

ANALYSIS OF THE 1993 FARMLAND PROTECTION SURVEY FOR ERIE COUNTY, NY

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ABSTRACT: *A survey was initiated by the Erie County Environmental Management Council in 1993 to address farmer and public official concerns about the preservation of farmland in Erie County, NY. The results of the survey will be used to support and encourage local farmland protection activities, including development of a county farmland protection plan. A total of 371 responses were received from an original mailing of 1,613 surveys. Results indicated that 79% of the respondents felt too much farmland is lost to non-agricultural uses and 79% approve of programs that would help owners retain their land for agricultural use. The majority of respondents would like to see farmland protection occur via a program that would, among other things, base land value on its agricultural value rather than the fair market value (thereby reducing tax assessment as encouragement to keep land in production). However, the economic consequences of preserving agricultural land was a major concern of the respondents.*

INTRODUCTION

Agricultural enterprises in New York State produce over \$ 2.5 billion worth of gross cash receipts annually (American Farmland Trust, undated). This places net value of the industry of agriculture above all others in the state. However, the number of farms and farm acreage have decreased in the state in recent decades (U.S. Dept. of Commerce, 1964; 1992). Farming is vital to the economic and social framework of New York State, but farms and agricultural landowners are facing a variety of problems and outside pressures which threaten to change New York's agricultural and rural landscape.

Erie County, like New York, has seen a decrease in farm acreage and the number of farms in recent decades. In 1959 there were 2,725 farms and in 1992 the number of farms had decreased to 995 (U.S. Dept. of Commerce, 1964; 1992) (Figure 1). Farm acreage also decreased from 289,889 acres

in 1959 to 145,679 acres in 1992 (U.S. Dept. of Commerce, 1964; 1992) (Figure 2). Factors such as improved farming techniques and advancements in farming machinery have created another trend in the farming community. Farms have become larger in size (number of acres) and fewer in number in order to be more efficient and remain economically competitive. For example, the average acreage of individual farms in Erie County has increased from 106 acres in 1959 to 146 acres in 1992 (U.S. Dept. of Commerce, 1964; 1992).

The Erie County Environmental Management Council (Erie County EMC) sponsored an Environmental Intern Project which produced the 1993 Erie County Agricultural Landowner/Farmland Preservation Survey. The survey was a partnership activity between Erie County EMC, Erie County Department of Environment and Planning, Western NY Land Conservancy, the Farm Bureau, and the Natural Resources Conservation Service. The Erie County EMC initiated the survey to address the farming

Farmland Protection Survey

community's and politician's concerns about the loss of prime and important farmland in the county. Results from the survey will be used to support and encourage local farmland protection activities, including development or modification of a county farmland protection plan. The objective of this report is to summarize the results of the survey.

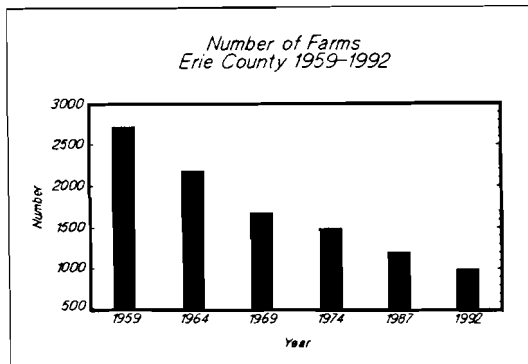


Figure 1: Number of farms in Erie County 1959-1992

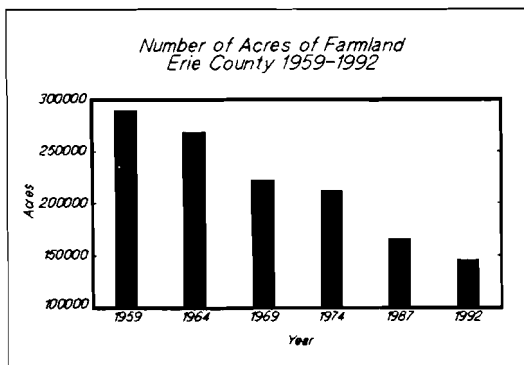


Figure 2: Number of acres of farmland in Erie County 1959-1992

METHODS

Survey Area

Erie County is located in western New York along Lake Erie (Figure 3). Erie County is a largely urban county including the city of Buffalo and suburban areas like Tonawanda. The majority of farmland in the county is south of Buffalo in areas like Eden and Springville. In 1993 there was a total of 668,800 acres in the county and 25% of that was farmland (NY Agricultural Statistics Service, 1994). The leading agricultural products in the county are dairy products, nursery and greenhouse products, vegetables, cattle and calves, and fruits and berries (NY Agricultural Statistics Service, 1994).

