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**Final Values**

## 2010 CURRENT AGRICULTURAL USE VALUE OF LAND TABLES

### EXPLANATION OF THE CALCULATION OF VALUES FOR VARIOUS SOIL MAPPING UNITS FOR TAX YEAR 2010

The annual current agricultural use values of land 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. The necessary information is available for approximately 3,500 map units, which are the soils with slopes less than 25 percent. The information used for a capitalized net income approach is as follows:

YIELD INFORMATION  
CROPPING PATTERNS  
CROP PRICES  
NON-LAND PRODUCTION COSTS  
CAPITALIZATION RATE

Each of these factors is explained below.

#### A. YIELD INFORMATION

For each of the soil mapping units, data regarding typical yields of each of the major field crops (corn, soybeans and wheat) were last published in 1984. In order to reflect more accurate yields, those yields of record have been updated annually since 2006. The yields are updated by a factor based on ten years of statewide yield information published by the Ohio Department of Agriculture. For 2010, yield data from calendar years 1999-2008 were averaged and divided by the 1984 yield for each crop. This factor is applied to the 1984 crop yield of record for each soil.

#### B. CROPPING PATTERNS

The cropping pattern for each map unit is assigned a rotation based on the most recent five-year average of crop acres harvested in Ohio: 39% corn, 51% beans, and 10% wheat. This rotation is based on data from 2004-2008 and closely reflects current agricultural markets in Ohio. The acres harvested in each year are shown in Exhibit A (see page 5).

There are two exceptions as follows:

- 1.) Soil map units with a productivity index of 55 or less are assumed to be most profitably used as pasture. Therefore, in 2010 a minimum value of \$200 is used for these soils; in 2009, the minimum value was \$170.
- 2.) A pattern of 50% corn and 50% soybeans is used for organic soil map units.

**C. CROP PRICE INFORMATION**

The crop prices used for the field crops are five-year weighted average prices. Crop price data is collected for seven years with the highest and lowest prices eliminated, and the average calculated using the remaining five years' data. The prices are weighted based on the statewide production for each year. For this calculation, the seven-year period is 2002 through 2008. The table shows average weighted prices for this period as well as prices for the three previous years. Each weighted price is reduced by 5% to allow for management.

		<b>TY 2007</b>	<b>TY 2008</b>	<b>TY 2009</b>	<b>TY 2010</b>
<b>Crop</b>	<b>Unit</b>	<b>1995-2005</b>	<b>2000-2006</b>	<b>2001-2007</b>	<b>2002-2008</b>
Corn	Bushel	\$1.96	\$2.02	\$2.29	\$2.66
Soybeans	Bushel	\$4.89	\$5.19	\$5.60	\$6.41
Wheat	Bushel	\$2.64	\$2.89	\$3.05	\$3.41

The annual production and price per unit for each of these crops for the 2002 through 2008 period are shown in Exhibit A-1 (see page 6).

**D. NON-LAND PRODUCTION COSTS**

Data on crop production costs were 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 for 2003-2009, inclusive. Again, data are collected for the seven-year period and the highest and lowest costs for each category are eliminated from the array. Five-year average costs per unit of specific non-land production cost items are computed from the remaining data as shown in Exhibit B-1 (see page 7).

The budgets are computed for each crop at a base yield equal to the lowest yield reported and for each additional unit above the base yield based on information from the Ohio Crop Budgets (see Exhibits B-2 through Exhibit B-4, pages 8-10).

The five year average non-land production costs for tax year 2010 are summarized below and compared with the costs used for tax year 2007 and 2009:

NON-LAND PRODUCTION COSTS				
Crop – Base Cost	Yield	TY 2007	TY 2009	TY 2010
Corn	118 bu	\$235.70	\$264.12	\$286.65
Soybeans	36 bu	\$168.14	\$175.21	\$189.10
Wheat	52 bu	\$153.67	\$159.01	\$170.16
Additional Cost per Unit				
Corn	1 bu	\$ 0.91	\$ 0.72	\$ 0.83
Soybeans	1 bu	\$ 0.49	\$ 0.57	\$ 0.66
Wheat	1 bu	\$ 0.81	\$ 0.86	\$ 1.14

E. CAPITALIZATION RATE:

Five-year averaging is used to derive the Farm Credit Service interest rate of 7.09% assuming a 60% loan for a 15-year term, payable annually, and an interest rate of 7.45% for the 40 percent equity portion (see Exhibit C, page 11). A five percent appreciation over a period of 5 years is included to address the increase in farmland values due to the demand for additional land in an increasingly efficient operation.

