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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 four major field crops (corn, soybeans, wheat and hay) 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. The most recent ten years of data for each crop are averaged and divided by the 1984 yield for that crop. This factor is applied to the 1984 crop yield of record for each mapping unit. For 2010, the factor is based upon yield data from calendar years 1999-2008.

B. CROPPING PATTERNS

The cropping pattern for each map unit is determined by the slope of that unit with 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, a cropping pattern of 100% hay is used for these soils.
- 2.) A pattern of 50% corn and 50% soybeans is used for organic soil map units.

All other soil map units were assigned a cropping pattern according the following schedule.

<u>% Slope</u>	<u>Corn</u>	<u>Soybeans</u>	<u>Wheat</u>	<u>Hay</u>
0-1, 0-2, 0-3, 0-4, 0-5, 1-3, 1-4, 1-5	35%	45%	15%	5%
0-6, 0-8, 0-10, 1-6, 1-7, 1-8, 2-4, 2-5, 2-6, 2-8, 3-6, 3-8	35%	37%	15%	13%
0-15, 1-15, 2-12, 3-10, 3-12, 3-15, 4-10, 4-12, 5-10, 5-15, 6-12, 6-15, 7-15, 8-15.....	35%	20%	20%	25%
5-20, 6-18, 6-20, 8-20, 8-25, 9-18, 10-15, 10-20, 10-25, 12-18, 12-20, 12-25, 15-20, 15-25, 18-25.....	20%	-	10%	70%

C. CROP PRICE INFORMATION

The crop prices used for the four 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 and mixed hay is reduced by 15% to account for harvesting loss.

		TY2007	TY2008	TY2009	TY2010
		1999	2000	2001	2002
		<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Corn	@bu	\$1.96	\$2.02	\$2.29	\$2.66
Soybeans	@bu	4.89	5.19	5.60	6.41
Wheat	@bu	2.64	2.89	3.05	3.41
Hay-Mixed	@ton	76.66	79.80	86.18	95.19
Hay-Grass	@ton	61.95	64.77	70.69	75.27

The annual production and price per unit for each of these crops for the 2002 through 2008 period are shown in Exhibit A (see page 5).

Two types of hay are used based on slopes and the productivity of the soil. The mixed hay is for lower sloped soils and higher producing soils. The grass hay is for higher slopes and less productive soils found predominantly in southeastern Ohio.

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 pages 6 and 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-5, pages 8-11).

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:

<u>Crop</u>	<u>Tax Year</u>	<u>Base Yield</u>	<u>Base Cost</u>	<u>Additional Cost Per Unit</u>
Corn	2010	118 bu	\$286.65	\$ 0.83
	2009		264.12	0.72
	2007		235.70	0.91
Soybeans	2010	36 bu	\$189.10	\$ 0.66
	2009		175.21	0.57
	2007		168.14	0.49
Wheat - (Grain Only)	2010	52 bu	\$170.16	\$ 1.14
	2009		159.01	0.86
	2007		153.67	0.81
Hay (All)	2010	2.5 ton	\$138.41	\$ 31.35
	2009		131.89	22.75
	2007		134.50	23.98

E. CAPITALIZATION RATE:

Five-year averaging is used to derive the Farm Credit Service interest rate of 7.08% 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 12). 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 0.11035	=	0.0662
40% Equity x equity yield rate of .0745	=	0.0298
Subtotal		0.0960
<u>Less</u> equity buildup for 5 years		
% loan x % mortgage paid off x sinking fund factor at equity rate for 5 years		
(0.60) [1- (6.997/9.0621)] (0.172337)	=	(0.0236)
<u>Less</u> 5% appreciation times sinking fund factor @ equity yield rate of .0745		
.05 x 0.172337	=	(0.0086)
Capitalization Rate before Taxes	=	0.0638 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%, $(.35 \times 38.87)/1000$.

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 \$300 per acre for soils with 25 percent slope or less.

G. WOODLAND AND PASTURE VALUE OF SOILS

- 1.) The minimum value for woodland and pasture is \$150.
- 2.) 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.) For excessively drained, well drained, moderately well drained, (E, W, MW) - No Cost
 - b.) For somewhat poorly drained, poorly drained, very poorly drained, saturated (SWP, P, VP) - \$500 for Tile Drainage
 - c.) A \$250 adjustment for surface drainage for the following soil series: 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
- 3.) Land used as permanent pasture is valued as cropland with appropriate deductions for clearing or drainage costs if necessary.