Survey Development

The Agricultural Landowner/Farmland Preservation Survey was drafted during the summer of 1993. A copy of the survey, a description of farmland protection programs, and a return envelope were mailed to active and retired farmers, agricultural landowners, and Erie County municipal officials. In addition, a cover letter from the Erie County Farm Bureau and a brochure from the Western NY Land Conservancy was included in each of the 1,613 surveys mailed. The mailing list for the survey was a compilation of Agricultural Stabilization Service, Consolidated Farm Services Agency, Natural Resources Conservation Service, Cornell Cooperative Extension, and Erie County Farm Bureau mailing lists. The packages were prepared and mailed by "Earth Team" volunteers and the Western NY Land Conservancy at the end of August, 1993 and the requested return date was September 10, 1993. Due to budget and time constraints, there were no follow up mailings or phone calls to encourage people to complete the survey.

The Agricultural Landowner/Farmland Preservation Survey contained fifteen questions. The first seven questions were concerned with the respondents opinions on existing farmland protection efforts. Appropriate responses (i.e., "yes", "no", and "not sure") to those questions were

Farmland Protection Survey

listed so the respondent only had to circle his or her answer. Questions eight through thirteen asked about the respondents demographic characteristics. The final two questions were more subjective and encouraged the respondents to indicate preferred farmland preservation programs and to include any additional comments. Space was given for the optional inclusion of the respondents name and mailing address.

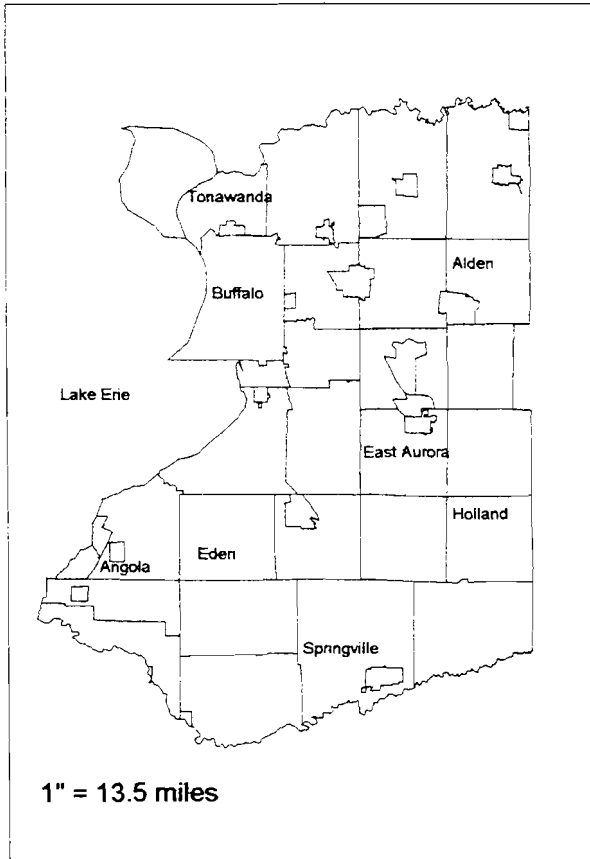


Figure 3: Map of Erie County, NY

Statistical Analysis

Chi square tests were performed to determine if survey responses were different based on respondent age, gender, and whether or not the respondent currently was farming. Because the survey did not specifically ask the respondents if they were farmers, question number ten (If you farm, are you considering retirement in the next five years?) was used to determine farming status.

Respondents who answered "yes" and "no" were considered farmers and respondents who answered "not applicable" were considered non-farmers. The Statistical Analysis Software (SAS) statistical package available on the Buffalo State College computer network was used for statistical analysis.

