Ohio | Department of Taxation

Interested Party
Senate Bill 36
March 8, 2017

Chairman Eklund, Vice Chair Terhar, Ranking Member Williams, and members of the Senate Ways & Means Committee, on behalf of the Ohio Department of Taxation (ODT), thank you for providing me the opportunity to testify on Senate Bill 36. I am Stan Dixon, Deputy Tax Commissioner for Tax Equalization at ODT.

As many of you are already aware, Ohio's Current Agricultural Use Valuation (CAUV) program is a constitutionally-authorized program by which qualifying real property is valued according to its agricultural use rather than its fair market value. Ohio voters approved the CAUV framework as part of a 1973 amendment to the Ohio constitution. CAUV values are determined by capitalizing the calculated net farm income on a parcel of land, assuming standard cropping patterns, growing practices, and yields for the soil type.

The Ohio Tax Commissioner, through ODT's Division of Tax Equalization, is responsible for preparing the annual CAUV calculations for over 3,500 soil types found in Ohio. To assist the Tax Commissioner in calculating CAUV values, ODT utilizes the CAUV Agricultural Advisory Committee, made up of individuals from farm-related organizations and public agencies, to provide economic and technological advice on the CAUV formula.

The basic structure of the CAUV formula is net operating income divided by the capitalization rate. Net operating income is the gross income received from the sale of crops less the non-land production costs. The formula to determine cropland values consists of income and expenses to produce Ohio's three major field crops – corn, soybeans, and wheat.

<u>Basic CAUV Formula</u>

GOI = Crop Yield x Avg. Crop Price

NOI = GOI – Non-land Production Costs

Value = NOI/Capitalization Rate

The CAUV formula is made up of five component pieces which are used to calculate net operating income and the capitalization rate:

1. **Crop Yields**

Yield data from each soil type is updated annually in the CAUV formula. Base yields from 1984 are adjusted by the ten-year average of actual yields per acre from the most recent ten years of data. In the case of preliminary Tax Year 2017 CAUV values, the ten-year average of actual yields per acre utilize yield data from 2007 through 2016. Data used to determine preliminary crop yields for Tax Year 2017 CAUV values can be found below. The table contains the average yields used to develop the factor for each of the crops utilized in the formula.

		TY 2014	TY 2015	TY 2016	TY 2017
Crop	**1984 Base**	**2004-2013**	**2005-2014**	**2006-2015**	**2007-2016**
Corn	118.0 bu	151.9 bu	155.2 bu	156.2 bu	156.2 bu
Soybeans	36.5 bu	45.0 bu	46.7 bu	47.2 bu	47.9 bu
Wheat	44.0 bu	66.0 bu	67.1 bu	66.7 bu	67.9 bu

2. **Cropping Patterns**

The cropping pattern for each map unit is assigned a crop rotation percentage based on the most recent five-year average of acres harvested in Ohio. For Tax Year 2017 estimated CAUV values, data from 2012 through 2016 is utilized. Average percentages for acres harvested for 2017 values are as follows:

- Corn: 40%
- Soybeans: 54%
- Wheat: 6%

There are two exceptions to the cropping pattern percentage calculation:

- Soil types with a productivity index of 55 or less (on a scale from 0 to 100) are assumed to be most profitably used as pasture. For 2017 CAUV values, a minimum value of $350 is used for these soils.
- A pattern of 50% corn and 50% soybeans is used for organic soils.

3. **Crop Prices**

Crop prices for the field crops in the CAUV formula are based on five-year weighted averages. Crop data is collected for seven years, with the highest and lowest prices eliminated, and the average calculated using the remining five years' data. Prices are weighted based on the statewide production for each year. Below is crop price data used in determining preliminary 2017 CAUV values, utilizing data from crop years 2010 through 2016.

CROP PRICES USED IN FIVE YR. AVERAGE			
USDA National Agricultural Statistics Service			
Crop Year	CORN	SOYBEANS	WHEAT
2016	~~$ 3.60~~	$ 9.65	~~$ 4.20~~
2015	$ 3.89	~~$ 9.16~~	$ 4.57
2014	$ 3.78	$ 10.30	$ 5.60
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

4. Non-Land Production Costs

Data on crop production costs are used to estimate average non-land production costs. The data are taken from the Ohio Crop Enterprise Budgets prepared by The Ohio State University Department of Agricultural, Environmental, and Development Economics. Like crop prices, data are collected for a seven-year period, with the highest and lowest values removed and the remaining five years averaged.

