

# Current Agricultural Use Values (CAUV) TY 2021 Agricultural Advisory Committee Meeting

DIVISION OF TAX ANALYSIS

JUNE 30, 2021

---



1

## Introduction

---

This is a meeting before the Ohio Department of Taxation to present data on the proposed tax year 2021 Current Agricultural Use Values (CAUV).

2

## Outline

---

### Factors used in the Calculation

- Crop yields & cropping pattern
- Crop prices & non-land production costs
- Capitalization rate

### 2021 Soil Values

- Phase-In Complete for counties undergoing with
- Average Cropland Values
- Comparative Charts – USDA Cropland Value
- Woodland & Conservation

3

## Basic Formula

---

*Value = NOI/Capitalization Rate*

- Net Operating Income (NOI) = *GOI – Non-land Production Costs*
- Gross Operating Income (GOI) = *Crop Yield x Average Crop Price*

*Value = [(Crop Yield x Average Crop Price) – Non-land Production Costs]/ Capitalization Rate*



4

## Crop Yields/Cropping Pattern

- Soil yields from 1984:
  - adjusted by 10-year average of actual yields per acre for 2011-20.
- Single crop pattern for most soils based on five-year average of acres harvested, 2016-2020:
  - Corn 37%
  - Soybeans 57%
  - Wheat 6%
- Maintain 50% corn & 50% soybeans for organic and frequently flooded soils.



5

### Crop Prices Used in Five Year Average

USDA, National Agricultural Statistics Service  
Crop Values, 2020 Summary, February 2021

Crop Year	Corn	Soybeans	Wheat
2020	<del>\$4.50</del>	<del>\$11.60</del>	\$5.35
2019	\$3.91	\$9.04	\$5.22
2018	\$3.74	<del>\$8.69</del>	\$5.08
2017	\$3.61	\$ 9.62	\$4.90
2016	<del>\$3.61</del>	\$9.66	<del>\$4.25</del>
2015	\$3.89	\$9.16	\$4.57
2014	\$3.78	\$10.30	<del>\$5.60</del>

6

### Adjusted Crop Prices in the Formula, 2018-2021

	<u>2018</u>	<u>2020</u>	<u>2021</u>	<i>Variance</i>	
				<u>2018-21</u>	<u>2020-21</u>
<b>Corn</b>	\$4.18	\$3.63	<b>\$3.59</b>	(\$0.55) (14.2%)	(\$0.04) (1.2%)
<b>Beans</b>	\$10.43	\$9.12	<b>\$9.10</b>	(\$1.31) (12.8%)	(\$0.02) (0.2%)
<b>Wheat</b>	\$5.52	\$4.84	<b>\$4.76</b>	(\$0.68) (13.7%)	(\$0.08) (1.6%)

7

### Non-Land Production Costs Base & Added Unit, 2018-2021

	<u>2018</u>	<u>2020</u>	<u>2021</u>	<i>Variance</i>	
				<u>2018-21</u>	<u>2020-21</u>
<b>Corn</b>	\$529.28	\$503.55	<b>\$491.35</b>	(\$39.96)	(\$12.20)
+bu	\$1.44	\$1.38	<b>\$1.34</b>	(\$0.10)	(\$0.04)
<b>Beans</b>	\$346.26	\$331.48	<b>\$322.85</b>	(\$23.41)	(\$8.63)
+bu	\$0.94	\$0.89	<b>\$0.89</b>	(\$0.05)	\$0.00
<b>Wheat</b>	\$330.53	\$303.88	<b>\$284.91</b>	(\$45.62)	(\$18.97)
+bu	\$1.49	\$1.33	<b>\$1.29</b>	(\$0.20)	(\$0.04)

8

## Capitalization Rate TY 2018 & 2021

	<u>2018</u>	<u>2021</u>
Mortgage/Equity Ratio	80/20	80/20
Interest Rate, 25-Year Fixed		
Multi-flex Loan*	5.52%	5.46%
Equity Rate**	7.73%	7.21%
Tax Additur	1.6%	1.6%
<b>Capitalization Rate</b>	<b>8.0%</b>	<b>7.8%</b>

\*Farm Credit Services 25-year fixed multi-flex rate for loan amounts \$75,000 and over.

