Tax Equalization DivisionP.O. Box 530
Columbus, Ohio 43216-0530
(614) 466-5744 Fax (614) 752-9822
tax.ohio.gov

April 20, 2012 Revised Final Values - 2012 Includes Crop Insurance Costs

2012 CURRENT AGRICULTURAL USE VALUE OF LAND TABLES

EXPLANATION OF THE CALCULATION OF VALUES FOR VARIOUS SOIL MAPPING UNITS FOR TAX YEAR 2012

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 of 25 percent or less. The information used for a capitalized net income approach is as follows:

YIELD INFORMATION
CROPPING PATTERN
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 2012, yield data from calendar years 2001-2010 were averaged and divided by the 1984 yield for each crop (Exhibit A, page 5). This factor is applied to the 1984 crop yield of record for each soil. The table below shows the average yields used to develop the factor for each of the crops.

Crop	1984 Base	TY 2009 1998-2007	TY 2010 1999-2008	TY 2011 2000-2009	TY 2012 2001-2010
Corn	118.0 bu	140.7	140.1	144.9	146.5
Soybeans	36.5 bu	42.0	41.2	42.5	43.1
Wheat	44.0 bu	66.7	67.1	67.3	66.2

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: 38.6% corn, 51.1% beans, and 10.3% wheat. This rotation is based on data from 2006-2010 and closely reflects current agricultural production in Ohio. The acres harvested in each year are shown in Exhibit B (page 6).

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; in 2012, a minimum value of \$350 is used for these soils. In 2011 a minimum value of \$300 is used for these soils; in 2010 a minimum value of \$200 is used for these soils and in 2009, the minimum value is \$170.
- 2.) A pattern of 50% corn and 50% soybeans is used for organic soils.

C. CROP PRICES

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 2004 through 2010. The annual production and price per unit for each of these crops for the 2004 through 2010 period are shown in Exhibit C (page 7).

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.

		TY 2009	TY 2010	TY 2011	TY 2012
Crop Unit	2001-2007	2002-2008	2003-2009	2004-2010	
Corn	Bushel	\$2.29	\$2.66	\$2.89	\$3.19
Soybeans	Bushel	\$5.60	\$6.41	\$7.22	\$7.74
Wheat	Bushel	\$3.05	\$3.41	\$3.64	\$3.98

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 2005-2011, 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 D (pages 8-9). For 2012, crop insurance costs are included for each crop.

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 (Exhibits D-1 through Exhibit D-3, pages 10-12).

The five year average non-land production costs for tax year 2012 are summarized below and compared with the costs used for tax years 2009 and 2011:

NON-LAND PRODUCTION COSTS										
Crop Base Cost	Yield/2012	TY 2009	TY 2011	TY 2012						
Corn	114 bu	\$264.12	\$300.98	\$350.71						
Soybeans	36 bu	\$175.21	\$204.60	\$227.51						
Wheat	51 bu	\$159.01	\$192.94	\$211.52						
Additional Cost	per Unit		4.02.01	Ψ211.02						
Corn	1 bu	\$ 0.72	\$ 0.84	\$ 0.90						
Soybeans	1 bu	\$ 0.57	\$ 0.77	\$ 0.93						
Wheat	1 bu	\$ 0.86	\$ 1.19	\$ 1.41						

E. CAPITALIZATION RATE

Five-year averaging is used to derive the Farm Credit Service interest rate of 6.79% assuming a 60% loan for a 15-year term, payable annually, and an interest rate of 6.9% for the 40 percent equity portion (Exhibit E, page 13). 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 is computed by the Akerson mortgage-equity method as follows:

60% loan x annual debt service of 0.108343 40% equity x equity yield rate of .069 Subtotal Less equity buildup for 5 years		= <u>=</u>	0.0650 0.0276 0.0926
% loan x % mortgage paid off x sinking fund factor at equity rate for 5 years (0.60) [1- (7.0923/9.23)] (0.174238)	•	=	(0.0242)
Less 5% appreciation times sinking fund factor @ equity yield rate of .069 .05 x 0.174238	=		<u>(0.0087)</u>
Capitalization Rate before Taxes	=		0.0597 or 6.0%

For tax year 2010 the statewide average effective tax rate after application of the reduction factors, (Section 319.301 Ohio Revised Code), levied on agricultural property was 46.07 mills. The ten percent rollback authorized by Section 319.302 of the code reduced this rate further to 41.46 mills. As a percent of market value the effective tax rate to be used in this year's capitalization formula is 1.5%, $(.35 \times 41.46)/1000$.

