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Extent of Local Efforts to Form Agricultural Districts in New York State

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CORNELL
AGRICULTURAL ECONOMICS
STAFF PAPER

EXTENT OF LOCAL EFFORTS TO FORM AGRICULTURAL
DISTRICTS IN NEW YORK STATE

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Introduction

The public has an abiding interest in land and its use. This interest is reflected in a long list of publicly sponsored programs and policies which directly or indirectly affect land. A segment of the public policy arena deals with the conversion of agricultural land to nonfarm uses. Necessary ingredients for policy in farmland conversion include some understanding of conversion trends, the forces influencing these trends, and the likely outcomes of specific policy instruments designed to intervene in the conversion process and register public or community-wide interests in private uses of farmland.

New York State has accumulated almost three years of experience with a law specifically designed to encourage the retention of farmland for farm use. The retention mechanism includes provisions for preferential or agricultural use-valued assessments of farmland and the formation of "Agricultural Districts".

The intent of this paper is to:

1. Outline the major features of the New York State Agricultural District Law.
2. Describe the extent of current efforts to implement the law.
3. Identify aspects of the Agricultural District program which may deserve more extensive study.

Discussion of these topics is prefaced with a section devoted to major social and economic trends that pertain to the use of land for farming in New York.

Trends in Farm Uses of Land in New York State

New York State's recent efforts to deal legislatively with decreasing use of land for farming come after several decades of farmland

losses. 1/ Farmed acreage amounted to some 22.6 million acres (about 74 percent of the State's total land area) at the turn of the century and has decreased since that time -- see Figure 1. Withdrawals of land from farm use slowed appreciably during the Great Depression and World War II years but the last two decades have brought unprecedented farmland losses.

Between 1950 and 1959, withdrawals of land from farm use averaged 280,000 acres per year. The 1959-1969 span brought withdrawals that approached 335,000 acres per year on the average. By 1969, less than one-third of the State's total land was actively farmed.

All major categories of land in farms are well represented in the recent surge of withdrawals from farm use (Table 1). In the 1950's, over half of the net farmland loss stemmed from decreases in cropland -- another fifth involved woodland and woodland pasture. Nearly one-third of the decrease reported between 1959 and 1969 involved cropland.

Table 1
Composition of Decreases in Total Land in Farms
for New York State, 1950-59 and 1959-69

	<u>1950-59</u>		<u>1959-69</u>	
	Acres	Percent	Acres	Percent
Decreased land				
in farms	-2,527,205	100.0	-3,341,157	100.0
Cropland	-1,364,118	54.0	-1,038,798	31.1
Woodland <u>a/</u>	- 461,809	18.3	- 820,844	24.6
All other <u>b/</u>	- 761,278	27.7	-1,481,515	44.3

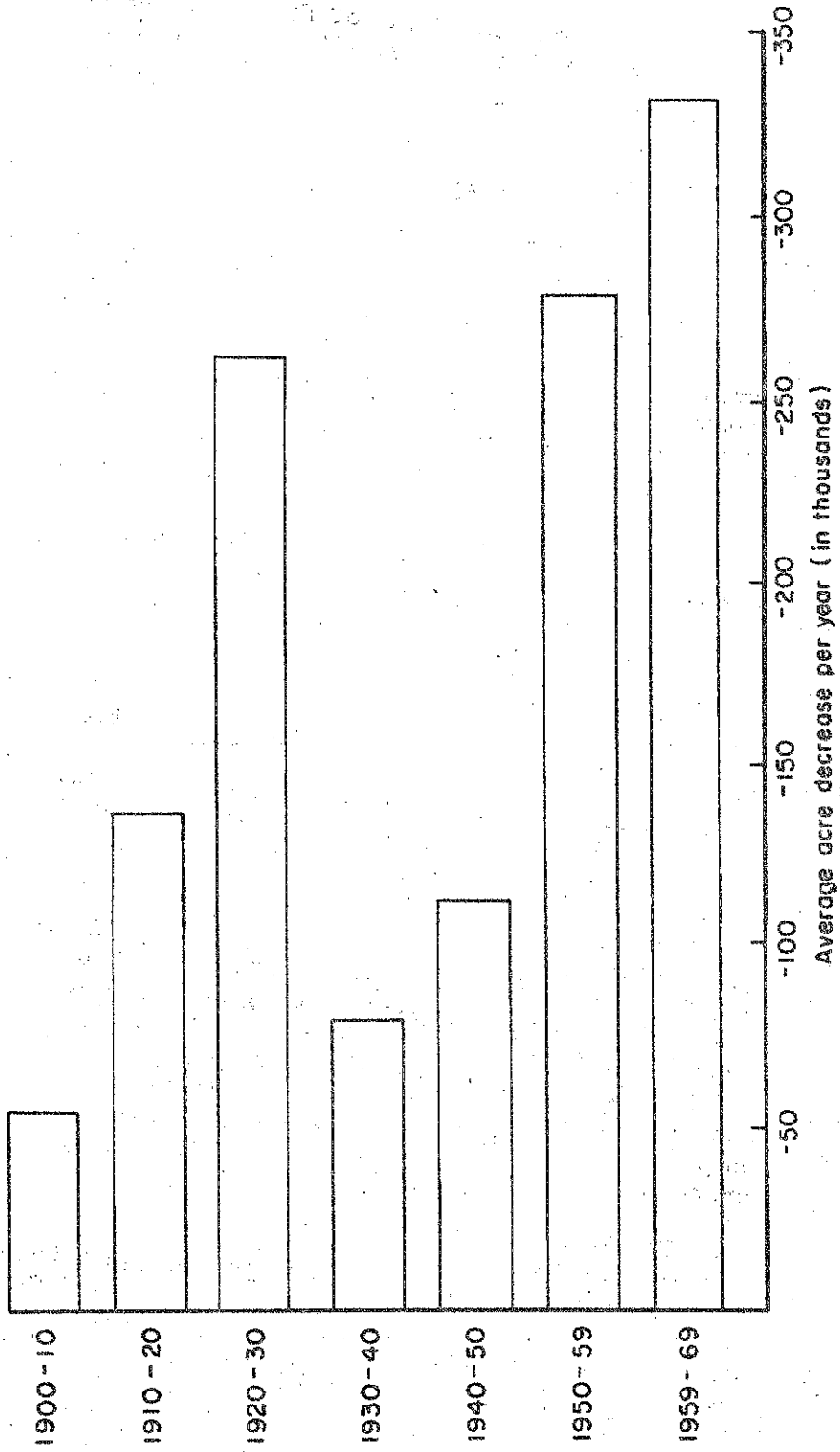
a/ Includes woodland used for pasture.

