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**ROLE OF THE NON-PROFIT PRIVATE
SECTOR IN RURAL LAND CONSERVATION:
RESULTS FROM A SURVEY IN THE
NORTHEASTERN UNITED STATES
(Revised)**

by

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ROLE OF THE NON-PROFIT PRIVATE SECTOR IN RURAL LAND CONSERVATION: RESULTS FROM A SURVEY IN THE NORTHEASTERN UNITED STATES (Revised)*

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INTRODUCTION

Land conservation has been an active arena for public policy in the United States for many years. Much of that attention has focused on the land base for U.S. agriculture and the conflicts that can arise out of urban-related development in farming communities. The debate about land use policy on the urban fringe intensified in the U.S. after World War II. State and local governments have become particularly active with programs and policies designed to afford farmland resources protection from urban encroachment. According to the National Association of State Departments of Agriculture, all 50 states make provisions for preferential property taxes on farmland, 48 states have right-to-farm laws, 24 have agricultural zoning, 15 provide for purchase or transfer of farmland development rights, and 12 have enabling legislation for the creation of special use or agricultural districts.

Expansion of publicly sponsored farmland protection programs can be expected in the future, particularly in regions impacted by large urban population concentrations. These programs can displace noticeable amounts of public funds, and often generate close scrutiny by researchers and public officials. Less well recognized are private or third-party initiatives to protect farmland. These private farmland protection initiatives,

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spearheaded by local and regional land trusts, appear to have gained substantial momentum over the past decade. A 1989 directory of conservation land trusts published by the Land Trust Exchange (now the Land Trust Alliance) listed 741 land trusts throughout the U.S. The Exchange reported that, while the first land trusts were formed in the late 1800s, about 85 percent of such organizations in existence today were formed after 1965; almost half were formed during the 1980s.

The land trust movement is centered in the densely populated Northeastern U.S., with 61 percent of the Nation's trusts located in the New England and Mid-Atlantic states. Interestingly, about 40 percent of the organizations listed in the 1989 Land Trust Alliance directory indicate participation in farmland protection programs. However, only anecdotal information is available on land trust efforts to deter farmland conversion. Absence of such information is especially noticeable in the Northeastern U.S. because of the wide concern about population growth in rural communities, relatively rapid reductions in farmland acreage, and any attendant effects on the future viability of commercial farming in the region.

To shore up the information base on private farmland protection initiatives, the Department of Agricultural Economics at Cornell University conducted a mail survey of local and regional land trusts in fall 1990. This paper reports on some of the preliminary results from the survey, emphasizing findings on trust organization, membership, and general scope of land protection efforts. The paper is organized into three sections. The discussion of the survey results is prefaced by a description of the methods used to assemble the survey data. A concluding section mentions some implications for rural land policy in the U.S. and highlights topics which may lend themselves to further inquiry.

SURVEY PROCEDURES AND SOURCES OF DATA

For the purposes of our study, we use a somewhat generous definition of the Northeast to include 12 states in the Northeast region (Table 1). It was decided that each land trust organization in the 12-state area would be asked to participate in the mail survey. The Land Trust Alliance, which maintains ongoing contacts and programs with the land trust community, agreed to furnish an up-to-date list of trust organizations presently active in each state. A contact person, usually the chair of a governing board or the organization's executive director, was identified for each land trust.

Table 1. Responses to mail survey of local and regional land trusts in the Northeast, 1990.

State	Total	Response		No response
		Useable	Not useable	
Connecticut	113	60	7	46
Delaware	3	2	0	1
Massachusetts	113	52	6	55
Maryland	20	7	3	10
Maine	69	47	3	19
New Hampshire	31	19	1	11
New Jersey	15	8	0	7
New York	53	30	2	21
Pennsylvania	35	19	6	10
Rhode Island	24	16	0	8
Vermont	15	7	1	7
West Virginia	2	1	0	1
Total	493	268	29	196

Each contact person received a mail questionnaire designed to gather background data on the trust organization, along with information on current efforts to protect agricultural land. A final section of the questionnaire asked for more detailed information on any restrictive easements held on agricultural land. Our impression was that land trusts

focus relatively large amounts of attention on acquiring and holding land easements. This orientation is consistent with the growing interest in publicly sponsored programs, such as farmland purchase of development rights (PDR), which achieve conservation goals by limiting future use of the land parcel with a restrictive easement.

