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February 25, 2011 FINAL VALUES

2011 CURRENT AGRICULTURAL USE VALUE OF LAND TABLES

EXPLANATION OF THE CALCULATION OF VALUES FOR VARIOUS SOIL MAPPING UNITS FOR TAX YEAR 2011

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 2011, yield data from calendar years 2000-2009 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.

| | | TY 2008 | TY 2009 | TY 2010 | TY 2011 |
|----------|--------------|-----------|-----------|-----------|-----------|
| Crop | 1984 Base | 1997-2006 | 1998-2007 | 1999-2008 | 2000-2009 |
| Corn | 118 bushels | 139.0 | 140.7 | 140.1 | 144.9 |
| Soybeans | 36.5 bushels | 42.0 | 42.0 | 41.2 | 42.5 |
| Wheat | 44 bushels | 67.0 | 66.7 | 67.1 | 67.3 |

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, 50.9% beans, and 10.5% wheat. This rotation is based on data from 2005-2009 and closely reflects current agricultural production in Ohio. The acres harvested in each year are shown in Exhibit B (see 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 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 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 2003 through 2009. The annual production and price per unit for each of these crops for the 2003 through 2009 period are shown in Exhibit C (see 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 2008 | TY 2009 | TY 2010 | TY 2011 |
|----------|--------|-----------|-----------|-----------|-----------|
| Crop | Unit | 2000-2006 | 2001-2007 | 2002-2008 | 2003-2009 |
| Corn | Bushel | \$2.02 | \$2.29 | \$2.66 | \$2.89 |
| Soybeans | Bushel | \$5.19 | \$5.60 | \$6.41 | \$7.22 |
| Wheat | Bushel | \$2.89 | \$3.05 | \$3.41 | \$3.64 |

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 2004-2010, 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 (see page 8).

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 D-1 through Exhibit D-3, pages 9-11).

The five year average non-land production costs for tax year 2011 are summarized below and compared with the costs used for tax years 2008 and 2010:

| NON-LAND PRODUCTION COSTS | | | | | | |
|---------------------------|--------|----------|----------|----------|--|--|
| Crop – Base Cost | Yield | TY 2008 | TY 2010 | TY 2011 | | |
| Corn | 110 bu | \$242.39 | \$286.65 | \$300.98 | | |
| Soybeans | 35 bu | \$174.44 | \$189.10 | \$204.60 | | |
| Wheat | 51 bu | \$156.68 | \$170.16 | \$192.94 | | |
| Additional Cost per | Unit | | | | | |
| Corn | 1 bu | \$ 0.90 | \$ 0.83 | \$ 0.84 | | |
| Soybeans | 1 bu | \$ 0.50 | \$ 0.66 | \$ 0.77 | | |
| Wheat | 1 bu | \$ 0.84 | \$ 1.14 | \$ 1.19 | | |

E. CAPITALIZATION RATE:

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Five-year averaging is used to derive the Farm Credit Service interest rate of 7.0% assuming a 60% loan for a 15-year term, payable annually, and an interest rate of 7.3% for the 40 percent equity portion (see Exhibit E, 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 is computed by the Akerson mortgage-equity method as follows:

| 60% loan x annual debt service of 0.109795 | | = | 0.0659 |
|---|---|---|----------------|
| 40% equity x equity yield rate of .073 | | _ | 0.0292 |
| Subtotal | | | 0.0951 |
| Less equity buildup for 5 years | | | |
| % loan x % mortgage paid off x sinking fund factor | | | |
| at equity rate for 5 years | | | |
| (0.60) [1- (7.0236/9.1079)] (0.172853) | | = | (0.0237) |
| Less 5% appreciation times sinking fund factor @ equity yield rate of .0743 | | | |
| .05 x 0.172853 | = | | (0.0086) |
| Capitalization Rate before Taxes | = | | 0.0627 or 6.3% |

For tax year 2009 the statewide average effective tax rate after application of the reduction factors, (Section 319.301 Ohio Revised Code), levied on agricultural property was 42.35 mills. The ten percent rollback authorized by Section 319.302 of the code reduced this rate further to 38.11 mills. As a percent of market value the effective tax rate to be used in this year's capitalization formula is 1.3%, $(.35 \times 38.11)/1000$.

Capitalization rate including R.E. taxes 7.6% The 7.6% 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 \$300 per acre for soils with 25 percent slope or less regardless of this calculated amount. In 2010, a minimum value of \$200 was used for these soils 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:
 - Clearing \$500 per acre for all soils a.
 - 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 \$200.