b/ Includes pasture land other than cropland and woodland pasture, houselots, barn lots, ponds, roads, wasteland, and so on.

Source: U. S. Census of Agriculture.

1/ The term "farmland" takes on several meanings to students of land use. In its widest sense, the term is used in reference to land where crop or livestock use would not be precluded by climate, topography, soil types, and so on. Narrow use of the term generally refers to land owned or rented by "commercial" or "full-time" operators that largely depend on farming for a living. The definition used in this paper falls between these two extremes and is based on the Census definition of "land in farms". Land in farms includes all places with product sales greater than \$50 during the Census year.

FIGURE 1. AVERAGE YEARLY DECREASE IN FARM ACREAGE BY DECADE FOR NEW YORK STATE, 1900-1969



SOURCE: 1969 CENSUS OF AGRICULTURE

Table 2
 Estimated Real Value of Farm Products Sold
 for New York State, 1950, 1959, and 1969

	1950	1959	1969	Change	
				1950-59	1959-69
. . Thousands of Dollars . . (1957-59 = 100) . .					
Total	592,482	777,171	902,304	184,689	125,133
Livestock and livestock products	438,203	570,316	673,713	132,113	103,397
Crops <u>a/</u>	154,279	206,855	228,591	52,576	21,736
. Percent					
Total	100.0	100.0	100.0	31.2	16.1
Livestock and livestock products	74.0	73.4	74.7	30.1	23.6
Crops <u>a/</u>	26.0	26.6	25.3	34.1	10.5

a/ Includes sales of forest products and horticultural specialty crops.

Source: Adapted from the U. S. Census of Agriculture and indexes of wholesale prices for farm products developed by USDA-ERS.

Despite substantial decreases in farmland, farm output (measured in terms of the price adjusted value of farm products sold) increased by more than \$300 mil. over the 1950-59 span (Table 2). After the effects of price changes are removed, the value of products produced on New York State farms increased by 31 percent. The decade of the 1960's, with a farmland loss of well over 3 million acres, was associated with a 16 percent increase in the value of farm products sold. The increase in the value of crops sold was 10 percent in comparison with 34 percent in the previous decade.

The loss in farms has been far more rapid than farmland as farming operations have been consolidated into larger farm units. Although farmland decreased by roughly 2.5 million acres between 1950 and 1959, the average size of New York State farms increased from 128 to 164 acres (Tables 1 and 3). Similarly, a 3.3 million acre decrease in farmland over the 1959-1969 span was associated with a 31 acre increase in average farm size. Between 1950 and 1969, the average real value of farm products sold per farm increased almost fourfold -- from \$4,740 to \$17,382.

Table 3
Total Farms, Acres per Farm, and the Real Value of
Sales per Farm for New York State, 1950, 1959, and 1969

	1950	1959	1969	Change	
				1950-59	1959-69
Total farms	124,977	82,356	51,909	-42,621	-30,447
Acres per farm					
Total	128	164	195	36	31
Cropland	68	87	117	19	20
Woodland	28	36	42	8	6
All other	32	41	36	9	-5
Real value of sales per farm					
Total	4,740	9,437	17,382	4,697	7,945
Livestock and livestock products	3,506	6,925	12,979	3,419	6,054
Crops	1,234	2,512	4,403	1,278	1,891