The survey was administered by Cornell University's Institute for Social and Economic Research during November 1990. Telephone follow-ups were conducted with survey respondents to minimize any problems with missing data or misinterpreted requests for information. After five wave mailings, usable data were collected on 268 trust organizations (see Table 1). This represents an overall response rate of 54 percent.

Crude checks for nonresponse bias could be conducted for a fraction of the list frame used in the survey. This was done by categorizing organizations listed in the recently published Land Trust Alliance directory as respondent or nonrespondent. Then, tests for statistically significant associations between these two groups and directory information on date of formation, size of membership, and total acreage of land protected were conducted. The results do not indicate any statistically significant evidence of non-response bias. Response rates were slightly higher for smaller organizations, as reflected in size of membership or number of acres under protection, but the differences were not significant from a statistical point of view. We were especially concerned that recently formed land trusts might be less willing to participate in the mail survey because of limited resources and time demands placed on a small paid or volunteer staff. Once again, however, our comparison of background information on respondents and nonrespondents did not reveal a statistically significant relationship between age of land trust and participation in our study.

SURVEY RESULTS

About 34 percent of all land trusts responding to our mail survey indicated that they currently undertake programs to protect agricultural land. This percentage is below

the 40 percent participation rate reported by the Trust Alliance for the Nation in 1989. One might initially expect materially higher rates of land trust involvement with farmland protection issues in the Northeast because of high population densities and growing concern about rapid rates of decline in actively farmed acreage over recent decades. However, those past decreases in land devoted to farm use in the Northeast make crop and pasture a relatively rare occurrence on the landscape compared to other regions. Indeed, some local land trusts are undoubtedly headquartered in communities with virtually no land remaining in active farm use.

These relationships can be demonstrated with data from the USDA's 1987 National Resources Inventory which show that 28 percent of non-Federal land in the 12-state study area is classified as crop or pasture land, compared with 37 percent for the entire coterminous U.S. The percentage in crop and pasture ranges from a low of 5 percent in New Hampshire to 38 percent in Maryland; about 11 percent of total non-Federal land is developed in urban-related uses, but forestland is the predominant land use (USDA). Much of this forested acreage was once farmed but reverted to natural cover after crop and pasture use was discontinued because of unfavorable cost/price relationships for agricultural commodities.

Land Trust Characteristics

We asked each respondent to indicate date of trust formation, current legal status with the U.S. Internal Revenue Service (IRS), sources of funds, and scope of land protection programs. We also made a brief inquiry into the socioeconomic features of the land trust membership. Status with IRS is important because of Federal income tax code provisions for charitable donations. Under current law, donation of an easement, which restricts the owner to maintaining a land parcel in a conservation use, to a qualified charitable organization may create a tax advantage for the donor (Daugherty, 1978; Diehl and Barrett; Small, 1988). A tax advantage could arise for an owner who can deduct the

donation when computing annual income subject to the Federal income tax (Daugherty, 1977, 1978 and 1980).

As expected, virtually all organizations who participated in the survey indicated that they had either obtained tax exempt status from the IRS or an application for approval of such status was pending. This status may be crucial in efforts to attract donors who are interested in sheltering income from the Federal income tax. Deductible donations of interests in land to charitable, not-for-profit organizations are often represented by their proponents as a farmland protection tool. Incentives to restrict land use, it is argued, arise because the after-tax cost of the donation -- measured in terms of land value foregone with a restrictive easement -- is reduced for the donor (Small, 1986; Stokes and Watson). These costs, of course, are not avoided but are shared by all taxpayers through displaced Federal income tax revenues. Proponents of easement donations also stress that additional financial incentives emanate from savings in estate (death) taxes and local *ad valorem* real property taxes as well; this view makes the act of donating ownership interests in land to a qualified charitable organization into a generalized technique for individual tax management (Small, 1988; Stokes and Watson).

