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SUMMARY OF RESEARCH ON
THE WISCONSIN FARMLAND
PRESERVATION PROGRAM

By

Richard Barrows

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PART I

BACKGROUND: THE PROGRAM AND THE STUDY

The basic provisions of the Farmland Preservation Law (FPL), and the approach of the department in administering the law are summarized in the introduction to a University Extension publication explaining the law:

The Farmland Preservation Act was passed to assist local people who want to preserve farmland, and to provide tax relief to farmers who participate in the local programs. The success or failure of the program rests in the hands of farmers, local citizens, and local elected officials. There are many options for local government under the law, and the state will not dictate local planning and zoning policies - those policy choices are the proper business of local citizens and local government. The Farmland Preservation Act will assist local governments in what they decide to do, but the decisions must be made by local citizens. It is important that people understand the facts about the new program in order to make well informed decisions for their family and their local community.*

Provisions of the Law

Initial Agreements. In the first five years, 1977-82, an eligible owner of farmland can sign an agreement, agreeing not to develop the land and becoming eligible for tax credits.

To qualify for an agreement, the owner must have 35 acres or more in a parcel, and the land must have produced a value of farm product of \$6,000 in the last year or \$18,000 in the last three years. Also, the owner must either have a farm conservation plan or request that a plan be prepared by the local soil and water conservation district (SWCD) and Soil Conservation Service (SCS).

*"Wisconsin's Farmland Preservation Program", Extension Bulletin G2890, University of Wisconsin-Extension, Madison, 1979, p. 1.

The owner applies for an agreement through the county, and if the county board approves the application, the state must sign an agreement with the owner if the land is legally qualified.

Under the agreement, no development is allowed unless it is for farm use. Owners are eligible for income tax credits, and are exempt from special assessments to provide urban-type public services such as sewer and water. The agreement follows the land, and expires on September 30, 1982. Under an initial agreement, tax credits are 50% of the amount calculated under the tax credit formula.

The Second Stage. The second stage of the program begins with local government adoption of exclusive agricultural zoning or an agricultural preservation plan. After September 30, 1982, local governments must have adopted either the zoning or planning in order for landowners to be eligible for tax credits. Counties and towns are not required to do anything, but tax credits depend on some county or town action. Counties can enter the second stage of the program prior to 1982, and many already have done so. Urban and rural counties have different requirements:

1. Urban counties - in counties with a population density of 100 or more people per square mile, the land must be under a certified exclusive agricultural zoning ordinance to be eligible for credits.
2. Rural counties - in counties with population density less than 100 people per square mile, the land must be under either a farmland preservation plan or an exclusive agricultural zoning ordinance to be eligible for credits.

Zoning. The law contains standards which county or town zoning ordinances must meet in order to be certified by the Agricultural Land Preservation (ALP)

Board and establish eligibility for tax credits. The ordinance must provide that farmland cannot be developed, and no residences can be built unless occupied by the farmer, his parents or children, or a person working on the farm. Special exceptions and conditional uses must be compatible with farming. Rezoning the land to allow development is a local decision. When a county zoning ordinance is amended to include the exclusive agricultural zoning provisions, each town decides for itself whether to accept or reject the provisions for that town. In a few urban counties which do not already have county zoning (such as Brown, Fond du Lac, Rock and Sheboygan) a countywide exclusive agricultural zoning ordinance could be adopted only by a majority vote of all the towns. Under certain conditions, towns can adopt exclusive agricultural zoning ordinances and qualify farmers for tax credits.

Planning. Agricultural Preservation Plans must be based on studies of the county's agriculture, natural resources, and population growth. The plan must include statements of county policy on preserving farmland, providing for urban growth, and protecting the local environment; maps of agricultural lands to be preserved; and a proposed program to preserve farmland. Plans are not binding on landowners or the county but are guides for future local decisions. The state provides small grants to help counties develop their maps and agricultural plans. Farmers whose land is in an area designated for preservation in a county plan may sign a 10-25 year agreement identical to the initial agreement except that farm operations must be conducted "in substantial accordance" with a conservation plan, unless impractical in the judgment of the county soil and water conservation district supervisors.

Tax Credits. Owners of eligible land may receive tax credits against their state income tax, based on household income. A household is a husband, wife, and dependent children under 18 years old. The household's income includes the net

farm income, any nonfarm wages, salaries and tips above \$7,500, and other miscellaneous sources of income. Property taxes up to \$6,000 are eligible for credits and the maximum credit is \$4,200. Basically, the higher the property tax, the higher the tax credit, and the lower the income, the higher the credit.

The level of tax credits also depends on county planning and zoning action. The table shows the maximum tax credit. Farmers with initial agreements receive 50% of the maximum credit. Farmers whose land is in an exclusive agricultural zone are eligible for 70% of the maximum credit. If the county has an agricultural preservation plan, farmers are eligible to sign a 10-25 year agreement and receive 70% of the maximum credit. If the county has both planning and zoning, landowners are eligible for 100% of the maximum credit. If a 10-25 year

Table 1
MAXIMUM TAX CREDIT SCHEDULE

Property Taxes:

Income\$	\$1000	\$2000	\$3000	\$4000	\$5000	\$6000
0	900	1800	2500	3200	3700	4200
5,000	900	1800	2500	3200	3700	4200
10,000	675	1575	2325	3025	3575	4075
15,000	360	1260	2080	2780	3400	3900
20,000	0	855	1755	2465	3165	3675
25,000	0	180	1080	1940	2640	3300
30,000	0	0	0	855	1755	2465
35,000	0	0	0	0	180	1080
40,000	0	0	0	0	0	0

agreement expires, or if land is removed from an exclusive agricultural zone, the owner must repay the tax credits received over the previous 10 years. Lesser rollback provisions apply to initial agreements.

Summary. The three key concepts in the Farmland Preservation law are: (1) incentives, not requirements; (2) individual decisions; and (3) local government decisions and local control. There are incentives to individuals to sign agreements and to become involved in local discussion of planning and zoning programs in order to increase their level of credits to 70% or 100%. There are incentives to local governments to develop and adopt planning and zoning policies -- the state provides financial assistance through grants and technical assistance through program staff, and county/town action will qualify farmers for more tax relief. Individual decisions are the basis for signing agreements, and town and county government decisions approve contract applications and develop and adopt agricultural planning and zoning. Nationally, the Wisconsin law is unique in its blend of incentives, individual decisions and local government decisions.

The Study

The simplest, and easiest, study of the effects of the FPL would be to trace the decline in the amount of farmland in the state, before and after enactment of the law. Unfortunately, this is not possible. First, data on farmland converted to nonfarm use are not available, except for certain counties for a few years. Data on "land in farms" collected by USDA and others are not appropriate because much of the land taken out of farm use is not developed. Data on farmland conversion are collected periodically by SCS, most recently for the 1967-77 period, but are accurate only at the state level, not at the county level. Second, even if such data were available, it would be impossible to separate the effects of the FPL from the effects of changes in milk or grain prices, mortgage interest rates, gasoline prices and other factors influencing the conversion of farmland to nonfarm use.

Therefore, several very specific studies were undertaken to determine the effects of the FPL.

1. Overview of participation in the program by farms and local government;
2. The process of local government adoption of planning and zoning programs;
3. The factors that influence farmers' decisions to sign, or not sign, agreements;
4. The effectiveness of exclusive agricultural zoning in preserving farmland;
5. The characteristics of tax credit recipients and the effect on farm households of several tax relief policy alternatives; and
6. The effect of the soil conservation plan requirement.

This series of studies provides a detailed understanding of precisely what the effects of the FPL have been, how various landowners have been affected, and why individuals and local governments have responded in particular ways to the program. The results of the various studies will be summarized in the next section.

PART II

THE EFFECTS OF THE FARMLAND PRESERVATION LAW

Studies of the effects of the law were carried out by UW faculty and students and state agency staff. The results will be presented in sections on overall participation, local government action, agreements, zoning, tax credits and soil conservation. A discussion of the administration of the program will be presented in the last section.

Overview of Participation*

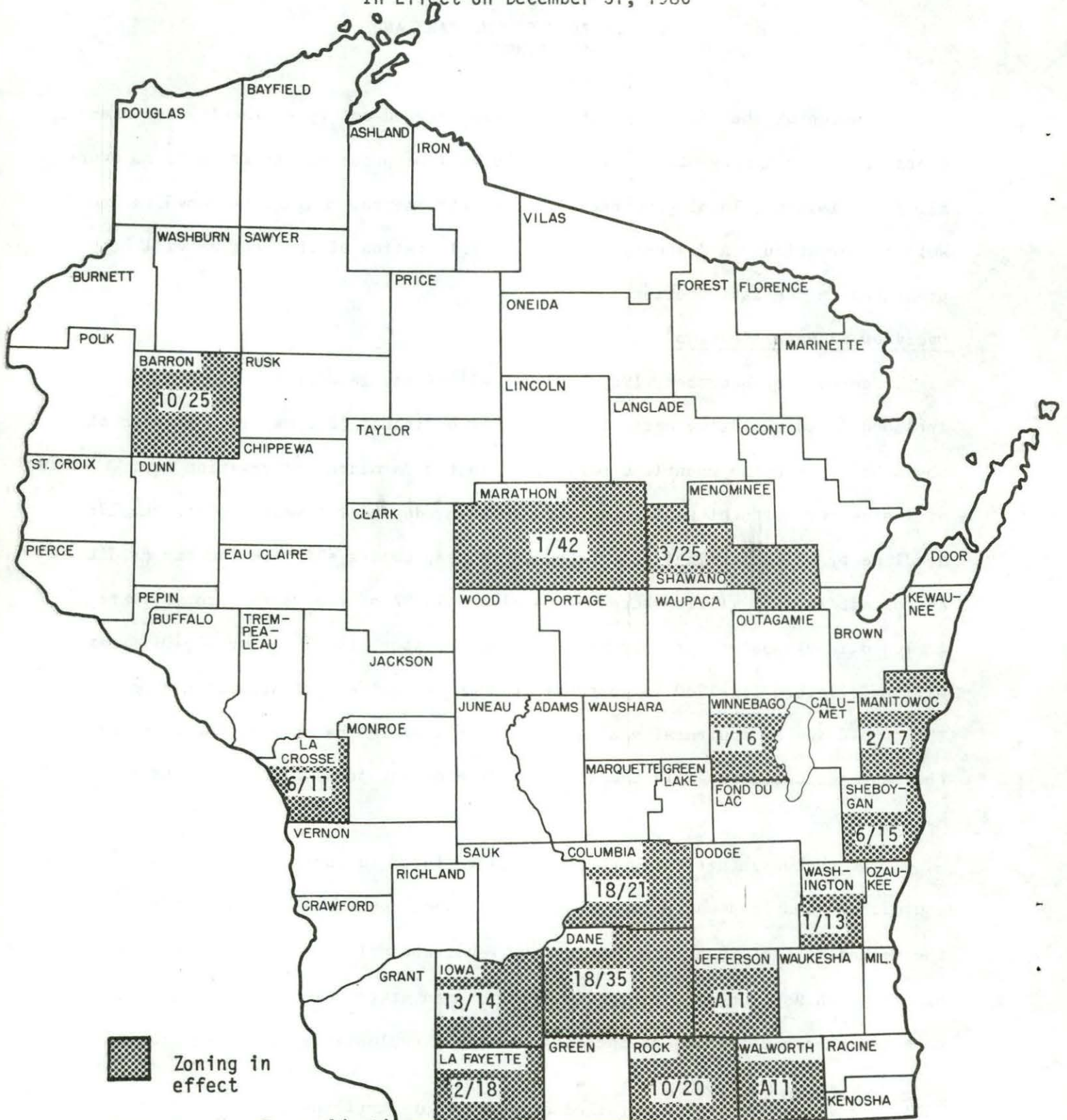
Zoning. By December, 1980, part or all of the land in 15 counties was included in an exclusive agricultural zoning ordinance (See Map 1). In nine of the state's 18 urban counties, as defined in the Farmland Preservation Law, exclusive agricultural zoning had already been adopted two years before the 1982 deadline by which farmland must be zoned to keep owners eligible for tax credits. Approximately 2.51 million acres of farmland, 13.8% of the state's total, were included in exclusive agricultural zones in December, 1980. About 12,407 farms will be eligible for 1980 tax credits through exclusive agricultural zoning. This exclusive agricultural zoning is concentrated in the area of the state with the best agricultural soils and the most development pressure on the land (see Map 2).

