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OHIO'S AGRICULTURAL EASEMENT PURCHASE PROGRAM: AN EVALUATION OF THE RANKING SYSTEM

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ABSTRACT

Ohio began to use public funds to purchase agricultural easements in 2002. The selection criteria for Ohio's Agricultural Easement Purchase Program are discussed and analyzed. During the first three years of the program, averages for many of the questions increased, indicating applicant response to the ranking criteria as well as discouraging applicants with lower scores to apply. The number of applicants who donated the maximum amount increased dramatically.

This program established a statewide ranking system that was based on understandable priorities. Future support for the program will likely be influenced by the high number of applicants compared to the funds available, as well as general agreement about the selection criteria. The results of this evaluation may be valuable to other states that are developing an agricultural easement purchase program.

I. INTRODUCTION

When Ohio voters approved a statewide bond issue in November, 2000, Ohio became the 19th state to offer a PACE (Purchase of Agricultural Conservation Easement) Program. This is also sometimes called a Purchase of Development Rights (PDR) program (American Farmland Trust, 2002). The legislation authorizing the Ohio program broadly designated the criteria to use in the statewide ranking of the applicants. The highest-ranking applicants would be offered state funds to voluntarily sell an easement on their farmland. The easement would be jointly held by the state and by a local partner. The local partner could be a county, township, municipality, or a non-profit organization. A local match of a minimum of 25% of the value of the easement was required to apply to the program.

Local governments or non-profit organizations might actively support a landowner to apply for state funding for farmland protection in order to strengthen the local farm economy. They might also pursue these programs to meet countywide or regional purposes, such as providing open space, wildlife habitat, tourism development, heritage recognition, or protecting water quality or water supplies.

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An agricultural easement is a "negative" easement that is recorded with the deed for the land. The

easement permanently restricts urban development on the land. The market value of the land is reduced

by the easement, and the landowner might agree to this transaction if compensated by direct payments or

by indirect income tax savings. Alternatively, the landowner might feel personal pride in protecting the

farmland to honor the history of the farm and the community.

The purpose of this paper is to provide a short history of Ohio's Agricultural Easement Purchase Program

(AEPP) and to describe the ranking and selection process for its first three years. It will also evaluate the

ranking system to analyze which factors or criteria were most important in selecting applicants for

funding.

One of the recommendations of the 1996-97 Ohio Farmland Preservation Task Force, appointed by then-

governor Voinovich, was to create an Office of Farmland Preservation within the Ohio Department of

Agriculture. Another recommendation was to create an Agricultural Easement Purchase Program (Ohio

Farmland Preservation Task Force, 1997). Both of these recommendations have been achieved. Many

other recommendations have not.

The legal basis for Ohio's Agricultural Easement Purchase Program (AEPP) was established through

passage of SB223 in January 1999. This legislation "enabled the Ohio Department of Agriculture (ODA),

local governments, and nonprofit organizations to hold, acquire, and accept agricultural easements"

(ODA/OFP, 2002). With the passage of SB223, the agricultural easement purchase program had legal

authority, and an easement donation program could also be promoted. The role of agricultural easements

is described in the context of other private land management initiatives by Chadbourne and American

Farmland Trust (1997).

The SB223 legislation did not provide funding. The passage by Ohio voters of the Clean Ohio Fund

(Issue 1) in the November 2000 election included \$25 million bond funding for farmland preservation, as

well as \$200 million funding for brownfield restoration, \$150 million for open space and stream corridor

protection, and \$25 million for recreational trails. The fund was established to operate for four years.

There were 442 applications filed during the first year of Ohio's AEPP in 2002, offering a total of 63,193

acres. The bond issue made available \$6.25 million for the 2002 Ohio AEPP. The Ohio Director of

Agriculture established a payment cap of \$4,000 per acre, with a maximum of one million dollars per

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farm (ODA/OFP, 2002). Nineteen applicants received funding through the Program in the 2002 Funding Round.