The table below shows non-land production costs used in the formula for preliminary Tax Year 2017 CAUV values. The costs represent base unit costs and incremental costs for each additional bushel produced on land where yields exceed typical yields.

Non-Land Production Costs
Base & Added Unit, 2014-2017

				Variance	
	2014	2016	2017	2014-17	2016-17
Corn	$437.85	$524.47	$539.11	$101.26	$14.64
+bu	$1.18	$1.38	$1.46	$0.28	$0.08
Beans	$275.21	$336.33	$348.48	$73.27	$12.15
+bu	$1.27	$1.07	$1.04	($0.23)	($0.03)
Wheat	$255.48	$323.52	$336.21	$80.73	$12.69
+bu	$1.80	$1.64	$1.63	($0.17)	($0.01)

5. Capitalization Rate

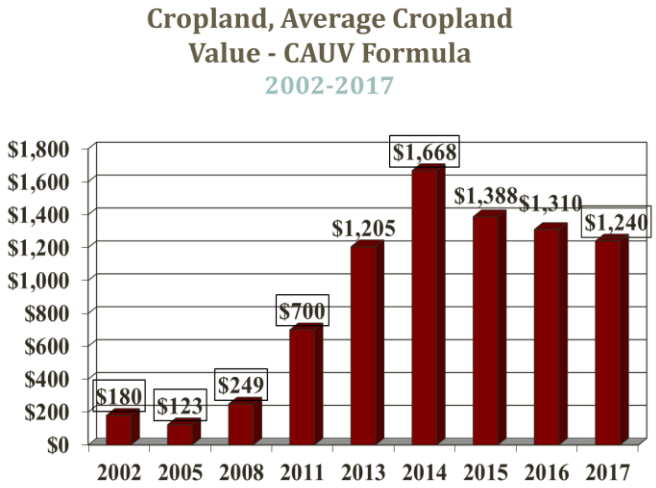
Five-year averaging is used to derive the Farm Credit Service interest rate of 5.57% assuming an 80% loan for a 25-year term, payable annually, and an interest rate of 5.3% for the 20 percent equity portion. The equity rate represents the required rate of return expected by the landowner on the equity in his or her property.

The capitalization rate for typical Ohio farmland is computed by the Akerson mortgage-equity method. Below is a table which provides additional detail on the computation of capitalization rates for tax years 2014 through 2016, with preliminary tax year 2017 factors included.

Capitalization Rate	**2014**	**2015**	**2016**	**2017***
Mortgage/Equity Ratio	60/40	80/20	80/20	80/20
Years	15	25	25	25
Interest Rate	5.89	6.15	5.8	5.57
Equity Rate	5.25	5.25	5.25	5.3
Tax Additur	1.5	1.6	1.6	1.6
Capitalization Rate	6.2	6.6	6.3	6.2
				* Preliminary Value

Recent Trends in CAUV Values

There has been considerable discussion in recent years regarding rising CAUV values. Looking at the data over the past 15 years, we see that CAUV values have gone from record lows in the mid-2000s to peaking to record highs in 2014. Factors including record high crop prices in the early 2010s and low interest rates following the 2008-2009 economic recession have contributed to the high CAUV values in recent years. As crop prices have returned closer to historical averages, we see that CAUV values have gradually declined. The chart below outlines the rise and fall of average CAUV values over the past 15 years.



I will also add that in response to rising CAUV values, ODT, working with the Agricultural Advisory Committee, adopted several updates to the CAUV formula in May of 2015. These changes, which can be found in Appendix A, have improved the accuracy of the formula and have helped to moderate CAUV values since Tax Year 2015.

Anticipated Effects of Further CAUV Formula Changes

As discussion about further CAUV formula changes has continued in recent years, ODT has attempted to anticipate the tax implications of such reforms. While changes to the CAUV largely impact local property taxes – taxes which ODT does not collect or administer – ODT has estimated how such changes may impact Ohioans.

In 2016, ODT completed an analysis on behalf of the Ohio Auditors Association to measure the fiscal impact of CAUV changes contained within H.B. 398 and S.B. 246 of the 131st General Assembly. Senate Bill 36 is identical to the previously mentioned bills.

After running simulations in eight test counties from across the state, ODT reached the following conclusions on the likely effects of the CAUV changes contained in H.B. 398 and S.B. 246:[1]

- A general shift in property taxes, varying in magnitude, from owners of agriculture property to owners of residential property.