The exclusive agricultural zoning is tailored to local administrative preferences and land use policy choices. In some counties, such as Jefferson, the zoning is administered at the county level and all towns participate. In others, such as LaCrosse, zoning is administered at the county level but only some towns have chosen to be included under the exclusive agricultural zoning

*This section summarizes a detailed discussion of participation found in R. Barrows, "Overview and Analysis of Participation in the Farmland Preservation Program, 1977-1979", Staff Paper No. 194, Department of Agricultural Economics, University of Wisconsin-Madison and University of Wisconsin-Extension, Madison, 1981.

Map 1

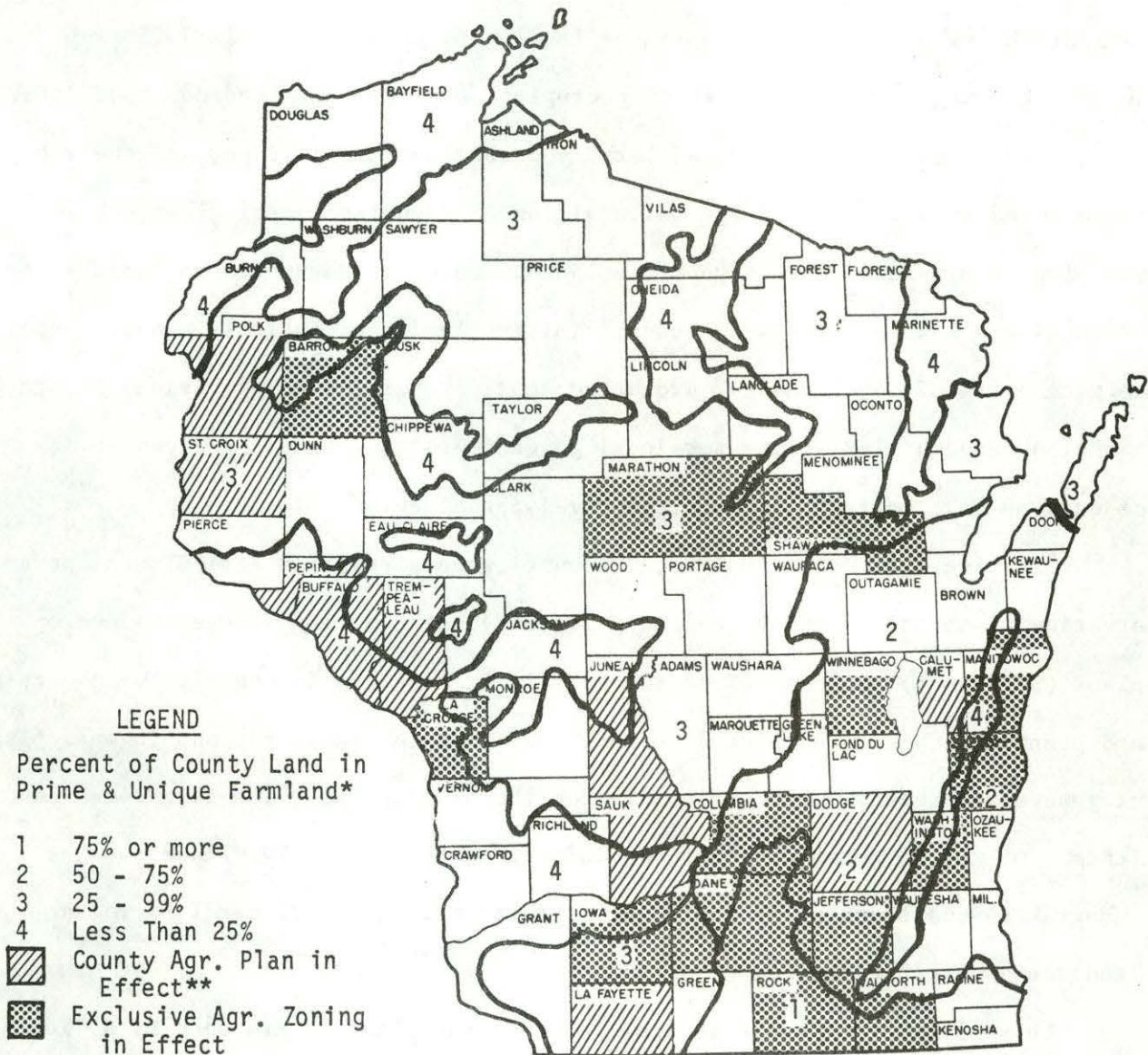
Exclusive Agricultural Zoning
In Effect on December 31, 1980



8/16 Top No.=Towns Adopting
Zoning to Date. Bottom No.= Total No. of Towns
in County

Map 2

Exclusive Agricultural Zoning and Certified Agricultural Preservation Plans, According to Soil Quality for Agricultural Use



*Definition by Soil Conservation Service. Prime land is generally land with soils in Soil Capability Classes I and II. Unique land includes land with special soil, water, climatic conditions that make it suitable for specialty crops.

**Agricultural Preservation Plans are also in effect in the zoned counties of Barron, LaCrosse, Columbia, Rock, Sheboygan and Walworth.

Source: Farmland Preservation Unit, Wisconsin Department of Agriculture, Trade and Consumer Protection.

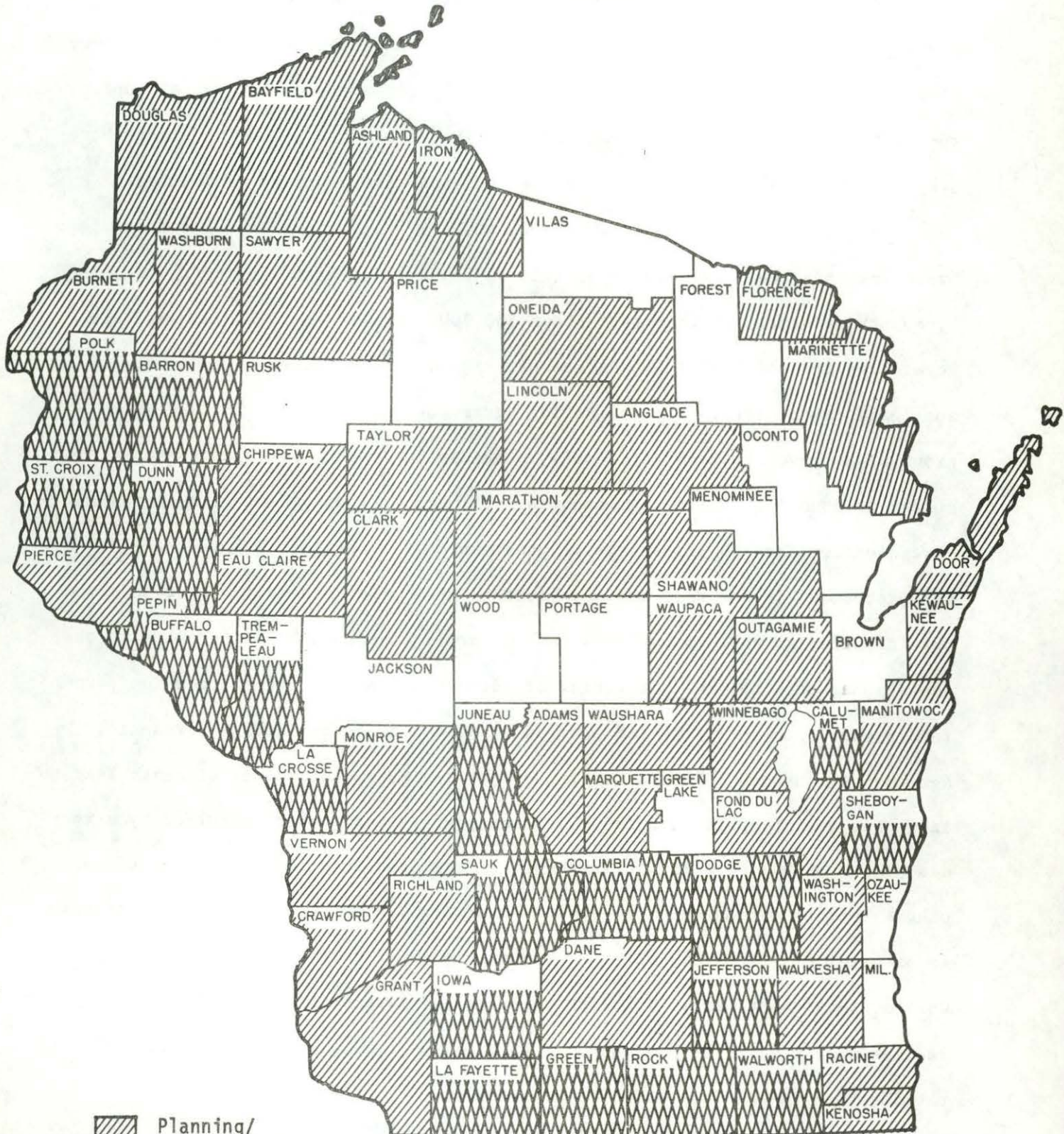
provisions. In other counties, such as Dane, zoning is tied to a town-by-town farmland planning process involving town government. In others, such as Rock and Sheboygan Counties, towns have adopted and administer their own zoning ordinances with technical assistance from full-time county planning staff.



Counties and towns have also tailored exclusive agricultural zoning to reflect the wishes of local people and local land use issues. In Jefferson county, the major focus is preserving cropland and avoiding land use conflicts. In Walworth County, land is zoned largely according to soil type, and the zoning is designed to protect good agricultural land and environmental areas, while allowing development on some wooded uplands. Columbia County zoning focuses on protecting all land in farm use and minimizing land use conflicts and the public service costs of development. Exclusive agricultural zoning provisions in state law allow enough flexibility for local governments to pursue their own policy objectives in a variety of administrative approaches.