For the program year 2003, \$3.125 million was made available for the state's AEPP. The reduction was required in order to balance the state budget. The effect was to spread the allocation of \$25 million to more than four program years. Applications from 299 landowners were received, including 10 that were ruled to be incomplete or invalid. For the 289 complete applications, a total of 48,550 acres were submitted. In 2003, there were additional limits placed on the distribution of the funds. These limits included one award per landowner, a maximum award of \$3,000 per acre and a maximum award of one million dollars per county. The intent was to have a wider distribution of the state's funds (ODA/OFP, 2003). Seven applicants received funding from the Ohio program during the 2003 program year.

There was \$3.1 million available for the 2004 program, further stretching out the funding beyond four years. ODA accepted 268 eligible applicants for this program. Limits for the 2004 program included one award per landowner, a maximum of \$2,000 per acre, a maximum of \$500,000 per landowner, and a maximum of \$750,000 per county. The intention was to distribute the existing funds more widely. A minimum 25% match was required, but all awarded applicants offered the maximum of 50% local match, and therefore the cost per acre for the easements declined. Thirteen easements were funded, involving a total of 2640 acres during the 2004 program.

Because Ohio had a statewide AEPP program, it qualified to apply for funds allocated through the Federal Farmland Protection Program, currently known as the Federal Farm and Ranch Lands Protection Program. It was reauthorized in the Farm Security and Rural Investment Act of 2002 and is administered by USDA/NRCS (USDA/NRCS, 2003). The ODA received \$1.6 million from the Federal Farmland Preservation program in 2002. Five easements were funded from the federal program in 2002. An amount of \$1.73 million was contributed from the federal program in 2003 and was used to purchase easements on six farms. Ohio was awarded \$2.1 million from the 2004 federal program and made these funds available for the 2005 program.

Additional funds from the Federal Farm and Ranch Lands Protection Program went directly to Ohiobased non-profit organizations in 2003. Three land trusts/counties received \$0.54 million to fund six easements covering 497 acres (USDA/NRCS, 2004).

Ohio Department of Agriculture started promoting an easement donation program following the passage

of SB223 in 1999. As a result, ODA received donations of 18 easements through 2004 for a total of

2,331 acres.

A summary of the financial resources, the number of easements and the number of acres for each of these

programs is summarized in Table 1. The average easement purchase cost was \$1732 per acre in 2002,

\$1669 per acre in 2003, and \$1178 in 2004. A total of 12,418 acres were under Ohio ODA easement at

the end of the 2004 program.

II. METHODOLOGY

Only a few landowners receive funding each year in the Ohio Agricultural Easement Purchase Program.

To get the funding and sell the easement, an applicant must meet certain eligibility criteria and then get a

high score in the ranking system. This ranking system is a state-wide competition, designed to protect

farmlands which best meet the criteria. The ranking system was also designed to reward efforts to

support farmland preservation in the state.

The ODA/Office of Farmland Preservation operates with the support of a Farmland Preservation

Advisory Board. A Technical Committee created the original ranking system and provided feedback to

the Office of Farmland Preservation. The design of the Ohio Ranking System was based on the ranking

systems of other states.

A two-tier system was adopted by the Ohio Office of Farmland Preservation for the 2002 Program. Tier

1 was more objective, and based on a series of questions that were given a numerical value. The

maximum score was 100 points. Tier 2 was more subjective, and the maximum score was 50 points.

To be selected for funding, an applicant must rank in the "top 20%" of the applicants, based on Tier 1

scores. The Advisory Board scored Tier 2 for those applicants in the "top 20%" only. Based on the

rankings and the funding restrictions per county, etc., the top applicants were selected until the funds were

exhausted. For purposes of this paper, only Tier 1 scores were evaluated.

The following is a general description of the Tier I Ranking System: There were minor changes between

2002, 2003 and 2004 (ODA/OFP 2002, ODA/OFP 2003, ODA/OFP 2004).