The organizations responding to this survey question reported a membership of just over 173,000, an average of about 650 members (Table 2). We defined membership to include not only individuals or corporations on a membership roster, but also any donor of property rights to the land trust. Membership size is highly skewed around the mean with 5 percent of the organizations reporting 61 percent of total membership. Under 20 percent of the respondents reported 500 or more members but account for nearly 80 percent of total membership.

Limited information could be obtained from each organization on the features of their membership. Responses to our survey suggest that individuals who decide to be a member of a land trust are not representative of the general population. Namely, members/donors tend to be relatively older and earning relatively high household

Table 2. Size of membership for local and regional land trusts in the Northeast, 1990.

Membership	Organizations		Members	
	Number	Percent	Number	Percent
Under 100	85	33	3,850	2
100 - 199	54	21	8,278	5
200 - 499	75	29	24,558	14
500 - 1,999	31	12	30,377	18
2,000 or more	14	5	105,977	61
Subtotal	259	100	173,040	100
No response	9	---	---	---
Total	268	---	---	---

incomes. Figures 1 and 2 show estimates of the age and income based on weighted percentage calculations from survey responses. About one-third of all members/donors are thought to be over 65 years old. In comparison, about 12 percent of the U.S. population is in this age group (U.S. Dept. of Commerce, 1991). Similarly, about 50 percent of all members/donors have annual incomes estimated at \$50,000; 22 percent of the general population in the Northeastern U.S. falls in this income group (U.S. Dept. of Commerce, 1988).

Membership features can be attributed, in part, to the longevity of each land trust. Recently formed organizations probably have relatively more potential for membership expansion in the longer term, compared with well-established, long-lived organizations. Our survey findings closely parallel earlier information from the Land Trust Alliance and show that over half of the trusts in the Northeast have been formed during the 1980 decade (Table 3). These fledgling organizations, however, control less than one-quarter of total trust membership. As expected, date of formation is positively correlated with size of organization, as measured by size of trust membership.

Figure 1. Percentage distribution of local and regional land trust membership by age, Northeastern U.S., 1990