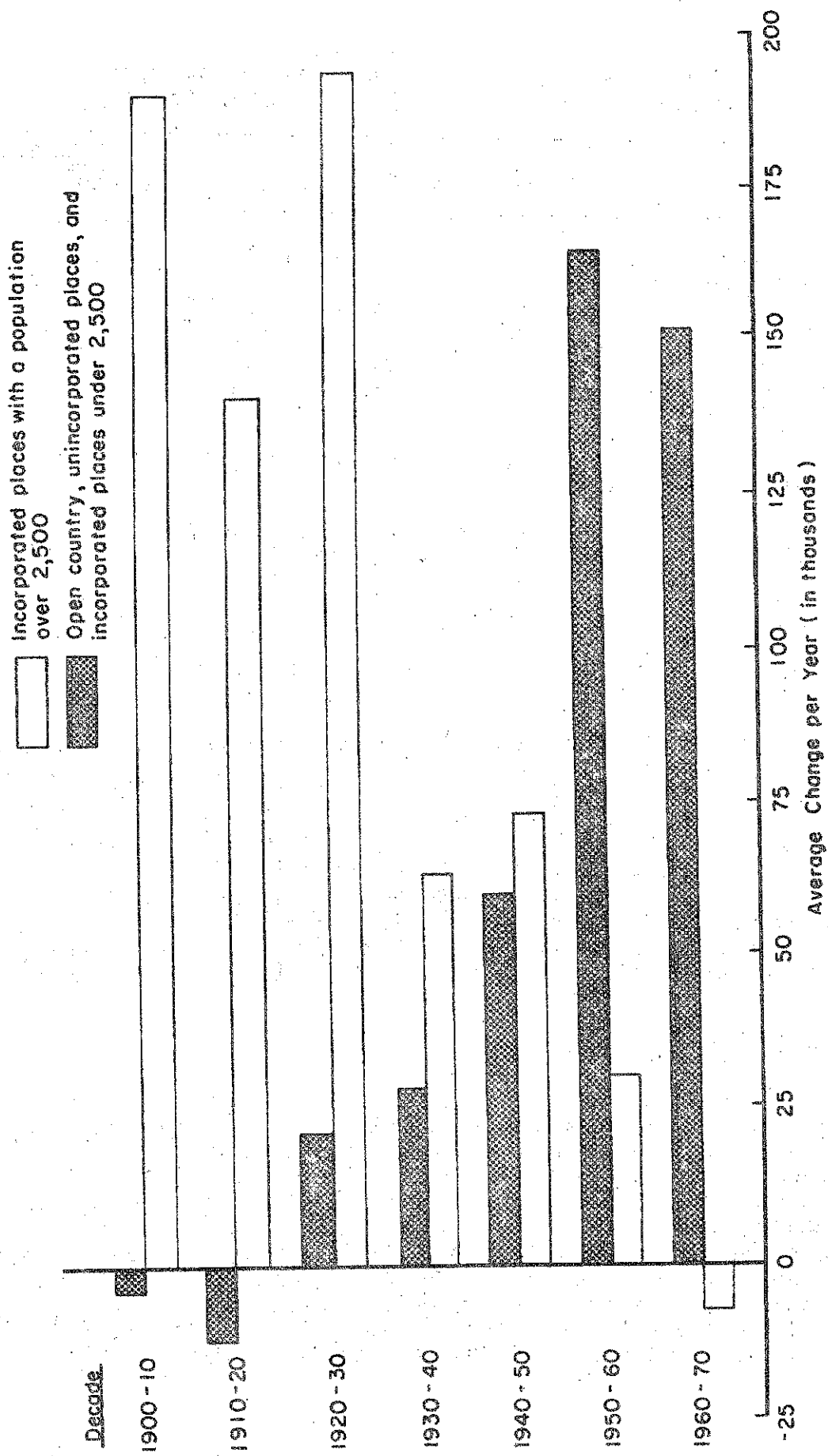
Source: Adapted from the U. S. Census of Agriculture.

Changes in farm production can be referenced to earnings (proprietary income accruing to farm operators along with wages paid to hired farm labor) in agriculture and compared with other sources of income accruing to New York State residents. Results for 1950, 1959, and 1969 are shown in Table 4. Immediately after World War II, earnings from farm production accounted for slightly less than 2 percent of total personal income. When measured in constant or price adjusted terms, agricultural earnings fell by more than \$120 million between 1950 and 1969. The earnings decrease, coupled with expansion in nonfarm sectors of the economy, reduced agriculture's share of total personal income to 0.7 percent.

Major Population Trends

The residential choices of all citizens have a major influence on the character of farming in an urbanizing state like New York. At the turn of the century, roughly 7 of every 10 citizens resided in an incorporated city or village with a population of 2,500 or more. This segment of the population, for purposes of the U. S. Population Census, was arbitrarily labeled urban. The remainder were defined as rural and resided in open country (on farms for the most part), in unincorporated places, or in incorporated places with fewer than 2,500 residents. Through 1920, net population growth was wholly confined to larger incorporated cities (see Figure 2). On a yearly basis, "urban" population increases averaged 189,000 over the 1900-10 period and 140,000 between 1910 and 1920 while

FIGURE 2. AVERAGE YEARLY POPULATION INCREASES BY DECADE FOR NEW YORK STATE, 1900-1970



SOURCE : U.S. POPULATION CENSUS

Table 4
Total Real Personal Income by Category for
New York State, 1950-1969 (1967 = 100)

	<u>1950</u>		<u>1959</u>		<u>1969</u>	
	Mil.Dol.	Pct.	Mil.Dol.	Pct.	Mil.Dol.	Pct.
Total personal income	38,420	100.0	50,132	100.0	75,387	100.0
Property income and transfer payments	6,215	16.2	8,041	16.0	15,101	20.0
Earnings <u>a/</u>	32,205	83.8	42,091	84.0	60,286	80.0
Agriculture	670	1.7	479	0.9	548	0.7
Mining	66	0.2	82	0.2	91	0.1
Construction	1,671	4.3	2,233	4.4	2,902	3.8
Manufacturing	10,126	26.3	12,789	25.5	16,006	21.2
Trade	6,775	17.6	8,045	16.0	10,446	13.8
Services	4,694	12.2	6,623	13.2	11,134	14.8
Government	3,085	8.0	4,859	9.7	8,769	11.6
All other <u>b/</u>	5,118	13.3	6,981	13.9	10,390	13.8

a/ The sum of personal income accruing to persons from wage and salary disbursements, proprietary income from unincorporated businesses, and other labor income.

b/ Includes the industrial categories of transportation, communication, public utilities, finance, insurance, and real estate.

Source: 1972 OBERS Projections, Vol. 5, U. S. Water Resources Council, Washington, D. C.

"rural" communities realized net population losses. Similarly, net rural population gains were overshadowed by urban population growth through 1950.