Planning. By January, 1981, 20 counties had certified agricultural preservation plans and 39 additional counties were engaged in projects to develop plans (See Map 3). About 92% of the state's farmland is in counties with mapping and planning projects completed or under way. State grants for mapping and planning have averaged \$25,700 per county for the 57 counties which have received funds. Of the 53 rural counties, as defined in the law, only 9 have not yet undertaken some planning or zoning activity to meet the 1982 deadline to keep landowners eligible for tax credits.

In some counties the technical parts of the planning are done by a "local team" which usually includes the county extension agent, a county planner or part-time planning help, the county zoning administrator, a few farm leaders and key elected officials, and the Soil and Water Conservation District staff or Soil Conservation Service soil scientist. In other cases, the technical planning is

Farmland Preservation Mapping and Planning
Projects, by County, December, 1980



-  Planning/
Mapping Projects
Underway
-  Plans in Effect &
Certified

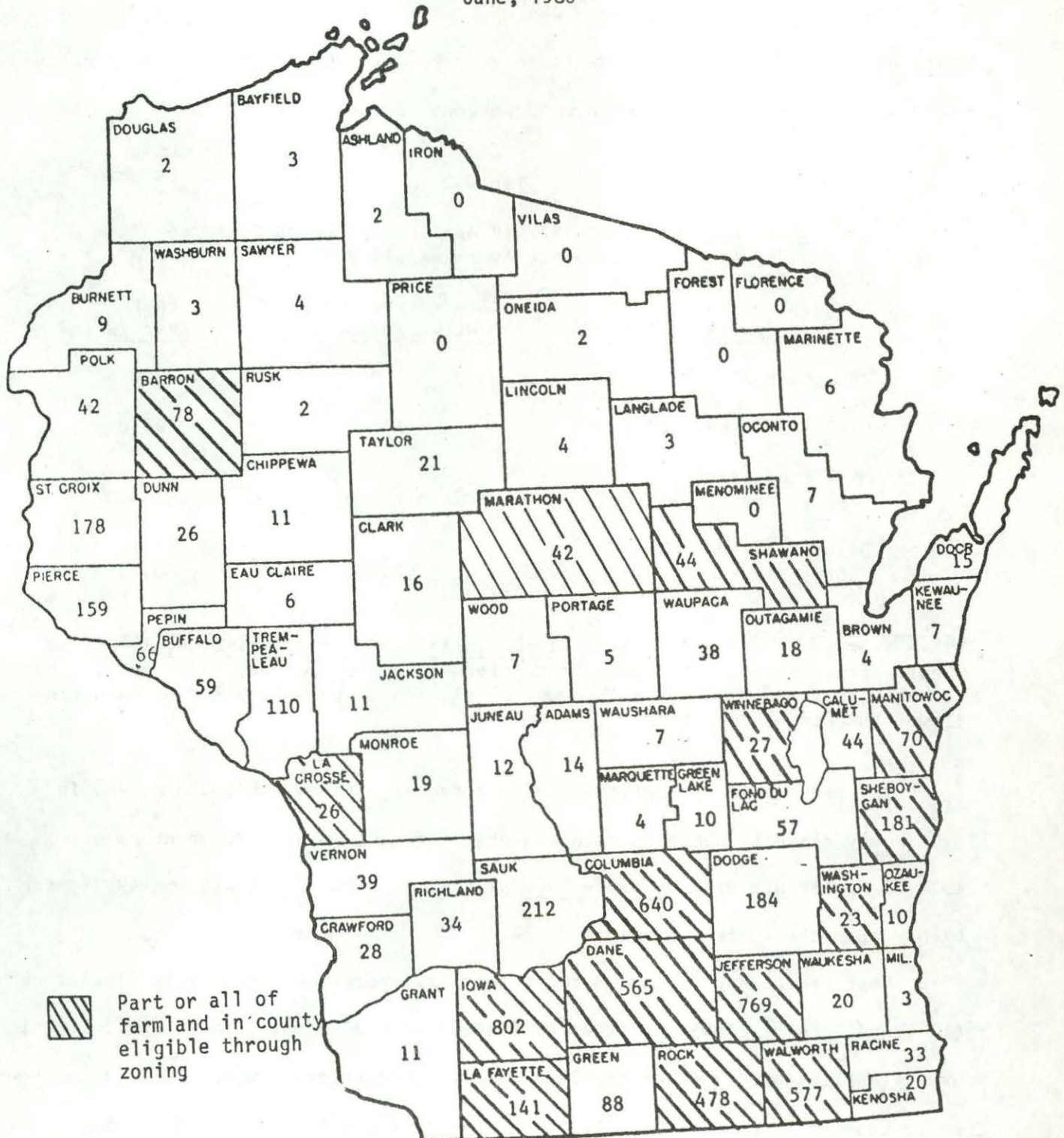
NO. OF COUNTIES COMPLETED (83% OF COUNTIES IN STATE)
OR UNDERWAY - 59

FARMLAND COVERED BY PLANNING PROJECTS: 16.7 MILLION ACRES
(92% OF ALL LAND IN FARMS IN STATE)

done through an agreement with the Regional Planning Commission or by a private consulting firm. In all cases, the most successful planning projects have been those that had a high level of participation by farmers and the general public, throughout the project. Farmland preservation mapping and planning grants have been very important in enabling counties to undertake planning activities.

Agreements. As of December, 1980, about 1,304 farmers had signed farmland preservation agreements, and an additional 761 applications were being processed by county or state governments. About 536,900 acres of agricultural land are covered by the total of 2,065 agreements signed or in process. The number of applications for farmland preservation agreements grew rapidly in 1977-78 but has grown at a slower rate more recently, probably due to the large increase in the number of counties qualifying landowners through exclusive agricultural zoning. Participation through agreements is greatest in the southern and eastern part of the state, and in the west and west-central areas (See Map 4). Differences in participation in various counties can be partly explained by differences in the educational efforts, the activities of advocates, and the extent to which farmland preservation policies had previously been debated by local governments. Agreements generate a "demonstration effect" -- large initial enrollments lead to large numbers of applicants in subsequent years. Information supplied by a random sample of 322 farmers with agreements indicated that 85% had suggested to others that they find out more about the program. Enrollment through agreements is proceeding at a pace similar to Michigan's experience but more slowly than California's experience. Total participation (agreements plus zoning) is increasing far more rapidly than the participation in Michigan, and slightly more rapidly than in California.

Farmland Preservation Agreements, by County, June, 1980*



Source: Farmland Preservation Unit, Wisconsin Department of Agriculture, Trade and Consumer Protection.

*In zoned counties, numbers represent the number of zoning certificates issued to date for the 1979 tax year, plus the number of signed Agreements in the unzoned towns. In counties without zoning, the numbers in each county represent the number of signed Agreements plus the number of new applications for 1980, as of June 30, 1980. Total number of agreements exceeds the total on the map, because some landowners in unzoned parts of counties with exclusive agricultural zoning have also signed initial agreements.

The "average farm" of those who applied for agreements in 1977-78 is a dairy operation, larger than the state average, with higher than average milk production, corn yields per acre, and percent of land in crop use.

Table 2
Characteristics of 1977-78 Applicants' Farms Compared
to State Averages, 1978

<u>Characteristic</u>	<u>Average for Farms With Agreements</u>	<u>State Average</u>
Size (acres)	249	201
Corn Yield (bu./acre)	107.7	98.0
Milk Production (lbs. per dairy farm)	571,900	464,800*
Percent of Land in Crop Use	67.5%	60.7%

*This average is calculated from Wisconsin Agricultural Statistics, 1979 (Wis. Dept. Agr., Trade and Consumer Protection and USDA, Madison, 1979) and excludes farms with fewer than ten milk cows. Inclusion of these smaller herds would lower the state average.

The percentage of applicants with very large farms (over 500 acres) is 6.1%, only slightly above the state average of 5.9%, but the percentage of 1977-78 applicants with above average size farms (200-499 acres) was 49.3%, far higher than the state average of 35.8%.

Most of the applicants' farms were dairy operations (68%) with "livestock" (17%) and "grain" (16%) the other activities listed as the primary agricultural use by applicants. Most of the land of 1977-78 applicants was held by joint tenants, tenants in common, or sole proprietorships (91%). Only 2.7% of the land was held by corporations and most of these had small landholdings. About 10.8% of all applicants excluded some of their land from the contract application. The reasons given for the exclusions varied widely, but the most frequent reason was to develop the land (27%, or 2.9% of the total number of applicants).

In general, local governments and individuals have responded rapidly to the Farmland Preservation Law. Almost all counties have enacted, or are developing some type of planning or zoning policy to preserve farmland and most appear to be able to meet the 1982 deadlines for adoption. To date, the land covered by exclusive agricultural zoning and by farmland preservation agreements is generally land with high agricultural potential that is in areas with strong development pressure. Participation in the program will continue to increase as more counties adopt exclusive agricultural zoning.

The Process of Local Government Action*

A study of the process of county government decision making on farmland preservation was conducted in Clark, Dane, Iowa, Lafayette, Marathon, Rock, St. Croix, Sauk and Waukesha Counties. Interviews were conducted with 109 elected county officials, county government staff, extension agents and leaders in support of and opposed to county action on farmland preservation, and farmers. Several generalizations can be made about the overall reaction to the program, the local political process and the basis for support and opposition among local leaders.

In general, the research uncovered much misinformation about the program among both local political leaders and farmers. In general, the tax incentive does motivate county action, but it is not the only factor. If one county, or some towns within a county, adopt exclusive agricultural zoning, the tax credits have a strong "demonstration effect" and neighboring town and county officials will begin to feel pressure from their constituents to act. In general, the FPL has involved many local officials and leaders in discussion about local preservation policies -- the state law has placed the issue on the agenda of local

*The research on which this section is based was carried out by John Witte and Jim Pletcher, assistant professor and graduate assistant, respectively, Department of Political Science, University of Wisconsin-Madison.

political issues to debate. The mapping and planning grants are important in providing a way for local elected officials to respond to demands for action on local farmland preservation policies, although in several counties they generated political controversy.

The political process at the county and town level is characterized by "personal politics" -- individuals take stands on the farmland preservation issue, rather than political combat among organized political groups or farm organizations. The only major exception to this is the quasi-organized opposition from groups such as the Posse Comitatus or others that are opposed, on ideological grounds, to a large number of government programs. Town Boards are extremely important in determining what, if any, policies will be adopted by the county under the state program. Likewise, county zoning and planning staff, the county extension agent, and key county board members are critical in determining whether the county even begins to act on farmland preservation, and shape the agenda for political debate. These individuals are often critical in initiating county action and in developing the policy alternatives which will be the focus of political discussion. Some of these individuals may also be key leaders actively supporting farmland preservation activity. Thus, differences among counties in response to the FPL can sometimes be attributed to differences among county staff and key county board members, and their perceptions of what should be done, if anything.

Local political opposition is often based on: (1) a fear of government programs in general; (2) the fear that the state or county will impose land use policies and decrease local authority; and (3) the fear that the state will amend the FPL, making it less beneficial to landowners and local governments once counties act to implement the law. Some opponents object to the "carrot and stick" approach of the current law, and others dislike the progressive nature of the tax

credit or the income limits in the current formula. Some prefer an across-the-board tax break with "no strings attached". Opponents are generally not organized in political groups or other organizations, although there is a network of ideological opposition to this and other government programs that has generated quasi-organized opposition in several counties. While the objections raised by these groups are often exaggerated, they sometimes strike a responsive chord among "average" farmers, who are wary of government programs and regulation in general and who feel that controls over the land have increased in recent years. These ideological groups do not control town or county governments, but can (and sometimes do) control local meetings and local response to the farmland preservation law. These ideologically-oriented groups are active in only a few counties.