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 \$300 Woodland \$200

Slopes greater than 25%

Woodland & pasture \$200

Exhibit A - Average Crop Yields by Year in Ohio 2009 Ohio Department of Agriculture Annual Report and Statistics Table 5 - Annual Summary: Crop Production and Value

| <u>Year</u> | Corn | Soybeans | <u>Wheat</u> |
|---|--------------------|--|--------------------------|
| 1984 | 318 | 36:5 | 44 |
| 1985 | 127 | 41.5 | 62 |
| 1986 | 128 | 40.5 | 46 |
| 1987 | 120 | 37 | 58 |
| 1988 | 85 | 27 | 50 |
| 1989 | 118 | 31.5 | 51 |
| 1990 | 121 | 39 | 59 |
| 1991 | 96 | 36 | 49 |
| 1992 | 143 | 40 | 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 | 4 147 | 42 | 72 |
| 2001 | 138 | 41 | 67 |
| 2002 | 4 - 1 1 89 m / h / | 1.1.1.1.1.1.1.1.1.1.3.2.1.1.1.1.1.1.1.1. | 62 |
| 2003 | 156 | 38,5 | 68 |
| 2004 | 158 | 47 | 62 |
| 2005 | 143 | 45 | 2004205 71 100000 |
| 2006 | 159 | 47 | 68 |
| 2007 | 150 | 47 milijahan | 63 |
| 2008 | 135 | 36 (11) | 68 |
| 2009 | 174 | 49 | 72 |
| 1984 | 118 | 36.5 | 44 |
| avg. 2000-2009 | 144.9 | 42.5 | 67.3 |
| % change 1984 vs. 2000-2009 increase | 1.227966 22.80% | 1.164384 16.44% | 1.529545 52.95% |

Exhibit B - Acres Harvested, 2005-2009 TY 2011 Crop Rotation

| | Corn | % of Total | Soybeans | % of Total | Wheat | % of Total | Corn, Beans & Wheat Totals |
|-------------|-----------|---------------|-----------|---------------|-----------|---------------|----------------------------------|
| <u>Year</u> | <u> </u> | <u></u> | <u> </u> | | VIIIVAL | 10101 | 101410 |
| 2005 | 3,410,000 | 39.1% | 4,480,000 | 51.4% | 830,000 | 9.5% | 8,720,000 |
| 2006 | 3,110,000 | 35.8% | 4,620,000 | 53.2% | 960,000 | 11.0% | 8,690,000 |
| 2007 | 3,780,000 | 43.8% | 4,130,000 | 47.8% | 730,000 | 8.4% | 8,640,000 |
| 2008 | 3,260,000 | 36.9% | 4,480,000 | 50.7% | 1,090,000 | 12.3% | 8,830,000 |
| 2009 | 3,310,000 | 37.5% | 4,530,000 | 51.4% | 980,000 | 11.1% | 8,820,000 |
| Five Year | | | | | | | |
| Average | 3,374,000 | 38.6% | 4,448,000 | 50.9% | 918,000 | 10.5% | 8,740,000 |

Ohio Dept. of Agriculture Annual Report--Table 5

| Sour | e: Ohio Agric | ultural Statistic | s Ser | vice | |
|------------------|----------------|--------------------|-----------------|-----------------|--|
| | year | production | | price | value (1000s |
| CORN | 2003 | 478,920 | \$ | 2.45 | 1,173,35 |
| | 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 |
| Totals | | 2,408,500 | | | 7,320,79 |
| Weighted Avg. Pr | ice | | \$ | 3.04 | · ···································· |
| After Managemen | | 5% | \$ \$ | 2.89 | |
| | | | | | |
| SOYBEANS | 2003 | 162,640 | \$ | 7.20 | 1,171,00 |
| | 2004 | 207,740 | | 5.15 | 1,069,86 |
| | 2005 | 201,600 | | 5.55 | 1,118,88 |
| | 2006 | 217,140 | | 6.25 | 1,357,12 |
| | 2007 | 194,110 | \$ | 10.10 | 1,960,51 |
| | 2008 | 161,280 | \$ | 9.60 | 1,548,28 |
| | 2009 | 221,970 | \$ | 9.60 | 2,130,91 |
| Totals | | 964,630 | | | 7,326,21 |
| Weighted Avg. Pr | ice | | \$ | 7.59 | |
| After Managemen | t Allowance of | 5% | \$ | 7.22 | |
| | 0000 | | | 2.22 | |
| WHEAT | 2003 | | | 3.20 | 217,60 |
| | 2004 | | | 3.15 | 173,81 |
| | 2005 | 58,930 | \$ | 3.20 | 188,57 |
| | 2006 | | \$ | 3.30 | 215,42 |
| | 2007 | | \$ | 5.50 | 252,94 |
| | 2008 | 74,120 | | 5.80 | 4 29,89 |
| | 2009 | 70,560 | \$ | 4.35 | 306,93 |
| Totals | | 308,760 | | | 1,181,48 |
| Weighted Avg. Pr | | | \$ | 3.83 | |
| After Managemen | t Allowance of | 5% | \$ | 3.64 | |