The capitalization rate for typical Ohio farmland, not including real property market inflation, was computed by the Akerson mortgage-equity method as follows:

60% loan x annual debt service of 0.11042	=	0.0663
40% Equity x equity yield rate of .0745	=	0.0298
Subtotal		0.0961
<u>Less equity buildup for 5 years</u>		
% loan x % mortgage paid off x sinking fund factor at equity rate for 5 years (0.60) [1 - (6.995/9.0564)] (0.172337)	=	(0.0235)
<u>Less 5% appreciation times sinking fund factor</u>		
@ equity yield rate of .0745 .05 x 0.172337	=	(0.0086)
Capitalization Rate before Taxes	=	0.0639 or 6.4%

For tax year 2008 the statewide average effective tax rate after application of the reduction factors, (Section 319.301 Ohio Revised Code), levied on agricultural property was 43.18 mills. The ten percent rollback authorized by Section 319.302 of the Code reduced this rate further to 38.87 mills. As a percent of market value the effective tax rate to be used in this year's capitalization formula is 1.4%, (.35 x 38.87)/1000.

Capitalization rate including R.E. taxes 7.8%

The 7.8% capitalization rate is the base rate for typical Ohio farmland.

F. CROPLAND VALUES

The current agricultural use cropland value equals the net return for the rotation acre of the soil map unit divided by the capitalization rate. The minimum value for cropland is \$200 per acre for soils with 25 percent slope or less.

G. WOODLAND VALUE

- 1.) The woodland value, with slopes of 25% or less, equals the cropland value less the costs to convert the woodland to cropland. The conversion costs are as follows:
  - a. Clearing - \$500 per acre for all soils
  - b. Drainage
    - a.) Excessively drained, well drained, moderately well drained, (E, W, MW) - No Conversion Cost
    - b.) Somewhat poorly drained, poorly drained, very poorly drained, saturated (SWP, P, VP) - \$500 for Tile Drainage
    - c.) For the following soil series, a \$250 adjustment for surface drainage is to be used: Allis, Atkins, Blanchester, Bono, Canadice, Clermont, Condit, Conneaut, Darien, Delmar, Frenchtown, Fries, Ginat, Ilion, Latty, Lorain, McGuffey, Mill, Miner, Montgomery, Muskego, Pauling, Peoga, Piopolis, Purdy, Roselms, Sheffield, Swanton, Toledo, Trumbull, Valley, Wabash, Wabasha, Warners, Wayland, Willette, and Zipp
- 2.) The minimum value for woodland with slopes of 25% or less, is \$120.

H. PASTURELAND VALUE

Where soil map units listed in these tables or comparable soils are used for permanent pasture, the land should be valued as cropland unless clearing or drainage costs would be incurred in converting the land to cropland. If so, appropriate deduction should be made for the capital investment necessary for the land to be tilled.

I. MINIMUM VALUES

Slopes of 25% or less:

Cropland	\$200
Woodland & pasture	\$120

Slopes greater than 25%

Woodland & pasture	\$100
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**Exhibit A - Acres Harvested, 2004-2008  
TY 2010 Crop Rotation**

<u>Year</u>	<u>Corn</u>	<u>% of Total</u>	<u>Soybeans</u>	<u>% of Total</u>	<u>Wheat</u>	<u>% of Total</u>	<u>Corn, Beans &amp; Wheat Totals</u>	<u>% of Total</u>	<u>Statewide Total Acres</u>
<b>2004</b>	3,300,000	<b>33.3%</b>	4,420,000	<b>44.6%</b>	890,000	<b>9.0%</b>	8,610,000	<b>86.8%</b>	9,917,300
<b>2005</b>	3,410,000	<b>33.9%</b>	4,480,000	<b>44.6%</b>	830,000	<b>8.3%</b>	8,720,000	<b>86.8%</b>	10,050,000
<b>2006</b>	3,110,000	<b>31.0%</b>	4,620,000	<b>46.1%</b>	960,000	<b>9.6%</b>	8,690,000	<b>86.7%</b>	10,021,200
<b>2007</b>	3,780,000	<b>38.2%</b>	4,130,000	<b>41.7%</b>	730,000	<b>7.4%</b>	8,640,000	<b>87.2%</b>	9,906,700
<b>2008</b>	3,260,000	<b>32.3%</b>	4,480,000	<b>44.4%</b>	1,090,000	<b>10.8%</b>	8,830,000	<b>87.6%</b>	10,081,500
<b>Five Year Average</b>	3,372,000	<b>39%</b>	4,426,000	<b>51%</b>	900,000	<b>10%</b>	8,698,000	<b>87%</b>	9,995,340