Local political support is often based on general support for the concept of preserving good farmland and "enlightened self-interest". Many farm supporters are interested primarily in protecting their own farm operations and investments, and in many cases are familiar with the conflict that can arise with nearby nonfarm residents over farm odors, dust, noise and other factors. On the other hand, the vast majority of farmers interviewed, even those opposed to the program, expressed genuine desire for both keeping good agricultural land in farm use and maintaining its productivity through conservation practices. Some felt that most farmers would do this without a government program. The tax credits have widespread appeal but are not often cited as the overriding concern of the supporters.

Many county board members from urban or nonfarm areas also favor the program and support local action. Urban board members almost all responded that their constituents knew nothing of the program. The reasons given for their support were: (1) the program is generally beneficial for agriculture and thus

the economic health of the area (particularly in rural counties); (2) city taxes are lost when residents moved to the country; and (3) they shared the concern of the farmers that farmland be preserved. In the absence of organized opposition, there is little pressure on these urban or nonfarm members to oppose the program.

Planning and zoning are often the most controversial points in the political process. Opponents often argue that planning inevitably leads to zoning and a loss of local autonomy. Opponents fear that zoning will lead to future controls in other areas. In most cases, where planning and zoning has been initiated successfully, three conditions are necessary: (1) key activists at the town and county levels have supported zoning; (2) county planners, extension agents, and/or state Farmland Preservation staff have effectively worked with the county and town boards; and (3) vocal opposition has not been significant county-wide. Once the issue becomes highly politicized, planning and zoning become much more difficult because information is often incomplete and easily distorted, and fears can overwhelm the process. In the counties studied, referenda or petitions taken in this atmosphere of fear nearly always defeat planning and zoning efforts.

In summary, the differences among counties in their response to the FPL can be explained, in general, by differences in the balance of support and opposition forces. In the counties that acted rapidly to adopt planning and zoning there was little opposition and strong support for the action. In other counties, opposition forces have blocked any effective action to implement the planning or zoning options under the state law. Tax credits are important in stimulating local action, but the desire to protect good farm operations, support for the concept of preservation in general, and other individual reasons are also important. Mapping and planning grants are very important in allowing county elected officials to respond to constituents' demands for action. The FPL has

placed the preservation issue on the local political agenda and most counties are responding with vigorous local political discussions.

Farmers' Response to Farmland Preservation Agreements*

In the autumn of 1980, a questionnaire was sent to a random sample of 400 farmers who had signed farmland preservation agreements and 800 farmers who had not signed. Completed questionnaires were received from 322 signers (81%) and 319 nonsigners (40%). The survey gathered information about the owner, the farm, and the reasons for signing or not signing an agreement. The key differences between the groups are listed in Table 2.

On average, signers had larger farms than nonsigners -- 270 acres versus 207 acres -- and a larger percentage of signers' land was in crop use. Also, a larger percentage of signers had "moderate" net farm incomes than nonsigners.

Table 3

Characteristics of Signers and Nonsigners
of Farmland Preservation Agreements
1980 Survey

<u>Characteristic</u>	<u>Signers</u>	<u>Nonsigners</u>
Size of Farm (acres)	270	207
Percent of Land in Crop Use	84%	75%
Net Farm Income		
less than \$10,000	46%	60%
\$10,000 to \$24,999	41%	29%
\$25,000 and over	13%	12%
Intend to make major new investment in next 10 years.	32%	26%
Children plan to take over farm.	48%	33%

*The discussion in this section is taken from E. Kohl and R. Barrows, "A Preliminary Analysis of Farmers' Decisions on Signing Farmland Preservation Agreements" Staff Paper No. 197, Department of Agricultural Economics, University of Wisconsin, Madison, 1981.

A larger proportion of signers intended to make major new investments (over \$20,000) in their farms in the next 10 years than nonsigners. In addition, a larger proportion of signers indicated that their children would take over their farm operation than nonsigners. A larger percentage of nonsigners (28%) than signers (19%) intended to retire during the next 10 years, although the average age of each group was almost the same, about 50 years. These data for signers are almost identical to those of the 1977-78 applicants for agreements. In general, signers had larger farms, moderate income, and were more "future oriented" in terms of investment plans and the farming plans of children.

Nonsigners were more likely than signers to view agreements as government intervention into private property matters and were more likely to have "hesitated to get involved in another government program". Signers and nonsigners had about the same development pressure on their land. About 34% of the signers and 33% of the nonsigners had been approached about selling some of their land for nonfarm use, but nonsigners were almost twice as likely to have sold cropland for non-farm use (12% versus 7%). On average, signers' land was located slightly closer to a commercial area, but about the same average distance from subdivisions, recreation areas and major highways as the land of nonsigners. The key difference is that the percentage of nonsigners who believed they could sell their land for development in the next ten years was twice as high as signers (15% versus 8%). Thus, nonsigners perceived more development opportunity, although all other evidence indicated no difference in development potential between the land of signers and nonsigners.

The considerations that signers identified as the most important to them in making their decision to sign an agreement were, in order of importance on

average (using the wording from the questionnaire):

- High property taxes
- Preserving farmland
- Tax credits
- The future of my farm
- The strength of agriculture in my community
- Soil conservation

The least important considerations were the influence of another person, protection from special assessments and age.

The considerations that nonsigners identified as most important to them in making their decision not to sign an agreement were, in order of importance, (as stated in the questionnaire):

- Having many restrictions in the agreement
- Government interference
- Limiting my options for using my land
- The agreement being tied to the deed
- The amount of tax credit available to me
- The newness of the program
- Potential limit on my land value appreciation

The least important considerations, as identified by nonsigners, were their age and the farm's location.

In general, farmers are responding to the opportunity to sign agreements in a predictable manner. For signers, tax credits are important in their decision, but so is a strong belief in farmland preservation and soil conservation. Their intention to remain in farming, make major investments, pass the farm on to their children, and their concern about the future of agriculture in their area are important reasons for their participation in the program. For nonsigners, the restriction on nonfarm land use contained in the agreement, foreclosing the development option for at least a few years, is important in determining their decision, as is the belief that the tax credits are not enough to warrant participation. A general mistrust of government action is also important in some landowners' decisions not to sign agreements.

The Effect of Exclusive Agricultural Zoning in Farmland Preservation

By December, 1980, land in 15 counties was covered by exclusive agricultural zoning ordinances, and most tax credits in 1978-79 went to landowners in zoned areas. Thus, the effectiveness of exclusive agricultural zoning in preserving farmland is important in determining whether the state's tax credit expenditures result in farmland preservation. Based on detailed studies it appears that exclusive agricultural zoning does preserve farmland. Because there has not been enough time in most counties to assess the effects of exclusive agricultural zoning since its adoption in the 1978-80 period, detailed studies were conducted in Columbia and Walworth Counties where virtually identical zoning has been in effect for at least 5 years. In addition, data on county decisions to rezone farmland out of the exclusive agricultural zone since 1978 were analyzed.

Columbia County. Since the adoption of exclusive agricultural zoning in 1973 there has been a decrease in the amount of farmland converted to nonfarm uses in zoned Columbia County towns, compared to similar towns without the exclusive agricultural zoning provisions.* Land use changes from 1973 to 1977 in the zoned Columbia County towns of Springvale, Fort Winnebago, Arlington and Leeds were compared with the changes in the adjoining towns of Scott, Pacific (both Columbia County), Vienna and Windsor (both Dane County), respectively. From Table 4, it is clear that the amount of farmland committed to development in each of the zoned Columbia County towns is far less than the farmland developed in the corresponding control town.

Because the zoned and control towns were not perfectly identical, a follow-up study traced the action of landowners or developers denied rezoning to develop

*The detailed discussion of the Columbia County study can be found in R. Barrows and J. Redman, "The Effects of Exclusive Agricultural Zoning on Columbia County, Wisconsin", Staff Paper No. 190, Department of Agricultural Economics, University of Wisconsin, Madison, 1981.

farmland. In almost all cases, the individuals had bought or built housing in an incorporated area, or bought or refurbished an existing rural house. Clearly, the zoning did save farmland in these cases.

The development that did occur on farmland in the zoned towns was more often on the poorer agricultural soils, compared to development in the control towns (see Table 4). The zoned towns also showed a more compact form of nonfarm development than the control towns, and there was no evidence that the zoning affected land values. A large part of the reason for the success of exclusive agricultural zoning in protecting farmland in Columbia County is the support of some key members of the county board and town governments.

Walworth County. Conversion of farmland to developed use in 1971-77 in a sample of Walworth County towns was compared to the experience in similar adjoining towns in neighboring counties which did not have exclusive agricultural zoning.* Certified surveys were used to compare conversion in a band of land 8 miles wide, 4 miles into a zoned Walworth town and 4 miles into a control town without exclusive agricultural zoning. Before adoption of the zoning, 1971-73, the amount of farmland conversion in the Walworth towns was similar to that in the control towns, but after zoning, 1976-77, the conversion was dramatically less in Walworth towns than in the control towns (Table 5). Also, the amount of Class I and II land converted fell drastically in the Walworth County towns after zoning, compared to the control towns. The exclusive agricultural zoning did not have any effect on the location of development with respect to built-up areas, and did not seem to have any effect on agricultural land values. Analysis of subdivision developments and residential developments on parcels of 6 to 30 acres

*A detailed discussion of the Walworth County study and results can be found in R. Barrows and C. Smith, "The Effects of Exclusive Agricultural Zoning in Walworth County, Wisconsin", Staff Paper No. 195, Department of Agricultural Economics, University of Wisconsin-Madison, 1981.

Table 4
COLUMBIA COUNTY ZONING
Farmland Committed to Development
Zoned and Control Towns, 1973-77
(z = zoned; c = control)

<u>Town</u>	<u>Acres Developed</u>	<u>Percent of Development on "Good" Agricultural Soils*</u>
Springvale (z)	99	5%
Scott (c)	230	32%
Arlington (z)	91	22%
Vienna (c)	108	40%
Leeds (z)	0	0
Windsor (c)	304	99%
Fort Winnebago (z)	133	35%
Pacific (c)	368	39%

*A parcel was defined as having "Good" agricultural soils if more than 75% of the soils were in SCS Soil Capability Classes I-III. Other definitions produced similar results.

Table 5
WALWORTH COUNTY ZONING
Farmland Committed to Nonfarm Uses
Walworth and Control Towns
Before (1971-73) and After (1976-77) Adoption
of Exclusive Agricultural Zoning

<u>Town*</u>	<u>Acres in Certified Surveys</u>		<u>Acres in Soil Classes I-II</u>	
	<u>1971-73</u>	<u>1976-77</u>	<u>1971-73</u>	<u>1976-77</u>
Walworth County Towns	186	93	103	48
Control Towns	157	360	102	173

*Walworth County towns were Troy, East Troy, Bloomfield, Richmond, Darien, Sharon and Lyons. Control towns were Eagle, Mukwonago, Randall, Johnstown, Bradford, Clinton and Wheatland respectively.

supported these conclusions. The success of the county program in preserving farmland may be due to the strong citizen involvement in the seven years of the program's development and the resulting political consensus to support the zoning effort.