Capitalization rate including R.E. taxes 7.5%

The 7.5% 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. However, the minimum value for cropland is \$350 per acre for soils with 25 percent slope or less regardless of this calculated amount. In 2011 a minimum value of \$300 was used for these soils; in 2010, the minimum value was \$200 and in 2009, the minimum value was \$170.

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 used in the formula 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 was 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 \$230.

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 & pasture \$350 Woodland \$230

Slopes greater than 25%:

Woodland & pasture \$230

Exhibit A - Average Crop Yields by Year in Ohio 2010 Ohio Department of Agriculture Annual Report and Statistics Table 5 - Annual Summary: Crop Production and Value

<u>Year</u>	Corn	Soybeans	Wheat
4004			
1984 1985	118	36,5	44
1986	127	41.5	62
1987	128 120	40.5	46
1988	85	37	58
1989	118	27 31.5	50
1990	121	39	51 50
1991	96	3 9 36	59 40
1992	143	40	49 53
1993	110	38	52
1994	139	44	58
1995	121	38	61
1996	111	35	39
1997	134	44	63
1998	141	44	64
1999	126	36	70
2000	147	42	72
2001	138	41	67
2002	89	32	62
2003	156	38.5	68
2004	158	47	62
2005	143	45	71
2006	159	47	68
2007	150	47	68
2008	135	36	68
2009	174	49	72
2010	163	48	61
1984	118	36.5	44
avg. 2001-2010	146 5	43.4	66 2
% change 1984 vs. 2001-2010 increase	1,241525 24,15%	1 180822 18 08%	1.504545 50.45%

Exhibit B - Acres Harvested, 2006-2010 TY 2012 Crop Rotation

<u>Year</u>	Corn	% of Total	Soybeans	% of <u>Total</u>	<u>Wheat</u>	% of Total	Corn, Beans & Wheat <u>Totals</u>
2006 2007 2008 2009 2010	3,780,000 3,260,000 3,310,000	43.8% 36.9% 37.5%	4,620,000 4,130,000 4,480,000 4,530,000 4,590,000	47.8% 50.7% 51.4%	960,000 730,000 1,090,000 980,000 750,000	8.4% 12.3%	8,690,000 8,640,000 8,830,000 8,820,000 8,750,000
Five Year Average	3,374,000	38.6%	4,470,000	51.1%	902,000	10.3%	8,746,000

Ohio Dept. of Agriculture Annual Report--Table 5

xhibit C, FIVE YE Source	e: Ohio Agric	cultural Statistic	's Sar	Vice	AR 2012
		Julius Generalises	3 001	VICE	
	year	production		price	value (1000s
CORN	2004	491,380		1.85	909,05
	2005	464,750		1.80	836,55
	2006	470,640		3.30	1,553,11
	2007	541,500	\$	3.95	2,138,92
	2008	421,200	\$	3.95	1,663,74
	2009	546,360	\$	3.70	2,021,53
	2010	533,010	\$	5.55	2,958,20
Totals		2,471,080			8,286,36
Weighted Avg. Pri			\$	3.35	
After Management	Allowance of	5%	\$	3.19	
SOYBEANS	2004	207.740	Φ.		
COTBLANG	2004	207,740		5.15	1,069,86
	2006	201,600	\$	5.55	1,118,88
	2007	217,140		6.25	1,357,12
	2007	194,110		10.10	1,960,51
	2008	161,280	\$	9.60	1,548,28
	2010	221,970	\$	9.60	2,130,91
Totals	2010	220,320	\$	11.80	2,5 99,77
Weighted Avg. Price	20	996,100		- 0.45	8,115 <u>,</u> 71
After Management		E0/	\$	8.15	
Atter Warragement	Allowance of	5% 	\$	7.74	
WHEAT	2004	55,180	\$	3.15	173,81
	2005	58,930	\$	3.20	188,57
	2006	65,280	\$	3.30	215,42
	2007	45,990	\$	5.50	252,94
	2008	74,120	\$	5.80	429,89
	2009	70,560	\$	4.35	306,93
	2010	45,750	\$	5.20	237,90
Totals		286,510			1,201,78
Weighted Avg. Price			\$	4.19	-1
After Management	Allowance of	5%	\$	3.98	

Exhibit D, Production Costs, Tax Year 2012 Determination of Five Year Average Costs for the Projected Crop Budgets