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

Source: Ohio Agricultural Statistics Service

	year	production	price	value (1000s)
CORN	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		5,930,659
Weighted Avg. Price			\$ 2.80	
After Management Allowance of 5%			\$ 2.66	
SOYBEANS	2002	141,300	\$ 5.45	770,085
	2003	162,640	\$ 7.20	1,171,008
	2004	207,740	\$ 5.15	1,069,861
	2005	201,600	\$ 5.55	1,118,880
	2006	217,140	\$ 6.25	1,357,125
	2007	194,110	\$ 10.10	1,960,511
	2008	161,280	\$ 9.60	1,548,288
	Totals	883,960		5,965,386
Weighted Avg. Price			\$ 6.75	
After Management Allowance of 5%			\$ 6.41	
WHEAT	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		1,035,249
Weighted Avg. Price			\$ 3.59	
After Management Allowance of 5%			\$ 3.41	
MIXED HAY	2002	3,750	\$ 96.00	360,000
	2003	3,400	\$ 98.75	335,750
	2004	3,232	\$ 102.50	331,280
	2005	3,630	\$ 87.00	315,810
	2006	3,421	\$ 126.25	431,901
	2007	2,931	\$ 160.71	471,041
	2008	2,802	\$ 143.00	400,686
	Totals	16,605		1,859,617
Weighted Avg. Price			\$ 111.99	
After Management Allowance of 15%			\$ 95.19	
GRASS HAY	2002	3,750	\$ 71.00	266,250
	2003	3,400	\$ 68.75	233,750
	2004	3,232	\$ 73.67	238,101
	2005	3,630	\$ 71.25	258,638
	2006	3,421	\$ 87.83	300,466
	2007	2,931	\$ 116.00	339,996
	2008	2,802	\$ 96.50	270,393
	Totals	16,835		1,333,848
Weighted Avg. Price			\$ 79.23	
After Management Allowance of 5%			\$ 75.27	

Exhibit B-1, Production Costs Determination of Five Year Average Costs for the Projected Crop Budgets Tax year 2010										
ITEM		UNITS	2003	2004	2005	2006	2007	2008	2009	5 yr. Avg.
VARIABLE COSTS										
Seed	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
	HAY	100lb	\$150.00	\$150.00	\$175.00	\$175.00	\$175.00	\$175.00	\$175.00	\$170.00
Fertilizer	N Corn		\$0.24	\$0.24	\$0.26	\$0.34	\$0.29	\$0.49	\$0.55	\$0.32
	N Wheat/Hay		\$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
Establishment/Hay	(OVER 5 YRS.)		\$19.00	\$19.00	\$19.00	\$19.00	\$19.00	\$14.41	\$16.73	\$18.55
Chemicals	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
Fuel, Oil, Grease	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	\$14.51	\$10.37	\$7.41
		-67	\$5.00	\$5.00	\$6.00	\$8.20	\$7.46	\$14.51	\$10.37	\$7.41
		-82	\$5.00	\$5.00	\$6.00	\$8.20	\$7.46	\$14.51	\$10.37	\$7.41
	HAY	-2.50	\$7.00	\$7.00	\$11.00	\$12.61	\$11.46	\$17.17	\$17.17	\$11.85
		-3.75	\$7.00	\$7.00	\$11.00	\$12.61	\$11.46	\$17.17	\$17.17	\$11.85
		-5.00	\$7.00	\$7.00	\$11.00	\$12.61	\$11.46	\$17.17	\$17.17	\$11.85
Repairs	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
	HAY	-2.50	\$13.00	\$13.00	\$7.00	\$16.13	\$16.13	\$18.30	\$18.30	\$15.31
		-3.75	\$13.00	\$13.00	\$7.00	\$16.13	\$16.13	\$18.30	\$18.30	\$15.31
		-5.00	\$13.00	\$13.00	\$7.00	\$16.13	\$16.13	\$18.30	\$18.30	\$15.31