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The priority for the Ranking System was to give more points to applicants with:

- A. Better soils. Prime soils received the most points, subject to a productivity index. These definitions were previously developed by USDA/NRCS. Bonus points could be earned if the applicant's county had designated "Unique," or "Locally-Important" soils. The intention was to protect the best or most productive soils.
- B. Location relative to other protected areas. The emphasis in this section was to encourage landowners to join together to apply to the program and/or create clusters, or "blocks," of protected lands adjacent to other protected lands. Contiguous or close proximity was rewarded.
- C. Conservation plans. Higher points were awarded if the landowner had already completed NRCSdefined conservation plans for the farm.
- D. Intermediate development pressure. The emphasis in this section was to give priority to parcels with an intermediate amount of development pressure. This meant the land was not subject to immediate development, nor was it outside the range of development. Questions in this section related to proximity to public sewer, to public water, and highway intersections; to the number of non-farm houses; and the amount of road frontage.
- E. Local comprehensive plan. The emphasis in this section was to reward landowners in areas with supportive agricultural zoning included in comprehensive plans.
- F. Other factors. The landowner gained more points if the farmland was located near an MSA county, or was listed as Century Farm or had state or national historical register status. There were extra points if the landowner or the local applicant had agreed to a higher than required minimum 25% donation or payment for the easement. The intention was to reduce per acre costs for easements so that the fixed amount of state funds could be used for additional applicants.

The ranking system experienced minor changes each year, reflecting advice from the Technical Committee and other sources. The basic framework above was maintained, while the weights of specific questions increased or decreased.

III. RESULTS

Data sets containing the responses to the various questions in the ranking system were assembled for the 2002, 2003 and 2004 programs. This section summarizes the data, and describes what happened during these three years related to this program. It also examines which questions in the ranking system were most important in selecting the applicants for funding during each year.

The average values for the responses for 2002, 2003 and 2004 for the various questions in the ranking system are shown in Table 2. The average scores of "all applicants" and for the "top 20%" are shown. Obviously, the average scores for each question were higher for the "top 20%" of the applicants, compared to all applicants. Tier I scores for 2002 were 43.89 for all applicants and 65.20 for the top 20%. This was a difference of 21.31 points. For 2003, the average Tier I score was 58.74 points for all applicants and 73.11 points for the top 20%. This was a difference of 14.37 points. For 2004, the average Tier I score was 63.12 for all applicants and 75.41 for the top 20%. This was a difference of 12.29. The average score increased for all applicants and for the top 20%. The difference between all applicants and the top 20% narrowed through this time period.

There was an increase of 14.85 points for Tier I scores from 2002 to 2003, and 4.38 points from 2003 to 2004. The increase for the top 20% was 7.91 points between 2002-03 and 2.30 points from 2003-04. Averages for all Tier I questions increased, with the exception of "Conservation Plan" from 2002-03. The averages for the Top 20% also increased for 17 of the 19 factors in the ranking system for the same period. Many of the scores for 2004 decreased, reflecting changes in the maximum points offered for the various questions.

There was no minimum acreage requirement in 2002, but the applicants were required to be enrolled in Ohio's differential tax assessment program (called Current Agricultural Use Valuation, or CAUV), which requires at least 10 acres for eligibility. There was a minimum farm size of 50 acres for eligibility in 2003. Eligibility for 2004 included a minimum of 40 acres or 25 acres if adjacent to farmland already held in permanent easement so that the total acreage is at least 40 acres. Average farm size for the applicants increased from 142 acres in 2002 to 168 acres in 2003 and then declined to 166 acres in 2004. For the top 20%, there was also an increase in average acres from 159 acres in 2002 to 207 acres in 2003, and a decrease to 195 acres in 2004.

Average scores for the ranking system are shown in Table 2 for all applicants and for the top 20% for each of the three years. The averages generally increased. Perhaps the applicants who did not score very high in the first year became discouraged and did not apply for the following year.

The various factors on the ranking system were correlated with the Tier I total to determine which were most important in determining a "high" score. Correlation coefficients for the questions used in the ranking system are shown in Table 3. This table shows correlation coefficients for all applicants and for

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the top 20%. The number of possible points for each factor of the ranking system is also given in the table.