| Det | termination of | oit D, Pr Five Yea | | | | | | idgets | | |
|---------------------------------------|--|-----------------------|---------------------|-------------------|------------------|---------------------|--------------------|----------------------|-------------------|-------------------|
| **** | | | | , | | , | | 3 | | 5 yr. |
| ITEM | | UNITS | 2004 | 2005 | <u>2006</u> | 2007 | 2008 | 2009 | 2010 | Avg. |
| VARIABLE COSTS | | | | | | | | | | |
| Seed | CORN | 1000k | \$ 1.10 | \$1.10 | \$1.13 | \$1.16 | \$2.05 | \$2.50 | \$2.81 | \$1.59 |
| | SOYBEANS | 1000s | \$0.10 | \$0.12 | \$0.21 | \$0.21 | \$0.23 | \$0.29 | \$0.32 | \$0.21 |
| | WHEAT | 1000s | \$ 0.01 | \$0.01 | \$0.01 | \$0.01 | \$0.02 | \$0.02 | \$0.02 | \$0.02 |
| Padilian. | | | 60.04 | 60.00 | 60.04 | #0.00 | CO 40 | 00.55 | 00.07 | 00.00 |
| Fertilizer | N Corn | | \$0.24 | \$0.26 | \$0.34 | \$0.29 \$0.36 | \$0.49 | \$0.55 | \$0.27 | \$0.33 |
| | N Wheat | | \$0.24 | \$0.26 | \$0.34 | | \$0.71 | \$0.71 | \$0.47 | \$0.43 |
| · | P2O5 K2O | | \$0.24 \$0.13 | \$0.30 \$0.18 | \$0.31 \$0.21 | \$0.31 \$0.20 | \$0.87 | \$0.77 | \$0.43 \$0.35 | \$0.42 |
| | LIME | | \$12.00 | \$22.00 | \$22.00 | \$22.00 | \$0.48 \$23.50 | \$0.72 \$25.00 | \$25.00 | \$0.29 \$22.90 |
| | CIMIC | | \$12.00 | \$22.00 | Ψ22.00 | ΨΖΖ.00 | \$25.50 | 020.00 | \$25.00 | ⊅∠∠.5 € |
| Chemicals | CORN | | \$22.00 | \$24.00 | \$24.42 | \$24.42 | \$26.86 | \$42.00 | \$35.00 | \$26.94 |
| | SOYBEANS | | \$26.00 | \$39.00 | \$21.10 | \$21.10 | \$21.10 | \$30.00 | \$30.00 | \$25.64 |
| | WHEAT | | \$7.00 | \$7.00 | \$6.86 | \$6.86 | \$7.55 | \$13.00 | \$13.00 | \$8.28 |
| | | | Ψ1.00 | Ģ 1.00 | Ψ0.00 | Ψ0.00 | Ψ1.00 | Ψ10.001 | Q10.00 | Ψ0.20 |
| Fuel, Oil, Grease | CORN | -122 | \$7.00 | \$9.00 | \$10.58 | \$9.61 | \$18.87 | \$13.48 | \$17.08 | \$11.95 |
| | | -155 | \$7.00 | \$9.00 | \$10.58 | \$9.61 | \$18.87 | \$13.48 | \$17.08 | \$11.95 |
| | | -192 | \$7.00 | \$9.00 | \$10.58 | \$9.61 | \$18.87 | \$13.48 | \$17.08 | \$11.95 |
| | SOYBEANS | -36 | \$5.00 | \$7.00 | \$7.67 | \$6.97 | \$13.63 | \$9.74 | \$9.12 | \$8.10 |
| | | -48 | \$5.00 | \$7.00 | \$7.67 | \$6.97 | \$13.63 | \$9.74 | \$9.12 | \$8.10 |
| | | -60 | \$5.00 | \$7.00 | \$7.67 | \$6.97 | \$13.63 | \$9.74 | \$9.12 | \$8.10 |
| | WHEAT | -52 | \$5.00 | \$6.00 | \$8.20 | \$7.46 | \$14.51 | \$10.37 | \$10.37 | \$8.48 |
| | | -67 | \$5.00 | \$6.00 | \$8.20 | \$7.46 | \$14.51 | \$10.37 | \$10.37 | \$8.48 |
| | | -82 | \$5.00 | \$6.00 | \$8.20 | \$7.46 | \$14.51 | \$10.37 | \$10.37 | \$8.48 |
| | | | | | | | | | | |
| Repairs | CORN | -122 | \$10.00 | \$12.00 | \$10.72 | \$10.66 | \$15.23 | \$10.68 | \$21.11 | \$11.86 |
| | | -155 | \$10.0 0 | \$12.00 | \$10.72 | \$10.66 | \$15.23 | \$10.68 | \$21.11 | \$11.86 |
| | | -192 | \$ 10.00 | \$12.00 | \$10.72 | \$10.66 | \$15.23 | \$10.68 | \$21.11 | \$11.86 |
| | SOYBEANS | -36 | \$13.00 | \$11.00 | \$7.80 | \$7.80 | \$10.59 | \$7.59 | \$11.70 | \$9.78 |
| | | -48 | \$13.00 | \$11.00 | \$7.80 | \$7.80 | \$10.59 | \$7.59 | \$11.70 | \$9.78 |
| | | -60 | \$13.00 | \$11.00 | \$7.80 | \$7.80 | \$10.59 | \$ 7.59 | \$11.70 | \$9.78 |
| | WHEAT | -52 | \$11.00 | \$11.00 | \$8.71 | \$8.71 | \$27.47 | \$9.15 | \$9.15 | \$9.80 |
| · · · · · · · · · · · · · · · · · · · | | -67 | \$11.00 | \$11.00 | \$8.71 | \$8.71 | \$27.47 | \$9.15 | \$9.15 | \$9.80 |
| | | -82 | \$11.00 | \$11.00 | \$8.71 | \$8.71 | \$27.47 | \$9.15 | \$9.15 | \$9.80 |
| | | | | | | | | | | |
| Miscellaneous | CORN | -122 | \$12.00 | \$6.00 | \$6.00 | \$6.00 | \$6.00 | \$7.00 | \$7.00 | \$6.40 |
| | | -155 | \$13.00 | \$7.00 | \$7.00 | \$7.00 | \$7.00 | \$8.00 | \$8.00 | \$7.40 |
| | | -192 | \$14.00 | \$8.00 | \$8.00 | \$8.00 | \$8.00 | \$9.00 | \$9.00 | \$8.40 |
| | SOYBEANS | -36 | \$12.00 | \$7.00 | \$7.00 | \$7.00 | \$7.00 | \$8.00 | \$8.00 | \$7.40 |
| | | -48 | \$13.00 | \$7.00 | \$7.00 | \$7.00 | \$7.00 | \$8.00 | \$8.00 | \$7.40 |
| | | -60 | \$14.00 | \$7.00 | \$7.00 | \$7.00 | \$7.00 | \$8.00 | \$8.00 | \$7.40 |
| | WHEAT | -52 | \$12.00 | \$6.00 | \$6.00 | \$6.00 \$6.00 | \$6.00 | \$6.00 | \$6.00 | \$6.00 |
| | | -67 | \$13.00 \$14.00 | \$6.00 | \$6.00 | | \$6.00 | \$6.00 | \$6.00 | \$6.00 |
| Drying: | | -82 | \$14.00 | \$6.00 | \$6.00 | \$6.00 | \$6.00 | \$6.00 | \$6.00 | \$6.00 |
| Fuel & Electric | CORN | | \$0.13 | \$0.15 | \$0.16 | \$0.11 | \$0.11 | \$0.11 | \$0.11 | \$0.12 |
| I del a Licettio | OOM | | ψ0.10 | ΨΦ.10 | Ψ0.10 | Ψ0.17 | Ψ0.11 | Ψ0.11 | Ψ0.11 | Ψ0.12 |
| Trucking: | | | | | | | | | | |
| Fuel Only | CORN | | \$0.04 | \$0.04 | \$0.06 | \$0.06 | \$0.09 | \$0.15 | \$0.02 | \$0.06 |
| | SOYBEANS | | \$0.03 | \$0.04 | \$0.06 | \$0.06 | \$0.09 | \$0.15 | \$0.02 | \$0.06 |
| | WHEAT | | \$0.03 | \$0.03 | \$0.06 | \$0.06 | \$0.09 | \$0.15 | \$0.04 | \$0.06 |
| | | | | | | | | | , , , , | , 5, 50 |
| Interest on variable cost | s | | 9.00% | 6.50% | 8.00% | 8.50% | 9.00% | 9.00% | 6.00% | 8.20% |
| FIXED COSTS | <u> </u> | | | | | | | | | |
| Labor Charge | CORN | | \$32.40 | \$36.00 | \$36.00 | \$36.00 | \$48.60 | \$43.20 | \$40.50 | \$38.34 |
| . ¥ . | SOYBEANS | | \$23.40 | \$20.00 | \$20.00 | \$20.00 | \$27.00 | \$27.00 | \$27.00 | \$23.48 |
| | WHEAT | | \$18.00 | \$20.00 | \$20.00 | \$20.00 | \$27.00 | \$27.00 | \$27.00 | \$22.80 |
| • | | | | | | | | | | |
| Machinery & Equipment | CORN | | \$59.00 | \$55.00 | \$52.85 | \$54.35 | \$65.07 | \$64.45 | \$77.45 | \$59.57 |
| | | | \$54.00 | | \$44.60 | \$46.56 | \$53.86 | \$52.45 | \$53.42 | \$50.66 |
| | SOYBEANS | 1 | Ψ0-1.00 | * . | + 1 | + 1 0.00 | 400.00 | ΨO _E . 10 | Ψ50.42 | |