Ohio Dept. of Agriculture Annual Report--Table 5

**Exhibit A-1, FIVE YEAR AVERAGE CROP PRICES, TAX YEAR 2010**

Source: Ohio Agricultural Statistics Service

	<u>year</u>	<u>production</u>	<u>price</u>	<u>value (1000s)</u>
<b>CORN</b>	2002	252,560	\$ 2.50	631,400
	2003	478,920	\$ 2.45	1,173,354
	2004	491,380	\$ 1.85	909,053
	2005	464,750	\$ 1.80	836,550
	2006	470,640	\$ 3.30	1,553,112
	2007	541,500	\$ 3.95	2,138,925
	2008	421,200	\$ 3.95	1,663,740
	Totals		2,114,700	
Weighted Avg. Price			\$ 2.80	
After Management Allowance of 5%			\$ 2.66	
<hr/>				
<b>SOYBEANS</b>	2002	141,300	\$ 5.45	770,085
	2003	162,640	\$ 7.20	1,171,008
	2004	207,740	\$ 5.15	1,069,864
	2005	201,600	\$ 5.55	1,118,880
	2006	217,140	\$ 6.25	1,357,125
	2007	194,110	\$ 10.10	1,960,514
	2008	161,280	\$ 9.60	1,548,288
	Totals		883,960	
Weighted Avg. Price			\$ 6.75	
After Management Allowance of 5%			\$ 6.41	
<hr/>				
<b>WHEAT</b>	2002	50,220	\$ 3.20	160,704
	2003	68,000	\$ 3.20	217,600
	2004	55,180	\$ 3.15	173,817
	2005	58,930	\$ 3.20	188,576
	2006	65,280	\$ 3.30	215,424
	2007	45,990	\$ 5.50	252,945
	2008	74,120	\$ 5.80	429,896
	Totals		288,420	
Weighted Avg. Price			\$ 3.59	
After Management Allowance of 5%			\$ 3.41	