Exhibit B-1, Production Costs

Determination of Five Year Average Costs for the Projected Crop Budgets

Tax year 2010

ITEM		UNITS	2003	2004	2005	2006	2007	2008	2009	5 yr. Avg.
Miscellaneous	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
	HAY	-2.50	\$14.00	\$14.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$6.00
		-3.75	\$15.00	\$15.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$7.00
		-5.00	\$16.00	\$16.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$8.00
Drying - Fuel & Electric	CORN		\$0.18	\$0.13	\$0.15	\$0.16	\$0.14	\$0.11	\$0.11	\$0.13
Trucking - Fuel Only	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
Interest on variable costs			9.00%	9.00%	6.50%	8.00%	8.50%	9.00%	9.00%	8.70%
FIXED COSTS										
Labor Charge	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
	HAY		\$45.00	\$45.00	\$30.00	\$30.00	\$30.00	\$40.50	\$40.50	\$37.20
Machinery & Equipment	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	\$56.74	\$55.16	\$51.54
	HAY		\$31.00	\$31.00	\$32.00	\$29.31	\$29.31	\$22.83	\$22.83	\$28.69

2010 CORN BUDGET
conservation tillage

ITEM	UNITS	INPUTS		5 YR. AVG. COST	5 YEAR AVERAGE COST		
		BASE 118	@ ADD. 32		BASE 118	@ ADD.	
		<u>BUSHEL</u>	<u>BUSHEL</u>		<u>BUSHEL</u>	<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	
		8.7%/12 X 7 MOS					
INTEREST: ON SUBTOTALLED COST		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	
		BASE 36 <u>BUSHEL</u>	@ ADD. 12 <u>BUSHEL</u>		BASE 36 <u>BUSHEL</u>	@ ADD. <u>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
SUBTOTAL					\$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
TOTALS					\$189.10	\$0.66

09/24/2009

2010 WHEAT BUDGET

ITEM	UNITS	INPUTS		5 YR. AVG. COST	5 YR. AVERAGE COST	
		BASE 52 <u>BUSHELS</u>	@ ADD. 15 <u>BUSHEL</u>		BASE 52 <u>BUSHELS</u>	@ ADD. <u>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
INTEREST: ON SUBTOTALLED COST		8.7%/12 X 8 MOS 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

2010 HAY BUDGET

ITEM	UNITS	INPUTS		5 YR. AVG. COST	5 YR. AVERAGE COST	
		BASE 2.5 TON	@ ADD. 1.25 TON		BASE COST 2.5 TON	@ ADD. COST TON
SEED*	(170.00/100)*10/5 PRORATED OVER 5 YRS.	10			\$3.40	\$0.00
FERTILIZER:						
	N LB.	0	65	\$0.38	\$0.00	\$19.76
	P2O5 LB.	25	15	\$0.39	\$9.75	\$4.68
	K2O LB.	60	25	\$0.24	\$14.40	\$4.80
	LIME TON	0.25	0	\$20.30	\$5.08	\$0.00
ESTABLISHMENT:	avg \$/5 yrs.			\$18.55	\$3.71	\$0.00
FUEL, OIL, GREASE				\$11.85	\$11.85	\$0.00
REPAIRS:				\$15.31	\$15.31	\$0.00
MISCELLANEOUS:				\$6.00	\$6.00	\$0.80
SUBTOTAL					\$69.50	\$30.04
INTEREST: on subtotal	8.7%/12 X 6 MOS 0.0435		int x subtotal		\$3.02	\$1.31
LABOR CHARGE:				\$37.20	\$37.20	\$0.00
MACHINERY & EQUIPMENT CHARGE:				\$28.69	\$28.69	\$0.00
TOTALS					\$138.41	\$31.35

*Seed is priced at \$170 per 100 pounds; the budget requires 10 pounds per acre over five years.