The proposed CAUV reform would reduce CAUV values across every soil type. Due to H.B. 920 tax reduction factors instituted in the 1970s, property value decreases within the same property class must offset for fixed rate levies. The same is true for fixed-sum levies through the action of county budget commissions. CAUV changes would affect Class 1 property which consists of residential and agricultural property. As agricultural land becomes less valuable, millage must be adjusted upward to make up for lost agricultural property tax revenue. This has the effect of increasing taxes paid by residential property owners who do not see decreases in value of their property. For the counties under consideration in the ODT study, property tax increases paid by residential landowners increased from minimal amounts to upwards of 10 percent in some taxing districts. The magnitude of the shift is largely driven by the ratio of agricultural property to residential property in a taxing district. Generally, the more rural the district, the larger the shift.

- Potential for revenue losses from inside millage and capped out levies.

[1] ODT's analysis only estimated the revenue impact due to proposed changes in the capitalization rate. H.B. 398 and S.B. 246 of the 131st General Assembly, as well as S.B. 36 of the 132nd General Assembly, propose reducing CAUV values for agriculture land enrolled in conservation programs to the minimal value. ODT is unable to estimate the fiscal impact of this provision of the proposal.

Inside mills are the 10 unvoted mills that counties are authorized to levy which are exempt from tax reduction factors. School districts and local governments divide these 10 mills to help fund their operations. With inside mills exempt from tax reduction factors, as CAUV land values decrease within a taxing district, there is no way to recoup the revenue losses from other classifications of property. As before, the losses from inside millage are typically larger in more rural areas with high concentrations of agricultural property.

A final scenario for potential revenue losses involves "capped out" levies. For fixed rate tax levies, which are subject to tax reduction factors, a decrease in CAUV values will cause the effective millage to increase to make up for lost revenue. The effective millage, however, cannot exceed that which was originally approved by voters. For levies already close to their original voted millage rates, a significant reduction in CAUV values would necessitate an increase in millage rates above the original voted upon rate. Ohio statute prevents millage increases above the original voted upon rate, which could cause revenue losses for local governments.

Due to widespread value declines in the recent recession, levies passed in the last ten years are likely to have reached or nearly reached the rates approved by voters, so declines in CAUV values will create revenue losses. And it is significant to note that revenue losses under this scenario are permanent and cannot be recovered even when property values increase.

Conclusion

Mr. Chairman and members of the committee, I hope that the testimony provided on the CAUV program has been helpful as discussion continues on S.B. 36. ODT is willing to serve as a resource to members of the General Assembly and interested parties on this complex and challenging issue. I thank you for the opportunity to testify today before your committee and I would be happy to answer any questions you have for me.

Appendix A: 2015 Changes to CAUV Calculation

CHANGES TO CAUV CALCULATION – Effective Tax Year 2015 Recommended by the Ohio Department of Taxation and Agricultural Advisory Committee		
FORMULA COMPONENTS	**CURRENT METHODOLOGY**	**RECOMMENDED CHANGES**
Crop yield & acres harvested (crop rotation)	Two-year lag (USDA Crop Production Summary)	One-year lag (USDA Crop Production Summary, published January of tax year); update prior years
Crop price	Two-year lag (USDA Crop Values Summary)	One-year lag (USDA Crop Values published February of tax year); update prices for prior years
Non-land production costs	One-year lag with OSU Crop Enterprise Budgets	Eliminate lag with current OSU Crop Enterprise Budgets
CAPITALIZATION RATE		
Debt equity split	60% loan/40% equity	80% loan/20% equity
Loan terms	15-year fixed multi-flex loan through Farm Credit Services	FCS 25-year fixed multi-flex loan for loans $25,000 and over
Tax additur - average effective tax rate on agricultural land	Two-year lag	One-year lag
WOODLAND VALUES		
Deduction for subsurface tile drainage	$500 deduction for somewhat poorly drained, poorly drained, very poorly drained soils (SWP, P, VP)	Increase deduction from $500 to $770 based on OSU Farm Custom Rates
Deduction for surface drainage	$250 deduction for limited number of soils (37 soils)	Increase deduction from $250 to $380 based on similar increase for subsurface drainage costs.
Deduction for clearing	$500 deduction for all soils	Increase deduction from $500 to $1,000 based on input from advisory committee.
SCHEDULE		
Agricultural Advisory Committee meeting to discuss preliminary values.	September prior to tax year	February or March of tax year
Public Hearing	February of tax year	May of tax year
Tax Commissioner's Journal Entry and table of values for counties undergoing revaluation in current tax year	Issued in March or April of tax year	Issuance delayed until June of tax year.

5/27/2015