## Exhibit B-1, Production Costs, Tax Year 2010

### Determination of Five Year Average Costs for the Projected Crop Budgets

ITEM		UNITS	2003	2004	2005	2006	2007	2008	2009	5 yr. Avg.
<b>VARIABLE COSTS</b>										
<b>Seed</b>	CORN	1000k	\$1.10	\$1.10	\$1.10	\$1.13	\$1.16	\$2.05	\$2.50	\$1.31
	SOYBEANS	1000s	\$0.10	\$0.10	\$0.12	\$0.21	\$0.21	\$0.23	\$0.29	\$0.17
	WHEAT	1000s	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.02	\$0.02	\$0.01
<b>Fertilizer</b>	N Corn		\$0.24	\$0.24	\$0.26	\$0.34	\$0.29	\$0.49	\$0.55	\$0.32
	N Wheat		\$0.24	\$0.24	\$0.26	\$0.34	\$0.36	\$0.71	\$0.71	\$0.38
	P2O5		\$0.24	\$0.24	\$0.30	\$0.31	\$0.31	\$0.87	\$0.77	\$0.39
	K2O		\$0.13	\$0.13	\$0.18	\$0.21	\$0.20	\$0.48	\$0.72	\$0.24
	LIME		\$12.00	\$12.00	\$22.00	\$22.00	\$22.00	\$23.50	\$25.00	\$20.30
<b>Chemicals</b>	CORN		\$22.00	\$22.00	\$24.00	\$24.42	\$24.42	\$26.86	\$42.00	\$24.34
	SOYBEANS		\$26.00	\$26.00	\$39.00	\$21.10	\$21.10	\$21.10	\$30.00	\$24.84
	WHEAT		\$7.00	\$7.00	\$7.00	\$6.86	\$6.86	\$7.55	\$13.00	\$7.08
<b>Fuel, Oil, Grease</b>	CORN	-118	\$7.00	\$7.00	\$9.00	\$10.58	\$9.61	\$18.87	\$13.48	\$9.93
		-150	\$7.00	\$7.00	\$9.00	\$10.58	\$9.61	\$18.87	\$13.48	\$9.93
		-184	\$7.00	\$7.00	\$9.00	\$10.58	\$9.61	\$18.87	\$13.48	\$9.93
	SOYBEANS	-36	\$5.00	\$5.00	\$7.00	\$7.67	\$6.97	\$13.63	\$9.74	\$7.28
		-48	\$5.00	\$5.00	\$7.00	\$7.67	\$6.97	\$13.63	\$9.74	\$7.28
		-60	\$5.00	\$5.00	\$7.00	\$7.67	\$6.97	\$13.63	\$9.74	\$7.28
	WHEAT	-52	\$5.00	\$5.00	\$6.00	\$8.20	\$7.46	\$14.54	\$10.37	\$7.41
		-67	\$5.00	\$5.00	\$6.00	\$8.20	\$7.46	\$14.54	\$10.37	\$7.41
		-82	\$5.00	\$5.00	\$6.00	\$8.20	\$7.46	\$14.54	\$10.37	\$7.41
<b>Repairs</b>	CORN	-118	\$10.00	\$10.00	\$12.00	\$10.72	\$10.66	\$15.23	\$10.68	\$10.81
		-150	\$10.00	\$10.00	\$12.00	\$10.72	\$10.66	\$15.23	\$10.68	\$10.81
		-184	\$10.00	\$10.00	\$12.00	\$10.72	\$10.66	\$15.23	\$10.68	\$10.81
	SOYBEANS	-36	\$13.00	\$13.00	\$11.00	\$7.80	\$7.80	\$10.59	\$7.59	\$10.04
		-48	\$13.00	\$13.00	\$11.00	\$7.80	\$7.80	\$10.59	\$7.59	\$10.04
		-60	\$13.00	\$13.00	\$11.00	\$7.80	\$7.80	\$10.59	\$7.59	\$10.04
	WHEAT	-52	\$11.00	\$11.00	\$11.00	\$8.71	\$8.71	\$27.47	\$9.15	\$10.17
		-67	\$11.00	\$11.00	\$11.00	\$8.71	\$8.71	\$27.47	\$9.15	\$10.17
		-82	\$11.00	\$11.00	\$11.00	\$8.71	\$8.71	\$27.47	\$9.15	\$10.17
<b>Miscellaneous</b>	CORN	-118	\$12.00	\$12.00	\$6.00	\$6.00	\$6.00	\$6.00	\$7.00	\$7.40
		-150	\$13.00	\$13.00	\$7.00	\$7.00	\$7.00	\$7.00	\$8.00	\$8.40
		-184	\$14.00	\$14.00	\$8.00	\$8.00	\$8.00	\$8.00	\$9.00	\$9.40
	SOYBEANS	-36	\$12.00	\$12.00	\$7.00	\$7.00	\$7.00	\$7.00	\$8.00	\$8.20
		-48	\$13.00	\$13.00	\$7.00	\$7.00	\$7.00	\$7.00	\$8.00	\$8.40
		-60	\$14.00	\$14.00	\$7.00	\$7.00	\$7.00	\$7.00	\$8.00	\$8.60
	WHEAT	-52	\$12.00	\$12.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$7.20
		-67	\$13.00	\$13.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$7.40
		-82	\$14.00	\$14.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$7.60
<b>Drying:</b>										
<b>Fuel &amp; Electric</b>	CORN		\$0.18	\$0.13	\$0.15	\$0.16	\$0.14	\$0.11	\$0.11	\$0.13
<b>Trucking:</b>										
<b>Fuel Only</b>	CORN		\$0.04	\$0.04	\$0.04	\$0.06	\$0.06	\$0.09	\$0.15	\$0.06
	SOYBEANS		\$0.03	\$0.03	\$0.04	\$0.06	\$0.06	\$0.09	\$0.15	\$0.06
	WHEAT		\$0.03	\$0.03	\$0.03	\$0.06	\$0.06	\$0.09	\$0.15	\$0.05
<b>Interest on variable costs</b>			9.00%	9.00%	6.50%	8.00%	8.50%	9.00%	9.00%	8.70%
<b>FIXED COSTS</b>										
<b>Labor Charge</b>	CORN		\$32.40	\$32.40	\$36.00	\$36.00	\$36.00	\$48.60	\$43.20	\$36.72
	SOYBEANS		\$23.40	\$23.40	\$20.00	\$20.00	\$20.00	\$27.00	\$27.00	\$22.76
	WHEAT		\$18.00	\$18.00	\$20.00	\$20.00	\$20.00	\$27.00	\$27.00	\$21.00
<b>Machinery &amp; Equipment</b>	CORN		\$59.00	\$59.00	\$55.00	\$52.85	\$54.35	\$65.07	\$64.45	\$58.36
	SOYBEANS		\$54.00	\$54.00	\$47.00	\$44.60	\$46.56	\$53.86	\$52.45	\$50.77
	WHEAT		\$52.00	\$52.00	\$48.00	\$48.51	\$50.01	\$56.71	\$55.16	\$51.54

Source: Field Crop Enterprise Budgets 2009, OSU Extension, Dept. of Agricultural, Environmental, and Development Economics.

**2010 CORN BUDGET**  
conservation tillage

ITEM	UNITS	INPUTS		5 YR. AVG. COST	5 YEAR AVERAGE COST		
		BASE 118 <u>BUSHEL</u>	@ ADD. 32 <u>BUSHEL</u>		BASE 118 <u>BUSHEL</u>	@ ADD. <u>BUSHEL</u>	
SEED:	KERNELS (1000's)	28	0.13	\$1.31	\$36.68	\$0.17	
FERTILIZER:							
	N*	LB.	128	18	\$0.32	\$40.96	\$0.18
	P2O5	LB.	43.7	12.2	\$0.39	\$17.04	\$0.15
	K2O	LB.	31.9	8.9	\$0.24	\$7.66	\$0.07
	LIME	TON	0.25	0	\$20.30	\$5.08	\$0.00
CHEMICALS:					\$24.34	\$24.34	\$0.00
FUEL, OIL, GREASE					\$9.93	\$9.93	\$0.00
REPAIRS:					\$10.81	\$10.81	\$0.00
MISCELLANEOUS:					\$7.40	\$7.40	\$0.03
DRYING: FUEL & ELECTRIC ONLY				\$0.13	\$15.34	\$15.34	\$0.13
TRUCKING: FUEL ONLY					\$0.06	\$7.08	\$0.06
	SUBTOTAL					\$182.31	\$0.79
INTEREST: ON SUBTOTALLED COST			8.7%/12 X 7 MOS				
			0.05 int x subtotal			\$9.25	\$0.04
LABOR CHARGE:					\$36.72	\$36.72	\$0.00
MACHINERY & EQUIPMENT CHARGE:					\$58.36	\$58.36	\$0.00
	TOTALS					\$286.65	\$0.83