RESULTS

A total of 371 responses were received from the original mailing of 1,613 surveys. The mailing of the Farmland Protection Survey yielded responses from a group of individuals that was 87% male (11% female, 2% no response) and predominantly over sixty years old (41%). In fact, the age range least represented by the responses was the youngest, from eighteen to thirty years of age (3%). Whether this age distribution truly represents the population, or a greater concern over farmland preservation by older citizens, or simply a bias in the mailing list is unclear. A total of 245 respondents (66%) were determined to be farmers based on the analysis of question number ten.

Results from the survey regarding the respondents opinions on existing farmland protection efforts are summarized in Table 1. Two questions on the survey specifically were directed towards farmers and they inquired about the farmers future plans for their agricultural land.

Twenty percent of the respondents who farm were considering retirement in the next five years, while 45% were not. Of the farmers considering retirement, 40% of them had plans for someone to take over the farm and 53% had no plans for a takeover.

Question number fourteen asked which farmland protection program the respondent would like to see implemented. There were 178 responses to the question and the Agricultural Value Assessment program had the highest percentage of responses (22%). The majority of respondents also indicated that they wanted preservation programs administered at the county level.

Chi square analysis results are summarized in Table 2. Results of the analysis indicate that for question number three, responses from people in the different age groups were significantly different

Farmland Protection Survey

Table 1. Summary of Responses to Survey Questions

Question*	Yes	No	Not Sure	Blank
1. Too much farmland being lost to non-agricultural uses?	79%	10%	9%	2%
2. Support of programs to retain farmland? **	79%	6%	12%	3%
3. Is NYS AAP *** effective for farmland protection?	23%	28%	46%	2%
4. Should NYS AAP be strengthened?	64%	8%	26%	3%
5. Favor local, state, federal legislation to restrict development on prime farmland?	64%	18%	15%	3%
6. Additional incentives to keep farmland in agricultural use?	84%	6%	7%	3%
7. Support of a development tax to raise money for farmland protection efforts?	36%	32%	27%	5%

- * Demographic questions were not included in this table
- ** Responses to question were "Approve", "Disapprove", and "Not Sure"
- *** Agricultural Assessment Program

($\chi^2=12.74$, $P=0.05$). There also was a significant difference in responses for question three between farmers and non-farmers ($\chi^2=5.86$, $P=0.05$). The responses to question number six were significantly different between farmers and non-farmers ($\chi^2=6.12$, $P=0.05$).

DISCUSSION AND CONCLUSIONS

Results from the survey indicate that 79% of the respondents felt that too much farmland is being lost to non-agricultural uses (Table 1). In addition, 79% of the respondents approved of programs which would help agricultural landowners retain their land. (Table 1). There also were no significant differences ($\alpha=0.05$) among the demographic groups (i.e., age, gender, or farmer vs non-farmer) (Table 2); therefore, it seems that the surveyed population felt that too much farmland was being lost and there was support for farmland protection programs regardless of demographic

group. However, the means by which the respondents wanted to achieve agricultural land preservation differed on the basis of age groups and farmer vs. non-farmer status.

The program most popular with the respondents was a component of the Agricultural Districts Law (Agricultural and Markets Law, Art. 25AA), the Agricultural Value Assessment Program. That program also is referred to simply as the Agricultural Assessment Program (AAP). Under the AAP, the value of farmland is based on agricultural use rather than its fair market value. The values are based on soil type and are set by the State Board of Equalization and Assessment based on a price and production sensitive formula. With that, school and real estate taxes are based on the agricultural value rather than the market value. In exchange for agricultural assessment, landowners agree to keep land in agricultural use for five years or pay tax penalties for conversion. The AAP was the most popular program presumably because it bases the tax assessment value of the land on agricultural use rather than its fair market value.

