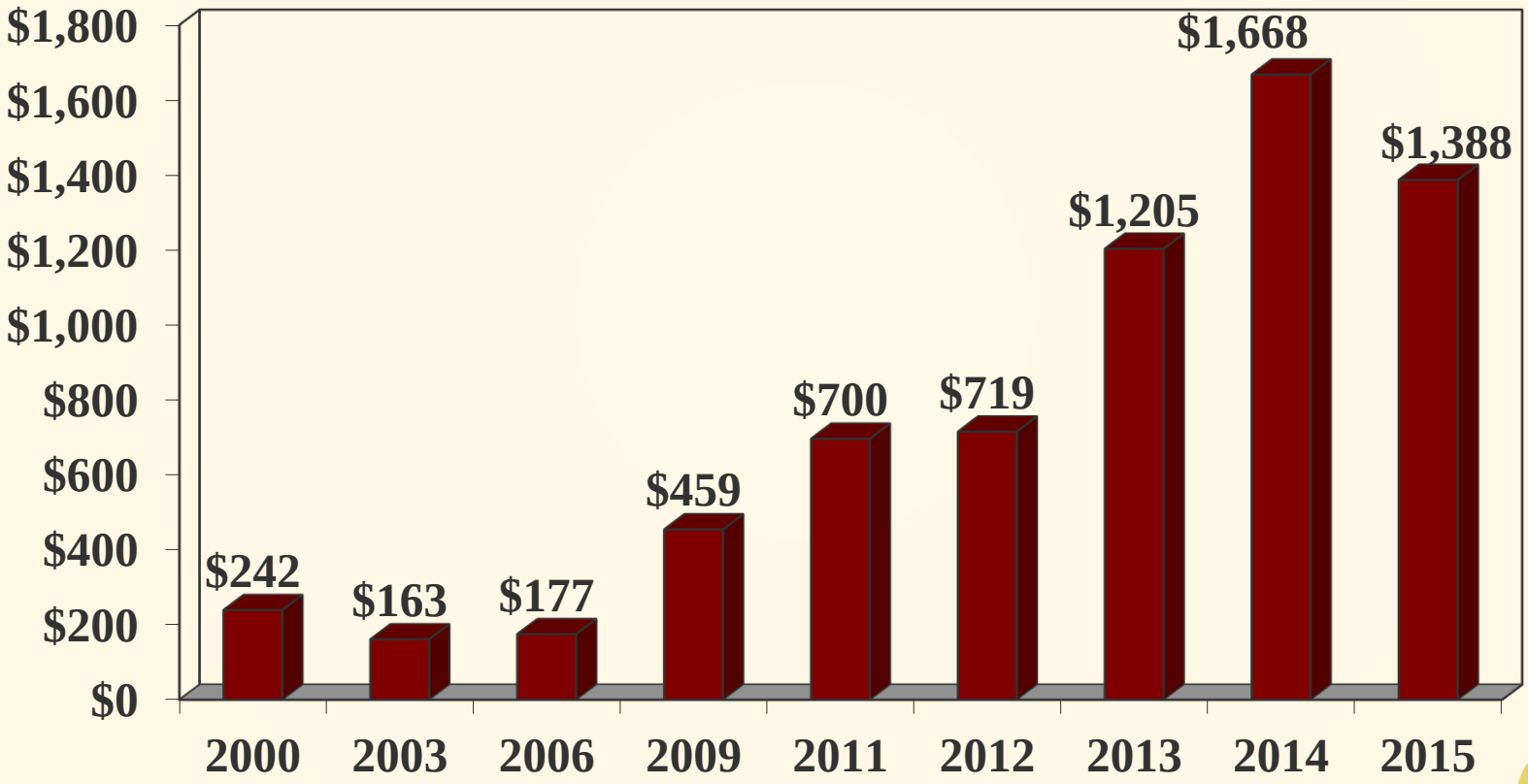
Average CAUV and Ohio Cropland Value - USDA Dollars per Acre, 2000-2014