144										5 yr.
ITEM VARIABLE COSTS		<u>Units</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Avg.</u>
Seed	CORN	1000k	\$1.10	\$1.13	\$1.16	\$2.05	ቀኅ ደሳ	# 0.04	00.00	# 4.00
3332	SOYBEANS	1000k	\$0.12		\$0.21	\$0.23	\$2.50 \$0.29	\$2.81 \$0.32	\$2.88	\$1.93
	WHEAT	1000s	\$0.01	\$0.01	\$0.21	\$0.23	\$0.29	\$0.02	\$0.33 \$0.02	\$0.25 \$0.02
						,		40.02	Ψ0.02	Ψ0.02
Fertilizer	N Corn		\$0.26	\$0.34	\$0.29	\$0.49	\$0.55	\$0.27	\$0.50	\$0.38
	N Wheat		\$0.26	\$0.34	\$0.36	\$0.71	\$0.71	\$0.47	\$0.63	\$0.50
	P2O5		\$0.30	\$0.31	\$0.31	\$0.87	\$0.77	\$0.43	\$0.70	\$0.50
	K2O		\$0.18	\$0.21	\$0.20	\$0.48	\$0.72	\$0.35	\$0.50	\$0.35
	LIME		\$22.00	\$22.00	\$22.00	\$23.50	\$25.00	\$25.00	\$25.00	\$23.50
Chemicals	CORN		\$24.00	\$24.42	\$24.42	\$26.86	\$42.00	\$35.00	\$35.00	¢20 1 <i>4</i>
	SOYBEANS		\$39.00	\$21.10	\$21.10	\$21.10	\$30.00	\$30.00	\$30.00	\$26.44
	WHEAT		\$7.00		\$6.86		\$ 13.00			\$9.48
Fuel Oll Occasion										
Fuel, Oil, Grease	CORN	-122		\$10.58		\$18.87				
		-155		\$10.58		\$18.87				
	COVERNO	-192		\$10.58		\$18.87				
	SOYBEANS	-36	\$7.00	\$7.67		\$ 13.63	\$9.74		\$12.27	\$9.15
		-48	\$ 7.00	\$7.67		\$13.63	\$9.74		\$12.27	\$9.15
	WUEAT	-60 50	\$ 7.00	\$7.67		\$13.63	\$9.74		\$12.27	\$9.15
	WHEAT	-52 67	\$6.00	\$8.20		\$14.51				\$9.35
		-67 -82	\$6.00 \$6.00	\$8.20 \$8.20		\$14.51 \$14.51				\$9.35
		-02	\$0.00	φο.Ζυ	Φ1. 4 0	\$14.51	\$10.37	\$10.37	\$10.37	\$9.35
Repairs	CORN	-122	\$12.00	\$10.72	\$10.66	\$15.23	\$10.68	\$21.11	\$21.18	\$13.95
		-155	\$12.00	\$10.72	\$10.66	\$15.23	\$10.68	\$21.11	\$21.18	\$13.95
		-192	\$12.00	\$10.72	\$10.66	\$15.23	\$10.68	\$21.11	\$21.18	\$13.95
	SOYBEANS	-36	\$11.00	\$7.80		\$10.59		\$11.70		\$9.78
		-48	\$11.00	\$7.80		\$10.59		\$11.70	•	\$9.78
	AU IT AT	-60	\$11.00	\$7.80		\$10.59	· ·	\$11.70		\$9.78
	WHEAT	-52 67	\$11.00	\$8.71		\$27.47	\$9.15		\$10.85	\$9.77
		-67	\$11.00	\$8.71		\$27.47	\$9.15		\$10.85	\$9.77
		-82	\$11.00	\$8.71	\$8.71	\$27.47	\$9.15	\$9.15	\$10.85	\$9.77
Crop Insurance	CORN	-122	\$6.00	\$ 5.72	\$6.90	\$11.00	\$21.60	\$19.50	\$19.50	\$12.58
		-155	\$6.00	\$5.72		\$11.00				
		-192	\$6.00	\$6.06		\$12.00				
	SOYBEANS	-36	\$5.00	\$4.56	\$5.63		\$20.20	\$8.00	\$8.00	\$6.73
		-48	\$5.00	\$4.50	\$5.58	\$7.50	\$20.80	\$8.00	\$8.00	\$6.82
		-60	\$5.00	\$4.70	\$5.83	\$8.00	\$22.30	\$8.00	\$8.00	\$6.97
	WHEAT	-52	\$5.00	\$5.39	\$3.9 4	\$5.77	\$ 10.50	\$5.50	\$5.50	\$5.43
		-67	\$6.00	\$5.52	\$4.01	\$5.87	\$ 10.50	\$6.00	\$5.50	\$5.78
		-82	\$6.00	\$5.87	\$4 . 26	\$6.20	\$11.00	\$6.00	\$6.00	\$6.01