09/24/2009



**2010 SOYBEAN BUDGET  
NO TILLAGE PRACTICES**

ITEM	UNITS	INPUTS		5 YR. AVG. COST	5 YR. AVERAGE COST	
		<u>BASE 36 BUSHEL</u>	<u>@ ADD. 12 BUSHEL</u>		<u>BASE 36 BUSHEL</u>	<u>@ ADD. BUSHEL</u>
SEED:	seeds (1000s)	180.0	0	\$0.17	\$30.60	\$0.00
FERTILIZER:						
	N LB.	0	0	\$0.00	\$0.00	\$0.00
	P2O5 LB.	28.8	8	\$0.39	\$11.23	\$0.26
	K2O LB.	50.4	14	\$0.24	\$12.10	\$0.28
	LIME TON	0.25	0	\$20.30	\$5.08	\$0.00
CHEMICALS:				\$24.84	\$24.84	\$0.00
FUEL, OIL, GREASE				\$7.28	\$7.28	\$0.00
REPAIRS:				\$10.04	\$10.04	\$0.00
MISCELLANEOUS:				\$8.20	\$8.20	\$0.04
TRUCKING: FUEL ONLY				\$0.06	\$2.16	\$0.06
	<b>SUBTOTAL</b>				\$111.52	\$0.64
INTEREST: ON SUBTOTALLED COST		8.7%/12 X 5 MOS 0.0363	int x subtotal		\$4.04	\$0.02
LABOR CHARGE:				\$22.76	\$22.76	\$0.00
MACHINERY & EQUIPMENT CHARGE:				\$50.77	\$50.77	\$0.00
	<b>TOTALS</b>				\$189.10	\$0.66

09/24/2009

## 2010 WHEAT BUDGET

ITEM	UNITS	INPUTS		5 YR. AVG. COST	5 YR. AVERAGE COST	
		<u>BASE 52 BUSHELS</u>	<u>@ ADD. 15 BUSHEL</u>		<u>BASE 52 BUSHELS</u>	<u>@ ADD. BUSHEL</u>
SEED:	seeds (1000s)	1,400	0	\$0.01	\$14.00	\$0.00
FERTILIZER:						
	N LB.	43.5	26.3	\$0.38	\$16.53	\$0.67
	P2O5 LB.	32.8	9.4	\$0.39	\$12.79	\$0.24
	K2O LB.	39.2	5.6	\$0.24	\$9.41	\$0.09
	LIME TON	0.25	0	\$20.30	\$5.08	\$0.00
CHEMICALS:				\$7.08	\$7.08	\$0.00
FUEL, OIL, GREASE				\$7.41	\$7.41	\$0.00
REPAIRS:				\$10.17	\$10.17	\$0.00
MISCELLANEOUS:				\$7.20	\$7.20	\$0.03
TRUCKING: FUEL ONLY				\$0.05	\$2.60	\$0.05
	SUBTOTAL				\$92.27	\$1.08
		8.7%/12 X 8 MOS				
INTEREST: ON SUBTOTALLED COST		0.0580	int x subtotal		\$5.35	\$0.06
LABOR CHARGE:				\$21.00	\$21.00	\$0.00
MACHINERY & EQUIPMENT CHARGE:				\$51.54	\$51.54	\$0.00
	TOTALS				\$170.16	\$1.14

09/24/2009

01/04/2010

**RATES USED IN CAPITALIZATION RATE  
2004-2010**

<b>TAX YEAR</b>	<b>INTEREST RATE</b>	<b>EQUITY RATE</b>
2004	7.00	6.00
2005	7.10	7.25
2006	<del>7.70</del>	9.50
2007	7.70	<del>10.25</del>
2008	6.95	9.25
2009	6.55	5.25
2010	6.70	5.25
	7.09	7.45

\* interest rate is based on a 15 year adjustable multi flex loan with the rate coming from [www.e-farmcredit.com](http://www.e-farmcredit.com) / today's rates

\*\* equity rate is prime plus two per cent at [www.bankrate.com](http://www.bankrate.com) from Wall Street Journal survey