Recent decades, however, have brought a distinct reversal in these long-standing patterns of population growth. During the 1950's, population increases in larger incorporated cities slowed to roughly 31,000 per year on the average while more than 163,000 per year were added outside larger cities. During the 1960-1970 decade, net population growth was wholly confined to areas outside the boundaries of larger cities.

After World War II, considerable population growth occurred adjacent to but not within the boundaries of large incorporated places. The well-known terms "suburban" and "urban fringe" were coined to describe land areas, in proximity to larger cities, moving toward intensive urban-

related residential, commercial, and industrial uses. The population concentrations found there were included with the total urban population. In 1950, 5 percent of New York State's population was located in the fringe of large incorporated cities (Table 5). The urban fringe accounted for almost 70 percent of the total 1950-1960 population increase. Despite a decrease of 253,000 in the rural-farm population, 84 percent of the State's 1.9 million population increase occurred outside larger incorporated places. Between 1960 and 1970, net population growth was wholly confined to open country (including small villages with a population under 2,500) and the fringe of large metropolitan areas.

Table 5
Rural and Urban Composition of the Population
for New York State, 1950-1970

	1950	1960	1970	Change	
				1950-60	1960-70
. Thousands					
Total population	14,830.1	16,782.3	18,236.9	1,952.2	1,454.6
Incorporated places, 2,500+	11,907.0	12,220.7	12,151.8	313.7	-68.9
Open country, un- incorp. places & incorp. places under 2,500	2,923.1	4,561.6	6,085.1	1,638.5	1,523.5
Rural-farm	577.6	324.8	190.6	-252.8	-134.2
Rural-nonfarm	1,570.1	2,125.5	2,443.8	555.4	318.3
Urban fringe	775.4	2,111.2	3,450.6	1,335.8	1,339.4
. Percent					
Total Population	100.0	100.0	100.0	100.0	100.0
Incorporated places, 2,500+	80.3	72.8	66.6	16.1	-4.7
Open country, un- incorp. places & incorp. places under 2,500	19.7	27.2	33.4	83.9	a/
Rural-farm	3.9	1.9	1.0	-12.9	-9.2
Rural-nonfarm	10.6	12.7	13.4	28.4	21.9
Urban fringe	5.2	12.6	18.9	68.4	92.1

a/ Greater than 100 percent

Source: U. S. Population Census.

Summary

The trend toward decreased use of land for farming in New York State is well entrenched. Farmland losses have characterized the industry since before the turn of the century. However, both relative and absolute amounts of land withdrawn from agricultural uses have reached unprecedented levels during the postwar years. Despite heavy withdrawals of land, the real value of products produced on New York State farms has increased materially over the past two decades, reflecting increases in resource productivity, substitution of other resources for land, and the scale benefits of consolidation of farms into larger producing units.

These gains in production, which translate into increased gross earnings for those who continue to farm and for those industries directly dependent on farming, have been outdistanced by income expansion in the non-farm segment of the State's economy. Earnings from farming now account for less than 1 percent of the State's total real personal income.

The total environment for farm uses of the State's land resources is closely bound to the residential choices of all New York State citizens. Although the rural population increased after 1920, the bulk of the State's population increases occurred in larger incorporated cities until after World War II. Since 1950, most of the State's net population increases have come to urban fringe areas, open country, and small villages. Many of these new residential choices have involved the conversion of land resources previously used for farming.

The New York State Agricultural District Law

Rapid conversion of farmland to urban-oriented uses was a key aspect of enabling legislation for New York State Agricultural Districts. ^{2/} In keeping with the State's policy to "conserve and protect and to encourage the development and improvement of its agricultural lands for the production of food and other agricultural products", the intent of the law is to provide a mechanism for the continuance of farming land jeopardized by urban growth [1].

^{2/} The material for this section is largely drawn from W.R. Bryant and H.E. Conklin, Legislation to Permit Agricultural Districts in New York, A. E. Ext. 74-17, Cornell University, December, 1973, and H.E. Conklin and W.R. Bryant, "Agricultural Districts: A Compromise Approach to Agricultural Preservation", American Journal of Agricultural Economics, August 1974. The text of the law can be found in McKinney's Consolidated Laws of New York - Annotated, Book 2B: Agriculture and Markets Law.

Efforts to intervene through public policy in the interplay between farm and nonfarm uses for land are not new. Some 31 states, for example, make provisions for use-value assessments of agricultural land [3]. State legislatures in 27 states (including New York) have granted local jurisdictions the authority to zone rural land for farm uses [6]. A thorough treatment of these various state initiatives is beyond the scope of this paper. It suffices to say that the New York concept of an agricultural district is somewhat unique, differs materially from approaches taken in other states, and therefore deserves study in its own right.

New York's agricultural district legislation contains two separate provisions [1]. The first specifies the steps required to create a district and the second identifies several provisions of the law that apply within a created district.

The impetus for creating a district stems from a petition by landowners to the county legislative body. Owners forwarding the proposal must own 500 acres or 10 percent of the land in the proposed district, whichever is greater. The proposal is referred to the county planning board and a county agricultural advisory committee for consideration.^{3/} These groups then make reports to the county legislature, public hearings are held, and the proposal ultimately goes to the New York State Commissioner of Environmental Conservation. The New York State Agricultural Resources Commission (a part of the New York State Department of Agriculture and Markets) and Office of Planning Services are consulted before the Commissioner's certification is received by the county legislature. The county legislature then takes final action on the district.