Exhibit D, Production Costs, Tax Year 2012

ITEM		l l., !£_	000=							5 yr.
	0001	<u>Units</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u> 2009</u>	<u> 2010</u>	<u> 2011</u>	<u>Avg.</u>
Miscellaneous	CORN	-122	\$6.00	,		+	\$7.00	\$7.00	\$8.00	\$6.40
		-155	\$7.00	\$7.00	-		\$8.00	\$8.00	\$9.00	\$7.40
		-192	\$8.00	,	\$8.00	,	\$9.00	\$9.00	\$10.00	\$8.40
	SOYBEANS	-36	\$7.00	,	\$7.00	\$7.00	\$8.00	\$8.00	\$9.00	\$7.40
		-48	\$7.00		\$7.00	\$7.00	\$8.00	\$8.00	\$9.00	\$7.40
		-60	\$7.00		\$7.00	\$7.00	\$8.00	\$8.00	\$9.00	\$7.40
	WHEAT	-52	\$ 6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$ 6.00	\$6.00
		-67	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6:00	\$6.00
Devis -		-82	\$ 6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00
Drying:										
Fuel & Electric	CORN		\$0.15	\$0.16	\$0.11	\$0.11	\$0.11	\$0.11	\$0.11	\$0.12
Trucking:										
Fuel Only	CORN		***							
i dei Olliy			\$0.04	\$0.06	\$0.06	\$0.09	\$0.15	\$ 0.02	\$0.02	\$0.05
	SOYBEANS		\$0.04	\$0.06	\$0.06	\$0.09	\$0.15	\$ 0.02	\$0.02	\$0.05
	WHEAT		\$0.03	\$0.06	\$0.06	\$0.09	\$0.15	\$0.04	\$ 0.02	\$0.06
Interest on variable costs	S		6.50%	8.00%	8.50%	9.00%	9.00%	6.00%	6.00%	7.60%
FIXED COSTS								J. J	0.0070	7.0070
Labor Charge	CORN		\$36.00	\$36.00	\$36.00	\$48.60	\$43.20	\$40.50	\$40.50	\$39.24
	SOYBEANS		\$20.00	\$20.00	\$20.00	\$27.00	\$27.00	\$27.00		
	WHEAT					\$27.00		\$27.00		
						,	4	4 27.00	Ψ27.00	Ψ24.20
Machinery & Equipment	CORN		\$55.00	\$ 52.8 5	\$54.35	\$65.07	\$64.45	\$77.45	\$92.00	\$63.26
	SOYBEANS		\$47.00	\$44.60	\$46.56	\$53.86	\$52.45	\$53.42	\$71.83	\$50.66
	WHEAT		\$48.00	\$48.51	\$50.01	\$56.71	\$55.16	\$55.53	\$68.61	\$53.12
Source: Field Crop Enternal	Dudusts 004	4 00		_			+00.10	450.00	400:0T	ψυυ. ΙΟ

Source: Field Crop Enterprise Budgets 2011, OSU Extension, Dept. of Agricultural, Environmental, and Development Economics.