**ACTUAL CAPITALIZATION RATES USED IN CALCULATION  
2004-2010**

<b>TAX YEAR</b>	<b>CAPITALIZATION RATE</b>
2004	9.0%
2005	8.6%
2006	8.5%
2007	8.4%
2008	8.3%
2009	7.9%
2010	7.8%

# Exhibit D - Average Crop Yields by Year in Ohio

2008 Ohio Department of Agriculture Annual Report and Statistics

Table 5 - Annual Summary: Crop Production and Value

<u>Year</u>	<u>Corn</u>	<u>Soybeans</u>	<u>Wheat</u>	<u>Oats</u>	<u>Hay</u>
1984	118	36.5	44	63	2.81
1985	127	41.5	62	85	3.17
1986	128	40.5	46	76	2.95
1987	120	37	58	70	3.05
1988	85	27	50	45	2.18
1989	118	31.5	51	63	2.8
1990	121	39	59	70	3.3
1991	96	36	49	60	2.42
1992	143	40	53	71	3.25
1993	110	38	52	60	2.78
1994	139	44	58	56	3.43
1995	121	38	61	69	3.23
1996	111	35	39	57	2.83
1997	134	44	63	78	3.08
1998	141	44	64	65	3.01
1999	126	36	70	70	2.42
2000	147	42	72	76	3.35
2001	138	41	67	73	2.88
2002	89	32	62	62	2.58
2003	156	38.5	68	66	2.94
2004	158	47	62	63	2.72
2005	143	45	71	60	3.03
2006	159	47	68	75	2.83
2007	150	47	63	62	2.55
2008	135	36	68	70	2.46
1984	118	36.5	44	63	2.81
avg. 1999-2008	140.1	41.2	67.1	67.7	2.78
% change 1984 vs. 1999-2008 increase	1.187288 18.73%	1.128767 12.88%	1.525000 52.50%	1.074603 7.46%	0.989324 -1.07%

## 2010 CAUV SAMPLE CALCULATION

**SOIL:** Millgrove, Silt Loam  
**SLOPE:** 0-2  
**EROSION:** Slight  
**DRAINAGE:** Very poorly  
**PROD. INDEX:** 100

	<u>CORN</u>	<u>BEANS</u>	<u>WHEAT</u>
PI DAT yield/acre (1984)	144	52	64
% increased yield	1.187288	1.128767	1.525
adjusted yield/acre	171	59	98
X Crop Price/Unit	\$2.66	\$6.41	\$3.41
= GROSS INCOME / ACRE	\$454.86	\$378.19	\$334.18
YIELD / ACRE	171	59	98
BASE YIELD	118	36	52
= YIELD ABOVE BASE	53	23	46
X ADDED UNIT COST	\$0.83	\$0.66	\$1.14
ADDED UNIT COST / ACRE	\$43.99	\$15.18	\$52.44
BASE YIELD COST	\$286.65	\$189.10	\$170.16
= TOTAL NON-LAND PROD. COST	\$330.64	\$204.28	\$222.60
NET RETURN / ACRE	\$124.22	\$173.91	\$111.58
X CROPPING PATTERN	0.39	0.51	0.1
= ROTATIONAL NET RETURN / ACRE	\$48.45	\$88.69	\$11.16
TOTAL ROTATIONAL NET RETURN	\$148.30		
BASE CAP RATE	0.078		
CAUV LAND VALUE	\$1,901.26	SAY	\$1,900

## 2007 CAUV SAMPLE CALCULATION

SOIL: Millgrove, Silt Loam  
 SLOPE: 0-2  
 EROSION: Slight  
 DRAINAGE: Very poorly  
 PROD. INDEX: 100

	<u>CORN</u>	<u>BEANS</u>	<u>WHEAT</u>	<u>HAY</u>
Current PI DAT yield	144	52	64	6
% increased yield	1.1381356	1.108219	1.45	1.026336
YIELD / ACRE	164	58	93	6.2
X PRICE / UNIT	\$1.96	\$4.89	\$2.64	\$76.66
= GROSS INCOME / ACRE	\$321.44	\$283.62	\$245.52	\$475.29
YIELD / ACRE	164	58	93	6.2
BASE YIELD	100	35	50	2
= YIELD ABOVE BASE	64	23	43	4.2
X ADDED UNIT COST	\$0.91	\$0.49	\$0.81	\$23.98
ADDED UNIT COST / ACRE	\$58.24	\$11.27	\$34.83	\$100.72
BASE YIELD COST	\$235.70	\$168.14	\$153.67	\$134.50
= TOTAL NON-LAND PROD. COST	\$293.94	\$179.41	\$188.50	\$235.22
NET RETURN / ACRE	\$27.50	\$104.21	\$57.02	\$240.07
X CROPPING PATTERN	0.35	0.45	0.15	0.05
= ROTATIONAL NET RETURN / ACRE	\$ 9.63	\$ 46.89	\$ 8.55	\$ 12.00
TOTAL ROTATIONAL NET RETURN	\$ 77.07			
BASE CAP RATE	0.084			
X MANAGEMENT FACTOR	0.95			
= ADJUSTED CAPITALIZATION RATE	0.0798			
CAUV LAND VALUE	\$ 965.79	SAY \$ 970.00		