Rezoning Activity. The enforcement of exclusive agricultural zoning ordinances since 1978 was studied in Dane, Iowa, Jefferson and Walworth Counties, by examining the decisions of the county boards in removing farmland from the agricultural zone.* This study does not indicate how much land would have been used for development in the absence of the zoning, nor is there any way to judge whether there are "too many" rezonings. In Walworth County, very few rezonings occurred, and most of the land rezoned is not cropland (See Table 6). Of the Jefferson County land rezoned, none was previously in cropland use. In Iowa County, only one-fifth of the land rezoned was cropland -- rezoning occurred mostly on wooded parcels. In Dane County, more land was rezoned than in other counties and a larger proportion of this land was in crop use. However, these data are difficult to interpret because Dane County has much more development pressure on its land and the rezonings may represent necessary and appropriate refinements of the initial, less detailed zoning maps.

In summary, it appears that in most counties, relatively little land is removed from the agricultural zone, and the land which is removed is not usually cropland. Rezonings seem to reflect county policies such as directing development to nonagricultural parcels, to woodland, or preserving cropland. In all cases, the data do not indicate how much development would have occurred in the absence of the zoning.

*A detailed discussion can be found in T. Speerschneider, P. Wiley, J. Johnson and R. Barrows, "Enforcement of Exclusive Agricultural Zoning in Wisconsin Counties", Staff Paper No. 193, Department of Agricultural Economics, University of Wisconsin, Madison, 1981.

Table 6
Removal of Land from the Exclusive Agricultural Zone
Selected Counties, 1978-80

County	Time Period (Month/Year)	Number of Rezoning	Total Acres Rezoned	Acres Rezoned for Development Use*	Percent of Development-Related Rezoning on Land Previously Used for Crops
Dane	3/79 - 12/80	106	839	321	51%
Iowa	1/79 - 6/80	74	460	145	21%
Jefferson	2/78 - 11/80	120	351**	56	0
Walworth	1/78 - 11/80	38	279	168	43%

*Other reasons for rezoning excluded from this category are: substandard or nonconforming parcels or nonconforming uses in existence at the time of adoption of the exclusive agricultural zoning, rezoning for parcels with farm buildings as part of farm consolidations, residences for parents or children of the farm operator, or rezoning land identified in the county's agricultural preservation plan as a transition area to be developed in the immediate future.

**Land use data were available for only 71 of the 120 rezonings, totaling 351 acres. Data were not available for the other 49 rezonings, totaling 245 acres, and these rezonings are not included .

Conclusion. The empirical evidence indicates that exclusive agricultural zoning preserves farmland. Even though it is difficult to control for the influence of other factors, every comparison of towns with and without exclusive agricultural zoning indicates that the zoning does preserve farmland. Political support from citizens and elected officials may be the key to a successful zoning program. It appears that exclusive agricultural zoning is being fairly strictly enforced in counties in which landowners are receiving tax credits under the law.

Distribution of Tax Credits***

Landowner participation in the tax credit program has increased rapidly. In 1977, there were 1,513 claimants and total credits of \$1.16 million, averaging

***A detailed analysis of the distribution of tax credits can be found in R. Barrows and P. Bradbury, "Distribution of Tax Relief under the Wisconsin Farmland Preservation Program: An Analysis of the Current Program and Policy Alternatives". Staff Paper No. 192, Department of Agricultural Economics, University of Wisconsin, Madison, 1981.

about \$766 per household. For the 1979 tax year, as of June 30, 1980, 4,275 claims had been received, total credits were \$6.0 million, and credits averaged about \$1,403 per household. Most claimants qualified through county or town zoning; for 1978 tax credits, 77% of the claimants qualified through zoning. The most recent data, at the time of this report, covered the 1978 tax year for which tax credit claims could be filed up to December 31, 1979. The 1979 tax year claims had to be filed by December 31, 1980, but these data were not available. Thus, a detailed study was conducted of 337 claimants who filed for tax credits in 1979 (covering 1978 taxes).

Income of 1978 Claimants. For households claiming credits for the 1978 tax year, the average Wisconsin Adjusted Gross Income (WAGI) was \$13,511, only slightly below the state average of \$13,991. About 34% of the households had total WAGI less than \$10,000, and another 55% have (WAGI) incomes of \$10,000 to \$25,000. Only 10% of the households had total income greater than \$25,000. Households receiving credits in 1978 can be generally classified as having "moderate or low" income. Income clearly from farm sources averaged about 54% of total household income, nonfarm sources provided about 34% on average, and sources which cannot be clearly classified provided about 12%. Net household income, the basis for calculating tax credits, also shows most households in the "low or moderate" income classes. Households with negative net household income (3.6% of the sample) had farm depreciation deductions substantially higher than the three next-highest income classes. In the four households (1% of the sample) in the very lowest income category (negative \$10,000 and less), two had net farm income of over \$30,000 but high negative nonfarm income, and the other two had moderate or high gross farm income but extremely high farm depreciation and real estate tax deductions.

Property Taxes of 1978 Claimants. The average 1978 real estate tax bill of the 337 households in the sample was \$2,571, compared to a state average for farm households of about \$2,475 (see Table 7). Only 2% had taxes of less than \$800 and an even smaller percent had taxes over \$6,000. Real estate taxes per acre averaged \$12.88, but averaged \$18.27 per acre in urban areas and only \$12.33 per acre in rural areas.

1978 Tax Credits. The average 1978 tax credit per household in the sample was \$1,193. One-quarter of the claimants received less than \$640, and one-quarter received more than \$1,632. Credits per household averaged \$1,352 in counties with exclusive agricultural zoning and an agricultural preservation plan, \$1,203 in counties with zoning but no plan, and \$856 for households qualifying under farmland preservation agreements. Overall, the credit was equal to 47% of real estate taxes paid. However, credits averaged 58% of real estate taxes paid for households in counties with zoning and planning, 43% of real estate taxes for households with zoning only, and 29% for those qualifying through an agreement. Tax credits reduced taxes proportionally more for lower income than higher income households, and resulted in a less regressive property tax system (See Chart 1). For households with net household income of less than \$5,000, tax credits reduced the net property tax bill by 63%. Households with net household incomes of \$25,000-\$30,000 and \$30,000-\$35,000 experienced net tax reductions of only 26% and 4%, respectively. In general, tax credits went to households with moderate or low incomes, and the percent reduction in net taxes declined as income increased.

Effect of Policy Alternatives. The level and distribution of tax relief under the current law was compared to three alternatives: (1) use value assessment; (2) proportional property tax reduction; and (3) a "farm cash flow" definition of income with the current formula. Each alternative would provide less

Table 7
Selected Characteristics of Sample of 1978
Claimants, by Means of Qualifying for Credit

Characteristic	Farms Qualified Through:			Average for All Claimants* in Sample	State Average (1978)
	Zoning Plus Planning	Zoning Only	Contract		
Level of Credit	100%	70%	50%	N.A.	N.A.
Average Farm Size (Acres)	159**	247	246	200	201
Average Real Estate Tax per Farm	\$2297	\$2794	\$2913	\$2571	\$2475
Average Real Estate Tax per Acre	\$14.42	\$11.31	\$11.84	\$12.88	\$12.55
Average Tax Credit	\$1352	\$1203	\$856	\$1193	N.A.

*All claimants in sample -- 337 households -- not all claimants in state for 1978 tax year.

**The data for claimants include only the acreage on which the claim was based. In Columbia and Jefferson Counties, the average acreage on which claims were based is about the same as the county average farm size. However, for Walworth County, the average acreage on which a claim was based was 143 acres, compared to an average farm size in the county of 234 acres. The difference is probably due to the fact that zoning districts were established on the basis of soil type, so many Walworth County farmers could claim credits on only part of their farm in 1978; since that time, more land has been added to the agricultural zone to qualify entire farms for the credit.

total tax relief to current participants than the current law, and would substantially change the distribution of tax relief.

Under use value assessment, farmland would be assessed and taxed at its value in agricultural use. Currently, all assessments must be at full market value. Use valuation would provide only one-third as much tax relief to 1978 program participants as the current FPL tax credit.* About 90% of the households in the sample would receive less tax relief under use value assessment than under the current law. In fact, some participants could experience a tax increase under use value assessment if their land is currently underassessed. Tax relief under use value would average \$395 per household compared to \$1,315 under the current version of the FPL tax credit formula (see Table 8). Use valuation would direct a larger share of the tax relief to high income households, but the current law provides a larger amount of tax relief for all but the highest income class. Farms in urban areas would receive a larger share of the tax relief but would receive a smaller amount of tax relief per farm or per acre, than under the current law. Tax relief to participants in urban areas would decline from 52% to 22% of property taxes paid. In rural areas tax relief would decline from 45% to 14% of taxes paid. Use value assessment would entail numerous administrative problems, such as determining a workable definition of use value.

Under a flat percentage reduction alternative, all landowners whose lands are subject to exclusive agricultural zoning or a preservation agreement would receive a credit equal to a flat percentage of their property taxes. Two variations were considered: a flat 30% credit against property taxes on land and a flat 20% credit on taxes on land combined with a Homestead credit to qualified

*Use value was estimated based on prices of farmland in sales to farmers for agricultural use. Estimates based on income capitalization were not possible because of the time required to visit all 337 farms in the sample.

Table 8

Tax Relief under Various
Policy Alternatives for Sample
of 1978 Claimants

<u>Tax Relief Policy Alternative</u>	<u>Number of Households Receiving Tax Relief</u>	<u>Average Tax Relief per Household</u>	<u>Average Percent Reduction in Real Estate Tax</u>
1978 Tax Credit Formula*	337	\$1193	47%
Current Law (1979 amendments)	337	\$1315	55%
Use Value Assessment	278	\$395	15%
30% Flat Rate Reduction on Land Taxes	337	\$602	23%
20% Flat Rate Reduction on Land Taxes, Plus Homestead	337	\$690	27%
Farm Cash Flow	308	\$1377	57%

*The households in the sample actually averaged \$1193 in tax credits in 1978. The credit formula was revised in 1979. If the current tax credit formula had been in effect in 1978, these same households would have averaged \$1315 in tax credits in the 1978 year. Both sets of estimates are presented, but for purposes of examining the effect of a policy change, the estimates using the current formula are more appropriate.

participants on the first \$1,000 of remaining property taxes. The total amount of tax relief available to those who claimed 1978 farmland preservation credits would decline by 54% under the 30% flat rate reduction and decline by 48% under the 20% flat rate/Homestead option. Although more than 85% of current participants would receive less tax relief under either flat rate proposal, the total cost of these alternatives would be between 32% and 50% higher than the current law because the number of households receiving tax relief would more than triple because all zoned landowners would receive tax reductions. The 30% flat percentage reduction concentrates tax relief on higher income participants with high net

farm incomes, compared to current law. Those households which would receive more tax relief under the 30% flat rate than under current law averaged \$24,358 in net household income; households that would lose tax relief averaged only \$10,795 in household income. The 20% flat rate/Homestead option reduces this effect somewhat. The relative distribution of tax relief between urban and rural areas would not vary substantially from current law.