2012 CORN BUDGET conservation tillage

							EAR
		inputs - 5	Yr. Average	G 400			GE COST
ITEM		UNITS	BASE 114	@ ADD.	5 YR. AVG.	BASE	@ ADD.
		J.111 C	BUSHEL	BUSHEL	COST	114 BUSHEL	BUSHEL
				BOOTILL	<u> </u>	DOSITEL	DUSHEL
SEED:	KERNELS	(1000's)	28	0.12	\$1.93	\$53.27	\$0.24
FERTILIZER:							
	N*	LB.	128.0	0.59	\$0.38	\$48.64	\$0.22
	P2O5	LB.	42.2	0.37	\$0.50	\$21.10	\$0.22 \$0.19
	K2O	LB.	38.3	0.27	\$0.35	\$13.42	\$0.09
	LIME	TON	0.25	0	\$23.50	\$5.88	\$0.00
CHEMICALS:							
OTTENHOALO.					\$29.14	\$29.14	\$0.00
FUEL, OIL, GREASE					\$13.92	\$13.92	\$0.00
REPAIRS:					\$13.95	\$13.95	\$0.00
CROP INSURANCE:					\$12.58	\$12.58	(\$0.03)
MISCELLANEOUS:					\$6.40	\$6.40	\$0.03
					Ψ0.40	φ0.40	φυ.υσ
DRYING: FUEL & ELECT	RIC ONLY			\$0.12	\$13.68	\$13.68	\$0.12
TRUCKING: FUEL ONLY					\$0.05	\$5.70	\$0.00
	SUBTOTAL	_				\$237.67	\$0.86
INTEREST: on Subtotal		7	7.6%/12 X 7 N 4.4%	IOS int x subtotal		\$10.54	\$0.04
				mex oubtotal		φ10.54	Ψ0.04
LABOR CHARGE:					\$39.24	\$39.24	\$0.00
MACHINERY & EQUIPME	NT CHARGE:				\$63.26	\$63.26	\$0.00
	TOTALS					\$350.71	\$0.90
04/05/2012							

2012 SOYBEAN BUDGET

					5 YR.	5 YR. AVERAGE COST	
		Inputs - 5 Yr.	-		AVG.		
ITEM		UNITS	BASE 36	@ ADD.	COST	BASE	@ ADD.
]	Onno	<u>BU</u> SHEL	BUSHEL		36	Buous
			DOUTEL	DOSHEL		<u>BUSHEL</u>	<u>BUSHEL</u>
SEED:		seeds (1000s	180.0	0	\$0.25	\$45.00	\$0.00
FERTILIZER:							
	N	LB.	0	0	\$0.00	\$0.00	\$0.00
	P2O5	LB.	28	0.8	\$0.50	\$14.24	\$0.00 \$0.40
	K20	LB.	62	1.4	\$0.35	\$21.55	\$0.40 \$0.49
	LIME	TON	0.25	0	\$23.50	\$5.88	\$0.49 \$0.00
		· · · · · · · · · · · · · · · · · · ·			7-0.00	Ψ0.00	Ψ0.00
CHEMICALS:					\$26.44	\$26.44	\$0.00
							40.00
FUEL, OIL, GRE	ASE				\$9.15	\$9.15	\$0.00
REPAIRS:							
KEPAIKS:					\$9.78	\$9.78	\$0.00
CROP INSURAN	ICE				45		
ONO! INCONA!	10L				\$6.73	\$6.73	\$0.01
MISCELLANEO	US:				67 40	07.40	
					\$7.40	\$7.40	\$0.00
TRUCKING: FU	EL ONLY				\$0.05	\$1.80	\$0.00
					Ψ0.00	Ψ1.00	ΦU.UU
	SUBTOTAL	ı				\$147.96	\$0.90
			7.6%/12 X 5 MO	S		Ψ111.00	Ψ0.90
INTEREST: ON	SUBTOTALI	ED COST	3.2%	int x subtotal		\$4.69	\$0.03
1 4 5 6 5 6 1 4 5 6	_						
LABOR CHARG	t:				\$24.20	\$24.20	\$0.00
MACHINERY & I	EOLIIDMENT	CUADOS:					
MACHINEK I & I	EQUIPMEN I	HAKGE:			\$50.66	\$50.66	\$0.00
	TOTALS						
	IVIALG					\$227.51	\$0.93