## 2010 CAUV SAMPLE CALCULATION

**SOIL:** Miami Silt Loam  
**SLOPE:** 2-6  
**EROSION:** Slight  
**DRAINAGE:** Well  
**PROD. INDEX:** 76

	<u>CORN</u>	<u>BEANS</u>	<u>WHEAT</u>
PI DAT yield/acre (1984)	108	38	50
% increased yield	1.187288	1.128767	1.525
adjusted yield/acre	128	43	76
X Crop Price/Unit	\$2.66	\$6.41	\$3.41
= GROSS INCOME / ACRE	\$340.48	\$275.63	\$259.16
YIELD / ACRE	128	43	76
BASE YIELD	118	36	52
= YIELD ABOVE BASE	10	7	24
X ADDED UNIT COST	\$0.83	\$0.66	\$1.14
ADDED UNIT COST / ACRE	\$8.30	\$4.62	\$27.36
BASE YIELD COST	\$286.65	\$189.10	\$170.16
= TOTAL NON-LAND PROD. COST	\$294.95	\$193.72	\$197.52
NET RETURN / ACRE	\$45.53	\$81.91	\$61.64
X CROPPING PATTERN	0.39	0.51	0.1
= ROTATIONAL NET RETURN / ACRE	\$17.76	\$41.77	\$6.16
TOTAL ROTATIONAL NET RETURN	\$65.69		
BASE CAP RATE	0.078		
CAUV LAND VALUE	\$842.24	SAY	\$840

## 2007 CAUV SAMPLE CALCULATION

SOIL: Miami, Silt Loam  
 SLOPE: 2-6  
 EROSION: Slight  
 DRAINAGE: Well  
 PROD. INDEX: 76

	<u>CORN</u>	<u>BEANS</u>	<u>WHEAT</u>	<u>HAY</u>
PI DAT yield/acre	108	38	50	4.6
% increased yield	1.138136	1.108219	1.450000	1.026336
adjusted yield/acre	123	42	73	4.7
X PRICE / UNIT	\$1.96	\$4.89	\$2.64	\$76.66
= GROSS INCOME / ACRE	\$241.08	\$205.38	\$192.72	\$360.30
YIELD / ACRE	123	42	73	4.7
BASE YIELD	100	35	50	2
= YIELD ABOVE BASE	23	7	23	2.7
X ADDED UNIT COST	\$0.91	\$0.49	\$0.81	\$23.98
ADDED UNIT COST / ACRE	\$20.93	\$3.43	\$18.63	\$64.75
BASE YIELD COST	\$235.70	\$168.14	\$153.67	\$134.50
= TOTAL NON-LAND PROD. COST	\$256.63	\$171.57	\$172.30	\$199.25
NET RETURN / ACRE	(\$15.55)	\$33.81	\$20.42	\$161.05
X CROPPING PATTERN	0.35	0.37	0.15	0.13
= ROTATIONAL NET RETURN / ACRE	(\$5.44)	\$12.51	\$3.06	\$20.94
TOTAL ROTATIONAL NET RETURN	\$31.07			
BASE CAP RATE	0.084			
X MANAGEMENT FACTOR	1			
= ADJUSTED CAPITALIZATION RATE	0.084			
CAUV LAND VALUE	\$369.88	SAY	\$370.00	



## CAUV Summary Values

05/01/2010  
TY 2010 - Final

productivity index	no. of units	net return/acre			cropland value/acre		
		low	high	avg.	low	high	avg.
0-49	601	0	12	0	200	200	200
50-59	749	0	41	6	200	530	214
60-69	1,119	0	97	33	200	1,250	436
70-79	798	29	108	65	380	1,380	845
80-89	206	68	130	99	870	1,670	1,278
90-99	35	115	151	126	1,470	1,880	1,601
100+	6	148	148	148	1,900	1,900	1,900
<b>all regions</b>	<b>3,514</b>	<b>\$0</b>	<b>\$151</b>	<b>\$34</b>	<b>\$200</b>	<b>\$1,900</b>	<b>\$505</b>

### TY 2007 Final (3/15/07)

productivity index	no. of units	net return/acre			cropland value/acre		
		low	high	avg.	low	high	avg.
0-49	608	0	46	10	100	100	100
50-59	752	0	87	21	100	100	100
60-69	1,103	0	98	12	100	270	123
70-79	805	0	47	24	100	530	283
80-89	200	10	62	41	130	770	521
90-99	36	48	77	59	600	970	747
100+	6	77	77	77	970	970	970
<b>all regions</b>	<b>3,510</b>	<b>\$0</b>	<b>\$98</b>	<b>\$19</b>	<b>\$100</b>	<b>\$970</b>	<b>\$181</b>