Source: Ohio Department of Taxation

Cropland, Average CAUV

Dollars per Acre - 2000-2015

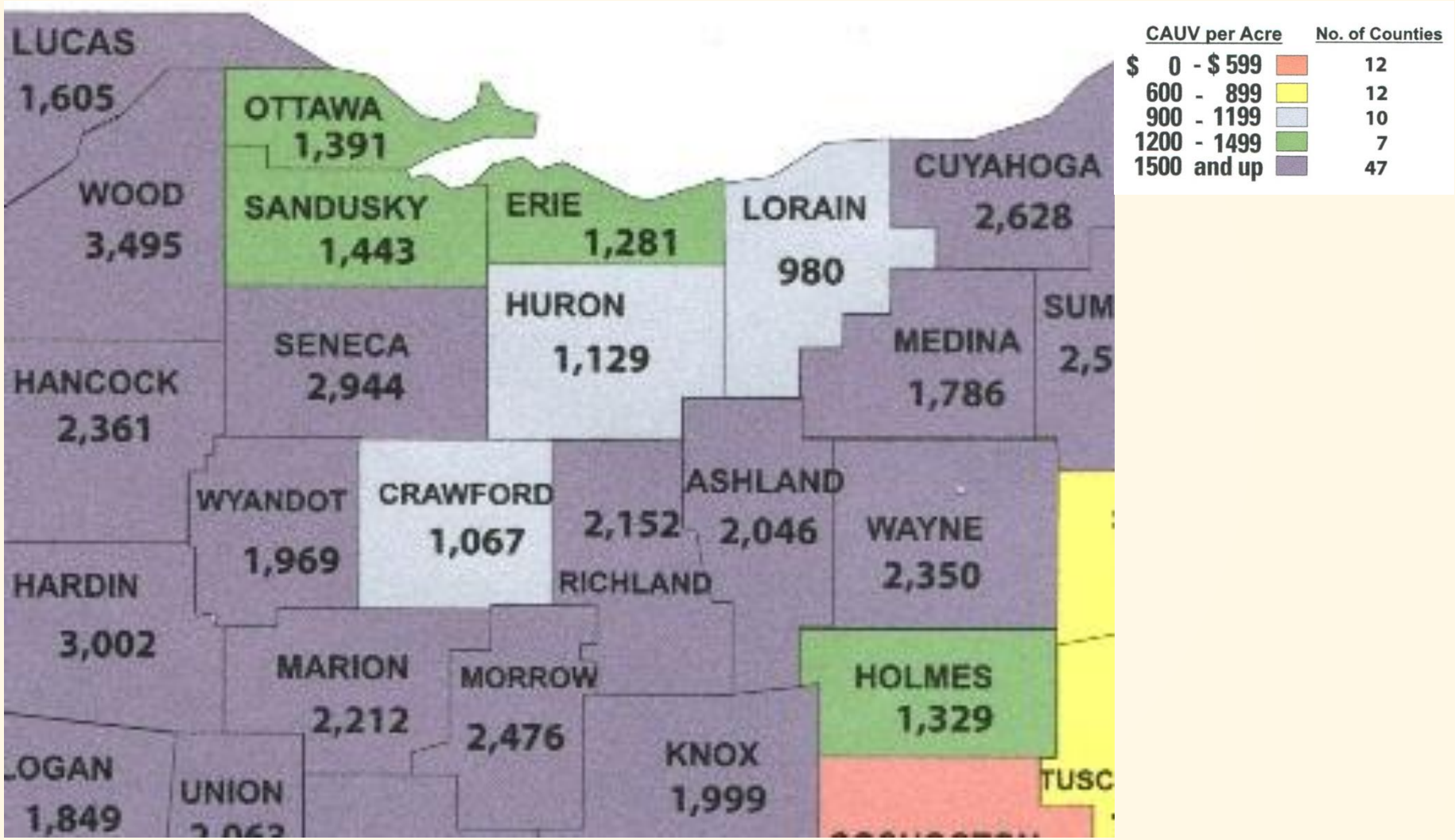


Source: Ohio Department of Taxation

2016-2020 PROJECTION

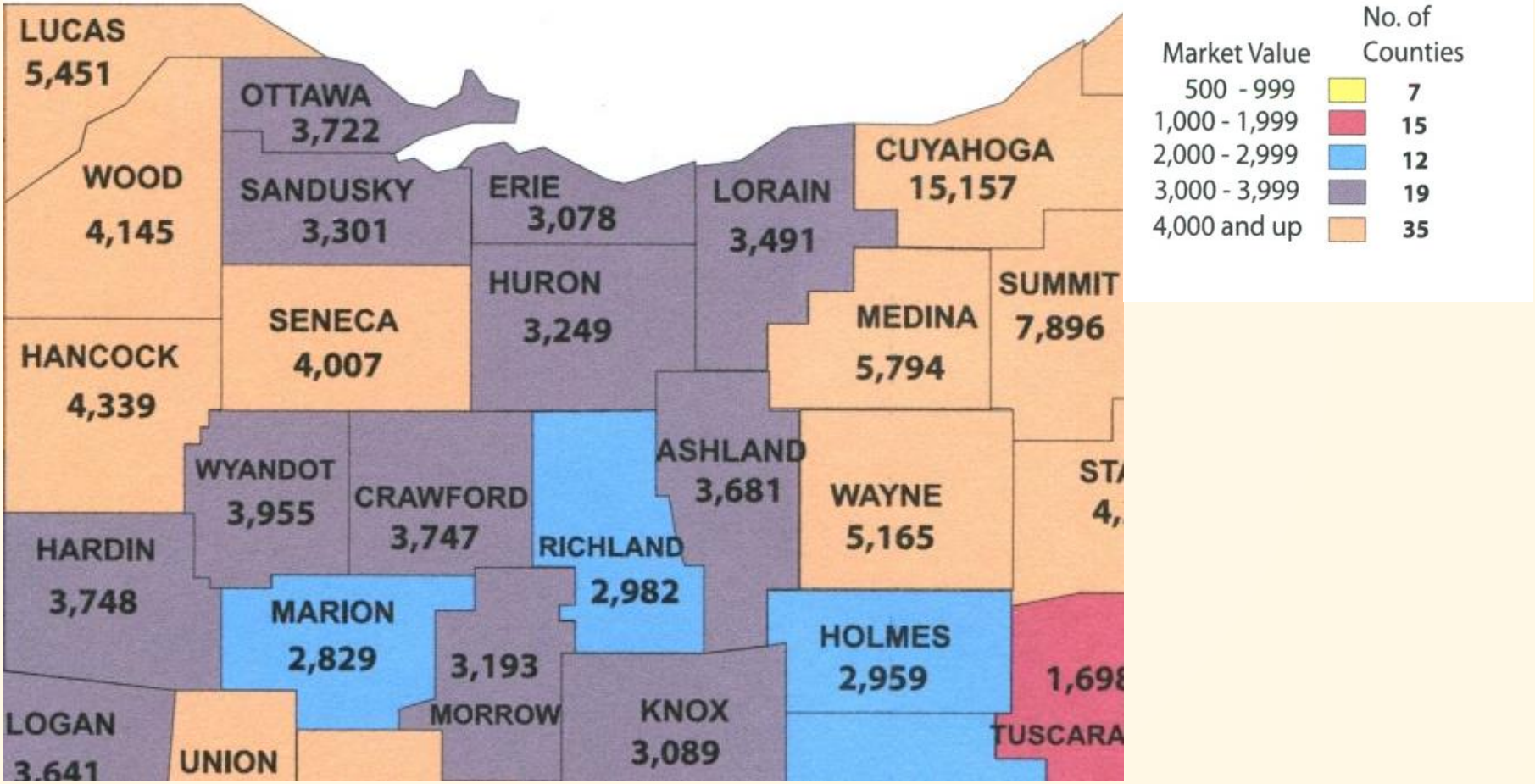
- **Yield will increase**
- **Cropping patterns – about the same**
- **Non-land production costs will increase**
- **Capitalization rate – Fed Policy / More changes**
- **Result – Growth will be flat but value remains elevated**