A third alternative maintains the current tax credit structure but replaces net household income with a measure of farm cash flow. Farm cash flow was defined as net farm income plus farm depreciation. Under this alternative, the total amount of tax relief provided to 1978 participants would be approximately 5% less than under current law. The average credit to eligible participants would be \$1,377 compared to \$1,315 under current law, but the number of eligible participants would decline by approximately 9%. By income class, those who lose the most tax relief are those with net household incomes of \$5,000 or less, but with high net farm income and high depreciation. Participants with net household incomes greater than \$5,000 would not be greatly affected by the change. Those who benefit most have low gross and net farm incomes, smaller size farms but higher net household incomes.

The current law provides more tax relief to participating households than the major alternatives -- three times as much as use value assessment and about twice as much as a 20% or 30% flat rate reduction. Yet total cost might be greater for the alternatives, in the next few years, because they are automatically applied to all land under zoning or contract. The current tax credit formula is preferable to the alternatives in relieving tax pressure when taxes are high compared to household income, relating the net tax to the household's ability-to-pay, increasing the stability of farm income from year to year, and avoiding the provision of tax relief to speculators, and other nonfarm

landowners. The flat rate reduction is preferable to the other alternatives, including the current law, in providing tax relief to all owners whose land is covered by zoning or a contract, tying tax relief to the land, and providing a stable amount of tax relief annually. Use value assessment allows targeting a larger share of the total tax relief to urban areas, but has much higher administrative costs than the other options.

Soil Conservation

Although the Farmland Preservation Law is clearly aimed at land preservation rather than soil conservation, there is one provision in the law to encourage soil conservation. To be eligible for an initial agreement, the landowner must have a Soil Conservation Service (SCS), Soil and Water Conservation District (SWCD) soil conservation plan for the farm. One of the provisions of the long-term agreement states that farm practices must be conducted "in substantial accordance with" the plan, but "deviations from a plan may be allowed, if in the judgment of the supervisors, personnel are not available to lay out the suggested practices on the land or if the practices are not economical for the owner to adopt". The effect of the soil conservation provision was studied in a series of interviews with SWCD staff, SCS staff, and local leaders in ten southern and western counties, and through a statewide questionnaire to participating farmers.

SWCD and SCS staff expressed concern about erosion problems in general. Most felt that linking soil conservation and land preservation made good sense, and that the conservation plan requirement was not a burden on participants. Some felt that the requirement has had a positive effect on conservation efforts by increasing farmers' awareness and interest in soil conservation practices. Two potential problems were identified with the existing soil conservation provisions -- the difficulty of preparing a large number of conservation plans and the potential difficulty in enforcing the "substantial compliance" provision.

SWCD and SCS staff expressed concern that some farmers might apply for a conservation plan simply to be able to get the agreement and tax credits, with no intention of implementing the plan. Another problem cited by staff was the increased workload in preparing conservation plans. Counties have developed several ways of dealing with the workload problem, including group meetings on conservation practices and setting priorities and timetables for work within the county.

A second potential problem involves monitoring and enforcing the "substantial accordance" provision. In many counties, both staff and county leaders expressed concern that there were no standards in the law to define "substantial accordance". However, in some counties it was clear that little thought had been given to developing county standards on procedures that could be used locally. At least two counties (among the ten counties studied) have already adopted standards for compliance and enforcement procedures. A few SWCD and SCS staff felt that the law should be changed to include specific standards for soil losses based on the Universal Soil Loss Equation (USLE), instead of tying enforcement to the conservation plan. They argued that it is more appropriate to focus on actual erosion and erosion tolerance limits, regardless of whether the farmer has a conservation plan or the extent to which the plan is implemented. Others noted that conservation plans are usually based on the USLE and soil erosion tolerance limits anyway, so in the end there would be little difference in the approaches.

The 1980 survey of farmers (agreement signers and nonsigners) revealed other views. Among the survey's 322 farmers who had signed initial or long-term agreements, 22% said that the Farmland Preservation Program had "encouraged" them to adopt soil conservation practices. About 12% indicated that they had actually adopted additional conservation practices because of the preservation program. These farmers indicated a variety of reasons why they adopted additional

conservation practices -- the assurance that the land would remain in agricultural use (59%), the additional income from tax credits made more conservation practices possible (51%), and increased assistance from the SWCD and SCS (43%).

The fact that 12% of the participants adopted additional conservation practices because of the program can be considered either a "success" or a "failure" of the conservation provisions. It could be argued that the provision has failed to change the conservation behavior of 88% of the participants. On the other hand, almost all of those surveyed had initial agreements where the only requirement is that a conservation plan be prepared, not implemented. So 12% of the respondents adopted more conservation practices without any requirement to do so. In addition, most farmers surveyed had already implemented most of their farm conservation plans. (About 81% of the participants already had conservation plans (at the time of the survey) and 83% of those reported that their plan was more than half implemented.) Thus, the fact that 22% of participants felt that the preservation law had "encouraged" their soil conservation activities, and that 12% of the farmers actually adopted more practices because of the law can be interpreted as a "success" for the conservation provision. The farmland preservation law is not drastically changing conservation behavior, but the evidence indicates that the law has some positive effect on soil conservation activity.

PART III

POLICY ALTERNATIVES:

Advantages and Disadvantages

The appropriate changes in the Farmland Preservation Law depend on the policy objective. Several possible recommendations will be advanced, covering Agricultural Land Policy and Tax Relief Policy.* The advantages and disadvantages of each alternative will be discussed. In some cases, the policy choice is to adopt or reject a specific change in the legislation, and the choice can be made independently of other choices. In other cases, particularly with tax relief and soil conservation alternatives, there are a series of possible alternatives which could be mutually exclusive or could be combined in various ways. The alternatives to be discussed are:

A. Land Policy Alternatives:

1. Continue a program of mapping and planning grants for farmland preservation.
2. Provide additional protection for agricultural land by requiring state agencies to modify procedures and projects to preserve agricultural land, when possible.
3. Bring state policy into conformance with local farmland preservation efforts by prohibiting use of public funds to finance nonfarm improvements on farmland in exclusive agricultural zones.
4. Provide additional protection for land in exclusive agricultural zones by limiting the degree to which local ordinances or nuisance suits can restrict farm operations.
5. Provide incentives to county and town governments to strictly enforce exclusive agricultural zoning provisions, once adopted.
6. Strengthen the soil conservation provisions of the law.

*Administrative policy alternatives were briefly analyzed in Part II and that discussion will not be repeated.

7. Continue to monitor rezoning of farmland out of exclusive agricultural zones, with special attention to urban counties, and monitor land use changes on land excluded from farmland preservation agreements by the owner, to determine if land is being developed adjacent to land under agreements.

B. Tax Relief Policy Alternatives:

1. Change the definition of household income, to limit the amount of nonfarm income losses that can be deducted from gross income, for purposes of the tax credit calculation.
2. Limit the amount of farm depreciation that can be deducted from gross farm income for purposes of the tax credit calculation.
3. Change the definition of income in the formula to reflect farm cash flow rather than household income.
4. Replace the current circuit-breaker tax credit formula with use value assessment, for eligible land.
5. Replace the current circuit-breaker tax credit formula with a proportional, flat rate, reduction in property taxes for eligible land.

Agricultural Land Policy Alternatives

The land policy provisions of the current law are working, in that most counties and towns are engaged in agricultural preservation planning and many have already adopted exclusive agricultural zoning. Local governments have responded to the land policy options in the law. However, additional land policy alternatives can be considered, in order to strengthen the agricultural land protection in the current law.

Continue Grant Program

Mapping and planning grants from the state were important in enabling local governments to respond to the mapping, planning and zoning provisions of the state law. The FPL provided an incentive for land mapping and planning, and the small grant program provided the means by which local government could respond to

the incentive. In many rural areas there had been little mapping or planning activity prior to the law.

The major advantages of continuing the small grant program are: (1) many counties could continue to develop policies to protect agricultural land and guide urban growth; (2) counties would have some support in helping them meet the requirement in the law that agricultural preservation plans be updated periodically; (3) counties that have failed to act to develop a plan by October, 1982 would have a source of support if they want to participate after that time; (4) small grants would help provide the personnel and technical skill necessary to implement the agricultural preservation plans already developed; and (5) it would provide continued support to numerous "spin off" activities generated by farmland preservation planning such as soil conservation (mapping critical erosion areas), right-to-farm (development of performance standards for intensive agricultural operation), and urban fringe planning.

The grant program is particularly important in rural areas where there is little or no established resource planning and management function in county government. Grants could be on a matching basis to help ensure local commitment to the effort. The total grant allocation per year might be in the neighborhood of \$200,000 to \$400,000.

The most serious disadvantage of continuing the grant program is cost, especially given the state's current financial condition. However, current funding of mapping and planning does not expire until 1983. Continuation of the grant program would not require a legislative appropriation until the 1983-85 biennial budget.

State Agency Activity

State agencies might be required to follow a general policy of preserving agricultural land, whenever possible. The existing law already instructs state agencies to "cooperate" with the department in implementing the farmland preservation law, but the provision could be extended to cover state agency activities not directly related to the law. Illinois already has adopted such a policy, issued in an executive order by the governor in 1980. State agencies are required to develop procedures to be used to preserve agricultural land whenever possible. The state department of agriculture is charged with coordinating the state agencies' response to the executive order.

This alternative would require that: (1) the state formally adopt farmland preservation as a state policy; (2) the state be willing to act to protect farmland in its own governmental actions, just as the state is encouraging county and town governments to act through local planning and zoning; and (3) state agencies develop general procedures for minimizing the adverse impacts of their activities on agricultural land.

This alternative could be combined with the provisions of the Agricultural Impact Statement Law, which requires that agencies exercising eminent domain on agricultural land inform the department of their intentions and furnish information and funds for the preparation of a brief study or impact statement which analyzes the effect of the agency's action on agricultural land and farm operations. The state could signal its intent to enforce both its general policy and the spirit of the Agricultural Impact Statement Law by offering county boards some power to delay an eminent domain proceeding in an exclusive agricultural zone if they feel the project did not adequately consider the alternatives to using the good farmland. For example, the county board could be given the option

of delaying the proceedings for some period of time, during which the department and the agency would assess the alternatives in more detail.

The advantages of this option are that state agency activities could be coordinated and focused on the objective of preserving farmland, whenever possible. The disadvantage is that it could result in much paperwork with little real effect; agencies could subvert the intent of the policy by following the requirements with no effect on their decision-making process.

Public Funds for Nonfarm Development

Under current law, farmland in an exclusive agricultural zone cannot be specially assessed for nonfarm improvements such as sanitary sewers, water, lights or nonfarm drainage. This concept could be extended to include sidewalk, curb and gutter, storm sewers, or other urban-type public services. In addition, the law could be amended to cover the use of any public funds to finance installation of these services on land in exclusive agricultural zones. To allow for emergency situations in which services, such as sewers, might be necessary to protect the public health or safety, the jurisdiction or special district wishing to spend the public funds could appeal for an exemption to the ALP Board.