Since higher scores were needed to sell easements in this program, the correlation coefficients helped to describe or determine which variables in the Ranking System were most important in selecting applicants for the limited funding. The question with the highest correlation coefficient for 2002 was the soils question. It had 20 points potential and the correlation coefficient for all applicants was 0.701. The comparable value for the top 20% was 0.139. This can be interpreted to mean that high quality soils were necessary, but not sufficient, for a high score. High soils scores were required to get into the top 20%. Most applicants in the top 20% had high soils scores. The value of the correlation coefficient for soils decreased over the 2002-04 period.

The 2003 correlation coefficient for soils was 0.539. This is less than in 2002. This correlation coefficient is high, but not the highest value. For the 2003 and 2004 programs, "local match" had the highest correlation coefficient value of 0.616 and 0.770 respectfully. This suggests that applicants learned by observation during the first year of the program that if they wanted to be at the top, they needed high soils scores, and they also needed to donate a higher amount toward the easement purchase. The correlation coefficient for soils decreased for the 2002-04 period, but increased for Local Match during the same period. Local Match had the highest correlation coefficient for 2003 and 2004.

For the Top 20%, the correlation coefficient for Local Match for the 2002 program was 0.536. This was the highest correlation coefficient for any question for the top 20% of the applicants. For 2003, the correlation coefficient for the top 20% for Local Match decreased to 0.163, indicating that because more of the applicants had offered a higher match, this question was not as important in sorting out those applicants who would rank the highest in Tier I total. For 2003 and 2004, the Local Match score was important to get the applicant into the Top 20%, but most of the other applicants in the Top 20% also had offered higher match. In 2004, all the applicants in the Top 20% had offered the maximum amount of 50% and earned the maximum points.

Many of the questions in the ranking system had correlation coefficients for 2002 that were higher than for the 2003 or 2004 program for all applicants. No clear trends emerged by observing the correlation coefficients. A question on the ranking system that appeared very important in one year might not be important in other years for all applicants. Questions about zoning and comprehensive plans appeared

important, but without a clear pattern. Questions about proximity to other protected lands, road frontage,

and near MSA appeared important from one year to another.

For the Top 20%, the question related to the potential for clustering permanently protected lands was

important in 2002 and 2003. For 2004, questions about water and sewer and zoning were most important

in advancing applicants into higher ranks, and potentially to get an offer for an easement sale.

Essentially, all the correlation coefficients for all years for all applicants are significant at the 0.01 level.

Many of the correlation coefficients for the Top 20% of the applicants are not significant at the 0.05 level.

The application form indicates the wording and scoring system for the individual questions of the ranking

system (ODA/OFP, 2002, 2003). Minor changes in the points for the ranking system are reflected in

Tables 2 and 3.

It is expected that correlation coefficients would be positive, since each factor is included in the Tier I

Total score. A couple factors had negative correlation coefficients and were not significant. In the case

of the two questions related to proximity to other protected lands, if the parcel associated with the

application is adjacent to more than 640 acres of other protected lands, it would receive the maximum

points available. Points were reduced if the other protected lands were farther away in a 3-mile radius,

and also reduced if there were fewer permanently protected lands. No points are received if there are no

other protected lands within the 3-mile radius. This ranking system is designed to reward clustering of

protected lands. This type of proximity scoring is expected to become more important as the program

protects more acreage in potential clusters.

The question related to potential cluster indicates there were higher average scores for the top 20%, and

also there was a higher correlation coefficient for the top 20%. This suggests that when applicants

submitted applications as a potential cluster, they were able to gain higher points. This was the highest

correlation coefficient for the top 20% in 2003. One interpretation is that it required good soils and

higher local match to get into the top 20%, and it took something else, such as clustering, to get to the top

of the top 20%.

There are also negative correlation coefficients for questions related to proximity to public water and

highway intersections. In each case there is an inverted U for the ranking system, designed to give the

highest points for the "intermediate" range. For proximity to public water, the highest points were

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available if the parcel was between 5000 and 16000 feet from public water services. Fewer points were offered if the parcel was closer or farther away.