\*\*25-year average rate of total rate of return on farm equity

9

## H.B. 49 Values

New values were phased in with counties undergoing reappraisal or update in 2017-2019:

- Values were sum of the new “formula values” for 2017 and half the decrease between the “formula values” and the values for 2016.

**Counties scheduled in 2021 will have calculation completely based on the new formula values.**

10

## 2021 Sample Calculation: Millgrove Silt Loam

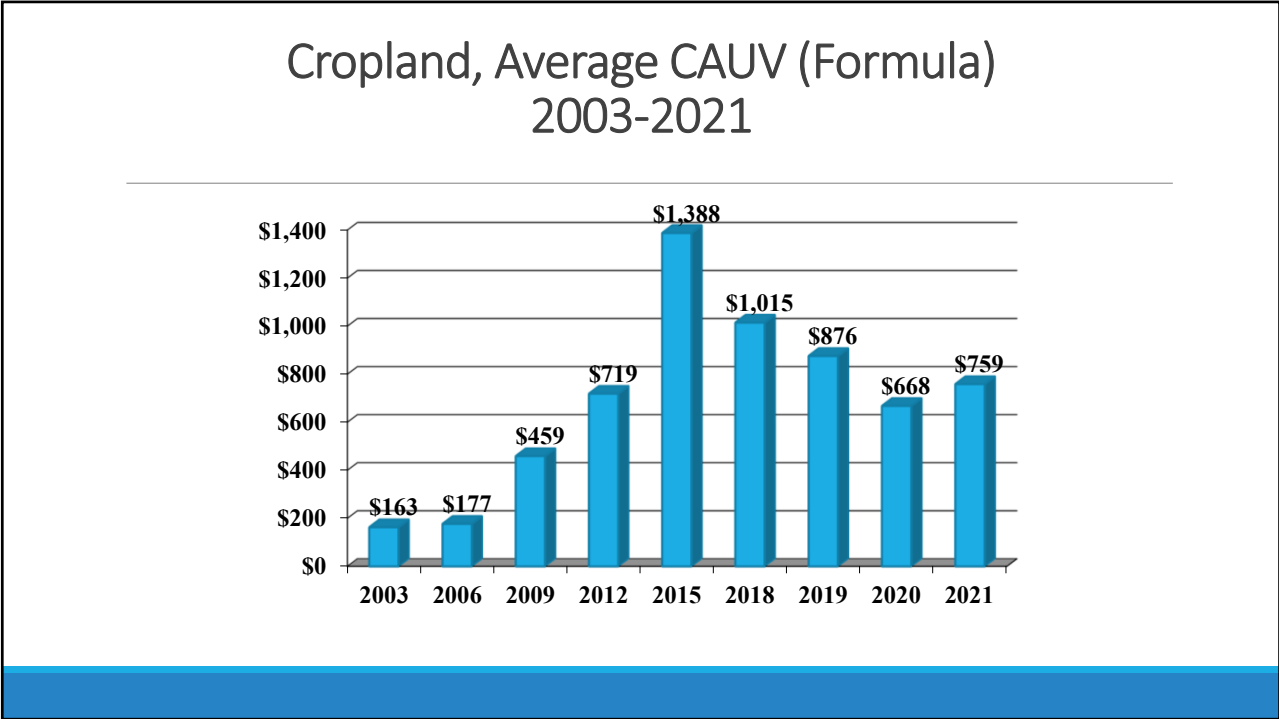
SOIL: Millgrove, Silt Loam			
SLOPE:	0-2		
EROSION:	Slight		
DRAINAGE:	Very poorly		
PROD. INDEX:	100		
		<b>CORN</b>	<b>BEANS</b>
PI DAT yield/acre (1984)		144	52
% increased yield	1.384746	1.391781	1.572727
adjusted yield/acre	199	72	101
X Crop Price/Unit	\$3.59	\$9.10	\$4.76
= GROSS INCOME / ACRE	\$714.41	\$655.20	\$480.76
YIELD / ACRE	199	72	101
BASE YIELD	134	41	58
= YIELD ABOVE BASE	65	31	43
X ADDED UNIT COST	\$1.34	\$0.89	\$1.29
ADDED UNIT COST / ACRE	\$87.10	\$27.59	\$55.47
BASE YIELD COST	\$491.35	\$322.85	\$284.91
= TOTAL NON-LAND PROD. COSTS	\$578.45	\$350.44	\$340.38
NET RETURN / ACRE	\$135.96	\$304.76	\$140.38
X CROPPING PATTERN	0.371	0.573	0.056
= ROTATIONAL NET RETURN / ACRE	\$50.44	\$174.63	\$7.86
TOTAL ROTATIONAL NET RETURN	\$232.93		
BASE CAP RATE	7.8%		
UNADJUSTED VALUE	\$2,986	Rounded	\$2,990