The major advantage of this alternative is that farmland in exclusive agricultural zones would be given extra protection from development pressures and special assessments. Usually, farmland would be rezoned for development use prior to installation of services such as sidewalks. In these cases, the provision would only prevent special assessments prior to rezoning. For other services, such as nonfarm drainage, the provision might effectively prevent development in the middle of an area zoned for agricultural use, because the drainage system might require crossing the agricultural land, and therefore could not be publicly funded. The major disadvantage of this policy alternative is

that nonfarm development might be too strictly curtailed in some cases. For example, a local community may wish to encourage development in the middle of an agricultural district if it did not conflict with farm operations, in order to relieve development pressure on good farmland elsewhere yet the prohibition on spending for nonfarm development on zoned lands might prevent the land use change.

Restrictive Ordinances and Nuisance Suits

Farmers in exclusive agricultural zones could be protected from local ordinances which might unreasonably restrict farm operations, such as night plowing or spreading liquid manure. Farmers in exclusive agricultural zones could also be protected from court suits which would unreasonably restrict their operations, unless the ordinances are necessary to protect public health or safety.

The main advantage of these changes is that land in exclusive agricultural zones would be given further protection in agricultural uses. The community has indicated that land in exclusive agricultural zones should be preserved for agricultural use. This alternative would place the burden of proof on those who object to the farm activity. The legal presumption would be that in an exclusive agricultural zone, agricultural uses are reasonable and preferred land uses. A restrictive ordinance or nuisance suit would have to overcome this presumption by showing that the agricultural use is unreasonable or that it injures the public health or safety. Local ordinances, perhaps designed to resolve land use conflicts between farm and suburban neighbors elsewhere, or perhaps supported by a group of local nonfarm residents, should not be allowed to unreasonably restrict farm operations. Farmers in exclusive agricultural zones would be given additional assurance that the area in the zone is set aside for farm use, and that their farm operations will not be unreasonably restricted. A total prohibition of local ordinances is not desirable or necessary, since in some cases an ordinance may be required to protect the public health or safety.

With respect to nuisance suits, farmers would be assured that normal farm operations are presumed to be appropriate, and those who object must prove otherwise. In addition, court-ordered relief in response to a nuisance suit could be limited, so that it would not restrict operations to the extent that no profitable agricultural uses can be made of the property. The provision would not (and constitutionally could not) exempt the farmer from any and all nuisance suits or confer an absolute right to carry out any type of agricultural practice. However the provision would ensure that any court decisions would not remove the possibility of using the land, profitably, for agriculture. Again, exceptions must be made for cases where public health or safety are involved.

The main disadvantage of this policy option is that it is difficult to define a "reasonable" restriction on farm operations in a local ordinance, and difficult to judge the extent to which a specific court directive removes the possibility of "profitable" farm uses. The provision may have little effect if the definitions are interpreted very loosely in the courts, or by local governments. Stronger provisions may not be legally defensible, but these provisions may be too weak to have any effect.

Zoning Enforcement

The legislature could consider ways to ensure effective administration of exclusive agricultural zoning ordinances and provide incentives to county and town governments to strictly enforce the ordinances, once local governments adopt them. Proper enforcement will help ensure that the state's expenditure of tax credits and planning grants achieve the objective of preserving farmland.

First, the state might help counties administer the ordinances effectively. One option is for the state to provide funds, say \$10,000 per county, to those counties which have adopted exclusive agricultural zoning. The funds would be

used to assist in hiring the zoning administration personnel necessary for proper administration of any zoning provisions, in this case the exclusive agricultural zoning provisions. The advantage of this option is that it supports local capabilities through financial assistance and encouragement, rather than state intervention. The major disadvantage is cost, which could run to several hundred thousand dollars per biennium. Cost could be reduced somewhat by requiring a local match, or alternating funding years.

Second, the state might encourage strict enforcement of exclusive agricultural zoning ordinances. One option is to make the county and/or town governments liable for part of the rollback tax when land is removed from the exclusive agricultural zone. This option has the advantage of placing the responsibility -- and liability -- for removing land from an exclusive agricultural district on both the individual and governmental decision makers. Counties and towns would be more likely to scrutinize proposed zoning changes carefully before approving them. This option has two major disadvantages. First, the existence of a tax credit rollback responsibility could make some counties reluctant to approve exclusive agricultural zoning in the first place. Second, counties would be encouraged to base rezoning decisions on the rollback tax rather than on the merits of the case.

A second option is to provide the Agricultural Lands Preservation Board with authority to "decertify" county and town ordinances. Exclusive agricultural zoning is not much more protective than other agricultural zoning if every petition to rezone is granted. Decertification action by the Board would only be initiated if the local unit showed failure to administer or enforce the ordinance properly, or in keeping with its original intent to preserve farmland. Specific procedures would have to be established to ensure an adequate hearing for the local unit in question.

The major advantage of this option is that the mere establishment of decertification authority would send a signal to counties that improper administration or enforcement of their ordinances could lead to withdrawal of tax credits. It would also protect, to some extent, the taxpayers' "investment" in farmland protection. The major disadvantage of adding this authority would be the suspicion or mistrust it might generate on the part of some local units. It might also discourage some units from adopting the zoning in the first place.

A third option is to require state approval of local zoning changes in the exclusive agricultural zone. The major advantage is that local governments might hesitate to rezone good agricultural land, and in any case, the state could veto any significant rezonings. The disadvantages are that several staff positions might be required to review all the local rezoning petitions, and state-level decisions would probably not be based on a complete understanding of the local situation. In addition, the provision would discourage many counties from adopting zoning.

Soil Conservation Policies

Although the law is mainly concerned with farmland preservation, there are some policy alternatives for strengthening the soil conservation provisions. The options are: (1) do nothing, but monitor the effects of current law; (2) extend the conservation plan requirement to cover all zoned lands, or allow counties the option of requiring a conservation plan for zoned land; (3) adopt state standards for counties to enforce in determining whether farm operations are carried out "in substantial accordance" with a soil conservation plan; (4) revise the conservation requirement and enforcement mechanism.

The first option, do nothing, would allow more time to observe how counties administer the current law, and how farmers respond -- there may be little

problem with the current law. Some counties are already devising ways to handle the increased workload of preparing conservation plans, and some have developed procedures and standards for enforcement of the conservation requirements. The major disadvantage of this option is that, if there is a problem, it will only become worse by waiting to act. In addition, the adoption of more creative and productive soil conservation policies would be delayed.

The advantage of the second option, extending the soil conservation requirement to all zoned land, is that it would bring equal treatment of zoned and contract lands. All landowners in the program would be required to conduct their operations "in substantial accordance" with a conservation plan, in order to be eligible for the tax credits. One disadvantage of this option is that a great demand would be created for conservation plans in zoned areas which current SWCD and SCS staff might find difficult to meet. In addition, it may be unwise to increase the amount of land covered by the conservation requirement by a factor of 4 to 5 (since most land is under zoning), particularly when it is not clear that the existing provisions in the law will be workable or effective. However, there may be little harm in extending to counties the option of requiring a conservation plan for zoned land, if the counties were required to develop and state in writing the enforcement procedures and standards which they would employ.

Under the third option, the state might adopt general standards which counties would use to determine if farm operations are being conducted "in substantial accordance" with a conservation plan. Counties would be required to adopt detailed written standards for the enforcement process, and landowners could be given appeal rights to the ALP Board in cases where counties act to remove tax credit eligibility because the conservation plan is not followed. The main advantage is that the current law would be clarified and enforcement provisions

specified. The main disadvantage is that state standards might be too inflexible to meet the wide variety of physical conditions in the state, and detailed county standards might be difficult to develop.

Under the fourth option, the soil conservation provisions of the law would be changed. No conservation plan would be required, but erosion from zoned land or land in an agreement would be required to be within the general tolerance limits established by the Soil Conservation Service. Enforcement would be initiated only if a complaint were received, formally or informally, by the local SWCD board. Local farmers and SWCD board members themselves might be given standing to complain. After receiving a complaint, the SWCD would investigate the situation and meet with the landowner if it appeared that there were serious conservation problems. If no remedial action were taken, the county SWCD supervisors would hold a public hearing to examine the problem and possible solutions and a state-level hearing could be held by the ALP Board if no action were taken to solve the problem after the county-level hearing. Tax credits would be cut off if no action were taken after the state hearing. Special cost-sharing funds might be provided, if needed, to help in solving the type of very severe problems that would result in complaints. This system is very similar to the soil conservation ordinances adopted by the Town of Sterling in Vernon County, and by the State of Iowa. The major advantages are that the option: (1) avoids the problems of attempting to enforce a conservation plan that has traditionally been voluntary and educational in nature; and (2) allows for enforcement at the local level, of problems perceived as severe by local people, and (3) encourages negotiation and education as means of solving the problem, rather than formal court proceedings based on state or county standards. It is very likely that only the most severe problems would generate complaints, and that most complaints would be solved informally, without the need for a public hearing.

The disadvantages of this option are: (1) it is a new concept and represents a departure from the familiar concept of the conservation plan; (2) it could potentially generate a flood of frivolous complaints (although this has not been the experience in Vernon County or in Iowa); (3) it has the potential of being applied unevenly within a county or town since enforcement relies on a complaint system; (4) if tax credits were terminated and the issue were taken to court, arguments about soil conservation behavior would probably be based on the practices recommended in the typical conservation plan, so ultimately the policy option does not avoid the difficulties inherent in the enforcement of a plan.

Adopting any of the alternatives (except the first, to do nothing) implies that farmland preservation and soil conservation policy would become more closely related over time.

Tax Relief Policy Alternatives

The major tax relief policy alternatives will be discussed in two sections. First, the advantages and disadvantages of not changing the current law will be discussed, followed by a discussion of three relatively minor changes in the current formula. Second, two major policy alternatives, use value assessment and a proportional, flat rate, reduction will be discussed and compared to the existing tax credit formula.

No Change or Only Minor Change

One option is to do nothing to change the existing formula. The main advantage of doing nothing is that the current system is working well in stimulating local agricultural land policies and providing tax relief to farm households whose property taxes are high compared to their incomes. Change may be counterproductive. First, county and town governments have undertaken farmland

mapping, planning and zoning with the expectation that farmland owners will be made eligible for tax relief, at a certain level, as a result. Local governments adopt agricultural planning and zoning programs for many other reasons, but the tax relief for individuals is clearly an important incentive. Reducing the level of tax relief at this time may be legitimately criticized as "changing the rules in the middle of the game". For some, this would confirm their suspicion that the law was carefully designed by the state to lure local governments into adopting land policies, but that the state would withdraw all the incentives once local governments acted. Since tax relief cannot be reduced for those under contracts, only those under zoning would be affected. Reducing the level of tax relief is, in effect, a penalty assessed on those local governments that responded to the state's tax relief incentives and adopted local planning and zoning programs. By reducing the level of tax relief, the state penalizes the very individuals, and governments, it should reward. In short, a sharp or clear reduction in tax relief might seriously damage the credibility of the state government in rural areas and could be a serious setback for local planning and zoning programs in general.

Second, the current formula can easily be transformed into a "sum certain" rather than a "sum sufficient" system. It may be necessary to reduce the level of tax relief as one means of controlling state government expenditures, even though the total tax relief in 1979 was only about 0.2% of the state budget. If the objective is to reduce the tax relief cost of the farmland preservation program, then the existing tax credit formula could be retained, but the state could pay only a given percentage of the credits calculated by each household. The percentage would be set according to how much the state could afford to pay in each year, but the current tax relief formula could be maintained.