The previous observations suggested that the number of applicants who offered 50% local match increased in 2003 and 2004. A frequency distribution showing how much of the local match would be offered by the applicant is shown in Table 4. In 2002, more than 72 percent offered the minimum amount of 25% local match. In 2003, less than 45% offered the minimum 25% match, and this declined to about 17% for 2004. The percent of applicants offering 50% local match increased from 13 percent to 41 percent from 2002 to 2003. More than 76% offered the maximum 50% in 2004. This variable is highly correlated to Tier I scores, as predicted. But it is not highly correlated to Tier I scores for the "Top 20%." This variable appears to be necessary to get into the "Top 20%" status, but is not sufficient to get an offer to sell an easement.

IV. CONCLUSIONS

This paper examined data from applicants during the first three years of Ohio's Agricultural Easement Purchase Program, and described the background for the program and the source of funding. It examined the ranking system designed to select the landowners to sell an easement in this statewide competition.

Applicants learned quickly how to respond to the ranking system. Average scores increased during this period. It appeared that for the first year, high quality soils were required to get into the top ranks, and then higher donations toward the easement value sorted out the applicants. During the second and third years, it appeared that high quality soils and high donation toward the easement values were necessary to get into the top ranks. Then it required something else, such as potential clustering of easements, to gain the highest scores.

The number of applicants declined during the first three years of the program, although the program was "oversubscribed" by more than 10 to 1. Applicants who did not score well in the first year may have declined to submit an application in the next year. Assistance to the landowners by the staff of land trusts and other organizations allowed selection of higher scoring applications. In some cases, the staff recruited landowners to apply for the program and the funding.

When Ohio established its agricultural easement purchase program, it began to provide Ohio landowners an additional financial option related to owning their farmland. Previously, the options were limited: (1) to continue to own and to farm the land, (2) to sell to another farmer, or (3) to sell to a

developer/speculator. With the AEPP, the kindowner could sell an easement and keep farming, and also

use the proceeds to reduce debt, to expand the farm operation, to provide funds for non-farm children in

an estate plan, or to use the proceeds to make other investments. The donation program allowed

landowners to qualify for income tax deductions for charitable contributions.

Applicants learned to initiate actions to gain points in the AEPP ranking system. Increases could also be

explained by actions taken by the local community to pass resolutions or change zoning to favor an

applicant's score. An example is the designation, by the county, of "Unique" or "Locally-important"

soils. This approval process would benefit farming operations, especially orchards or other specialty

crops. Another step to benefit the applicant's score would be to complete comprehensive plans or

strengthen zoning. The applicant could complete a conservation plan as a deliberate step to gain points.

The increase in the percentage of applicants who were willing to donate up to 50% of the value of the

easement in order to gain points is another example of actions taken to increase points and the likelihood

of easement sales. Applicants learned very quickly what to do to gain advantage and to add points. This

also had the effect of lowering the average cost per acre of the purchased easements. Landowners who

had assistance from someone familiar with the ranking system and the application process had an

advantage.

There are several observations from this analysis of interest to applicants in the Ohio program. There are

limited ways to "adjust" your score, but applicants with an intent to gain state funding must respond to the

ranking system in whatever way is possible. Adding to the percent of donation was observed in the

second and third year of the Ohio AEPP.

Program directors in other states that are designing a new program or modifying an existing one would

also have an interest in the results of the first years of the Ohio Agricultural Easement Purchase Program.

One observation is the extent to which the funds were oversubscribed. There were applications for 10-20

times the amount of funds available.

In Ohio, the decision to support farmland protection funding coincided with the decision to fund other

greenfield programs as well as brownfield programs. This initial funding was for a limited four-year

period. It is too early to speculate how future funding for farmland protection will be supported and how

the legislators will decide this issue. The AEPP program has had a higher applicant/award ratio than any

of the other Clean Ohio programs.

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During the development of the Ranking System, ODA realized the value in using an objective ranking

system. They also realized that the ranking system could send signals to landowners and to counties and

townships to initiate planning practices that would help to protect farmland. Initial observation suggests

that this purpose has been achieved.