2011 CORN BUDGET conservation tillage

| | 1 | nouts - 5 | Yr. Average | 1 | | | EAR GE COST |
|-------------------------|----------|-----------|---------------|----------------|---------------|---------------|----------------|
| ITEM | | JNITS | BASE 110 | @ ADD. | 5 YR. AVG. | BASE 110 | @ ADD. |
| | 1 | | <u>BUSHEL</u> | <u>BUSHEL</u> | <u>cost</u> | <u>BUSHEL</u> | <u>BUSHEL</u> |
| SEED: | KERNELS | (1000's) | 27 | 0.13 | \$1.59 | \$43.25 | \$0.21 |
| FERTILIZER: | | | | | • | | |
| | N* | LB. | 118.2 | 0.75 | \$0.33 | \$39.01 | \$0.25 |
| | P2O5 | LB. | 40.6 | 0.36 | \$0.42 | \$17.05 | \$0.15 |
| | K2O | LB. | 40.8 | 0.27 | \$0.29 | \$11.82 | \$0.08 |
| | LIME | TON | 0.25 | 0 | \$22.90 | \$5.73 | \$0.00 |
| CHEMICALS: | | | | | \$26.94 | \$26.94 | \$0.00 |
| FUEL, OIL, GREASE | | | | | \$11.95 | \$11.95 | \$0.00 |
| REPAIRS: | | | | | \$11.86 | \$11.86 | \$0.00 |
| MISCELLANEOUS: | | | | | \$6.40 | \$6.40 | \$0.00 |
| DRYING: FUEL & ELECTRIC | ONLY | | | \$0.12 | \$13.20 | \$13.20 | \$0.12 |
| TRUCKING: FUEL ONLY | | | | · | \$0.06 | \$6.60 | \$0.00 |
| | SUBTOTAL | | 8.2%/12 X 7 N | 106 | | \$193.80 | \$0.80 |
| INTEREST: on Subtotal | | | 4.8% | int x subtotal | | \$9.27 | \$0.04 |
| LABOR CHARGE: | | | | | \$38.34 | \$38.34 | \$0.00 |
| MACHINERY & EQUIPMENT C | HARGE: | | | | \$59.57 | \$59.57 | \$0.00 |
| | TOTALS | | | | | \$300.98 | \$0.84 |