Beginning in September of 1975, the Commissioner of Environmental Conservation may create agricultural districts of 2,000 or more acres to encompass "unique and irreplaceable agricultural lands". The Commissioner needs to consult with local people, the Agricultural Resources Commission and the Office of Planning Services before any action is taken.

The law contains six major provisions which apply in all agricultural districts ratified by county legislatures:

^{3/} A county agricultural advisory committee is appointed by the county legislature and consists of four active farmers, four agribusinessmen, and one member of the county legislative body.

1. Farmers with \$10,000 or more in yearly gross sales may make an annual application for a use-value assessment of farmland. If any land so assessed is converted to a nonfarm use, a rollback of taxes must be paid (the rollback is limited to five years). ^{4/}
2. Local jurisdictions of government are constrained from regulating farm structures or practices by ordinance.
3. State agencies must modify regulations and procedures to encourage commercial farming.
4. The right of public agencies to acquire land through eminent domain is modified.
5. The right of public agencies to provide funds for public facilities that would encourage nonfarm development is modified.
6. The power of public service districts to tax farmland for sewer, water, and nonfarm drainage is restricted.

Extent of Agricultural Districts

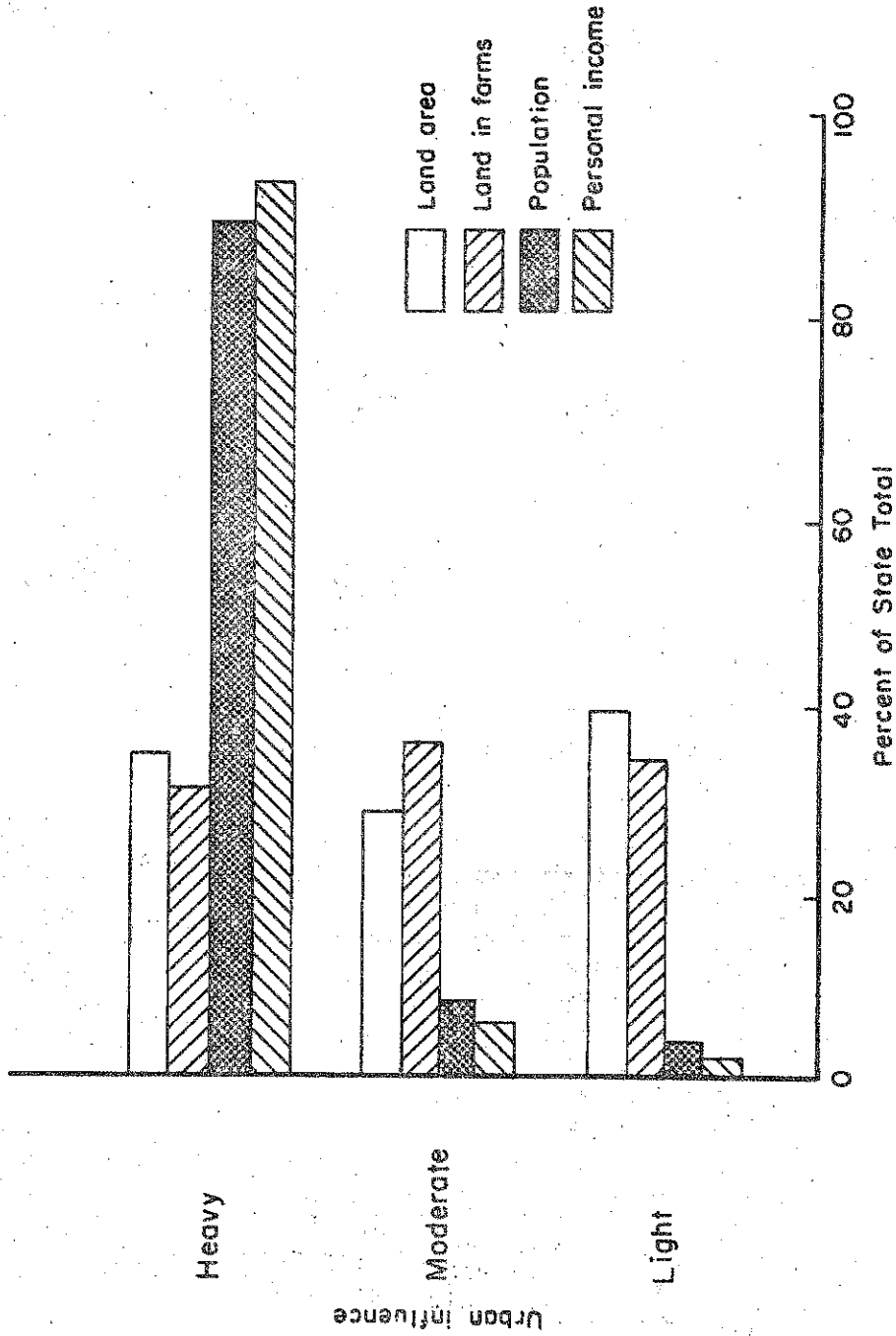
Rural-urban contrasts are abrupt in New York State. Since interest centers on district formation in the context of increasing urban-related pressures on farmland, the State's 63 counties were divided into three categories of "urban influence" -- heavy, moderate, and light (Figure 3). The State's 28 Standard Statistical Metropolitan Area (SMSA) counties are heavily influenced for purposes of this paper. The remaining 34 non-SMSA counties were ranked from high to low with urban as a percentage of the total population and population per square mile (population density) receiving equal weights. Those counties with the 17 lowest ranks were designated as lightly influenced; those with the 17 highest ranks were designated as moderately influenced.