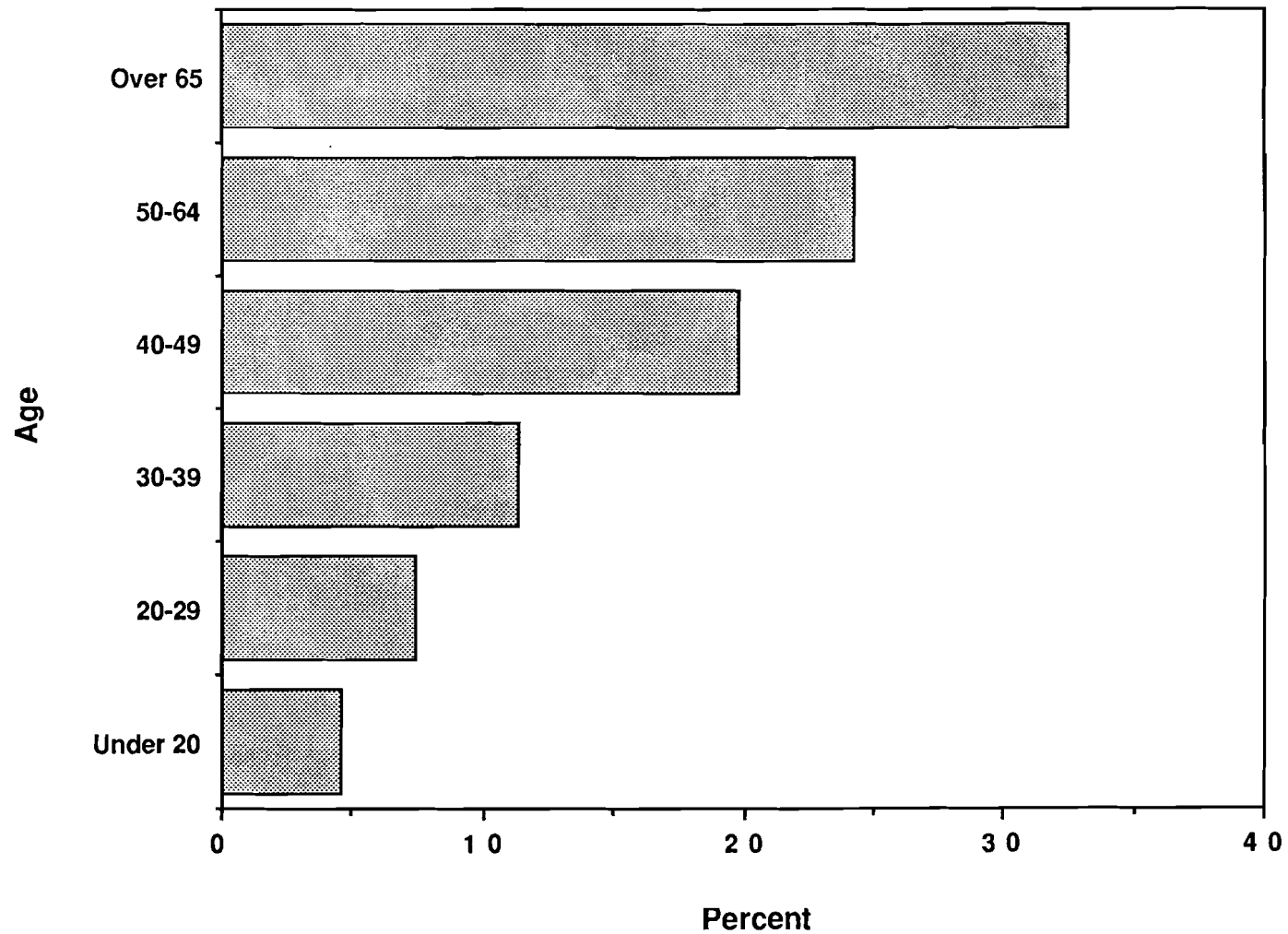


Figure 2. Percentage distribution of local and regional land trust membership by annual household income, Northeastern U.S., 1990