An easement purchase program is an element in the "market" for environmental products (Grossi, 1998).

This market recognizes environmental attributes, including water quality, scenic values, etc., that are

outside the usual market channels.

The statewide AEPP program was designed as a pilot program, with the expectation that it would be able

to gain added funding from the state beyond the first four years. The state has spread the current funding

beyond the four years, but has not provided any additional funds. The state has used the program to

leverage some federal funds. Prospects for future funding depend on the strength of the state budget and

the overall economy. However, there are additional factors making future program funding uncertain,

including support for competing programs for state bonding authority, support for the overall Clean Ohio

fund programs, and support for the farmland preservation program specifically. The advisory committee

continues to make modifications to the ranking system each year in an effort to make it easier to

understand or explain, to respond to criticism from applicants in parts of the state, and to pursue goals of

wider distribution of funds across the state.

This research documents the experience of the Ohio AEPP program in the first three years of the program.

Other states that are considering initiating an agricultural easement purchase program might be able to

predict similar outcomes.

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Table 1: Summary of Funding and Easement Transfers for Ohio Agricultural Easement Purchase Program, Federal Farmland Protection Program in Ohio, and Ohio's Donation of Agricultural Easement Program, 2002-2004

| PURCHASE PROGRAM | 2002 | 2003 | 2004 | | | | |
|---|--------|--------|--------|--|--|--|--|
| Ohio AEPP funds (millions) | \$6.25 | \$3.13 | \$3.1 | | | | |
| Easements Purchased | 19 | 7 | 13 | | | | |
| Acres | 2755 | 1997 | 2640 | | | | |
| Federal funds (millions) | \$1.6 | \$1.73 | a | | | | |
| Easements Purchased | 5 | 6 | a | | | | |
| Acres | 1799 | 915 | a | | | | |
| Total Funds (millions) | \$7.85 | \$4.86 | \$3.1 | | | | |
| Total Easements | 24 | 13 | 13 | | | | |
| Total Acres | 4535 | 2912 | 2640 | | | | |
| Average price per acre | \$1732 | \$1669 | \$1174 | | | | |
| DONATION PROGRAM (since beginning of program) | | | | | | | |
| Easements Donated | | | 18 | | | | |
| Acres | | | 2331 | | | | |

a) Federal funds for 2004 (\$2.1 M) transferred to 2005 Program.

Table 2: Average Values for Ranking System Questions, Ohio Agricultural Easement Purchase Program, 2002, 2003 & 2004