Table 2. Summary of Chi Square Analysis

Question	Age*	Gender	Farmer vs. Non-Farmer
1. Too much farmland being lost to non-agricultural uses?	$\chi^2=4.38, P=0.63$	$\chi^2=1.08, P=0.58$	$\chi^2=5.34, P=0.07$
2. Support of programs to retain farmland?	$\chi^2=3.46, P=0.75$	$\chi^2=3.12, P=0.21$	$\chi^2=4.12, P=0.13$
3. Is NYS AAP effective for farmland protection?	$\chi^2=12.74, P=0.05^{**}$	$\chi^2=0.19, P=0.91$	$\chi^2=5.86, P=0.05^{**}$
4. Should NYS AAP be strengthened?	$\chi^2=8.46, P=0.21$	$\chi^2=1.23, P=0.54$	$\chi^2=4.06, P=0.13$
5. Favor local, state, federal legislation to restrict development on prime farmland?	$\chi^2=7.47, P=0.28$	$\chi^2=0.45, P=0.80$	$\chi^2=1.55, P=0.46$
6. Additional incentives to keep farmland in agricultural use?	$\chi^2=3.75, P=0.71$	$\chi^2=0.195, P=0.91$	$\chi^2=6.12, P=0.05^{**}$
7. Support of a development tax to raise money for farmland protection efforts?	$\chi^2=5.74, P=0.45$	$\chi^2=1.33, P=0.51$	$\chi^2=0.66, P=0.72$

* The age groups were: 18-30, 31-45, 46-60, and over 60

** Indicates significant results at the 0.05 significance level

That aspect of the program generally would result in reduced property taxes on active agricultural land; therefore, more land could be kept in agricultural production.

Twenty-three percent of the people responding to the survey felt that the New York State AAP was effective in farmland protection and 64% felt the AAP should be strengthened (Table 1). As stated previously, chi square analysis indicated that respondents in the different age groups felt differently about the effectiveness of the AAP ($\chi^2=12.74, P=0.05$). Ten percent of people between 18 and 30 felt that the AAP was effective, while 31% of people over 60 felt it was effective. There also was a significant difference among farmers and non-farmers ($\chi^2=5.89, P=0.05$). Of

the respondents who thought the AAP was effective, 32% were farmers and 23% were non-farmers. The fact that a larger percentage of farmers and older respondents felt the AAP was effective may have resulted because those groups may have actually used and benefited from the AAP. The non-farmers and younger respondents may have only read about the AAP in the material enclosed with the survey and felt that it potentially would not be effective. While the survey does not ask which specific aspects of the AAP should be strengthened, some relevant "additional comments" should be noted.

A few responses relating to the effectiveness of New York State's AAP were critical of its eligibility requirements. More specifically,

Farmland Protection Survey

their opinion was that the ten-thousand dollar annual gross sales requirement was too high. Some respondents felt that this dollar amount was in excess of what a small farm or a semi-retired farmer could produce. Some felt that a partial exemption from real property taxes should be available to all farms, regardless of size or productivity. It was expressed that over-taxation of farming families was the primary reason that farmers were selling land to developers. Through reduction of taxes, fees, and regulations, one person wrote, the profitability of farming could be restored. More farmers would then be encouraged to continue farming, and the loss of agricultural land to non-farming uses would be reduced.

Another "additional comment" suggested the implementation of a locator service as part of New York's AAP. Through this locator service, landowners could find individuals willing to farm their land. The suggestion is similar to the "Farms In Transition Match-up Program", which was included in the description of farmland protection programs that accompanied the questionnaire. The locator service could serve farmers specifically trying to qualify for an agricultural assessment. By matching potentially idle farmland with farmers wishing to expand production, or willing to enter a rental agreement, the service could help landowners retain their partial tax exemption. The locator service also could be implemented using a state-wide data base that would assure that the AAP's eligibility requirements (e.g., \$10,000 annual gross sales) were within reach of even the smallest farms. Theoretically, the relative cost of this type of service would be low because most of the channels of communication needed to share the information are already in place. A program essentially identical to the locator service concept that the respondents suggested was implemented by the Cornell Cooperative Extension after this survey was distributed. The program is New York Farm Link and while it did not result from this survey, New York Farm Link is an enrollment based referral and match-up program where retiring farmers are able to receive information on farmers who are looking for land.