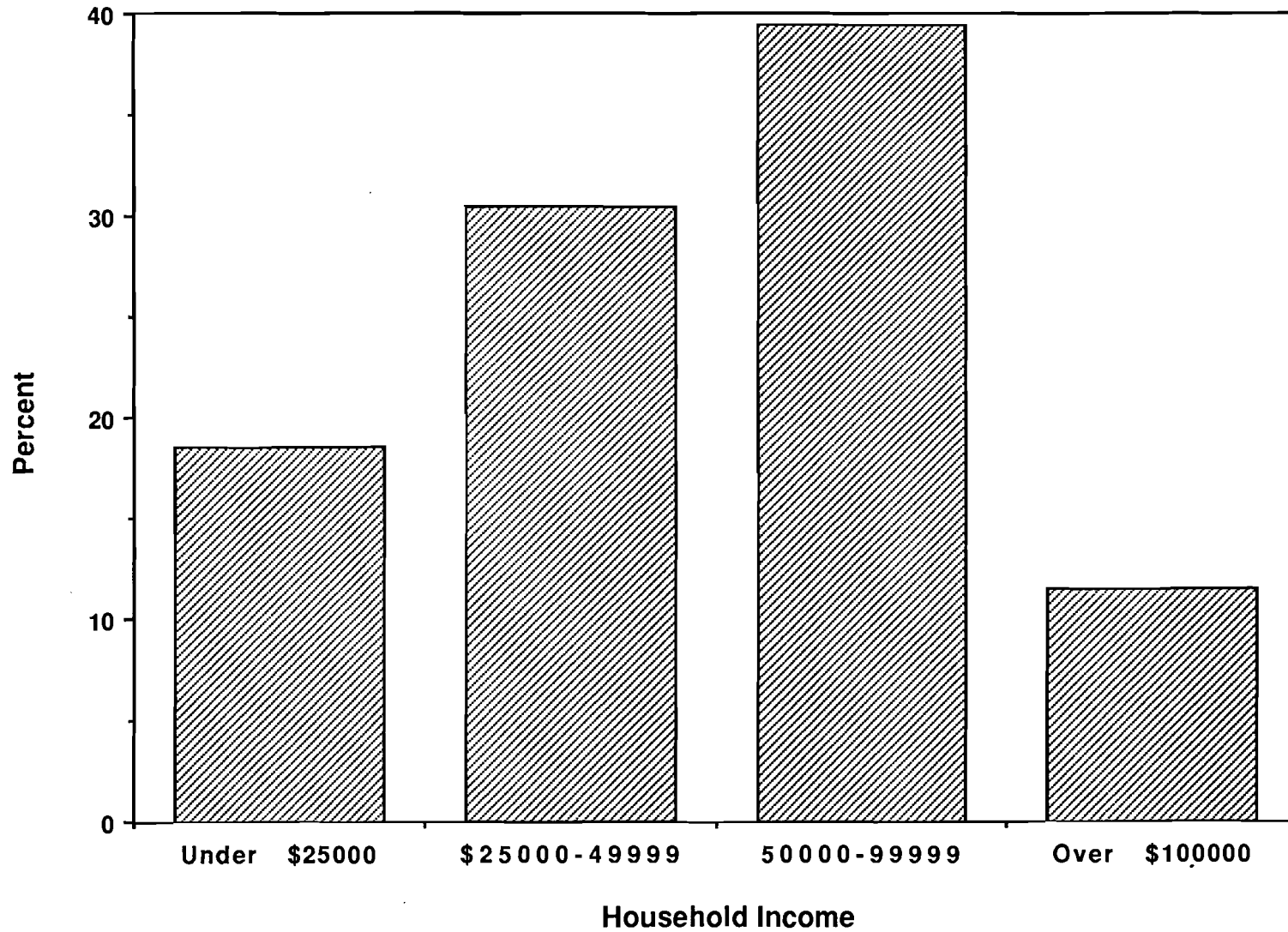


Table 3. Year of formation for local and regional land trusts in the Northeast, 1990.

Year formed	Organizations		Members	
	Number	Percent	Number	Percent
1980 - 1990	136	54	39,373	24
1970 - 1979	59	23	23,146	14
1960 - 1969	40	16	20,993	13
1950 - 1959	5	2	4,250	3
Before 1950	13	5	79,412	47
Subtotal	253	100	167,174	100
No response	15	---	5,866	---
Total	268	---	173,040	---

Another useful measure of organization size is the annual operating budget. Once again, we found that operating funds are not well distributed around the mean (Table 4). In fact, our findings suggest that as much as 95 percent of the operating funds controlled by local and regional land trusts in the Northeast are presently in the hands of about 15 percent of total organizations. These organizations, each reporting an annual operating budget of \$100,000 or more, account for 71 percent of the active trust membership in the Northeast region. Conversely, most of the trusts responding have very limited financial resources. Six of every ten organizations responding reported budgets under \$10,000 for calendar 1990. Budgets this small suggest that land protection operations are very limited in scope at present.

Sources of income for land trusts are equally diverse. The principal avenue for funding is donations and membership dues (Table 5). Nearly three-quarters of the organizations responding to our survey reported using funds from this source. Together, donations and dues account for 30 percent of the operating budgets for these not-for-profit organizations. A smaller number of organizations have endowments. Endowments generate interest income which accrues to invested funds controlled by the trust organization. In terms of aggregate funding dollars, this source accounts for 15 percent

Table 4. Annual budget for local and regional land trusts in the Northeast, 1990.