This categorization of counties divides the State's total land area into approximate thirds --- see Figure 4. Similarly, there are only small differences in each group's share of New York State's total farmed acreage, but nearly 9 of 10 New York State residents are found in the 28 most urban SMSA counties and roughly 91 percent of the State's total personal income accrues to them. The balance of this section explores efforts to form agricultural districts in each group of counties on the presumption that each category of "urban influence" captures important relative differences in the total socio-economic climate for farm uses of land.

Between September, 1971 and July, 1974, 162 districts encompassing more than 1.6 million acres have been proposed (Table 6). Of those, 124 districts involving roughly 1.1 million acres have been ratified by county legislative bodies. The remaining 38 proposals are under active

^{4/} Individual farmers who are not inside a district are also eligible for a use-value assessment under the Agricultural District Law. Their commitment, however, is for 8 years (renewed annually) and conversion to a nonfarm use involves a monetary penalty along with a rollback of previously exempted taxes.

FIGURE 4. PERCENTAGE SHARES OF LAND AREA, LAND IN FARMS, POPULATION, AND PERSONAL INCOME FOR NEW YORK STATE COUNTIES WITH HEAVY, MODERATE, AND LIGHT URBAN INFLUENCE



SOURCE: 1969 CENSUS OF AGRICULTURE, U.S. POPULATION CENSUS, AND UNPUBLISHED USDA - ERS DATA ON PERSONAL INCOME

Table 6
 Number of Districts, Total Districted Acreage, and
 Average District Size for New York State, July 1974

	<u>Urban Influence</u>			
	Total	Heavy	Moderate	Light
. Districts				
Total	162	53	69	40
Formed	124	42	51	31
Proposed	38	11	18	9
. Districted Acreage				
Total	1,673,157	428,858	650,349	553,950
Formed	1,119,230	321,018	447,378	350,834
Proposed	513,927	107,840	202,971	203,116
. Acres per District				
Total	10,328	8,091	9,425	13,489
Formed	9,026	7,643	8,772	11,317
Proposed	13,524	9,804	11,276	22,568

Source: Adapted from NYS Agricultural Resources Commission reports on Agricultural District Status.

consideration. Counties in each urban category are represented in the agricultural district program. The State's most urban counties contain 32 percent of all districts and 28 percent of all districted acreage. The least urban counties account for 25 percent of all districts and 33 percent of the districted acreage. Farm people in counties with moderate amounts of urban influence have shown the greatest amount of interest in the program thus far. These 17 counties, with 35 percent of the State's total land in farms account for roughly 40 percent of New York State's districts and district acreage.

Agricultural districts average about 10,300 acres in size. Districts in the more urban counties are smaller. They contain roughly 8,100 acres on the average while districts in the least urban counties average almost 14,000 acres. More recent proposals for districts statewide are larger, on the average, than districts already ratified by county legislatures.

Initiatives to form districts thus far take up roughly 13 percent of the State's farmed acreage (Table 7). 5/ Correspondingly, about 13 percent of the State's commercial farm units are located within the boundaries of an agricultural district. Slightly more than 7 percent of all farms in SMSA (the State's most urban) counties are involved but 12 percent of the total land in farms has been incorporated into districts. District activity, both in terms of farms and acreage, has been the greatest in counties with moderate amounts of urbanity. Districts formed there represent about 22 percent and 16 percent respectively, of all commercial farms and land in farms reported in the most recent agricultural census.

Table 7
Farms and Farm Acreage in Districts as a Percent
of All Farms and Farm Acreage for New York State, July 1974

Urban Influence	Farms			Farm Acreage		
	Total a/	Districted	Pct.	Total a/	Districted	Pct.
		Number			Number	
Total	34,404	4,348	12.6	8,372,844	1,119,230	13.4
Heavy	12,103	896	7.4	2,659,501	321,018	12.1
Moderate	11,489	2,518	21.9	2,790,229	447,378	16.0
Light	10,812	934	8.6	2,923,114	350,834	12.0

a/ All class 1-5 or commercial farms as reported in the 1969 Census of Agriculture. Commercial farms had sales greater than \$2,500 during the Census year.

Source: 1969 Census of Agriculture and data adapted from NYS Agricultural Resources Commission reports on Agricultural District Status.

Size of individual districts is an important aspect of a program geared toward fostering a continuing commitment to agricultural uses of land. Although the law allows for a minimum size of 500 acres, only 5 of the 124 districts formed thus far contain fewer than 1,000 acres (Table 8). These smaller districts account for well under one percent of the total acreage in the program. At the other extreme, districts with

5/ The data in Table 7 must be interpreted with care inasmuch as Census data on farms and farm acreage are five years old. The comparisons, therefore, are not exact to the extent that farms and farmed acreage has changed -- quite possibly at differing rates throughout the State -- over this five-year span.

25,000 or more acres make up almost 30 percent of the program acreage. Three single districts constitute almost one-half of the district acreage found in the State's least urban counties.

Table 8
Number of Districts and Districted Acreage by
Size of District for New York State, July 1974

Acres	Urban Influence							
	Total		Heavy		Moderate		Light	
	Dis-	Acres	Dis-	Acres	Dis-	Acres	Dis-	Acres
	tricts		tricts		tricts		tricts	
. Number								
Under 1,000	5	4,128	1	893	1	736	3	2,499
1,000-2,499	19	33,249	8	13,541	9	16,596	2	3,112
2,500-4,999	35	133,537	15	57,651	12	47,929	8	27,957
5,000-9,999	31	216,410	8	53,285	15	105,600	8	57,525
10,000-24,999	26	402,115	8	117,088	12	193,337	6	91,690
25,000 or more	8	329,791	2	78,560	2	83,180	4	168,051
Total	124	1,119,230	42	321,018	51	447,378	31	350,834
. Percent								
Under 1,000	4.0	0.4	2.4	0.3	2.0	0.2	9.7	0.7
1,000-2,499	15.3	3.0	19.0	4.2	17.6	3.7	6.4	0.9
2,500-4,999	28.2	11.9	35.7	17.9	23.5	10.7	25.8	8.0
5,000-9,999	25.0	19.3	19.0	16.6	29.4	23.6	25.8	16.4
10,000-24,999	21.0	35.9	19.0	36.5	23.5	43.2	19.3	26.1
25,000 or more	6.4	29.4	4.8	24.5	4.0	18.6	12.9	47.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Adapted from NYS Agricultural Resources Commission reports on Agricultural District Status.