Responses to question number three regarding the effectiveness of the AAP (Table 1) indicate that 46% of the survey's respondents were unsure of New York's AAP's effectiveness in

protecting farmland. That may suggest a lack of communication between the legislators and the farmers at some point. If the goal of the AAP is tax relief for qualified farms and a subsequent decrease in the loss of prime farmland, then there is a need for communication between all interested parties. Legislative bodies need to recognize the farmer's concerns and the agricultural community should be made aware of the successes and shortcomings of preservation efforts. At a time when all levels of government are struggling to generate more revenue for important programs, the portion of the farming community represented by this survey repeatedly states that it is over-taxed.

A farmland preservation technique developed in the 1970's, Purchase of Development Rights (or Purchase of Conservation Easements) (PCE), ensures that a tract of land will remain undeveloped, while allowing the landowner to retain ownership and full control of the farmland. The right to develop non-agricultural enterprises upon the tract of land is purchased from the landowner by non-profit organizations or government agencies. This allows the land to remain agriculturally active, puts the farmer's fears concerning loss of control over the land to rest, and ensures that some tax revenue will still be generated from this land. The sale of these development rights also provides the farmer with additional funds with which to improve the land, reduce debt, or replace old machinery. This program is an excellent preservation strategy, but is quite expensive. Funds with which to purchase these development rights must be replenished regularly if this type of program is to be successful on a long term basis. The PCE program was the fourth most popular program and seems to deal with some of the problems (i.e., loss of control over farmland and loss of retirement income) that respondents had with the other options. If more funds could be appropriated for this type of program and incentives could be directed towards the PCE program, it could be an alternative to the current AAP.

A majority of respondents would support government legislation to restrict development on prime farmland (64%) and felt that additional incentives would be useful in keeping agricultural land in use (84%) (Table 1). However, the responses from the 84% in support of additional incentives were different based on farmer and non-

farmer status ($\chi^2=6.12, P=0.05$). Six percent of non-farmers felt that there should not be any additional incentives to keep farmland in agricultural production, while 78% felt there should be additional incentives. Nineteen percent of farmers felt that there should not be any additional incentives and 65% felt there should be additional incentives. That difference may have been a result of farmers not wanting the government to get involved with the sale of their land. The non-farmers saw a question of incentives and encouraged it, but the farmers saw a question of government interference over business operations and future land use.

While the majority of respondents support government legislation to restrict development on prime farmland through incentives, the respondents do not seem to want to pay for the support. Thirty-six percent of the respondents would support a development tax or fee to raise money for farmland protection efforts (Table 1). Forty-one percent of the people who thought that there should be additional incentives to help keep farmland in agricultural use also supported a development tax or fee. Although respondents saw legislation as a possible solution to the loss of prime farmland, it seems that the suggestion of additional taxation or fees began to erode farmer support of the programs, though support was still possible, particularly considering the high percentage of "not sure" responses on the survey (31%). If an equitable and efficient funding source were available, an incentive program would seem to have a sizeable base of support within the agricultural community.

As expressed in the Agricultural Districts portion, Article 25AA, of the Agriculture and Markets Law (as amended through October 1, 1993), New York State's agricultural land is "an economic and environmental resource of major importance." Article 25AA seeks to provide a "locally-initiated mechanism for the protection and enhancement" of this resource. Responses to the Agricultural Landowner/Farmland Preservation Survey indicate that the agricultural community in Erie County would prefer a "locally-initiated mechanism" to protect farmland. Question number thirteen asked the survey respondents at which level should farmland protection programs be administered; however, the survey did not ask the

respondent to specify only one level or to rank the levels. As a result, many respondents selected more than one level of program administration. Administration at the county level was chosen the greatest number of times, but a direct conclusion cannot be made as to how much the respondents would prefer program administration at the county level because people chose more than one level. Nevertheless, local (i.e., county and town) governments do seem to be preferred over the federal government and the private sector. Due to local characteristics such as various cash crops, a wide range of soil types, and differing reasons for the conversion of agricultural land, farmland preservation should be administered at local levels of government. Each agricultural area of the state is unique and will have its own set of problems and solutions.