Annual budget	Organizations		Members	
	Number	Percent	Number	Percent
No budget	7	3	1,594	1
Under \$1,000	27	11	2,290	1
\$1,000 - 4,999	83	34	13,491	8
\$5,000 - 9,999	24	10	8,295	5
\$10,000 - 24,999	35	14	8,630	5
\$25,000 - 99,000	33	13	15,406	9
\$100,000 or more	39	16	121,443	71
Subtotal	248	98	171,149	100
No response	20	---	1,891	---
Total	268	---	173,040	---

Table 5. Sources of operating income for local and regional land trusts in the Northeast, 1990.

Source	Number reporting	Weighted average budget share
		--- Percent ---
Donations	72	15
Membership dues	73	15
Endowment income	43	15
Corporate or foundation grants	33	17
Public grants	24	8
Program fees	23	12
Consulting or service fees	22	7
Special event revenues	32	1
Real estate revolving funds	22	2

of total funds, putting it on par with dues and donations as an income source. Grants supply about one-fourth of total operating income. Most of these funds come from either corporate or foundation sources. Smaller amounts of funding are drawn from fees, special event revenues, and real estate revolving funds. The latter may grow in importance as land trusts develop more pro-active conservation programs in their local community.

The survey showed that the trusts spent almost 80 percent of their 1990 annual budgets on operating expenses and personnel, and just over 25 percent was reportedly spent on real estate or easement purchases. In light of the limited budgets reported above, it is not surprising that the trusts reported over 80 percent of all staff members were either volunteers or paid part-time personnel. The remaining 20 percent of all staff, categorized as full-time paid staff, received nearly 45 percent of reported budget expenditures for 1990, an approximate yearly salary of \$22,000 each.

Land Conservation

Each land trust was asked to report on the acreage for which land protection programs had been initiated. The definition of land protection used in our study is very extensive and ranges from fee simple ownership, where control over the use of a land parcel is complete, to land leasing where the trust would have only temporary and partial control over a land parcel. Based on these broad-based interpretations of land protection, 232 of the 268 organizations responding to our survey indicated that some land parcels were protected by land trust programs (Table 6). The remaining 36 organizations were unable or unwilling to respond to the acreage question. The bulk of these nonrespondents were newly formed organizations and probably control very limited land acreages.

Organizations responding reported that they protected nearly 383,000 acres, or about 1,400 acres on average. Once again, the distribution of protected acreage is highly skewed with well over 80 percent of the total reporting fewer than 1,000 acres under

Table 6. Acreage protected by local and regional land trusts in the Northeast, 1990.

Acre size class	Organizations		Acreage	
	Number	Percent	Number	Percent
No acreage	9	4	---	---
Under 100	91	40	3,688	1
100 - 499	76	33	19,141	5
500 - 999	24	10	16,573	4
1,000 - 4,999	20	9	46,771	12
5,000 - 9,999	4	2	27,276	7
10,000 or more	8	3	269,423	70
Subtotal	232	100	382,872	100
No response	36	---	---	---
Total	268	---	---	---

protection. At the other extreme, 3 percent of the trusts responding to our survey indicated that more than 269,000 acres -- 70 percent of total acreage -- was under their protection.

Protecting Farmland

We asked for a separate accounting for farmland and for land parcels in a non-farm use. Once again, the definition of farmland selected for the purposes of the study was broad and probably overstates estimates of farmland compared to standard definitions. The Census definition of a farm, the common reference point for agricultural data, is a place with annual production valued at \$1,000 or more. Acreage owned or leased by the farm operator is counted as land in farms for Census purposes. In contrast, we did not ask respondents to consider a specific sales criterion when classifying the acreage protected by the land trust. Moreover, we also asked respondents to classify open space land as farmland if the acreage was presently idle but judged to be suited for future agricultural use.

Surprisingly small amounts of acreage can be classified as farmland. Overall, 10 percent (about 38,000 acres) of all protected acreage in our sample fell in this category (Table 7). Recall this percentage compares with upwards of 30 percent of total non-Federal acreage in crop or pasture use in the 12-state study area. However, there is a discernable trend in the data, with several newly formed land trusts, i.e., trusts established after 1980, indicating that their programs focus to some degree on farmland resources. Of the 88 trusts with farmland protection programs, 46 (54 percent) were established after 1980.