11

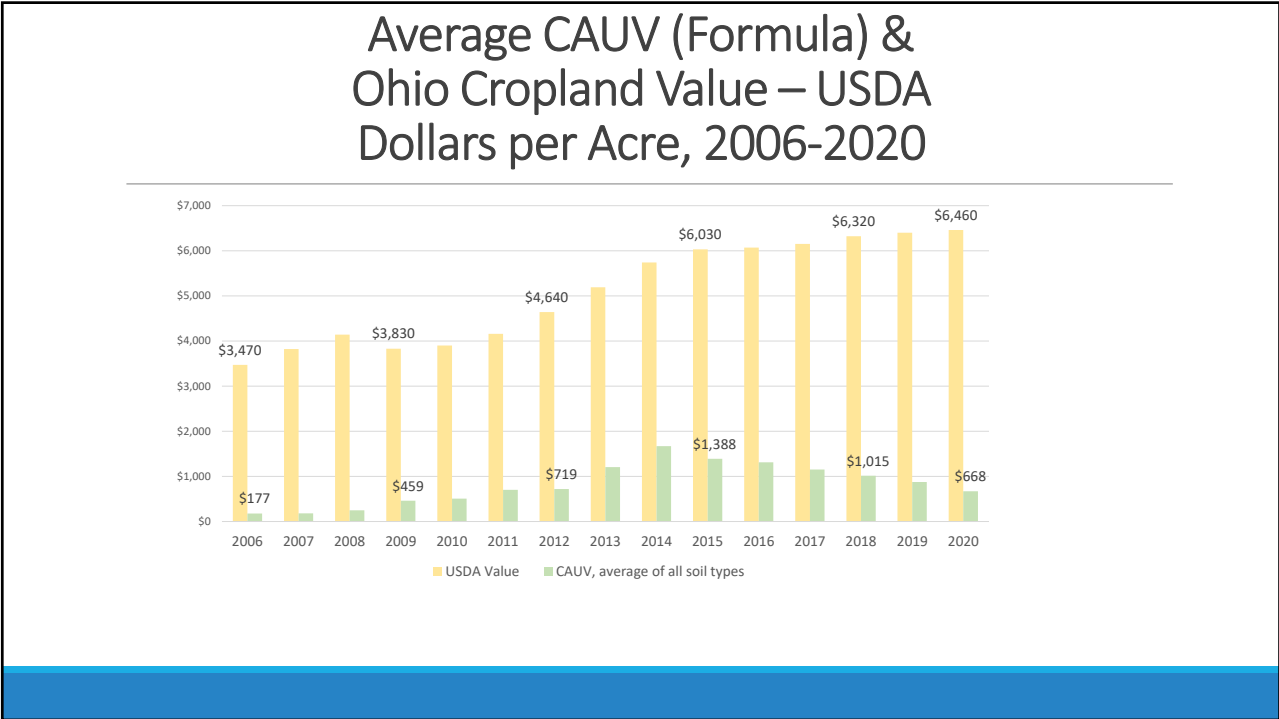
## Cropland, Simple Average CAUV Value by Productivity Index 2013-2021