2012 WHEAT BUDGET

		***************************************	Inputs - 5 Y	r. Average	5 YR. AVG.	5 YR. AVER	AGE COST
ITEM		UNITS	BASE 51	@ ADD.	COST	BASE 51	@ ADD.
	!		<u>BUSHELS</u>	BUSHEL		BUSHELS	BUSHEL
SEED:		seeds (1000s	s) 1,400	0	\$0.02	\$28.00	\$0.00
FERTILIZER:							
	N	LB.	42	1.75	\$0.50	\$21.00	\$0.88
	P2O5	LB.	32	0.63	\$0.50	\$16.00	\$0.32
	K20	LB.	39	0.37	\$0.35	\$13.65	\$0.13
	LIME	TON	0.25	0	\$23.50	\$5.88	\$0.00
CHEMICALS:					\$9.48	\$9.48	\$0.00
FUE: 0" 0==					701.0	Ψ0.40	Ψ0.00
FUEL, OIL, GRE	ASE				\$9.35	\$9.35	\$0.00
REPAIRS:					\$9.77	\$9.77	\$0.00
CROP INSURAN	ICE:				\$5.43	\$5.43	\$0.02
MISCELLANEO	US:				\$6.00	\$6.00	\$0.00
TRUCKING: FU	EL ONLY				\$0.06	\$3.12	\$0.00
	SUBTOTAL		7.00/40.3/	_		\$127.68	\$1.34
INTEREST: ON	SUBTOTALE	D COST	7.6%/12 X 8 MO: 5.1%	S int x subtotal		\$6.47	\$0.07
LABOR CHARG	E:				\$24.20	\$24.20	\$0.00
MACHINEDY	~^! !!D!!E::-				,	Ţ= 1. 20	Ψ0.00
MACHINERY & I	=QUIPMENT	CHARGE:			\$53.18	\$53.18	\$0.00
04/05/2012	TOTALS					\$211.52	\$1.41

04/05/2012

RATES USED IN CAPITALIZATION RATE 2006-2012

TAX YEAR	INTEREST RATE	EQUITY RATE
2006	7.70	9.50
2007	7.70	10.25
2008	6.95	9.25
2009	6.55	5.25
2010	6.70	5.25
2011	6.05	5.25
2012	4.70	5.25
	6.79	6.90

^{*} Interest rate is based on a 15-year fixed multi flex loan offered by Farm Credit Services of Mid-America at www.e-farmcredit.com/TodaysRates/FarmRates.

ACTUAL CAPITALIZATION RATES USED IN CALCULATION 2006-2012

TAX YEAR	CAPITALIZATION RATE
2006	8.5%
2007	8.4%
2008	8.3%
2009	7.9%
2010	7.8%
2011	7.6%
2012	7.5%

^{**} Equity rate is the prime rate plus 2% at www.bankrate.com from the Wall Street Journal's bank survey.

SOIL:

Millgrove, Silt Loam

SLOPE:

0-2

EROSION:

Slight

DRAINAGE:

Very poorly

PROD. INDEX:

100

PI DAT yield/acre (1984)	<u>CORN</u> 144	BEANS 52	WHEAT
% increased yield	1.241525	1.180822	64
adjusted yield/acre	1.24 1323		1.504545
X Crop Price/Unit		61	96
= GROSS INCOME / ACRE	\$3.19	\$7.74	\$3.98
- GROSS INCOME / ACRE	\$571.01	\$472.14	\$382.08
YIELD / ACRE	179	61	96
BASE YIELD	114	36	51
≃ YIELD ABOVE BASE	65	25	45
X ADDED UNIT COST	\$0.90	\$0.93	\$1.41
ADDED UNIT COST / ACRE	\$58.50	•	\$63.45
BASE YIELD COST	\$350.71		\$211.52
= TOTAL NON-LAND PROD. COST	\$409.21	\$250.76	\$274.97
NET RETURN / ACRE	\$161.80	\$221.38	\$107.11
X CROPPING PATTERN	0.386	0.511	0.103
= ROTATIONAL NET RETURN / ACRE	\$62.45	\$113.13	\$11.03
	,	4110.70	Ψ11.00
TOTAL ROTATIONAL NET RETURN	\$186.61		
BASE CAP RATE	0.075		
CAUV LAND VALUE	\$2,488.16	SAY	\$2,490

04/05/2012

SOIL:

Millgrove, Silt Loam

SLOPE:

0-2

EROSION:

Slight

DRAINAGE:

Very poorly

PROD. INDEX:

100

	CORN	BEANS	<u>WHEAT</u>	<u>HAY</u>
Current PI DAT yield	144	52	64	6.0
% increased yield	1.192373	1.150685	1.515909	1.007117
YIELD / ACRE	172	60	97	6.0
X PRICE / UNIT	\$2.29	\$5.60	\$3.05	\$86.18
= GROSS INCOME / ACRE	\$393.88	\$336.00	\$295.85	\$517.08
YIELD / ACRE	172	60	97	6.0
BASE YIELD	117	36	52	2.5
= YIELD ABOVE BASE	55	24	45	4
X ADDED UNIT COST	\$0.72	\$0.57	\$0.86	\$22.75
ADDED UNIT COST / ACRE	\$39.60	\$13.68	\$38.70	\$79.63
BASE YIELD COST	\$264.12	\$175.21	\$159.01	\$131.89
= TOTAL NON-LAND PROD. COST	\$303.72	\$188.89	\$197.71	\$211.52
NET RETURN / ACRE	\$90.16	\$147.11	\$98.14	\$305.57
X CROPPING PATTERN	0.35	0.45	0.15	0.05
= ROTATIONAL NET RETURN / ACRE	\$ 31.56	\$ 66.20	\$ 14.72	\$ 15.28
TOTAL ROTATIONAL NET RETURN	\$ 127.75			
BASE CAP RATE	0.079			
CAUV LAND VALUE	\$ 1,617.15	SAY	\$ 1,620.00	