Table 7. Farmland acreage protected by local and regional land trusts in the Northeast, 1990.

Acre size class	Organizations		Acreage	
	Number	Percent	Number	Percent
No acreage	180	--	--	--
Under 100	51	58	1,940	5
100 - 499	23	26	4,950	13
500 - 999	5	6	3,924	11
1,000 - 4,999	9	10	26,119	71
Total	268	100	36,933	100

Protection Techniques

Local and regional land trusts use a diverse and creative array of farmland protection techniques. To assess these techniques and to determine their relative importance, each respondent was asked to indicate present practices and to comment on the likely configuration of their program for farmland five years into the future. The latter line of questioning, while entirely speculative, may provide some limited insight into future program directions.

Results for programs currently operated are shown in Table 8. As one might expect, programs for farmland appear to be presently centered on donations of ownership interests in land by private landowners. Over two-thirds of the 88 organizations reporting farmland protection efforts indicated active involvement in obtaining full or partial easement interests in agricultural land. As mentioned above, a donor may be in a position to deduct all or part of the gift to a not-for-profit organization from their Federal income tax liability. After-tax costs of the donation are reduced accordingly.

Successful donation programs can require overt efforts to recruit donors and acquaint them, along with the public at large, with farmland protection issues for the community and the potential benefits of affiliating with a local land trust. Over half of the trusts with farmland protection programs have undertaken such efforts, which include advising and consulting with individual landowners and conducting educational programs. A relatively large number of trusts are also pursuing related activities via a working involvement with local governments on land use planning activities. Nearly one-third indicated that such interaction with public officials was elevated to the state level, with contacts in state legislatures or with operatives in state agencies.

Perhaps second generation protection efforts by local land trusts have to do with more pro-active efforts to acquire a controlling interest in farm real estate through direct purchase. One-quarter of the respondents to our survey indicated involvement to some degree with purchases of farm real estate in fee simple with explicit intentions for resale at a later date after encumbering the land parcel with an easement which would preclude future development.

Pro-active land purchases, of course, can require substantial amounts of working capital. It was pointed out earlier that at present the land trust movement is primarily propelled by donations. A strategy for increasing working capital and subsequently increasing leverage in local farmland markets is to engage in limited development projects where some acreage in a farmland parcel is converted to a residential or commercial

Table 8. Techniques used by local and regional land trusts for farmland protection in the Northeast, 1990.

Technique	Number	Percent
Fee simple purchase	37	42
Fee simple purchase/resale with restrictive agreement	21	24
Land donations	57	65
Easement donations	58	66
Easement purchases	22	25
Maintain land registry	7	8
Advise/consult with landowners	54	61
Lease or rental of ag land	13	15
Educational programs	49	56
Preacquisition of farmland for state or local governments	14	16
Limited farmland development	20	23
Working involvement in local government planning	50	57
Working involvement with state legislatures and agencies on farmland policy	27	31

use while the remainder is encumbered with an easement to ensure open space use in the future. Limited development may be important from an organizational point of view because the proceeds from a land development project, albeit limited, will enhance the organization's access to financial resources. As noted in Table 5, over a fifth of all land trusts in the Northeast have established revolving funds to facilitate real estate purchases and sales. Similarly, 25 percent of the organizations active in farmland protection indicated that they are actively engaged in limited development projects (Table 8).

Nine states in the Northeast operate state-funded purchase of development rights (PDR) programs for farmland (Williams and Bills). Instead of an easement donation, owners who participate in a PDR program are compensated for lost property rights when state governments acquire a development restriction on their property. An important activity for nonprofit land trusts can involve cooperation with state officials responsible for public acquisitions of farmland development rights. A common concern with public programs is timing of the development right purchase (Williams). A state agency is usually bound by strict administrative guidelines which can make plans to buy land rights very slow and methodical. Owners wishing to participate in the state PDR program may need to arrange the sale in a more timely fashion to accommodate any number of personal and financial considerations. According to our survey results, a fraction of the land trusts with farmland protection programs are involved with preacquisition of farmland for the purpose of future sale to state or local governments (see Table 8). Nearly a quarter of these respondents estimate that such activities can be expected within the next five years.