2014 AVERAGE CAUV VALUES



Source: Ohio Department of Taxation

2014 MARKET VALUES



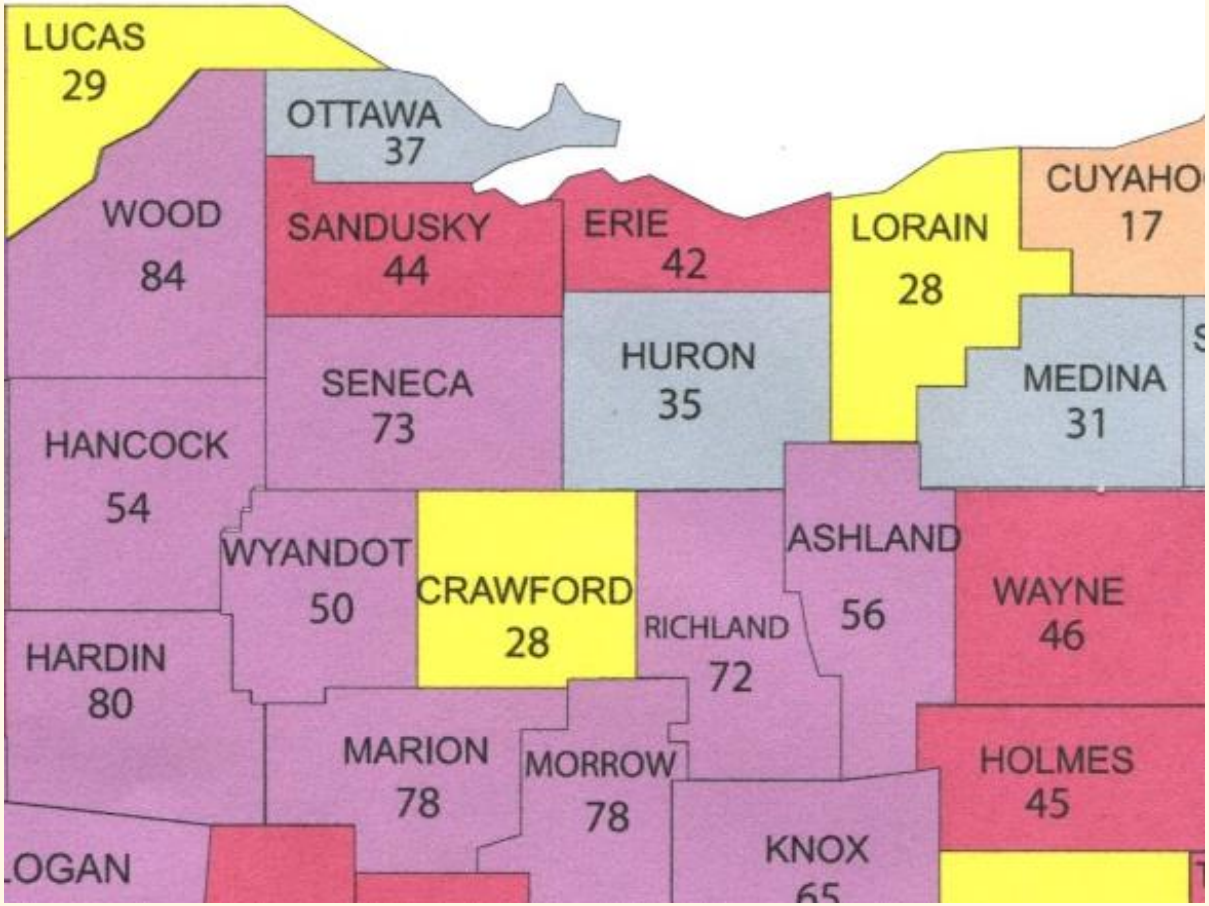
Source: Ohio Department of Taxation

V-6C(2014)
Source: DTE 114

2014 CAUV Value as a Percent of Market Value

Statewide average is 52%

% of Market	No. of Counties
0 - 19	3
20 - 29	9
30 - 39	12
40 - 49	20
≥ 50	44



Source: Ohio Department of Taxation