Finally, the existing system is working well in providing tax relief to farm households. Credits averaged \$1,403 per household in 1980. From the various studies, claimants were similar to the average Wisconsin farm household with respect to income, have larger than average farms, are generally committed to agriculture and have generally productive operations. Most of their income was from farm sources, and very few large corporate farms, if any, received credits. The average 1970 credit per household in urbanizing areas was \$1,305, versus \$1,164 per household in rural areas. Overall, the tax credit averaged 46.8% of the property tax of participating households, but in counties with both planning and zoning, the credit averaged 58% of property taxes paid. The current tax credit system is performing well, which is one very important advantage of not changing the tax relief policy. The disadvantages of the current system are in fact the advantages of the alternative tax relief policies and will be discussed separately.

Two relatively minor changes could be made in the existing formula to attempt to reduce the credits to the very few households (less than 1%) that have, in effect, high incomes but receive a large amount of tax credit. First, the definition of income under the current tax credit formula could be changed slightly to limit the amount of nonfarm income losses which can be subtracted from farm income under the credit formula. The advantage of this option is that it would eliminate or reduce tax credits to households with extremely large net farm incomes but large income losses from nonfarm activities. In the 1978 study, two households (out of 337) fit this category. The disadvantages of this option are that there are some cases of nonfarm losses, such as business failure, that would be eliminated from the income calculations and the households penalized.

Second, the income definition could be changed to place an upper limit on the amount of farm depreciation that could be deducted from gross income, for the

credit calculation. The advantage of this option is that credits would be reduced for those relatively well-off households which are rapidly expanding their farm operations and have very large depreciation deductions against a high household income. Some households in the 1978 study fit in this category. The major disadvantages are that the appropriate limit would be difficult to define, and that many moderate income families may also show high farm depreciation and would thus be penalized by the change.

Farm Cash Flow

A slightly more complex policy alternative is to change the concept of income and move away from household income toward a definition based on farm cash flow or annual disposable income. One obvious definition is to define cash flow income as net farm income plus depreciation. The major advantages are that the tax relief is based on the economic conditions of the farm and the farm property tax, the option does not provide any disincentive to earn off-farm income, and the problem of large nonfarm income losses is eliminated. The major disadvantages are that it would reduce the level of tax relief to farms that are expanding, would provide a small disincentive to farm investment, would provide more tax relief to hobby farmers and other nonfarm owners of farmland who have high nonfarm incomes, and it would be difficult to define farm cash flow, particularly for partnerships or corporations.

Use Value Assessment, Proportional Reduction

Major change in the current circuit-breaker tax credit system implies adoption of a completely different tax relief policy. The major alternatives are use value assessment or a proportional (flat rate) reduction of property taxes on the land of, say 30%. The other major tax relief option is the current circuit-breaker income tax credit, so the three major alternatives will be compared.

The advantages and disadvantages of the alternatives depend on the objective which the tax relief is to attain. Possible objectives might be, in no particular order: (1) maintain a high level of tax relief in the short run; (2) maintain a high level of tax relief in the long run; (3) provide tax relief in a manner in which costs can be controlled; (4) prevent a "tax squeeze" on farm families; (5) reduce property taxes on the urban fringe; (6) relate the property tax to ability-to-pay; (7) provide an incentive for planning and zoning; (8) provide tax relief to all farm households whose land is restricted in an agricultural land preservation program; (9) reduce the variation in farm income; (10) provide a stable level of tax relief; (11) avoid providing tax relief to land speculators, hobby farmers, nonfarm investors, or nonresidents; and (12) minimize the administrative costs of a tax relief program. In Table 9, the three policy alternatives are ranked in terms of their effectiveness in reaching each possible objective.

Short Run Tax Relief. The current circuit-breaker tax credit and a 30% flat rate reduction would provide about the same amount of total tax relief in the short run. The tax credit option would provide about twice as much tax relief as the flat rate reduction, and over three times as much as use value assessment, for those who are now receiving farmland preservation tax credits. Since not all households are eligible, or claim the credit, the flat rate or use valuation provides tax relief to more households, at a lower rate. Use value assessment would provide less than either alternative in rural areas, and about the same per household as the flat-rate option in urban areas.

Long Run Tax Relief. Because participation under the current tax credit system will undoubtedly increase over time, the current tax credit formula will probably provide more tax relief, in the long run, than the other alternatives. The flat rate would provide more than use value assessment, as in the short run.

Table 9

Effectiveness of Tax Relief Policy Alternatives
in Attaining Various Objectives

<u>Objective of Tax Relief</u>	<u>Most Effective</u>		<u>Least Effective</u>
High Short Run Tax Relief	Tax Credit or Flat Rate		Use Value
High Long Run Tax Relief	Tax Credit	Flat Rate	Use Value
Control Costs	ALL ARE COMPARABLE		
Reduce Tax Squeeze on Farm Income	Tax Credit	Flat Rate	Use Value
Urban Fringe Tax Relief	Use Value	Flat Rate	Tax credit
Relate Property Tax to Ability to Pay	Tax Credit	Flat Rate	Use Value
Provide Incentive to Adopt Land Use Policy	Tax Credit	Flat Rate	Use Value
Provide Tax Relief to All Restricted Land	Flat Rate	Tax Credit	Use Value
Increase Stability of Farm Income	Tax Credit	Flat Rate or Use Value	
Provide Stable Tax Relief	Flat Rate	Use Value	Tax Credit
Avoid Benefits to Speculators, etc.	Tax Credit	Flat Rate or Use Value	
Minimize Administrative Costs	Flat Rate or Tax credit		Use Value

Control Costs. None of the alternatives is perfectly controllable -- spending for tax credits depends on income and property taxes, and spending for use value assessment and the flat percentage reduction depend on the level of property taxes. In any given year any of the three alternatives could result in an unacceptably high level of spending given the state's fiscal position, and the tax relief would have to be reduced in some manner. In each case, this could be done by limiting the tax relief to some percentage of the "entitlement" under the formula or assessment procedure. Note that it is assumed that the state will reimburse local governments for the reduction in local property tax revenue due to use value assessment -- otherwise the cost to the state is zero and farm tax reductions simply shift the tax burden to other local property owners.

Reduce Tax Squeeze. The "tax squeeze" on farm households results when property taxes rise more rapidly than income. Use value assessment will ease the tax squeeze on the urban fringe, but not necessarily in rural areas where both the use value and market value of farmland have been increasing. The current circuit-breaker tax credit eases the squeeze in both urban and rural areas. However, current limits on eligible property tax and income reduce the effect for some farm households. The flat rate reduction will lower all property taxes on farmland by the same percentage, regardless of how much the family income is being "squeezed". Thus, the tax credit reduces the "tax squeeze" more than the flat rate reduction, and both reduce the income squeeze more than use value assessment.

Reduce Urban Fringe Tax. Use value taxation targets tax relief to urban areas. The current tax credit formula provides more tax relief per acre to participating farms in urban areas, but not all farm households receive tax relief. The flat rate reduction would provide about the same amount of tax relief as use

value assessment in the urban areas. For any given level of expenditure, use value assessment provides the most tax relief on the urban fringe.

Relate Tax to Ability-to-Pay. The current tax credit reduces the property tax more for lower income groups than for higher income groups, and reduces the regressivity of the property tax. A flat rate reduction applies the same proportional reduction in taxes to all income classes. Use value taxation concentrates tax relief relatively more in the upper income groups compared to the other alternatives. Thus, the current tax credit is the best alternative for reducing the degree of regressivity of the property tax.

Land Use Policy Incentive. It is difficult to judge whether the tax credit or the flat rate reduction provides more incentive to local governments to adopt land use policies. Use value assessment is probably the least effective. The current tax credit provides a higher level of tax relief to qualified farmers and should therefore provide more incentive for these farmers to urge adoption of local agricultural land policies. On the other hand, the tax credit excludes many farmers with high incomes, some of whom are respected and politically influential members of their communities. However, these same individuals stand to gain the most from planning and zoning to protect their farm operations. The flat rate reduction would extend tax relief to all land that is zoned for exclusive agricultural use and would tie tax relief directly to the land. On the other hand, the flat rate reduction might lower the land policy incentive because it provides a lower level of tax relief than the current tax credit program, to qualified farmers. A flat rate reduction might impede local government action if a change in the "rules of the game" fuels the basic suspicion that state government seeks to entice local governments to adopt farmland policies, but once adopted, the state will remove the incentives (tax relief). Use value taxation has all of the disadvantages of the flat rate reduction, but does not have the

important advantage of providing all restricted landowners with tax relief -- rural areas may get little relief, and taxes for some might increase.

Tax Relief to Restricted Owners. The flat rate reduction would apply to all land and would provide tax relief to all zoned landowners. Tax credits will not provide tax relief to all landowners because of the income limits in the formula. Use value assessment might provide tax relief to more households than the tax credit (at a lower level), but would increase the taxes of some owners, whose land is now underassessed.

Reduce Variation in Income. The circuit-breaker tax credit increases as income declines, other things equal, providing a (small) automatic stabilizing effect on farm households' income. Neither the flat rate reduction nor use value taxation vary with the income of the household and would have no effect reducing the variation in income.

Provide Stable Amount of Tax Relief. The flat rate reduction would maintain about the same level of tax relief from year to year regardless of changes in income. Use value assessment would also provide a stable amount of tax relief. Both are preferable to the current tax credit system in this respect.

Avoid Benefits to Nonfarmers. The current tax credit is based on the income of the owner, and high income households receive no credit. This helps eliminate some, but not necessarily all, nonfarm investors, hobby farmers and speculators. Flat rate reduction, or use value assessment, would give benefits to all owners of eligible land, including speculators, nonfarm investors, hobby farmers, nonresidents, and others. Speculators and others have benefited from use value assessment in other states, and the flat rate reduction would have the same effect. Thus the tax credit provides less benefit to speculators, hobby farmers, and other nonfarm owners than the other alternatives.

Minimize Administrative Costs. Use value assessment would entail high costs in estimating use value and changing the property assessment procedures. For the other alternatives, tax credits involve slightly more administrative cost at the state level, but the flat rate reduction would involve higher administrative costs for local government.

In short, the best tax relief policy depends on the objective that the tax relief is to achieve. Use value assessment is best at targeting tax relief to the urban fringe, and providing stable tax relief from year to year, but is inferior to tax credits and flat rate reductions in meeting the other possible objectives. The tax credit system in the current law is best at providing a high level of tax relief in the long run, reducing the squeeze that higher property taxes place on farm income, relating the property tax to ability-to-pay and reducing the regressivity of the tax, stabilizing farm income, and avoiding benefits to speculators, hobby farmers, and other nonfarm owners. The flat rate reduction is best in providing stable tax relief from year to year and is similar to the tax credit system in administrative cost. It is not clear, in principle, whether the tax credit system or the flat rate reduction provides more incentive to local governments to adopt agricultural planning and zoning. However, since any sharp reduction in tax relief could seriously reduce the credibility of state government and weaken local farmland preservation efforts, retaining the current tax credit system would probably provide more land policy incentive to local governments.