Easements on Farmland

Much of the survey was focused on information concerning agricultural land under easement. We concentrated on the land trusts' use of easements because of the increasing emphasis on the use of development rights as a means of conserving land resources. Nearly 65 percent (over 23,000 acres) of all protected agricultural land covered in our survey is under a restrictive easement (Table 9).

The capital outlays necessary to purchase development right easements on development-prone farmland are enormous and constrain public conservation initiatives. Private organizations are more aggressively seeking easement donations from farmland owners. Our survey shows that reliance on easement donations is quite significant, with over 70 percent of the farm acreage under easement acquired through this method (Table 10). Again, the principal economic incentive available to agricultural land owners for

Table 9. Farmland acreage protected by an easement hold by local and regional land trusts in the Northeast, 1990.

Acreage under easement	Organizations		Acreage	
	Number	Percent	Number	Percent
Under 100	30	61	1,473	6
100 - 499	9	18	1,995	9
500 - 999	4	8	2,945	13
1,000 - 4,999	6	12	16,722	72
Total	49	100	23,085	100

Table 10. Methods used to acquire easements on agricultural land by local and regional land trusts in the Northeast, 1990.

Method	Acres	Percent	Parcels	Trusts
Purchase	5,357	24	77	10
Donations	16,181	71	208	41
Purchase and resale of residual rights	1,262	6	13	4
Other	21	0	2	2
Subtotal	22,800	100	299	57
No response	285	--	9	--
Total	23,085	--	308	--

donating easements to land trust organizations is any leverage gained when calculating income and estate taxes.

Limited information could be obtained on the farming operations conducted on land under restrictive easement. Most farms operating under easements were classified as individual or family farms. The farm was most typically owner-operated by an individual between 35 and 55 years of age. The respondents also indicated that, much like the entire Northeast region, the predominant enterprise was dairy farming, with most of the cropped acreage supporting corn and hay production.

DISCUSSION

The rapidly growing land trust movement reflects a persistent concern over management of rural land resources in the Northeastern U.S. Our study helps document the scope of these private, but third party, efforts to intervene in the decisions that individual landowners make on the use of their land. Our mail survey, directed at nearly 500 land trusts, shows that these not-for-profit organizations are devoting significant attention to agricultural land. About one-third reported that farmland protection programs are in operation in the region. Numerous protection techniques are utilized by trusts, but acquisitions of full or partial land rights via donations play a central role in local land trust programs. Dependence on land donations, particularly development right easements which restrict development of a land parcel, traces to incentives provided by U.S. tax law. Donors may be in a position to reduce income and/or estate tax liabilities when a donation is made to a qualified charitable organization.

Our analysis clearly points up the need to undertake more authoritative assessments of the economic incentives for an easement donation. The eventual impact of the growing land trust movement on the region's rural landscape will largely be determined by successful efforts to reach classes of landowners who not only own farm real estate but stand to be advantaged with a donation under Federal tax laws. We are starting

research which will help clarify the economic considerations involved in such choices when tax levies on income, estates, and real estate are taken into account.

A more subtle issue has to do with the prospects that the rapidly growing land trust movement presents to state and local governments. In the U.S., these units of government are assigned the authorities needed to directly intervene in private land markets to effect socially desirable allocations of land among competing uses. These interventions are centered on the local real estate property tax and constitutional guarantees for police power rights to regulate land use through planning and zoning. Spending decisions by these entities influence land use also. In fact, expenditures of public money to acquire farmland development rights have gained much notoriety in the region over the past decade. Our survey demonstrates that local and regional land trusts in many cases are making overt efforts to involve themselves in public policy formation and implementation at the state and local levels. It seems likely that these groups will wield increasing amounts of influence over the direction and scope of the public debate over rural land use in the future.

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