| b | 2002 | | 200 | 13 | 2004 | |
|---|-------|---------|-------|---------|---------|-------|
| | N=442 | N=67 | N=289 | N=57 | N=268 | N=60 |
| Acres in application | 142.1 | 158.5 | 167.9 | 207.2 | 166.3 | 195.4 |
| Soils (max=20) | 10.90 | 14.67 | 13.88 | 15.31 | 14.67 | 15.54 |
| Local Match (max=10) | 1.68 | 5.46 | 4.41 | 9.26 | 7.85 | 10.00 |
| Proximity to other land | 0.66 | 1.46 | 1.00 | 1.64 | 1.44 | 2.43 |
| protected by easements (2002 | | | | | | |
| max=10; 2003 $max = 5$; 2004 | | | | | | |
| max=7.5) | | | | | | |
| Other non-easement protected | 1.14 | 1.54 | 1.82 | 1.78 | 0.87 | 1.10 |
| land (max=5; 2004 max= 2.5) | | | | | | |
| Potential cluster permanently | 1.70 | 3.09 | 2.78 | 3.50 | 2.56 | 3.63 |
| protected lands (max=5) | | | | | | |
| Proximity to highway | 2.15 | 3.40 | 2.42 | 3.09 | 2.17 | 2.50 |
| intersection (max=6, 2004 | | | | | | |
| max=3) | | | | W MW NC | 200 200 | |
| Conservation plan (max=5) | 4.08 | 4.93 | 3.45 | 4.00 | 4.1 | 4.67 |
| Public sewer (max=4; 2004 | 2.53 | 3.45 | 2.93 | 3.47 | 3.24 | 4.26 |
| max=5) | | 100 A 1 | | | | |
| Road frontage (max=4; 2004 | 2.15 | 2.64 | 2.45 | 3.09 | 2.85 | 3.43 |
| max=5) | | | | | | |
| Non-farm homes within radius | 1.75 | 2.54 | 2.85 | 3.32 | 2.11 | 2.37 |
| (max=4) | 2.06 | 4.00 | 2.02 | 4.00 | | |
| Plan less than 7 years (max=4) | 3.06 | 4.00 | 3.82 | 4.00 | | |
| Designated ag area (2002 | 3.45 | 3.94 | | | | |
| max=4) | 1.04 | 2 (1 | 0.05 | • 00 | | |
| Zoned primarily for ag (max=3; | 1.84 | 2.64 | 2.37 | 2.89 | | |
| 2004 max=6) | 0.20 | 0.46 | 1.15 | 2.22 | 1.06 | 4.02 |
| Zoning acres per house (2002 | 0.30 | 0.46 | 1.15 | 2.33 | 1.86 | 4.03 |
| max=3; 03 max=5; 04 max=6) | 1.02 | 1 40 | 1.21 | 1.74 | 1.05 | 2.66 |
| Public water (max=2; 2004 | 1.02 | 1.40 | 1.31 | 1.64 | 1.95 | 2.66 |
| max=3) | 1.70 | 2.00 | 2.02 | 4.00 | 5.05 | 5.05 |
| Comprehensive plan (2002 max=2; 03 max=4; 04 max=6) | 1.78 | 2.00 | 3.82 | 4.00 | 5.95 | 5.95 |
| Previous inconsistencies (2002 | 1.48 | 1.94 | 3.46 | 4.00 | 4.45 | 4.05 |
| max=2; 03 max=4; 04 max=5) | 1.40 | 1.94 | 3.40 | 4.00 | 4.43 | 4.95 |
| Proposed inconsistencies (2002 | 1.50 | 1.88 | 3.72 | 4.00 | 2.83 | 2.95 |
| max=2; 03 max=4; 04 max=3) | 1.50 | 1.00 | 3.12 | 4.00 | 2.03 | 2.93 |
| Near MSA (max=2; 2004 | 1.26 | 1.36 | 1.31 | 1.47 | 0.74 | 0.89 |
| max=1) | 1.20 | 1.50 | 1.31 | 1.4/ | 0.74 | 0.09 |
| Ag District (2002 max=2; 2003 | 1.76 | 1.94 | 2.83 | 3.00 | 1.88 | 2.00 |
| max=3; 2004 max=2) | 1.70 | 1.27 | 2.03 | 3.00 | 1.00 | 2.00 |
| Historical status (2002 max=1; | 0.23 | 0.46 | 0.67 | 1.23 | 0.69 | 1.27 |
| 2003 max=5; 2004 max=4) | 0.23 | 0.70 | 0.07 | 1.43 | 0.07 | 1.4/ |
| BONUS: No previous easement | | | | | 0.85 | 0.74 |
| (2004 max=3) | | | - | | 0.03 | 0.77 |
| \ | | | | | | |

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Table 3: Correlation Coefficients for Ranking System Questions, Ohio Agricultural Easement Purchase Program, 2002, 2003 & 2004