10/28/2010

2011 SOYBEAN BUDGET

| | | | | | 5 YR. | 5 YR. AVER | AGE COST |
|----------------|----------|----------------|-----------------|----------------|--------------|------------|----------|
| | | Inputs - 5 Yr. | Average BASE | @ ADD. | AVG. COST | BASE | @ ADD |
| ITEM | | UNITS | 35 | W ADD. | 0031 | 35 | @ ADD. |
| | | | BUSHEL | BUSHEL | | BUSHEL | BUSHEL |
| SEED: | | seeds (1000s | 180.0 | 0 | \$0.21 | \$37.80 | \$0.00 |
| FERTILIZER: | | | | | | | |
| | N | LB. | 0 | 0 | \$0.00 | \$0.00 | \$0.00 |
| | P2O5 | LB. | 28 | 8.0 | \$0.42 | \$11.89 | \$0.34 |
| | K20 | LB. | 63 | 1.4 | \$0.29 | \$18.41 | \$0.41 |
| | LIME | TON | 0.25 | 0 | \$22.90 | \$5.73 | \$0.00 |
| CHEMICALS: | | | | | \$25.64 | \$25.64 | \$0.00 |
| FUEL, OIL, GRE | ASE | | | | \$8.10 | \$8.10 | \$0.00 |
| REPAIRS: | | | | | \$9.78 | \$9.78 | \$0.00 |
| MISCELLANEO | US: | | | | \$7.40 | \$7.40 | \$0.00 |
| TRUCKING: FU | EL ONLY | | | | \$0.06 | \$2.10 | \$0.00 |
| | SUBTOTAL | - | 8.2%/12 X 5 MO | S | | \$126.85 | \$0.74 |
| INTEREST: ON | SUBTOTAL | ED COST | 3.4% | int x subtotal | | \$4.33 | \$0.03 |
| LABOR CHARG | E: | | | | \$23.48 | \$22.76 | \$0.00 |
| MACHINERY & | EQUIPMEN | T CHARGE: | | | \$50.66 | \$50.66 | \$0.00 |
| | TOTALS | | | | | \$204.60 | \$0.77 |

07/01/2010

2011 WHEAT BUDGET

| | | | Inputs - 5 Y | r Average | 5 YR. AVG. | 5 YR. AVER | AGE COST |
|----------------|-----------|--------------|------------------------|---------------------|---------------|----------------------|----------|
| 17724 | | | BASE | @ ADD. | COST | BASE | @ ADD. |
| ITEM | | UNITS | 51 <u>BUSHELS</u> | <u>BUSHEL</u> | | 51 <u>BUSHELS</u> | BUSHEL |
| SEED: | | seeds (1000s |) 1,400 | 0 | \$0.02 | \$28.00 | \$0.00 |
| FERTILIZER: | | • | • | | · | • | |
| TEIXTICIEET. | N | LB. | 41 | 1.75 | \$0.43 | \$17.63 | \$0.75 |
| | P2O5 | LB. | 32 | 0.63 | \$0.42 | \$13.44 | \$0.26 |
| | K20 | LB. | 39 | 0.37 | \$0.29 | \$1 1.31 | \$0.11 |
| | LIME | TON | 0.25 | 0 | \$22.90 | \$5.73 | \$0.00 |
| CHEMICALS: | | | | | \$8.28 | \$8.28 | \$0.00 |
| FUEL, OIL, GRE | ASE | | | | \$8.48 | \$8.48 | \$0.00 |
| REPAIRS: | | | | | \$9.80 | \$9.80 | \$0.00 |
| MISCELLANEO | US: | | | | \$6.00 | \$6.00 | \$0.00 |
| TRUCKING: FU | IEL ONLY | | | | \$0.06 | \$3.12 | \$0.00 |
| | SUBTOTAL | | 0.00/40.2/0.840 | • | | \$111.79 | \$1.12 |
| INTEREST: ON | SUBTOTALI | | 8.2%/12 X 8 MO 5.5% | S int x subtotal | | \$6.11 | \$0.06 |
| LABOR CHARG | E: | | | | \$22.80 | \$22.80 | \$0.00 |
| MACHINERY & | EQUIPMENT | CHARGE: | | | \$52.24 | \$52.24 | \$0.00 |
| 07/01/2010 | TOTALS | | | | | \$192.94 | \$1.19 |