## CAUV Summary Values

05/07/2010

TY 2010 - Final

productivity index	no. of units	net return/acre			cropland value/acre		
		low	high	avg.	low	high	avg.
0-49	601	0	12	0	200	200	200
50-59	749	0	41	6	200	530	214
60-69	1,119	0	97	33	200	1,250	436
70-79	798	29	108	65	380	1,380	845
80-89	206	68	130	99	870	1,670	1,278
90-99	35	115	151	126	1,470	1,880	1,601
100+	6	148	148	148	1,900	1,900	1,900
<b>all regions</b>	<b>3,514</b>	<b>\$0</b>	<b>\$151</b>	<b>\$34</b>	<b>\$200</b>	<b>\$1,900</b>	<b>\$505</b>

### TY 2009 Final

productivity index	no. of units	net return/acre			cropland value/acre		
		low	high	avg.	low	high	avg.
0-49	600	0	78	33	170	200	176
50-59	749	0	98	53	170	330	200
60-69	1,117	0	93	42	180	930	435
70-79	798	19	89	60	240	1,100	746
80-89	206	57	109	84	720	1,390	1,059
90-99	35	97	127	108	1,230	1,610	1,368
100+	6	128	128	128	1,620	1,620	1,620
<b>all regions</b>	<b>3,511</b>	<b>\$0</b>	<b>\$128</b>	<b>\$50</b>	<b>\$170</b>	<b>\$1,620</b>	<b>\$459</b>

### Average CAUV Values By Year

Productivity Index	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
0-49	100	100	100	100	100	100	100	100	100	100	100	108	100	100	176	200
50-59	101	100	100	111	114	107	104	102	101	114	106	134	100	100	200	214
60-69	150	114	163	230	233	200	181	125	113	104	101	125	123	188	435	436
70-79	320	257	373	448	452	417	394	285	244	157	124	241	283	431	746	845
80-89	539	487	632	694	699	666	640	516	467	342	293	465	521	708	1059	1278
90-99	740	689	850	894	908	869	842	713	663	533	492	675	747	973	1368	1601
100+	870	820	990	1040	1060	1030	1000	870	820	690	650	880	970	1200	1620	1900
<b>Totals</b>	189	160	209	258	262	242	231	180	163	135	123	177	181	249	459	505
<b>No. of Soils</b>	3050	3050	3083	3246	3281	3371	3279	3307	3313	3313	3358	3482	3510	3511	3511	3514

### Average CAUV Values By Reappraisal/Update Year

Productivity Index	1995	1998	2001	2004	2007	2010
0-49	100	100	100	100	100	200
50-59	101	111	104	114	100	214
60-69	150	230	181	104	123	436
70-79	320	448	394	157	283	845
80-89	539	694	640	342	521	1278
90-99	740	894	842	533	747	1601
100+	870	1040	1000	690	970	1900
<b>Totals</b>	189	258	231	135	181	505
<b>No. of Soils</b>	3050	3246	3279	3313	3510	3514

### Comparison of Inputs, Tax Years 2007-2010

<b>Crop Prices</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Difference</b>	
					<b>2007-10</b>	<b>2009-10</b>
<b>Corn</b>	\$1.96	\$2.02	\$2.29	\$2.66	<b>\$0.70</b>	\$0.37
<b>Soybeans</b>	\$4.89	\$5.19	\$5.60	\$6.41	<b>\$1.52</b>	\$0.81
<b>Wheat</b>	\$2.64	\$2.89	\$3.05	\$3.41	<b>\$0.77</b>	\$0.36
<b>Non-land Production Costs</b>						
<b>Base Cost</b>						
<b>Corn</b>	\$235.70	\$242.39	\$264.12	\$286.65	<b>\$50.95</b>	\$22.53
<b>Soybeans</b>	\$168.14	\$174.44	\$175.21	\$189.10	<b>\$20.96</b>	\$13.89
<b>Wheat</b>	\$153.67	\$156.68	\$159.01	\$170.16	<b>\$16.49</b>	\$11.15
<b>Additional Unit Cost</b>						
<b>Corn</b>	\$0.91	\$0.90	\$0.72	\$0.83	<b>(\$0.08)</b>	\$0.11
<b>Soybeans</b>	\$0.49	\$0.50	\$0.57	\$0.66	<b>\$0.17</b>	\$0.09
<b>Wheat</b>	\$0.81	\$0.84	\$0.86	\$1.14	<b>\$0.33</b>	\$0.28
<b>Capitalization Rate</b>						
<b>Mortgage/Equity Ratio</b>	60/40	60/40	60/40	60/40		
<b>Years</b>	15	15	15	15		
<b>Interest Rate</b>	7.49	7.29	7.06	7.24		
<b>Equity Rate</b>	8.35	8.15	7.65	7.80		
<b>Tax Additur</b>	1.4	1.4	1.4	1.4		
<b>Capitalization Rate</b>	8.4	8.3	7.9	7.8	(0.60)	(0.10)