For the most part, large districts mainly result from the participation of larger farm owners. Statewide, farms included in ratified agricultural districts average 257 acres in size (Table 9). According to the last Census, all New York State farms average 195 acres and commercial farms (sales in excess of \$2,500) average 243 acres. Large districts -- those with 25,000 or more acres -- contained farms that averaged 433 acres in size. As a general rule, average farm sizes were smaller for districts that are moderately influenced by urban population and population growth.

Table 9
Average Farm Size for Counties and for
Portions of Counties in Agricultural Districts, July 1974

	<u>Urban Influence</u>			
	<u>Total</u>	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>
. Acres				
Census average - 1969:				
All farms	195	170	198	227
Class 1-5 farms a/	243	220	243	270
Agricultural Districts	257	358	190	365
Under 1,000 acres	188	298	67	312
1,000-2,499	254	273	236	250
2,500-4,999	261	266	235	319
5,000-9,999	277	295	235	337
10,000-24,999	198	437	128	368
25,000 or more	433	569	332	452

a/ Class 1-5 farms had sales of \$2,500 or more during the Census year.

Source: 1969 Census of Agriculture and data adapted from NYS Agricultural Resources Commission reports on Agricultural District Status.

Towns and Agricultural Districts

Counties constitute the granting authority for the District program, but New York State's 931 towns (called townships in many other states) are an influential unit of local government. Outlays for elementary and secondary education excepted, roughly 15 percent of all expenditures by substate jurisdictions are attributable to the town unit of government [5]. More importantly, the town is a major decision-making unit in regard to the use of rural land. For example, the authority to implement other, more comprehensive controls over land use -- such as zoning -- extends to the town in New York State.

Local efforts to form Agricultural Districts have often crossed the political boundaries of towns. Statewide, only 48 of 124 formed districts are within the political boundaries of a single town (Table 10). Thirteen districts incorporate acreage located in four or more towns (one district crosses the political boundaries of 11 town jurisdictions).

In order to focus on town jurisdictions, data for individual Agricultural Districts were pooled so that the boundaries of towns and districts would coincide. A total of 181 towns (19 percent of all New York State towns) are involved with the District program.

Table 10
Agricultural Districts by Size and
Number of Town Jurisdictions, July 1974

Acres	Total	Towns			
		One	Two	Three	Four or more
	 Number			
Under 1,000	5	2	3	0	0
1,000-2,499	18	12	5	1	1
2,500-4,999	35	14	15	5	1
5,000-9,999	31	10	10	7	4
10,000-24,999	26	10	5	8	3
25,000-or more	8	0	2	2	4
Total	124	48	40	23	13

Source: Adapted from NYS Agricultural Resources Commission Reports on Agricultural District Status.

Few is any New York State towns have closed out options for substantial amounts of nonfarm growth through the formation of Agricultural Districts -- see Table 11. By and large, only a fraction of the total land area in any single town group is impacted by one or more Agricultural Districts. Only 4 towns have over 75 percent of their total land area committed to an Agricultural District. Three of these four towns are located in counties with moderate amounts of urban influence.

Regardless of urban influence, efforts to form Agricultural Districts have most typically resulted in the dedication of 10 to 50 percent of a town's total land area to agricultural uses. Statewide, about 65 percent of all towns participating in the program fall in this category.

Farm people have been more active in forming Agricultural Districts in local communities where recent population increases have been relatively abrupt. Almost 120 (about 65 percent) of the towns with one or more Agricultural Districts realized population increases of 10 percent or more between 1960 and 1970 -- Table 12. The 1960-70 population increase for all of New York State was under 9 percent. Only a small fraction of the State's Agricultural Districts have been established in communities with a declining or relatively stable population base. Fewer than 10 percent of all towns in the program received a population loss over the 1960-70 span.

To the extent that rates of population change are a useful proxy measure of community growth and any attendant pressure on land for non-farm uses, experience thus far with the New York law would imply that

Table 11
Proportions of Total Land Area Committed to
Agricultural Districts for 181 New York State Towns

Proportion of Land Area in Districts	Urban Influence			
	Total	Heavy	Moderate	Light
. Number				
Under 5%	17	7	2	8
5-9%	38	7	14	17
10-24%	62	36	9	17
25-49%	55	8	29	18
50-74%	5	1	4	0
Over 75%	4	1	3	0
Total	181	60	61	60
. Percent				
Under 5%	9.4	11.7	3.3	13.3
5-9%	21.0	11.7	22.9	28.3
10-24%	34.2	60.0	14.7	28.3
25-49%	30.4	13.2	47.5	30.0
50-74%	2.8	1.7	6.5	0
Over 75%	2.2	1.7	4.9	0
Total	100.0	100.0	100.0	100.0

Source: The U. S. Population Census and NYS Agricultural Resources Commission reports on Agricultural District Status.

farmer-citizen interest in the District concept is the keenest in communities where growth pressures are relatively prominent.