09/24/2009

08/25/2009

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

TAX YEAR	INTEREST RATE	EQUITY RATE
2004	7.00	6.00
2005	7.10	7.25
2006	7.70	9.50
2007	7.70	10.25
2008	6.95	9.25
2009	6.55	5.25
2010	6.65	5.25
	7.08	7.45

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

** equity rate is prime plus two per cent at www.bankrate.com from Wall Street Journal survey

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

TAX YEAR	CAPITALIZATION RATE
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>	<u>HAY</u>
PI DAT yield (1984)	144	52	64	6
% increased yield	1.187288	1.128767	1.525	0.989324
ADJUSTED YIELD / ACRE	171	59	98	5.9
X PRICE / UNIT	\$2.66	\$6.41	\$3.41	\$95.19
= GROSS INCOME / ACRE	\$454.86	\$378.19	\$334.18	\$561.62
 YIELD / ACRE	 171	 59	 98	 5.9
BASE YIELD	118	36	52	2.5
= YIELD ABOVE BASE	53	23	46	3.4
X ADDED UNIT COST	\$0.83	\$0.66	\$1.14	\$31.35
ADDED UNIT COST / ACRE	\$43.99	\$15.18	\$52.44	\$106.59
BASE YIELD COST	\$286.65	\$189.10	\$170.16	\$138.41
= TOTAL NON-LAND PROD. COST	\$330.64	\$204.28	\$222.60	\$245.00
 NET RETURN / ACRE	 \$124.22	 \$173.91	 \$111.58	 \$316.62
X CROPPING PATTERN	0.35	0.45	0.15	0.05
= ROTATIONAL NET RETURN / ACRE	\$43.48	\$78.26	\$16.74	\$15.83
 TOTAL ROTATIONAL NET RETURN	 \$ 154.30			
 BASE CAP RATE	 0.078			
X MANAGEMENT FACTOR	1			
= ADJUSTED CAPITALIZATION RATE	0.078			
 CAUV LAND VALUE	 \$1,978.26	 SAY	 \$1,980.00	

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>	<u>HAY</u>
PI DAT yield/acre (1984)	108	38	50	4.6
% increased yield	1.187288	1.128767	1.525	0.989324
adjusted yield/acre	128	43	76	4.6
X Crop Price/Unit	\$2.66	\$6.41	\$3.41	\$95.19
= GROSS INCOME / ACRE	\$340.48	\$275.63	\$259.16	\$437.87
 YIELD / ACRE	 128	 43	 76	 4.6
BASE YIELD	118	36	52	2.5
= YIELD ABOVE BASE	10	7	24	2.1
X ADDED UNIT COST	\$0.83	\$0.66	\$1.14	\$31.35
ADDED UNIT COST / ACRE	\$8.30	\$4.62	\$27.36	\$65.84
BASE YIELD COST	\$286.65	\$189.10	\$170.16	\$138.41
= TOTAL NON-LAND PROD. COST	\$294.95	\$193.72	\$197.52	\$204.25
 NET RETURN / ACRE	 \$45.53	 \$81.91	 \$61.64	 \$233.63
X CROPPING PATTERN	0.35	0.37	0.15	0.13
= ROTATIONAL NET RETURN / ACRE	\$15.94	\$30.31	\$9.25	\$30.37
 TOTAL ROTATIONAL NET RETURN	 \$85.86			
 BASE CAP RATE	 0.078			
 CAUV LAND VALUE	 \$1,100.77	 SAY	 \$1,100	

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

09/25/2009

TY 2010 - Preliminary

productivity index	no. of units	net return/acre			cropland value/acre		
		low	high	avg.	low	high	avg.
0-49	600	0	81	37	300	300	300
50-59	749	0	98	60	300	570	356
60-69	1,117	0	99	58	300	980	667
70-79	798	37	111	79	470	1,290	1008
80-89	206	77	135	106	990	1,730	1,365
90-99	35	121	155	133	1,560	1,970	1,704
100+	6	156	156	156	1,980	1,980	1,980
all regions	3,511	\$ -	\$ 156	\$ 63	\$ 300	\$ 1,980	\$ 669

TY 2007 Final

productivity index	no. of units	net return/acre			cropland value/acre		
		low	high	avg.	low	high	avg.
0-49	608	0	46	10	100	370	133
50-59	752	0	87	21	100	540	170
60-69	1,103	0	98	12	100	450	146
70-79	805	0	47	24	100	560	287
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
all regions	3,511	0	\$ 98	\$ 19	\$ 100	\$ 970	\$ 210

