# Tax Bulletin

**OSU EXTENSION TAXATION PROGRAM** 

February 2014

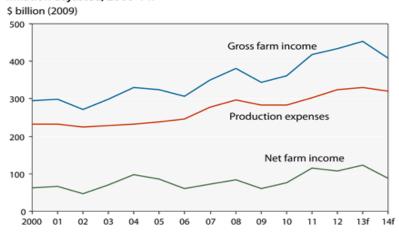
# Why Did My CAUV Values Increase So Much?

## **INTRODUCTION**

Many rural landowners are shocked when they see their 2013 CAUV values. Depending on the soil types, some values increased 100 percent over 2010 values. As a result, questions arise about the CAUV program. Unlike fair market value appraisals, CAUV values are calculated for each soil type in Ohio (approximately 3500 soils) by a formula that is based on five factors. The landowner's value for tax purposes is then based on the soil types found on his land. The numbers that are inserted in the formula are real numbers that reflect the average net return of agriculture in Ohio.

Contrary to the economy as a whole, the net return from farming has increased since 2006. Therefore, CAUV values have increased, since CAUV values are based on net return from farming.

Gross farm income, production expenses, and net farm income, inflation adjusted, 2000-14f



Note: Data for 2013 and 2014 are forecasts. Data as of February 11, 2014. Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.



### WHY NOW? REAPPRAISAL AND UPDATES

By law, county auditors are required to reappraise every parcel of land in the county every six years. Further by law, auditors are required to establish the fair market value of each of four components for every parcel. The four components are:

- 1.) the home
- 2.) a one-acre home site
- 3.) the other outbuildings on the property
- 4.) the other land

Fair market value is defined to be the value that land would transfer between a willing seller and a willing buyer in an arms-length transaction. Foreclosure sales, public auctions and sales between family members are not considered arms-length transactions.

Because property values were rapidly increasing in the 1960's and 1970's, a law was passed in 1976 that established the triennial update. This law requires county auditors to adjust property values every third year after a reappraisal. Therefore, CAUV values are adjusted every three years. The difference between a reappraisal and a triennial update is that the reappraisal is based upon an inspection of the property and a triennial update is determined in the auditor's office and is based upon sales of property in the county.

The Ohio Department of Taxation calculates CAUV values annually and sends the values out to the auditors. The auditors then use the CAUV values, as determined by the Ohio Department of Taxation, for those years when the county does a reappraisal or an update. The county auditor does not set CAUV values.

The counties performing a reappraisal in 2013 are: Carroll, Champaign, Clark, Fairfield, Logan, Marion, Medina, Miami, Ross, Union and Wyandot.

The counties performing a triennial update in 2013 are: Adams, Columbiana, Hancock, Hocking, Holmes, Lawrence, Meigs, Monroe, Paulding, Scioto, Tuscarawas, and Washington.

#### WHAT IS CAUV?

In 1972, Ohio voters approved a constitutional amendment that allowed qualified agricultural land to be valued at its current agricultural use value for real property tax purposes rather than fair market value. The home, home site and outbuildings are still valued at fair market value. Current agricultural use value can be determined by the capitalization of the typical net income from agricultural crops on a given parcel of land assuming typical management, cropping patterns, and yields for the types of soil present on the tract.



### **HOW IS CAUV CALCULATED?**

The CAUV values are based upon a formula containing five factors applied to three crops: corn, soybeans, and wheat, the three most prevalent crops in Ohio. Hay was dropped from the formula in 2010. The five factors are:

- Cropping pattern- based upon the acres of corn, beans and wheat compared to the total acres of those three crops. These percentages are based upon statewide averages.
- 2.) Crop prices- based upon a survey of elevators in Ohio
- 3.) Crop yields- based upon 1984 NRCS/NASS per acre yield estimates for each soil type, adjusted for actual average yields in Ohio for the past ten years.
- 4.) Non-land production costs- based upon farmer surveys by The Ohio State University.
- 5.) Capitalization rate- based upon the interest rate for a 15-year fixed rate mortgage at Farm Credit Services, with 40% attributed to equity and 60% to debt.