PI	2013	2014	2015	2016	2017	2018	2019	2020	2021
0-49	350	350	350	350	350	350	350	350	350
50-59	516	700	518	466	430	400	378	351	358
60-69	1,218	1,778	1,371	1,235	1,061	896	731	488	598
70-79	1,958	2,728	2,347	2,255	1,969	1,723	1,469	1,073	1,253
80-89	2,743	3,718	3,354	3,302	2,909	2,586	2,270	1,783	1,969
90-99	3,310	4,428	4,104	4,074	3,602	3,226	2,863	2,303	2,512
100+	3,780	5,030	4,770	4,750	4,205	3,810	3,420	2,820	2,990
<b>Total</b>	1,205	1,668	1,388	1,310	1,153	1,015	876	668	759
<b>No. of</b>									
<b>Soils</b>	3,514	3,514	3,514	3,514	3,514	3,514	3,514	3,514	3,517

12



13



14

## Average Woodland Value CAUV Formula

	2017	2018	2019	2020	2021
<b>Slope 25% or Less</b>					
Maximum	\$2,575	\$2,190	\$1,840	\$1,300	<b>\$1,520</b>
Median	\$230	\$230	\$230	\$230	<b>\$230</b>
Average	\$459	\$383	\$325	\$250	<b>\$266</b>
<b>Minimum value: all slopes</b>					
	\$230	\$230	\$230	\$230	<b>\$230</b>
<b>Number of soils at minimum value: slope 25% or less</b>					
	2,128	2,130	2,130	3,263	<b>3,138</b>

15

## HB 49 – Conservation Land

Land used for conservation practices (25%) or under a qualifying retirement or conservation contract:

- Receives lowest value in the Table (\$230).  
R.C. 5713.31

Under contract with federal government:

- As of January 1<sup>st</sup> of the tax year starting with 2017 reappraisal/update counties R.C.5715.01(A)(3)
- If use changes sooner than 36 months after initial certification, auditor recoups extra tax savings. R.C. 5713.34

16

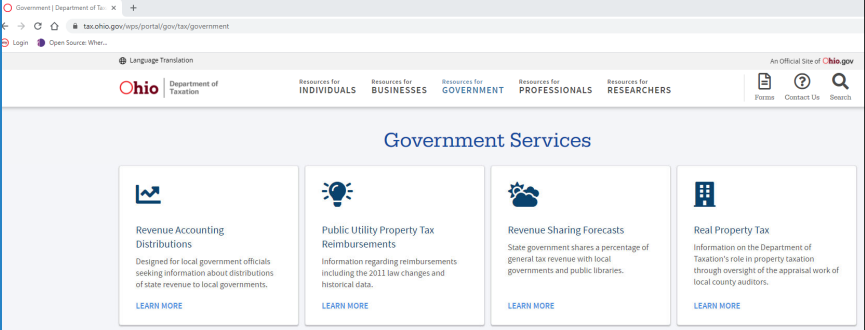


Questions?

[www.Tax.Ohio.gov](http://www.Tax.Ohio.gov)

Government

Real Property Tax



[Meghan.Sullivan.Homsher@Tax.State.Oh.Us](mailto:Meghan.Sullivan.Homsher@Tax.State.Oh.Us)

[Tax.Analysis@Tax.State.Oh.Us](mailto:Tax.Analysis@Tax.State.Oh.Us)

17