SOIL:

Miami Silt Loam

SLOPE:

2-6

EROSION:

Slight

DRAINAGE:

Well

PROD. INDEX:

76

PI DAT yield/acre (1984) % increased yield adjusted yield/acre X Crop Price/Unit = GROSS INCOME / ACRE	CORN 108 1.241525 134 \$3.19 \$427.46	38 1.180822 45 \$7.74 \$348.30	WHEAT 50 1.504545 75 \$3.98 \$298.50
YIELD / ACRE BASE YIELD = YIELD ABOVE BASE	134 114 20	45 36 9	75 51
X ADDED UNIT COST ADDED UNIT COST / ACRE BASE YIELD COST = TOTAL NON-LAND PROD. COST	\$0.90 \$18.00 \$350.71 \$368.71	\$0.93 \$8.37 \$227.51 \$235.88	24 \$1.41 \$33.84 \$211.52 \$245.36
NET RETURN / ACRE X CROPPING PATTERN = ROTATIONAL NET RETURN / ACRE	\$58.75 0.386 \$22.68	\$112.42 0.511 \$57.45	\$53.14 0.103 \$5.47
TOTAL ROTATIONAL NET RETURN	\$85.60		
BASE CAP RATE	0.075		
CAUV LAND VALUE	\$1,141.30	SAY	\$1,140

04/05/2012

SOIL:

Miami Silt Loam

SLOPE:

2-6

EROSION:

Slight

DRAINAGE:

Well

PROD. INDEX:

76

	CORN	BEANS	WHEAT	HAY
PI DAT yield/acre	108	38	50	406
% increased yield	1.192373	1.150685	1.515909	1.007117
adjusted yield/acre	129	44	76	4.6
X PRICE / UNIT	\$2.29	\$5.60	\$3.05	\$86.18
= GROSS INCOME / ACRE	\$295.41	\$246.40	\$231.80	\$396.43
YIELD / ACRE	129	44	76	4.0
BASE YIELD	117	36	76 52	4.6
= YIELD ABOVE BASE	12	8	24	2.5
X ADDED UNIT COST	\$0.72	\$ 0.57	\$0.86	2.1
ADDED UNIT COST / ACRE	\$8.64	\$4.56	\$0.60 \$20.64	\$22.75 \$47.78
BASE YIELD COST	\$264.12	\$175.21	\$159.01	Ψ47.76 \$131.89
= TOTAL NON-LAND PROD. COST	\$272.76	\$179.77	\$179.65	\$179.67
NET RETURN / ACRE	\$22.65	\$66.63	\$52.15	\$216.76
X CROPPING PATTERN	0.35	0.37	0.15	0.13
= ROTATIONAL NET RETURN / ACRE	\$7.93	\$24.65	\$7.82	\$28.18
TOTAL ROTATIONAL NET RETURN	\$68.58			
BASE CAP RATE	0.079			
CAUV LAND VALUE	\$868.13	SAY	\$ 870.00	*

^{*} This soil has been manually changed to \$820

CAUV Summary Values

04/05/2012 FY 2012 - Final

productivity index	no. of units	net low	return/acre high	avg.	cropia low	and value/ac	ere avg.
0-49	601	0	24	0	350	350	350
50-59	749	0	54	9	350	720	362
60-69	1,114	0	95	44	350	1,270	610
70-79	798	38	137	86	510	1,830	1,147
80-89	211	90	169	128	1,210	2,250	1,717
90-99	35	147	185	159	1,960	2,470	2,128
100+	6	187	187	187	2,490	2,490	2,490
all regions	3,514	\$0	\$187	\$45	\$350	\$2,490	\$719

TY 2009 Final

productivity index	no. of units	net low	return/acre high	avg.	cropia low	and value/ac high	сге 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	\$0	\$128	\$50	\$170	\$1,620	\$459