| | 2002 | | 20 | 03 | 2004 | |
|-----------------------------|-------|---------------------|-------------|---------------------|--------------|----------------------|
| | N=442 | N=67 | N=289 | N=57 | N=268 | N=60 |
| Soils (max=20) | 0.701 | 0.139^{b} | 0.539 | 0.252 ^b | 0.493 | -0.062 ^{b)} |
| Local Match (max=10) | 0.412 | 0.536 | 0.616 | 0.163^{b} | 0.770 | c) |
| Proximity to other land | 0.240 | -0.111 ^b | 0.335 | -0.056^{b} | 0.222 | $0.128^{b)}$ |
| protected by easements | | | | | | |
| (2002 max=10; 2003 max = | | | | | | |
| 5) | | | | | | |
| Other non-easement | 0.133 | -0.325 | 0.102^{b} | -0.046 ^b | 0.204 | $0.001^{b)}$ |
| protected land (max=5) | | | | | | |
| Potential cluster | 0.346 | 0.442 | 0.319 | 0.369 | 0.368 | $0.196^{b)}$ |
| permanently protected lands | | | | | | |
| (max=5) | | | | | 100 | |
| Proximity to highway | 0.303 | 0.226^{b} | 0.187 | -0.017^{b} | 0.136^{a} | .0246 ^{b)} |
| intersection (max=6) | | | | | | |
| Conservation plan (max=5) | 0.386 | 0.140^{b} | 0.322 | 0.240^{b} | 0.525 | $0.093^{b)}$ |
| Public sewer (max=4) | 0.434 | 0.276^{a} | 0.252 | 0.147^{b} | 0.199 | $0.319^{a)}$ |
| Road frontage (max=4) | 0.125 | 0.005^{b} | 0.155 | 0.309^{b} | 0.298 | $0.213^{a)}$ |
| Non-farm homes within | 0.198 | 0.320 | 0.175 | 0.182^{b} | $0.138^{a)}$ | $0.016^{b)}$ |
| radius (max=4) | | | | | | |
| Plan less than 7 years | 0.561 | c) | 0.272 | c) | | |
| (max=4) | | | | | | |
| Designated ag area (2002 | 0.474 | 0.099^{b} | | | | |
| max=4) | | | | | | |
| Zoned primarily for ag | 0.452 | 0.002^{b} | 0.323 | 0.181^{b} | 0.512 | 0.358 |
| (max=3) | | | | | | |
| Zoning acres per house | 0.268 | -0.252^{a} | 0.443 | 0.420^{b} | | |
| (2002 max=3; 2003 max=5) | | | | | | |
| Public water (max=2) | 0.321 | -0.195^{b} | 0.319 | 0.050 | 0.232 | $0.068^{a)}$ |
| Comprehensive plan (2002 | 0.450 | c) | c) | c) | $0.104^{a)}$ | $0.091^{b)}$ |
| max=2) | | | | 1 | | |
| Previous inconsistencies | 0.404 | 0.016^{b} | 0.429 | c) | 0.603 | $0.091^{b)}$ |
| (2002 max=2; 2003 max=4) | | | | | | |
| Proposed inconsistencies | 0.410 | 0.102^{b} | 0.303 | c) | 0.340 | $0.091^{b)}$ |
| (2002 max=2; 2003 max=4) | | | | | | |
| Near MSA (max=2) | 0.188 | 0.406 | 0.199 | 0.158^{b} | 0.326 | 0.140 ^{b)} |
| Ag District (max=2) | 0.206 | 0.143^{b} | 0.314 | c) | 0.313 | c) |
| Historical status (2002 | 0.244 | 0.327 | 0.209 | 0.200^{b} | 0.324 | 0.120 ^{b)} |
| max=1; 2003 max=5) | | | | | | |

a) P>0.01 and p<0.05

b) P>0.05

c) All values equal.

Table 4: Frequency Distribution for Local Match, Ohio Agricultural Easement Purchase Program, 2002, 2003 & 2004

| Local | Points | 2002 | | 2003 | | 2004 | |
|-------------|--------|------|-------|------|-------|------|-------|
| Match | | # | % | # | % | # | % |
| 25% | 0 | 321 | 72.6 | 128 | 44.3 | 46 | 17.2 |
| 26-40% | 1,2,4 | 52 | 7.2 | 41 | 14.2 | 6 | 6.0 |
| 41-49% | 6,8 | 11 | 2.5 | 1 | 0.3 | 1 | 0.4 |
| 50% or more | 10 | 58 | 13.1 | 119 | 41.2 | 205 | 76.5 |
| Total | | 442 | 100.0 | 289 | 100.0 | 268 | 100.0 |