CAUV Summary Values

09/25/2009

TY 2010 - Preliminary

productivity index	no. of units	net return/acre			cropland value/acre		
		low	high	avg.	low	high	avg.
0-49	600	0	81	37	300	300	300
50-59	749	0	98	60	300	570	356
60-69	1,117	0	99	58	300	980	667
70-79	798	37	111	79	470	1,290	1008
80-89	206	77	135	106	990	1,730	1,365
90-99	35	121	155	133	1,560	1,970	1,704
100+	6	156	156	156	1,980	1,980	1,980
all regions	3,511	\$ -	\$ 156	\$ 63	\$ 300	\$ 1,980	\$ 669

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
all regions	3,511	\$ -	\$ 128	\$ 50	\$ 170	\$ 1,620	\$ 459

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	300
50-59	101	100	100	111	114	107	104	102	101	114	106	134	100	100	200	356
60-69	150	114	163	230	233	200	181	125	113	104	101	125	123	188	435	667
70-79	320	257	373	448	452	417	394	285	244	157	124	241	283	431	746	1008
80-89	539	487	632	694	699	666	640	516	467	342	293	465	521	708	1059	1365
90-99	740	689	850	894	908	869	842	713	663	533	492	675	747	973	1368	1704
100+	870	820	990	1040	1060	1030	1000	870	820	690	650	880	970	1200	1620	1980
Totals	189	160	209	258	262	242	231	180	163	135	123	177	181	249	459	669
No. of Soils	3050	3050	3083	3246	3281	3371	3279	3307	3313	3313	3358	3482	3510	3511	3511	3511

Average CAUV Values By Reappraisal/Update Year

Productivity Index	1995	1998	2001	2004	2007	2010
0-49	100	100	100	100	100	300
50-59	101	111	104	114	100	356
60-69	150	230	181	104	123	667
70-79	320	448	394	157	283	1008
80-89	539	694	640	342	521	1365
90-99	740	894	842	533	747	1704
100+	870	1040	1000	690	970	1980
Totals	189	258	231	135	181	669
No. of Soils	3050	3246	3279	3313	3510	3511

Comparison of Inputs, Tax Years 2007-2010

Comparison of Inputs, Tax Years 2007-2010						
<u>Crop Prices</u>					Difference	
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2007-10</u>	<u>2009-10</u>
Corn	\$1.96	\$2.02	\$2.29	\$2.66	\$0.70	\$0.37
Soybeans	\$4.89	\$5.19	\$5.60	\$6.41	\$1.52	\$0.81
Wheat	\$2.64	\$2.89	\$3.05	\$3.41	\$0.77	\$0.36
Hay(mixed)	\$76.66	\$79.80	\$86.18	\$95.19	\$18.53	\$9.01
Hay(grass)	\$61.95	\$64.77	\$70.69	\$75.27	\$13.32	\$4.58
<u>Non-land Production Costs</u>						
<u>Base Cost</u>						
Corn	\$235.70	\$242.39	\$264.12	\$286.65	\$50.95	\$22.53
Soybeans	\$168.14	\$174.44	\$175.21	\$189.10	\$20.96	\$13.89
Wheat	\$153.67	\$156.68	\$159.01	\$170.16	\$16.49	\$11.15
Hay	\$134.50	\$133.80	\$131.89	\$138.41	\$3.91	\$6.52
<u>Additional Unit Cost</u>						
Corn	\$0.91	\$0.90	\$0.72	\$0.83	(\$0.08)	\$0.11
Soybeans	\$0.49	\$0.50	\$0.57	\$0.66	\$0.17	\$0.09
Wheat	\$0.81	\$0.84	\$0.86	\$1.14	\$0.33	\$0.28
Hay	\$23.98	\$24.23	\$22.75	\$31.35	\$7.37	\$8.60
<u>Capitalization Rate</u>						
<u>Mortgage/Equity Ratio</u>						
Years	15	15	15	15		
Interest Rate	7.49	7.29	7.06	7.24		
Equity Rate	8.35	8.15	7.65	7.80		
Tax Additur	1.4	1.4	1.4	1.4		
Capitalization Rate	8.4	8.3	7.9	7.8	(0.60)	(0.10)