01/07/2011

RATES USED IN CAPITALIZATION RATE 2005-2011

| TAX YEAR | INTEREST RATE | EQUITY RATE |
|----------|-----------------|------------------|
| 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 | 6.70 | 5.25 |
| 2011 | 6.05 | 5.25 |
| | 7.00 | 7.30 |

^{*} 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 2005-2011

| TAX YEAR | CAPITALIZATION RATE |
|----------|---------------------|
| 000= | 0.00/ |
| 2005 | 8.6% |
| 2006 | 8.5% |
| 2007 | 8.4% |
| 2008 | 8.3% |
| 2009 | 7.9% |
| 2010 | 7.8% |
| 2011 | 7.6% |

^{**} 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

| | <u>CORN</u> | BEANS | WHEAT |
|--------------------------------|-------------|--------------|--------------|
| Pl DAT yield/acre (1984) | 144 | 52 | 64 |
| % increased yield | 1.227966 | 1.164384 | 1.529545 |
| adjusted yield/acre | 177 | 61 | 98 |
| X Crop Price/Unit | \$2.89 | \$7.22 | \$3.64 |
| = GROSS INCOME / ACRE | \$511.53 | \$440.42 | \$356.72 |
| YIELD / ACRE | 177 | 61 | 98 |
| BASE YIELD | 110 | 35 | 51 |
| = YIELD ABOVE BASE | 67 | 26 | 47 |
| X ADDED UNIT COST | \$0.84 | \$0.77 | \$1.19 |
| ADDED UNIT COST / ACRE | \$56.28 | \$20.02 | \$55.93 |
| BASE YIELD COST | \$300.98 | \$204.60 | \$192.94 |
| = TOTAL NON-LAND PROD. COST | \$357.26 | \$224.62 | \$248.87 |
| NET RETURN / ACRE | \$154.27 | \$215.80 | \$107.85 |
| X CROPPING PATTERN | 0.386 | 0.509 | 0.105 |
| = ROTATIONAL NET RETURN / ACRE | \$59.55 | \$109.84 | \$11.32 |
| TOTAL ROTATIONAL NET RETURN | \$180.71 | | |
| BASE CAP RATE | 0.076 | | |
| CAUV LAND VALUE | \$2,377.82 | SAY | \$2,380 |

TY 2008 Final Calculation

SOIL: Millgrove, Silt Loam

SLOPE: 0-2

EROSION: Slight

DRAINAGE: Very poorly

PROD. INDEX: 100

| | <u>C</u> | ORN | <u>B</u> | <u>EANS</u> | W | <u>HEAT</u> | | <u>HAY</u> |
|--------------------------------|----------|---------|----------|-------------|------|-------------|-----|------------|
| | | 4.4.4 | | | | | | _ |
| Current PI DAT yield | | 144 | | 52 | | 64 | | 6 |
| % increased yield | 1 | .177966 | 1. | 150685 | 1 | .522727 | 1.0 | 024911 |
| YIELD / ACRE | | 170 | | 60 | | 97 | | 6.1 |
| X PRICE / UNIT | \$ | 2.02 | \$ | 5.19 | \$ | 2.89 | \$7 | 79.80 |
| = GROSS INCOME / ACRE | \$ | 343.40 | \$. | 311.40 | \$ | 280.33 | \$4 | 486.78 |
| YIELD / ACRE | | 170 | | 60 | | 97 | | 6.1 |
| BASE YIELD | | 100 | | 35 | | 50 | | 2 |
| = YIELD ABOVE BASE | | 70 | | 25 | | 47 | | 4.1 |
| X ADDED UNIT COST | \$ | 0.90 | \$ | 0.50 | \$ | 0.84 | \$2 | 24.23 |
| ADDED UNIT COST / ACRE | | \$63.00 | , | \$12.50 | | \$39.48 | ç | \$99.34 |
| BASE YIELD COST | \$2 | 42.39 | \$1 | 74.44 | \$1 | 56.68 | \$1 | 33.80 |
| = TOTAL NON-LAND PROD. COST | \$ | 305.39 | \$ | 186.94 | \$ | 196.16 | \$2 | 233.14 |
| NET RETURN / ACRE | | \$38.01 | \$ | 124.46 | | \$84.17 | \$2 | 253.64 |
| X CROPPING PATTERN | | 0.35 | | 0.45 | | 0.15 | | 0.05 |
| = ROTATIONAL NET RETURN / ACRE | \$ | 13.30 | \$ | 56.01 | \$ | 12.63 | \$ | 12.68 |
| TOTAL ROTATIONAL NET RETURN | \$ | 94.62 | | | | | | |
| BASE CAP RATE | | 0.083 | | | | | | |
| X MANAGEMENT FACTOR | | 0.95 | | | | | | |
| = ADJUSTED CAPITALIZATION RATE | (| 0.07885 | | | | | | |
| CAUV LAND VALUE | \$1, | 199.97 | | SAY | \$1, | 200.00 | | |