CAUV Summary Values

04/05/2012 FY 2012 - Final

productivity index	no. of units	net Iow	return/acre high	e avg.	cropla low	and value/ad high	ere avg.
0-49	601	0	24	0	350	350	350
50-59	749	0	54	9	350	720	362
60-69	1,114	0	95	44	350	1,270	610
70-79	798	38	137	86	510	1,830	1,147
80-89	211	90	169	128	1,210	2,250	1,717
90-99	35	147	185	159	1,960	2,470	2,128
100+	6	187	187	187	2,490	2,490	2,490
all regions	3,514	\$0	\$187	\$45	\$350	\$2,490	\$719

TY 2011 Final

productivity index	no. of units	net Iow	return/acre high	avg.	cropia iow	and value/ac high	re avg.
0-49	601	0	27	0	300	300	300
50-59	749	0	59	12	300	780	328
60-69	1,114	0	96	47	300	1,260	632
70-79	798	43	132	85	570	1,740	1,126
80-89	211	88	161	124	1,160	2,110	1,641
90-99	35	140	179	153	1,840	2,360	2,017
100+	6	181	181	181	2,380	2,380	2,380
all regions	3,514	\$0	\$181	\$46	\$300	\$2,380	\$700

Average CAUV Values By Year

Productivity Index 199	Mity 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0-49	100	100	100	100	100	100	100	100	100	108	100	100	176	200	300	350
50-59	100	111	114	107	104	102	101	114	106	134	100	100	200	214	328	362
69-09	163	230	233	200	181	125	113	104	101	125	123	188	435	436	632	610
70-79	373	448	452	417	394	285	244	157	124	241	283	431	746	845	1126	1147
80-89	632	694	669	999	640	516	467	342	293	465	521	208	1059	1278	1641	1717
66-06	850	894	806	869	842	713	663	533	492	675	747	973	1368	1601	2017	2128
100+	066	1040	1060	1030	1000	870	820	069	029	880	970	1200	1620	1900	2380	2490
Totals	209	258	262	242	231	180	163	135	123	177	181	249	459	505	700	719
Soils	3083	3246	3281	3371	3279	3307	3313	3313	3358	3482	3510	3511	3511	3514	3514	3514
Ave	erage	CAL	Average CAUV Values	alues	By	By Reappraisal/UpdateYear	prais	al/Uk	odate	¥ear						
Productivity	vity				•	•				•						
Index	1997		- •	2000		-	2003			2006			2009			2012
0-49	100			100			100			108			176			350
50-59	100			107			101			134			200			362
69-09	163			200			113			125			435			610
70-79	373			417			244			241			746			1147
80-89	632			999			467			465			1059			1717
66-06	850			869			663			675			1368			2128
100 ⁺	066		•	1030			820			880			1620			2490
Totals	209			242			163			177			459			719
# Soils	3083		(-)	3371		• •	3313		. •	3482		• •	3511			3514

Comparison of Inputs, Tax Years 2009-2012

Crop Prices					Diffe	rence
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>		2011-12
Corn	\$2.29	\$2.66	\$2.89	\$3.19	\$0.90	\$0.30
Soybeans	\$5.60	\$6.41	\$7.22	\$7.74	\$2.14	\$0.52
Wheat	\$3.05	\$3.41	\$3.64	\$3.98	\$0.93	\$0.34
Non-land Production Costs Base Cost						
Corn	\$264.12	\$286.65	\$300.98	\$350.71	\$86.59	\$49.73
Soybeans	\$175.21	\$189.10	\$204.60	\$227.51	\$52.30	\$22.91
Wheat	\$159.01	\$170.16	\$192.94	\$211.52	\$52.51	\$18.58
Additional Unit Cost						
Corn	\$0.72	\$0.83	\$0.84	\$0.90	\$0.18	\$0.06
Soybeans	\$0.57	\$0.66	\$0.77	\$0.93	\$0.36	\$0.16
Wheat	\$0.86	\$1.14	\$1.19	\$1.41	\$0.55	\$0.22
Capitalization Rate						
Mortgage/Equity Ratio	60/40	60/40	60/40	60/40		
Years	15	15	15	15		
Interest Rate	7.06	7.24	7.00	6.79		
Equity Rate	7.65	7.80	7.30	6.90		
Tax Additur	1.4	1.4	1.3	1.5		
Capitalization Rate	7.9	7.8	7.6	7.5	(0.40)	(0.10)