The crop prices, non-land production costs and capitalization rate are calculated by taking the previous seven years of numbers, eliminating the highest number and the lowest number, and then averaging the remaining five numbers. Cropping pattern is based on an average of the last five years of acres planted. The prices, cropping pattern, costs and yields are then multiplied, added and subtracted to determine the net profit per acre of soil type, and that number is then divided by the capitalization rate to arrive at the final value. This calculation is performed for each of the 3500 soil types in Ohio.

#### SO WHAT MADE THE VALUES INCREASE?

- 1.) Previous values were substantially lower. Starting in the year 2000, CAUV values decreased at an unprecedented rate. 2005 represented the bottom when the average value for all soil types in Ohio was \$123/acre. 2006 values were just a little higher. CAUV values have trended upwards since then at a rapid pace. Since the values are based on a seven year rolling average, the lower numbers from the early 2000s have dropped out of the formula and have been replaced by higher numbers from recent years.
- 2.) Crop yields per soil type increased. Beginning in 2006, crop yields were adjusted to become more accurate. It was discovered in 2005 that NRCS/NASS had not adjusted its estimated crop yields per soil type since 1984. For example, NRCS/NASS estimates list the corn yield for Millgrove Silt Loam (arguably the best soil in the state) at 144 bushels per acre when, in fact, the average corn yield per acre for all soil types was 158 bushels per acre. It was obvious that the yields used in the CAUV formula needed updated. The same was true for soybeans and wheat.

Beginning in 2006, the yields per acre for each soil type for each of the three crops was adjusted by multiplying the 1984 NRCS/NASS per acre yield estimates by a factor that was determined by comparing the average of the last 10-years of actual yield to the NRCS/NASS estimates. In 2013, the corn yield for Millgrove Silt Loam



- went from 144 to 181 bushels per acre. For Miamian Silt Loam, a medium productivity soil, the yield went from 108 to 136 bushels of corn per acre.
- 3.) The capitalization rate decreased. The capitalization rate decreased from 7.8% in 2010 to 6.7% in 2013. Since CAUV values are determined by dividing net return by the capitalization rate, lower capitalization rates mean higher land values. For example, if we assume a net return per acre of \$90, a 7.8% capitalization rate produces a value of \$1154 per acre and a 6.7% capitalization rate produces a value of \$1343 per acre.
- 4.) Crop Prices Increased. The biggest reason for the increase in CAUV values is the increase in crop prices. Based on a seven year rolling average, and with three years between value adjustments, three years of crop prices drop out of the formula and are replaced by three new crop prices. For corn, the three crop prices that dropped out were \$1.85, \$2.45, and \$2.50. These numbers were replaced by \$3.70, \$5.55, and \$6.40. For beans, the prices that dropped out were \$5.15, \$7.20, and \$5.45, replaced by \$9.60, \$11.80, and \$11.90. For wheat, the prices that dropped out of the formula were \$3.15, \$3.15, and \$3.20 replaced by \$4.35, \$5.20, and \$6.60. In the current formula, the price for corn is \$3.91, beans is \$8.98, and wheat is \$4.54. The costs of production did increase, but not nearly in the same proportion as prices.

# AN INCREASE IN LAND VALUE DOES NOT EQUATE TO THE SAME % INCREASE IN TAXES

A big mistake that landowners make is to take the increased land values and multiply the value by last year's millage rate. Because of tax credits, the possible expiration of certain mils, and most notably, the tax reduction factor, the actual taxes paid by the landowner will not increase in the same proportion as the value. It is important to find out the actual millage rates from the county auditor.

#### SUMMARY

There is nothing wrong with the CAUV formula. It is this writer's opinion that Ohio has the best CAUV formula in the country. It is the same formula that gave us the lowest values in CAUV history in 2005. The values are reflective of the farm economy. Even in this period of recession, the farm economy has remained strong.

It is not CAUV's purpose to guarantee the lowest values for landowners, but rather to accurately reflect what is happening in the farming community. The problem is that landowners became accustomed to the lower values in 2005. Even with the increased values, CAUV landowners are paying taxes on values substantially below fair market value. It is a program that farmers must have to survive.