SOIL:

Miami Silt Loam

SLOPE:

2-6

EROSION:

Slight

DRAINAGE:

Well

PROD. INDEX:

08/20/2010

76

| | CORN | BEANS | WHEAT |
|--------------------------------|------------|----------|----------|
| PI DAT yield/acre (1984) | 108 | 38 | 50 |
| % increased yield | 1.227966 | 1.164384 | 1.529545 |
| adjusted yield/acre | 133 | 44 | 76 |
| X Crop Price/Unit | \$2.89 | \$7.22 | \$3.64 |
| = GROSS INCOME / ACRE | \$384.37 | \$317.68 | \$276.64 |
| YIELD / ACRE | 133 | 44 | 76 |
| BASE YIELD | 110 | 35 | 51 |
| = YIELD ABOVE BASE | 23 | 9 | 25 |
| X ADDED UNIT COST | \$0.84 | \$0.77 | \$1.19 |
| ADDED UNIT COST / ACRE | \$19.32 | \$6.93 | \$29.75 |
| BASE YIELD COST | \$300.98 | \$204.60 | \$192.94 |
| = TOTAL NON-LAND PROD. COST | \$320.30 | \$211.53 | \$222.69 |
| NET RETURN / ACRE | \$64.07 | \$106.15 | \$53.95 |
| X CROPPING PATTERN | 0.386 | 0.509 | 0.105 |
| = ROTATIONAL NET RETURN / ACRE | \$24.73 | \$54.03 | \$5.66 |
| TOTAL ROTATIONAL NET RETURN | \$84.43 | | |
| BASE CAP RATE | 0.076 | | |
| CAUV LAND VALUE | \$1,110.87 | SAY | \$1,110 |

SOIL:

Miami Silt Loam

SLOPE:

2-6

EROSION:

Slight

DRAINAGE:

Well

PROD. INDEX:

76

| | <u>CORN</u> | BEANS | WHEAT | <u>HAY</u> |
|--------------------------------|-------------|--------------|--------------|------------|
| PI DAT yield/acre | 108 | 38 | 50 | 4.6 |
| % increased yield | 1.177966 | 1.150685 | 1.522727 | 1.024911 |
| adjusted yield/acre | 127 | 44 | 76 | 4.7 |
| X PRICE / UNIT | \$2.02 | \$5.19 | \$2.89 | \$79.80 |
| = GROSS INCOME / ACRE | \$256.54 | \$228.36 | \$219.64 | \$375.06 |
| YIELD / ACRE | 127 | 44 | 76 | 4.7 |
| BASE YIELD | 100 | 35 | 50 | 2 |
| = YIELD ABOVE BASE | 27 | 9 | 26 | 2.7 |
| X ADDED UNIT COST | \$0.90 | \$0.50 | \$0.84 | \$24.23 |
| ADDED UNIT COST / ACRE | \$24.30 | \$4.50 | \$21.84 | \$65.42 |
| BASE YIELD COST | \$242.39 | \$174.44 | \$156.68 | \$133.80 |
| = TOTAL NON-LAND PROD. COST | \$266.69 | \$178.94 | \$178.52 | \$199.22 |
| NET RETURN / ACRE | (\$10.15) | \$49.42 | \$41.12 | \$175.84 |
| X CROPPING PATTERN | 0.35 | 0.37 | 0.15 | 0.13 |
| = ROTATIONAL NET RETURN / ACRE | (\$3.55) | \$18.29 | \$6.17 | \$22.86 |
| TOTAL ROTATIONAL NET RETURN | \$43.76 | | | |
| BASE CAP RATE | 0.083 | | | |
| X MANAGEMENT FACTOR | 1 | | | |
| = ADJUSTED CAPITALIZATION RATE | 0.083 | | | |
| CAUV LAND VALUE | \$527.23 | SAY | \$510.00 | |

CAUV Summary Values

02/25/2010 TY 2011- Final

| productivity index | no. of units | net Iow | return/acre high | e avg. | cropi low | and value/a high | acre 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 |

TY 2008 Final (02/29/08)

| productivity index | no. of units | low | net return/acre high | avg. | cropland value/acre low high avg. |
|-----------------------|-----------------|-----|-------------------------|------|--------------------------------------|
| 0-49 | 600 | 0 | 48 | 15 | 100 100 100 |
| 50-59 | 749 | 0 | 87 | 29 | 100 100 100 |
| 60-69 | 1,117 | 0 | 87 | 21 | 100 490 188 |
| 70-79 | 797 | 0 | 61 | 36 | 100 710 431 |
| 80-89 | 206 | 29 | 78 | 56 | 370 990 708 |
| 90-99 | 35 | 67 | 95 | 76 | 850 1200 973 |
| 100+ | 6 | 95 | 95 | 95 | 1200 1200 1200 |
| all regions | 3,510 | \$0 | \$95 | \$28 | \$100 \$1,200 \$249 |

CAUV Summary Values

02/25/2011 FY 2011 - Final

| productivity | no. of | | return/acr | е | - | land value/a | cre |
|--------------|--------|-----|------------|------|-------|--------------|-------|
| index | units | low | high | avg. | low | high | 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 |