Question number ten of the survey asked whether or not the respondent was considering retirement from farming within the next five years. The next question in the survey inquired if plans had been made for another individual to take over the farm upon retirement. Seventy-five farmers (20%) responded that their retirement would occur within five years, but less than half of these individuals (40%) had plans for someone to take over their farm. It would seem that an individual nearing retirement, and considering selling farmland, would naturally be interested in programs that may directly affect the value of his or her land. This may explain the greater number of older respondents, and concerns such as this often were expressed in the "additional comments" portion of the survey. One such response, from a farmer not considering retirement in the near future, indicated that, due to recent residential construction in his area, his farmland had become too valuable to developers for him to sell it as a farming enterprise. Other "additional comments" expressed dismay at depressed prices of farm produce, steadily increasing insurance rates and property taxes, and the growing presence of residential sub-divisions and gravel mines. The comments discuss land that is no longer profitable to farm and the mounting debt associated with farming marginal land. Complaints about today's lack of young farmers were tempered with an understanding as to why a young person would not want to farm in this adverse economic climate.

Farmland Protection Survey

The comments regarding over-taxation and the lack of profitability in farming from this survey were similar to comments made by farmers in another study done in 1978 (Amato et al., unpub. data). For example, the majority of the farmers from the 1978 survey wrote that they were not able to make enough money farming to cover their taxes. One reason that the 1978 respondents gave for not making enough money was that their farms were too small to compete with the larger, more profitable farms and there was no room for agricultural expansion as a result of non-agricultural development. Another reason that often was cited for not making enough money was that they were getting too old to farm full-time and there was no one to take over the farming operations. Some 1978 respondents commented on selling their land to developers in order to make money. Those farmers that had sold to developers expressed concern for selling their agricultural land, but they felt they had to make money for their retirement. In general, even in 1978, it seemed that tax incentives were outweighed by the money developers were able to offer for the farmland.

Similar to the 1978 survey, many "additional comments" from the 1993 survey gave the impression that, upon retirement, the older respondents would prefer to have their farmland remain agriculturally active. They also implied that economic factors may force them to seriously consider offers from non-farmers to purchase the land. They feel that young farmers cannot match offers put forth by interested developers and investors. As the farmers see more and more neighboring farms being sold off and sub-divided for residential construction, their resistance to sell to a developer may subside. The reality is that the sale of land often is a farmer's only means of financial security upon retirement. Even if an agricultural landowner does not want to see his or her land subdivided and developed, he or she also must attempt to receive the greatest return on the sale of the land. This difficult situation may explain feelings of isolation or an "us versus them" attitude that seems to be expressed in many handwritten responses to the survey. It is possible interaction or cooperation between area landowners and farmers would substantially help the preservation of Erie County's farmland. The sharing of ideas, viewpoints, and skills between farmers could help to

amplify feedback such as the responses to this survey. At the very least, it could alleviate feelings of isolation that may arise as more and more farms are sold to developers.

While offers from developers and outside investors to purchase agricultural land are not unusual, they contribute to a substantial and difficult problem in the farmland preservation movement. To fully understand this problem, one must view it from the farmer's perspective. Many "additional comments" from farmers express an aversion to, and a blatant distrust of, government intervention into agricultural issues. Some respondents feel that government agencies have continually raised taxes on farmers, while allowing market prices of dairy and food produce to fall or remain stagnant. These factors are blamed for the lack of profit in farming and, ultimately, the sale of farmland for non-farming uses. Now, some agricultural landowners express the concern that "Farmland Protection" or "Farmland Preservation" programs would do no more than prevent farmers from selling their land to outside investors or developers, which amounts to a loss of control over their land. In other words, governmental restrictions upon development, under the guise of preventing further loss of agricultural land, may, in effect, prevent farmers from selling their land to the highest bidder. Thus, some responding farmers remain quite skeptical of such government programs. According to one response, finding a balance between limiting development and maintaining fair land prices, if a farmer wishes to sell to a developer, will be difficult.

In conclusion, a program that results in farmland protection and profits for farmers needs to be pursued. Based on the results of the direct survey questions and many "additional comments", modifications to the AAP or PCE program would be favorable options. All options require further discussion and analysis with the likely result that no single solution will work for all farms or farming regions. Those programs which minimize additional regulation, help to improve farm profitability, and fairly compensate landowners for loss of control over their land will be the most favorably received.

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