Rates of population increase were found to be significantly associated with the extent of town acreage that has been committed to the Agricultural District program (Table 13). Once again, if population changes reflect nonfarm growth and increased competition for farmland, these data provide some support for the notion that farmer-interest is greater in local areas where the possibility of nonfarm growth is relatively immediate.

Summary

The response of New York State farmers to legislation providing for Agricultural Districts has been significant. In fewer than three years, formed districts encompass 4,348 farms and 1,119,230 acres -- roughly 8

Table 12
Rates of Population Change for 181 New York
Towns with Agricultural Districts, 1960-70

Population Change, 1960-70	Urban Influence			
	Total	Heavy	Moderate	Light
. Number				
Decrease	13	3	2	8
Increase	168	57	59	52
Under 5%	17	3	8	6
5-9%	34	4	12	18
10-24%	80	34	20	26
Over 25%	37	16	19	2
Total	181	60	61	60
. Percent				
Decrease	7.2	5.0	3.3	13.3
Increase	92.8	95.0	96.7	86.7
Under 5%	9.4	5.0	13.1	10.0
5-9%	18.8	6.7	19.7	30.0
10-24%	44.2	56.7	32.8	43.3
Over 25%	20.4	26.6	31.1	3.3
Total	100.0	100.0	100.0	100.0

Source: U. S. Population Census and data adapted from NYS Agricultural Resources Commission reports on Agricultural District Status.

percent and 11 percent, respectively, of the State's total farms and land in farms. The response has also been remarkably even in the sense that districts have been formed in the shadow of large population centers and in parts of the state where the possibilities for intense urban-related pressures on farmland are thought to be far more remote. Although the exact location of districted tracts in relation to the incorporated boundaries of cities and major arterial highways awaits further study, 32 percent of all districts have been formed in New York State's SMSA counties -- counties thought to be most heavily impacted by urban growth. These districts account for 28 percent of all the farmland committed to the program thus far.

Some formed districts are located on relatively small tracts of land and contain as few as two individual farm units. However, these smaller districts account for only a small fraction of the farms and the farm acreage in the program. Districts with 10,000 or more acres account for 65 percent of the total program acreage. Statewide, agricultural districts

Table 13
 Proportions of Total Land Area in Districts and
 Rates of Population Change for 181 New York State Towns

Proportion of Land' Area in Districts	Population Change, 1960-70					
	Total	Decrease	0-5%	5-9%	10-24%	Over 25%
 Number					
Under 5%	10	0	1	2	4	3
5-9%	45	7	18	9	10	1
10-24%	62	4	7	3	33	15
25-49%	55	1	3	4	30	17
50-74%	5	0	1	1	3	0
Over 75%	4	1	2	0	0	1
Total	181	13	32	19	80	37

Computed value of $\chi^2 = 59.69$
 Critical value of $\chi^2 = 43.77$
 .95, 29 df

average about 10,300 acres --- the typical district contains 40 farms that average 257 acres in size.

The town is among the more important units of local government in New York State. Since several of the State's 124 formed Agricultural Districts cross the political boundaries of towns, 181 towns are currently involved in the District program. Few if any towns have closed out the possibility of significant amounts of nonfarm growth if Districts formed thus far are successful in maintaining land in a farm use. Only 4 of 181 towns have 75 percent or more of their total land area taken up by one or more Agricultural Districts. The bulk of New York State's Districts have been formed in towns that gained population faster than the state as a whole during the last decade. Rates of population increase are significantly associated with the extent to which town acreage has been dedicated to farm use.

Implications for Further Study

Program Participation

The body of this paper largely speaks to the need for a systematic appraisal of several factors that are likely to influence participation in the Agricultural District program. Indeed, this aspect seems to be critical inasmuch as the program is not only voluntary but depends heavily on local farmer-initiative to establish a district in any single

community. Results could be used to help anticipate the pace of efforts to form Agricultural Districts in other parts of the State. Clues could also be gained in the transferability of the District concept to other states. Several other variables besides gross rates of population change discussed above -- such as the volume of total farmland, differences in the behavior of local property taxes, behavior in local real estate markets, and the economic structure of local communities -- might also wield some influence on the extent to which farmland is committed to a district.

Program Impacts

Use-Value Assessments

The New York State law provides farm operators with the option of applying for a use-value assessment on farmland (improvements to farm land are not eligible). An immediate possibility for local governments, then, is some decrease in property tax revenues. Further study could gauge the extent of any revenue displacement by determining farmer eligibility, the magnitude of incentives to apply, and the role of property tax revenues in the total cash flow of individual jurisdictions of government.

The Growth Path of Communities

Legislation aimed at influencing patterns of land use ultimately strikes at the rate and composition of community economic growth. Comparisons of land use patterns in established agricultural districts are required to determine whether withdrawals of land from farm uses are slowed or halted. Similarly, the nature and extent of land utilization for nonfarm use can be ascertained. Since many shifts in land use are thought to be triggered by changes in land prices, it would be of interest to know if the appearance of a district exerts a noticeable influence on local land prices.

Closely associated impacts relate to the rate and composition of investments in improvements to land. A point of entry is the tentative hypothesis that a district might create a more certain image of future patterns of land use, i.e., retention of a known amount of acreage in farm use. Do participants in local capital markets respond? Farm-related capital investments seem to warrant particular consideration since continued farming often requires substantial investment in land improvements which have little or no value if the acreage is converted to a nonfarm use. Equally significant would be any measurable shift in patterns of investment by local jurisdictions of government in behalf of such local services as water and sewage disposal.

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