TY 2010 Final (5/07/2010)

| productivity index | no. of units | ne Iow | t return/acı high | e avg. | crop low | oland value/a high | icre 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 |
| all regions | 3,514 | \$0 | \$151 | \$34 | \$200 | \$1,900 | \$505 |

Average CAUV Values By Year

| | ۷.L. | | | | | | | | | | | | | | | |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Index 1996 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 0-49 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 108 | 100 | 100 | 176 | 200 | 300 |
| 50-59 | 100 | 100 | 111 | 114 | 107 | 104 | 102 | 101 | 114 | 106 | 134 | 100 | 100 | 200 | 214 | 328 |
| 69-09 | 114 | 163 | 230 | 233 | 200 | 181 | 125 | 113 | 104 | 101 | 125 | 123 | 188 | 435 | 436 | 632 |
| 70-79 | 257 | 373 | 448 | 452 | 417 | 394 | 285 | 244 | 157 | 124 | 241 | 283 | 431 | 746 | 845 | 1126 |
| 80-89 | 487 | 632 | 694 | 669 | 999 | 640 | 516 | 467 | 342 | 293 | 465 | 521 | 708 | 1059 | 1278 | 1641 |
| 66-06 | 689 | 850 | 894 | 806 | 869 | 842 | 713 | 663 | 533 | 492 | 675 | 747 | 973 | 1368 | 1601 | 2017 |
| 100+ | 820 | 066 | 1040 | 1060 | 1030 | 1000 | 870 | 820 | 069 | 650 | 880 | 970 | 1200 | 1620 | 1900 | 2380 |
| Totals | 160 | 209 | 258 | 262 | 242 | 231 | 180 | 163 | 135 | 123 | 177 | 181 | 249 | 459 | 505 | 200 |
| No. of Soils | 3050 | 3083 | 3246 | 3281 | 3371 | 3279 | 3307 | 3313 | 3313 | 3358 | 3482 | 3510 | 3511 | 3511 | 3514 | 3514 |

Average CAUV Values By Reappraisal/UpdateYear

| Productivity | ivity | | | | | |
|---------------------|-------|------|------|------|------|------|
| Index | 1996 | 1999 | 2002 | 2005 | 2008 | 2011 |
| 0-49 | 100 | 100 | 100 | 100 | 100 | 300 |
| 50-59 | 100 | 114 | 102 | 106 | 100 | 328 |
| 69-09 | 114 | 233 | 125 | 101 | 188 | 632 |
| 70-79 | 257 | 452 | 285 | 124 | 431 | 1126 |
| 80-89 | 487 | 669 | 516 | 293 | 708 | 1641 |
| 66-06 | 689 | 806 | 713 | 492 | 973 | 2017 |
| 100+ | 820 | 1060 | 870 | 650 | 1200 | 2380 |
| Totals | 160 | 262 | 180 | 123 | 249 | 700 |
| # Soils | | 3281 | 3307 | 3358 | 3511 | 3514 |

| Comparis | on of Inp | uts, Tax | Years 2 | 2008-201 | 1 | |
|---------------------------|-----------|-------------|-------------|-------------|------------|----------------|
| Crop Prices | | | | | Differ | ence |
| | 2008 | <u>2009</u> | <u>2010</u> | <u>2011</u> | 2008-11 | <u>2010-11</u> |
| Corn | \$2.02 | \$2.29 | \$2.66 | \$2.89 | \$0.87 | \$0.23 |
| Soybeans | \$5.19 | \$5.60 | \$6.41 | \$7.22 | \$2.03 | \$0.81 |
| Wheat | \$2.89 | \$3.05 | \$3.41 | \$3.64 | \$0.75 | \$0.23 |
| Non-land Production Costs | | | | | | |
| Base Cost | | | | | | |
| Corn | \$242.39 | \$264.12 | \$286.65 | \$300.98 | \$58.59 | \$14.33 |
| Soybeans | \$174.44 | \$175.21 | \$189.10 | \$204.60 | \$30.16 | \$15.50 |
| Wheat | \$156.68 | \$159.01 | \$170.16 | \$192.94 | \$36.26 | \$22.78 |
| Additional Unit Cost | | | | | | |
| Corn | \$0.90 | \$0.72 | \$0.83 | \$0.84 | (\$0.06) | \$0.01 |
| Soybeans | \$0.50 | \$0.57 | \$0.66 | \$0.77 | \$0.27 | \$0.11 |
| Wheat | \$0.84 | \$0.86 | \$1.14 | \$1.19 | \$0.35 | \$0.05 |
| Capitalization Rate | | | | | | |
| Mortgage/Equity Ratio | 60/40 | 60/40 | 60/40 | 60/40 | | |
| Years | 15 | 15 | 15 | 15 | | |
| Interest Rate | 7.29 | 7.06 | 7.24 | 7.00 | | |
| Equity Rate | 8.15 | 7.65 | 7.80 | 7.30 | | |
| Tax Additur | 1.4 | 1.4 | 1.4 | 1.3 | | · |
| Capitalization Rate | 8.3 | 7.9 | 7.8 | 7.6 | (0.70) | (0.20) |